Usenet Newsgroup Archive: rec.radio.amateur.homebrew

2006

These Usenet messages were preserved as a plain-text archive. This PDF was generated by Digital Library of Amateur Radio & Communications from the source text file in 2026.

Date span: 2006-01-01 through 2006-12-31

Source text: rec.radio.amateur.homebrew.txt

Source item: https://archive.org/details/usenet-rec

Messages included in this PDF: 5,988

Message records with no readable body available in the source text: 12

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

1. Re: Identifying a mystery diode

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-01 11:21:02 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_43b768a4@fidonet.org>
Source record: 14902

"Dan Halbert" bravely wrote to "All" (31 Dec 05 20:34:08)
--- on the heady topic of "Re: Identifying a mystery diode"

DH> From: Dan Halbert <vhalbertv@vhalwitzv.vorgv>
DH> Xref: core-easynews rec.radio.amateur.homebrew:90419

DH> You could apply power it to as you would an LED (using a
DH> current-limiting resistor), and take a look at it in a digital
DH> camera's display. Digital cameras are somewhat sensitive to IR, even
DH> though they usually have a built-in IR cut filter. Try it with an IR
DH> remote control to see what I mean.

DH> Dan, KB1RT

IR LED makes quite sensitive IR receiver. Just power up the mystery
diode near it and measure the voltage across the leads using a DMM.

A*s*i*m*o*v

... Curiousity didn't kill the cat, I got him with the mower!

2. Re: RARE admission by Radio Mart L@@K

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-01 13:45:00 UTC
From: boners <burperofgarlic@cantaloupes.eus>
Message-ID: <a3457$43b7eae8$d1cc796f$17154@snip.allthenewsgroups.com>
Source record: 14903
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave

There is no scam. Radio Mart is a legetimate e-Bay reseller
of refurbished ham radio equipment and accessories. There is
no difference between how Radio Mart does business and
other retailers like HRO, AES and others.

The problem here lies with a few usenet knuckleheads and cheap bastard
hams who pontificate about all so much 'sour grapes' over them.
(most or all of em' being ex-hamfest dealers who just don't like e-Bay!)

Something, in perspective, so common of the minority of cheap
ham radio op's we all used to see at the hamfests years ago.
The hams that used to walking around in dirty 10 year old clothes who
never had a good word for anything or anybody so they cast
their bile on that which they could or would not simply walk away from
because the radio on the table was "too expensive" for them. In short
it's cheap-assed cranky old men who act like spoiled 8-year-olds.

If they don't like Radio-Mart you'd think they'd just go buy new
stuff at HRO and AES. R-M has to be doing something right as
it appears each and every auction they put up ends with someone
bidding on something. I say more power to them, and if someone don't
like how they do business, they can go down the street to the next corner
Deli on the block and get a pastrami-on-rye from them instead.

"Lenny" <freilich@comcast.net> wrote in message
news:xaidnWk3T_SCRSrenZ2dnUVZ_t6dnZ2d@comcast.com...
> So, what exactly is the Radio Mart scam?
> Lenny
>
> "Unrevealed Source" <Unrevealed_Source@nospam.net> wrote in message
> news:FrQtf.5665$nj1.4013@fe06.lga...
> > BDK - you must be new here. (Welcome).
> >
> > The Radio-Mart scam is well-known to most regulars of this newsgroup.
> > Most of us have him filtered out of our eBay searches.
> >
> >
> > "BDK" <kingratay@buckeye-express.com> wrote in message
> > news:MPG.1e212285ba924974989ca4@news.buckeye-express.com...
> >> In article <1136084951.368056.242220@g44g2000cwa.googlegroups.com>,
> >> miso@sushi.com says...
> >>> "This receiver has not been recently or completely restored by By
CHUCK
> >>> RIPPLE, and $900 plus has not been spent restoring it."

> >>>
> >>>
<http://cgi.ebay.com/Collins-R-390A-Nice-One-Getting-in-Short-Supply_W0QQit
emZ5845509014QQcategoryZ4673QQrdZ1QQcmdZViewItem>
> >>>
> >>>
> >>
> >>
> >> Hmm, 97.3% favorable feedback on 3600 transactions...
> >>
> >> What exactly is your problem with him?
> >>
> >> The real story...please.
> >>
> >> BDK
> >
> >
>
>

3. Re: Ground Plane construction vs pre-printed "protoboards"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-01 15:56:23 UTC
From: dkelly42@cox.net
Message-ID: <1136130983.382349.266100@f14g2000cwb.googlegroups.com>
Source record: 14904

For years I designed my boards in a time consuming way. I used Microsoft paint to draw the pattern. I printed this pattern on clear piece of 3M transparancy using my copy machine at work. Later I used my home laser printer. I cut and cleaned the board like Richard Hosking suggested. I then ironed the pattern on the PC board using a home cloths iron. I used doubled sided PC board. I have always surface mounted all my parts even leaded types. I used the lower side of the double sided board as a ground plane drilling holes only to attach ground leads below. I also placed as much ground plane on the surface of the board as possible.

This method always worked well but I must qualify my building as being between 1.8 and 30MHz, nothing higher. In the last 7 or 8 years I have gone to Ugly construction. I read a quote attributed to W7EL Roy Lewellen about ugly construction years ago. The method I used was time consuming. I could save patterns for reuse and dupication but the whole classic PC board process is time consuming. I tried Roy's suggestion and never went back to my time consuming process.

My first project years ago was updating a drifty 40M VFO. I measured the drift in the old VFO to >200 cycle/hr after 20min warmup. The new VFO using ugly construction measured at <20 per hour after warmup. Both used the exact same circuit, roughly the same component values but different manufacturer so the comparison is somewhat flawed. Recent projects using ugly construction: An new HB RF signal generator, 6W sideband transceiver, logarithmic RF detector and a 1.7 to 1.85MHz LO for a new sideband transceiver. This new VFO drifts <10 cycle/hr (47 cycles over 24hr) but is still open to the environment on the workbench.

I have used ugly construction in tube rigs, VFO's, high gain audio sections of DC receivers, test gear, etc. The one thing that makes it appealing is the ability to test a circuit or idea without going into the long process of PC board prep. The ugly method is intuitive and my opinion...damn the appearance....does it work well!

Don K5UOS

PS John Miles' receiver is amazing! Wish he lived near me.

4. Re: RARE admission by Radio Mart L@@K

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-01 16:53:27 UTC
From: miso@sushi.com
Message-ID: <1136134407.334669.143990@f14g2000cwb.googlegroups.com>
Source record: 14905
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave

Radio-Mart(RM) is a deceptive seller that has cause more than a few
buyers to get negative feedback. I like how the R390A he sells is
Collins "designed", which is not the same as Collins built.

If Radio-Mart(RM) was an honest broker, then there would be no need for
the private sales.

I often see items for sale from Radio-Mart(RM) that I want, but I won't
buy from Mr. Red Velvet. Just wait a bit longer and a better deal will
show up on ebay. There is no need to deal with Radio-Mart(RM).

boners wrote:
> There is no scam. Radio Mart is a legetimate e-Bay reseller
> of refurbished ham radio equipment and accessories. There is
> no difference between how Radio Mart does business and
> other retailers like HRO, AES and others.
>
> The problem here lies with a few usenet knuckleheads and cheap bastard
> hams who pontificate about all so much 'sour grapes' over them.
> (most or all of em' being ex-hamfest dealers who just don't like e-Bay!)
>
> Something, in perspective, so common of the minority of cheap
> ham radio op's we all used to see at the hamfests years ago.
> The hams that used to walking around in dirty 10 year old clothes who
> never had a good word for anything or anybody so they cast
> their bile on that which they could or would not simply walk away from
> because the radio on the table was "too expensive" for them. In short
> it's cheap-assed cranky old men who act like spoiled 8-year-olds.
>
> If they don't like Radio-Mart you'd think they'd just go buy new
> stuff at HRO and AES. R-M has to be doing something right as
> it appears each and every auction they put up ends with someone
> bidding on something. I say more power to them, and if someone don't
> like how they do business, they can go down the street to the next corner
> Deli on the block and get a pastrami-on-rye from them instead.
>
>
> "Lenny" <freilich@comcast.net> wrote in message
> news:xaidnWk3T_SCRSrenZ2dnUVZ_t6dnZ2d@comcast.com...
> > So, what exactly is the Radio Mart scam?
> > Lenny
> >
> > "Unrevealed Source" <Unrevealed_Source@nospam.net> wrote in message
> > news:FrQtf.5665$nj1.4013@fe06.lga...

> > > BDK - you must be new here. (Welcome).
> > >
> > > The Radio-Mart scam is well-known to most regulars of this newsgroup.
> > > Most of us have him filtered out of our eBay searches.
> > >
> > >
> > > "BDK" <kingratay@buckeye-express.com> wrote in message
> > > news:MPG.1e212285ba924974989ca4@news.buckeye-express.com...
> > >> In article <1136084951.368056.242220@g44g2000cwa.googlegroups.com>,
> > >> miso@sushi.com says...
> > >>> "This receiver has not been recently or completely restored by By
> CHUCK
> > >>> RIPPLE, and $900 plus has not been spent restoring it."
> > >>>
> > >>>
> <http://cgi.ebay.com/Collins-R-390A-Nice-One-Getting-in-Short-Supply_W0QQit
> emZ5845509014QQcategoryZ4673QQrdZ1QQcmdZViewItem>
> > >>>
> > >>>
> > >>
> > >>
> > >> Hmm, 97.3% favorable feedback on 3600 transactions...
> > >>
> > >> What exactly is your problem with him?
> > >>
> > >> The real story...please.
> > >>
> > >> BDK
> > >
> > >
> >
> >

5. Re: RARE admission by Radio Mart L@@K

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-01 17:59:14 UTC
From: basfm6 <basfm6@postcards.net>
Message-ID: <11rg63gkmnagm45@corp.supernews.com>
Source record: 14906
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave

The "private" sales stem from many folks here contacting his bidders warning them about his supposed questionable character. One or two folks here found his online auctions and started calling him a crook, then many more folks who have never had a single dealing with him joined the bandwagon. Radio-Mart isn't doing anything different than the normal used gear seller... he just doesn't hide his practices as well. Millions of salespeople use these tactics all day long. If true problems develop Ebay will pull his registered status or kick him off, but he's far from being that bad. The situation concerns him, his buyers, and Ebay... everyone else is either jealous, enjoys causing trouble, or can't afford his stuff. If you don't like his practices, then don't bid.

<miso@sushi.com> wrote in message
news:1136134407.334669.143990@f14g2000cwb.googlegroups.com...

> If Radio-Mart(RM) was an honest broker, then there would be no need for
> the private sales.

6. Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-01 20:49:22 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1136148561.946351.257400@g44g2000cwa.googlegroups.com>
Source record: 14907
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I need to replace an oscilloscope that has gone to the Great Test Bench
in the sky.

What Tektronix scope do you prefer?

I have always like the 7000 series...would you recommend these or
another series?

Thanks

TMT

7. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-01 21:00:17 UTC
From: novatech@eskimo.com
Message-ID: <dp9ft1$g3m$1@eskinews.eskimo.com>
Source record: 14908
Cross-posted to: sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Too_Many_Tools" <too_many_tools@yahoo.com> writes:

>I need to replace an oscilloscope that has gone to the Great Test Bench
>in the sky.

>What Tektronix scope do you prefer?

>I have always like the 7000 series...would you recommend these or
>another series?

>Thanks

>TMT

I use the new Tek DPO scopes for most work, but keep 7904 (500MHz) with
high speed plug-ins and samplers for the times I need analog.

You can get 7k scopes for almost nothing. The DPOs will cost a bunch.

Steve.
--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997
206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

8. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-01 21:17:13 UTC
From: kludge@panix.com
Message-ID: <dp9gsp$i2q$1@panix2.panix.com>
Source record: 14909
Cross-posted to: sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Too_Many_Tools <too_many_tools@yahoo.com> wrote:
>I need to replace an oscilloscope that has gone to the Great Test Bench
>in the sky.
>
>What Tektronix scope do you prefer?
>
>I have always like the 7000 series...would you recommend these or
>another series?

The 7000 series is hard to beat. It's stable, it's not that hard to
work on, and there are plenty of useful plug-ins available at reasonable
prices.

That said, I still have a 545 on my bench at work. The calibration contract
just went over to a new company and the new cal guys aren't really sure what
to make of it....
--scott
--
"C'est un Nagra. C'est suisse, et tres, tres precis."

9. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-01 21:20:47 UTC
From: Pooh Bear <rabbitsfriendsandrelations@hotmail.com>
Message-ID: <43B847AF.1D169241@hotmail.com>
Source record: 14910
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Scott Dorsey wrote:

> Too_Many_Tools <too_many_tools@yahoo.com> wrote:
> >I need to replace an oscilloscope that has gone to the Great Test Bench
> >in the sky.
> >
> >What Tektronix scope do you prefer?
> >
> >I have always like the 7000 series...would you recommend these or
> >another series?
>
> The 7000 series is hard to beat. It's stable, it's not that hard to
> work on, and there are plenty of useful plug-ins available at reasonable
> prices.
>
> That said, I still have a 545 on my bench at work. The calibration contract
> just went over to a new company and the new cal guys aren't really sure what
> to make of it....

Goodness. I had to get rid of a couple of 545s years ago (no room to keep them
).

My current scope at home is a 465. Basic but nice.

Graham

10. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-01 22:58:33 UTC
From: "James F. Mayer" <jfma@ix.netcom.com>
Message-ID: <t8Ztf.955$ZA2.428@newsread1.news.atl.earthlink.net>
Source record: 14911
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1136148561.946351.257400@g44g2000cwa.googlegroups.com...
>I need to replace an oscilloscope that has gone to the Great Test Bench
> in the sky.
>
> What Tektronix scope do you prefer?
>
> I have always like the 7000 series...would you recommend these or
> another series?
>
> Thanks
>
> TMT
>
I like the TEK2465, Personally I don't think that it can be beat for
an analog scope.

11. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-01 23:00:45 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <66ngr1hin5creudun4004eqgp2862945ul@4ax.com>
Source record: 14914
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

ORIGINAL MESSAGE:

On 1 Jan 2006 12:49:22 -0800, "Too_Many_Tools"
<too_many_tools@yahoo.com> wrote:

>I need to replace an oscilloscope that has gone to the Great Test Bench
>in the sky.
>
>What Tektronix scope do you prefer?
>
>I have always like the 7000 series...would you recommend these or
>another series?
>
>Thanks
>
>TMT

~~~~~~

Depends on what you want to use it for.

If you want an older, inexpensive, general purpose 100 Mhz scope, I
think the 465B (not the 465) was the best Tek ever made. They sold for
about $2500 back in the '70s and were worth every penny.

Ok, I'm a bit prejudiced because I worked on the production line for
both models for three years, testing and calibrating. In that time I
did about 2000 of them.

They have been out of production for more than 20 years now, but a
good one can still be had. Shop around. Tek built them to last.

73, Bill W6WRT

p.s. Actual quote from a Tektronix customer: "I gave my purchasing
people instructions that they can buy any kind of scope they want, as
long as they are blue and come from Beaverton, Oregon."
~~~~~~

12. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-01 23:05:21 UTC
From: Dino Papas <kl0s@cox.net>
Message-ID: <kl0s-9469F5.18052101012006@news.east.cox.net>
Source record: 14912
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I finally sold off my great Tek 475 and picked up a Tek 2440 -- nice to
be able to "save" the display and then be able to make measurements on
the signal at your leisure. Especially nice when looking at the slew
rate of the slower op-amps.

Dino KL0S/4

In article <t8Ztf.955$ZA2.428@newsread1.news.atl.earthlink.net>,
"James F. Mayer" <jfma@ix.netcom.com> wrote:

> "Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
> news:1136148561.946351.257400@g44g2000cwa.googlegroups.com...
> >I need to replace an oscilloscope that has gone to the Great Test Bench
> > in the sky.
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> > What Tektronix scope do you prefer?
> >
> > I have always like the 7000 series...would you recommend these or
> > another series?
> >
> > Thanks
> >
> > TMT
> >
> I like the TEK2465, Personally I don't think that it can be beat for
> an analog scope.

13. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-01 23:10:16 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <6hZtf.3293$vL4.3204@bignews1.bellsouth.net>
Source record: 14913
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Too_Many_Tools wrote:
> I need to replace an oscilloscope that has gone to the Great Test Bench
> in the sky.
>
> What Tektronix scope do you prefer?
>
> I have always like the 7000 series...would you recommend these or
> another series?
>
> Thanks
>
> TMT
>
Do you prefer Analog or Digital? Do you have room for an old tube
mainframe scope, or prefer a "portable"?

I have a Tek 454 that I got at a company auction years back where
I used to work (paid $150 for it). The 453,453A,454, 454A series
are easy to work on, and parts are available from many sources
(the nuvistor tubes in the front end and the tunnel diodes in
the sweep circuits can be a bit hard to find, but are available).
The 485 is a look a like that is all solid state with higher BW
but many do not consider it as good a scope design. I would not
turn one away if it were cheap enough though, when working they
do a good job.

The 453,454,485 scopes have a good CRT that will give years of
service. I've been told that the 465-475 series (larger tube)
will suffer from CRT burn-out eventually, the 453-454-485 scopes
rarely need a new crt. (The company where I got the scope from
had bought spare parts to keep all their scopes going, they NEVER
replaced a 453-454 crt but used up all their 465-475 crt spares).

14. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-01 23:12:47 UTC
From: Paul Burridge <pb@shove.your.spam.up.your.arse.atlanticstar.co.uk>
Message-ID: <t9ogr190irbqdu7dhdn98l0ou1udrs1944@4ax.com>
Source record: 14921
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On 1 Jan 2006 12:49:22 -0800, "Too_Many_Tools"
<too_many_tools@yahoo.com> wrote:

>I need to replace an oscilloscope that has gone to the Great Test Bench
>in the sky.
>
>What Tektronix scope do you prefer?

Tek 475.
I have fancier scopes that do fancy stuff, but the 475 is an all-time
classic par excellence. I love it so much I also use it as a
decorative centrepiece for the dining room table.
--

"What is now proved was once only imagin'd" - William Blake

15. Re: RARE admission by Radio Mart L@@K

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-01 23:25:38 UTC
From: Telamon <telamon_spamshield@pacbell.net.is.invalid>
Message-ID: <telamon_spamshield-20988C.15253801012006@newsclstr02.news.prodigy.com>
Source record: 14915
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave

In article <11rg63gkmnagm45@corp.supernews.com>,
"basfm6" <basfm6@postcards.net> wrote:

> The "private" sales stem from many folks here contacting his bidders
> warning them about his supposed questionable character. One or two
> folks here found his online auctions and started calling him a crook,
> then many more folks who have never had a single dealing with him
> joined the bandwagon. Radio-Mart isn't doing anything different than
> the normal used gear seller... he just doesn't hide his practices as
> well. Millions of salespeople use these tactics all day long. If true
> problems develop Ebay will pull his registered status or kick him
> off, but he's far from being that bad. The situation concerns him,
> his buyers, and Ebay... everyone else is either jealous, enjoys
> causing trouble, or can't afford his stuff. If you don't like his
> practices, then don't bid.
>
> <miso@sushi.com> wrote in message
> news:1136134407.334669.143990@f14g2000cwb.googlegroups.com...
>
> > If Radio-Mart(RM) was an honest broker, then there would be no need
> > for the private sales.

"Radio-Mart isn't doing anything different than the normal used gear
seller... he just doesn't hide his practices as well. Millions of
salespeople use these tactics all day long."

Nice justification. I'll be sure to ignore your advice in the future.

Radio-Mart is into buying radios on Ebay and then turning around and
selling them on Ebay for a higher price and pocketing the difference.
It makes perfict sense to look for radios that are undervalued and then
resell them. I and most other people have no problem with that. The
problem is he does not tell the truth about where he got the radios and
the condition of the radios. I don't understand why he is compelled to
do tell stories about the radios he sells but it does not generally
cross the line into outright fraud and treads around in a grey area so
he will continue to be controversial topic in the news group. Going
"private" will further take his sales into the grey area and apparently
that and the story telling are risks he is willing to take. Buyer
beware.

I have not contacted nor am I aware of anyone else who has contacted
bidders about Radio Mart auctions. They may have read about him on
Usenet, which would eliminate any reason to contact them.

I don't care one way or the other about Radio Mart but people that buy from him should be informed about the way he conducts his business.

--
Telamon
Ventura, California

16. Re: RARE admission by Radio Mart L@@K

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-01 23:28:14 UTC
From: Chas <wg2a@earthlink.net>
Message-ID: <iAZtf.3370$M%4.1889@newsread3.news.atl.earthlink.net>
Source record: 14916
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave

Yeah, right! I've been ripped off by that bastard too(along with
numerous others). Claimed the radio was near perfect, found it had been
repainted (not discernable from poor photo) and it smoked after I got it out
of the box. Lets not forget the Shill Bidding he does from his gottahaveit
account!!!!!!! Don't try to defend him, he keeps getting the same negatives
after all these years which shows us, he's still playing the same games with
some defective gear and covering himself with the "Private Sales".

"basfm6" <basfm6@postcards.net> wrote in message
news:11rg63gkmnagm45@corp.supernews.com...
> The "private" sales stem from many folks here contacting his bidders
> warning them about his supposed questionable character. One or two folks
> here found his online auctions and started calling him a crook, then many
> more folks who have never had a single dealing with him joined the
> bandwagon. Radio-Mart isn't doing anything different than the normal used
> gear seller... he just doesn't hide his practices as well. Millions of
> salespeople use these tactics all day long. If true problems develop Ebay
> will pull his registered status or kick him off, but he's far from being
> that bad. The situation concerns him, his buyers, and Ebay... everyone
> else is either jealous, enjoys causing trouble, or can't afford his stuff.
> If you don't like his practices, then don't bid.
>
> <miso@sushi.com> wrote in message
> news:1136134407.334669.143990@f14g2000cwb.googlegroups.com...
>
>> If Radio-Mart(RM) was an honest broker, then there would be no need for
>> the private sales.
>
>

17. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-01 23:36:27 UTC
From: john jardine <john@jjdesigns.fsnet.co.uk>
Message-ID: <dp9p1p$jq3$1@news7.svr.pol.co.uk>
Source record: 14917
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1136148561.946351.257400@g44g2000cwa.googlegroups.com...
> I need to replace an oscilloscope that has gone to the Great Test Bench
> in the sky.
>
> What Tektronix scope do you prefer?
>
> I have always like the 7000 series...would you recommend these or
> another series?
>
> Thanks
>
> TMT
>
Until last month I'd treasured my Tek 7633. Cost the eqiv' of only $60, yet
gave 5 years continuous, unremitting, troublefree service. Lovely bit of
kit. Looked right, felt right and offered a vast, soul pleasing array of
buttons and knobs.
Switched on with the fan purring away, I knew that I was at one with the
world.
Sadly, the display character generator started to fail. Even bought a
service manual and had a poke about. Joy was not to be, a Tek chip was
giving up the ghost. I knew then it's life was drawing to an honourable
close and another Tek scope would have to be sought.
I'd previously fancied the more modern Tek 2445, so downloaded a service
manual.
Shock-horror!, perusal of the circuitry revealed that there is nothing in
them other than a few special Tek chips.
Ended up buying a 100MHz Hitachi scope (equiv of $160). It does much more
than my old Tek, having benefit of modern uP aided cursors and measurements
etc. It's also smaller, lighter and repairable.
I love using it but I can't help feeling there's something missing that's
really crucial. Something that raises an instrument from the status of
'nice' to that of 'beloved'. (probably the Tek fan :).
Obviously I need to get out more.
regards
john

18. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 00:03:07 UTC
From: zwsdotcom@gmail.com
Message-ID: <1136160187.513596.273380@g44g2000cwa.googlegroups.com>
Source record: 14918
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

john jardine wrote:

> I'd previously fancied the more modern Tek 2445, so downloaded a service
> manual.
> Shock-horror!, perusal of the circuitry revealed that there is nothing in
> them other than a few special Tek chips.

I've got a 2445, which I've had for about six years. It was the first equipment purchase made when I started a new job; it was purchased reconditioned from Tucker. I inherited the scope when that employer went bankrupt. I enjoy it very much, but need storage... I have a TDS210 (same provenance) which is pretty good, but I lust after the HP scope I have at work, which has two analog channels and 16 digital channels, and LOADS of memory... *sigh*. So many projects, so little time and money :)

19. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 00:05:23 UTC
From: John-Del <ohger1s@aol.com>
Message-ID: <1136160323.896346.250500@z14g2000cwz.googlegroups.com>
Source record: 14920
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Too_Many_Tools wrote:
> I need to replace an oscilloscope that has gone to the Great Test Bench
> in the sky.
>
> What Tektronix scope do you prefer?
>
> I have always like the 7000 series...would you recommend these or
> another series?

I have used a 7603 for about 15 years for general troubleshooting, and it's my favorite scope. It's rock solid, and bright and sharp. I haven't been able to find a horiz plug-in with TV sync, but the trigger is so good I can get it to lock on video anyway. Only problems are the huge Mallory capacitors in the power supply that will open without warning. Replace all of these and you'll have no trouble at all.

John

20. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 00:05:24 UTC
From: James Sweet <jamessweet@hotmail.com>
Message-ID: <87_tf.3536$aB1.2558@trnddc02>
Source record: 14919
Cross-posted to: sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Too_Many_Tools wrote:
> I need to replace an oscilloscope that has gone to the Great Test Bench
> in the sky.
>
> What Tektronix scope do you prefer?
>
> I have always like the 7000 series...would you recommend these or
> another series?
>
> Thanks
>
> TMT
>

I love my 465B, depends on what you need in a scope though.

21. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 00:17:00 UTC
From: Rube <rube@nospamers.com>
Message-ID: <43B870FB.F6590F0C@nospamers.com>
Source record: 14922
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Here is a link to the Tek forun on Yahoo,
lots of great info on new and older models.

perhaps you can make a few bucks parting
out the older scope.

http://groups.yahoo.com/group/TekScopes/

22. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 00:20:59 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <53sgr1l9of9o6dgv5cq6i9gq1i5c9r6jfl@4ax.com>
Source record: 14923
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On 1 Jan 2006 21:00:17 GMT, novatech@eskimo.com (Steven Swift) wrote:

>"Too_Many_Tools" <too_many_tools@yahoo.com> writes:
>
>>I need to replace an oscilloscope that has gone to the Great Test Bench
>>in the sky.
>
>>What Tektronix scope do you prefer?
>
>>I have always like the 7000 series...would you recommend these or
>>another series?
>
>>Thanks
>
>>TMT
>
>I use the new Tek DPO scopes for most work, but keep 7904 (500MHz) with
>high speed plug-ins and samplers for the times I need analog.
>
>You can get 7k scopes for almost nothing. The DPOs will cost a bunch.
>
>Steve.

7104 is an even nicer analog scope, with its phenomenal writing rate.

A used 11801 or 11802 and a sampling head will get you a 12 or 20 GHz
dual-trace digital scope for under $2K, a *much* nicer sampling system
than the 7000-series stuff.

My everyday scope is a TDS2012, which is great for most things. You
can take beautiful photos of the color screen for engr notes, manuals,
or test procedures.

Great plugin: 7A22 (or 1A7A, for the 547) which has switchable
bandwidth and differential input down to 10 uV/cm.

John

23. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 00:44:08 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <dp9t0oiip1@puck.litech.org>
Source record: 14924
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

In rec.radio.amateur.homebrew Pooh Bear <rabbitsfriendsandrelations@hotmail.com> wrote:

> Scott Dorsey wrote:

>> Too_Many_Tools <too_many_tools@yahoo.com> wrote:
>> >I need to replace an oscilloscope that has gone to the Great Test Bench
>> >in the sky.
>> >
>> >What Tektronix scope do you prefer?
>> >
>> >I have always like the 7000 series...would you recommend these or
>> >another series?
>>
>> The 7000 series is hard to beat. It's stable, it's not that hard to
>> work on, and there are plenty of useful plug-ins available at reasonable
>> prices.
>>
>> That said, I still have a 545 on my bench at work. The calibration contract
>> just went over to a new company and the new cal guys aren't really sure what
>> to make of it....

> Goodness. I had to get rid of a couple of 545s years ago (no room to keep them
>).

> My current scope at home is a 465. Basic but nice.

Tek 465M (465B plus digital meter stuff) is my favorite of the ones
in the shop. Next fave is a non-Tek: Phillips PM3055.

--
Mike Andrews W5EGO 5WPM
mikea@mikea.ath.cx Extra
Tired old sysadmin working on his code speed

24. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 00:54:19 UTC
From: Arthur Harrison <theremin1@worldnet.att.net>
Message-ID: <%Q_tf.214981$qk4.114848@bgtnsc05-news.ops.worldnet.att.net>
Source record: 14925
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

My favorite for LF analog work (<200MHz) is the is the Tek TAS485 They
stopped making this, along with all their analog scopes, which is a cryin'
shame, since digital really isn't good for everything.

-Art

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1136148561.946351.257400@g44g2000cwa.googlegroups.com...
> I need to replace an oscilloscope that has gone to the Great Test Bench
> in the sky.
>
> What Tektronix scope do you prefer?
>
> I have always like the 7000 series...would you recommend these or
> another series?
>
> Thanks
>
> TMT
>

25. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 01:09:51 UTC
From: "Dave Plowman (News)" <dave@davenoise.co.uk>
Message-ID: <4de2aa6286dave@davenoise.co.uk>
Source record: 14927
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

In article <66ngr1hin5creudun4004eqgp2862945ul@4ax.com>,
Bill Turner <noway@nohow.com> wrote:
> If you want an older, inexpensive, general purpose 100 Mhz scope, I
> think the 465B (not the 465) was the best Tek ever made. They sold for
> about $2500 back in the '70s and were worth every penny.

Yup. Does everything most need from a scope. But in the UK, they still
fetch decent money.

--
*If all the world is a stage, where is the audience sitting?

Dave Plowman dave@davenoise.co.uk London SW
To e-mail, change noise into sound.

26. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 01:21:11 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1136164871.509477.182630@z14g2000cwz.googlegroups.com>
Source record: 14926
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Thanks for the replies so far...they are appreciated.

One feature of the 7000 series that I have appreciated is the plugin capability.

Spectrum analyzer, semiconductor tester, differential amps, etc. all add to its flexibility.

Does anyone have a history of the 7000 series?

Another issue I have seen with the older scopes is at least one can usually repair them....with parts from another parts scope. The newer scopes are reaching the point of throw away status with no parts available and if by chance they are, the price prevents a reasonable repair.

TMT

27. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 01:50:43 UTC
From: Jim Yanik <jyanik@abuse.gov>
Message-ID: <Xns973ED3EFFE6E8jyanikkuanet@129.250.170.86>
Source record: 14928
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in
news:1136164871.509477.182630@z14g2000cwz.googlegroups.com:

> Does anyone have a history of the 7000 series?

What you want is the book "Winning with People;The First 40 Years of
Tektronix",by Marshall M.Lee,published by Tektronix,10/86
There's no ISBN number,though.Maybe you can find a copy on Ebay.

It's a fantastic story about Tek from start to the late 1980's.
Unfortunately,it does not cover the decline of Tek.

> The newer
> scopes are reaching the point of throw away status with no parts
> available and if by chance they are, the price prevents a reasonable
> repair.

That is the new TEK.

--
Jim Yanik
jyanik
at
kua.net

28. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 02:05:09 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <uh2hr15stm4tem2jtae96lkn3f7u4lav7k@4ax.com>
Source record: 14930
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

ORIGINAL MESSAGE:

On Mon, 02 Jan 2006 00:12:47 +0100, Paul Burridge
<pb@shove.your.spam.up.your.arse.atlanticstar.co.uk> wrote:

>I have fancier scopes that do fancy stuff, but the 475 is an all-time
>*classic* par excellence. I love it so much I also use it as a
>decorative centrepiece for the dining room table.

~~~~~~

Now there's my kind of guy!!

73, Bill W6WRT
~~~~~~

29. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 02:07:52 UTC
From: Pooh Bear <rabbitsfriendsandrelations@hotmail.com>
Message-ID: <43B88AF8.7D07133B@hotmail.com>
Source record: 14929
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Dave Plowman (News)" wrote:

> In article <66ngr1hin5creudun4004eqgp2862945ul@4ax.com>,
> Bill Turner <noway@nohow.com> wrote:
> > If you want an older, inexpensive, general purpose 100 Mhz scope, I
> > think the 465B (not the 465) was the best Tek ever made. They sold for
> > about $2500 back in the '70s and were worth every penny.
>
> Yup. Does everything most need from a scope. But in the UK, they still
> fetch decent money.

You'll find them regularly on ebay btw.

I'd rather like a 2465 though. They do indeed fetch quite a fair price
still.

Graham

30. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 04:36:49 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <IuCdnVTBBvBoMSXeRVn-oQ@adelphia.com>
Source record: 14931
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Ignoramus32654 wrote:
(snip)
>
> I will sell the 475 though, two scopes is too much.

That's just crazy talk!

31. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 04:47:45 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <ptbhr1t7vved4uju9brap34vi251p437bb@4ax.com>
Source record: 14932
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Sun, 01 Jan 2006 18:05:09 -0800, the renowned Bill Turner
<noway@nohow.com> wrote:

>
>ORIGINAL MESSAGE:
>
>On Mon, 02 Jan 2006 00:12:47 +0100, Paul Burridge
><pb@shove.your.spam.up.your.arse.atlanticstar.co.uk> wrote:
>
>>I have fancier scopes that do fancy stuff, but the 475 is an all-time
>>*classic* par excellence. I love it so much I also use it as a
>>decorative centrepiece for the dining room table.
>
>~~~~~~
>
>Now there's my kind of guy!!
>
>73, Bill W6WRT

He's crocheted the nicest doily and 'scope cosy for it too.

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

32. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 06:19:18 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <2ehhr1177a399sv3eildusvc9hnfb4jt32@4ax.com>
Source record: 14934
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

ORIGINAL MESSAGE:

On Sun, 01 Jan 2006 23:47:45 -0500, Spehro Pefhany
<speffSNIP@interlogDOTyou.knowwhat> wrote:

>He's crocheted the nicest doily and 'scope cosy for it too.
~~~~~~

Just thinking about it brings tears to my eyes. :-)

73, Bill W6WRT
~~~~~~

33. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 06:38:03 UTC
From: Robert Baer <robertbaer@earthlink.net>
Message-ID: <fT3uf.5006$nu6.4861@newsread1.news.pas.earthlink.net>
Source record: 14933
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Scott Dorsey wrote:

> Too_Many_Tools <too_many_tools@yahoo.com> wrote:
>
>>I need to replace an oscilloscope that has gone to the Great Test Bench
>>in the sky.
>>
>>What Tektronix scope do you prefer?
>>
>>I have always like the 7000 series...would you recommend these or
>>another series?
>
>
> The 7000 series is hard to beat. It's stable, it's not that hard to
> work on, and there are plenty of useful plug-ins available at reasonable
> prices.
>
> That said, I still have a 545 on my bench at work. The calibration contract
> just went over to a new company and the new cal guys aren't really sure what
> to make of it....
> --scott

Well, you *could* earn consulting fees to train them...

34. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 07:08:18 UTC
From: john_c@tpg.com.au
Message-ID: <43b8cb5f.32800902@free.teranews.com>
Source record: 14935
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Sun, 01 Jan 2006 15:00:45 -0800, Bill Turner <noway@nohow.com>
wrote:

>
>If you want an older, inexpensive, general purpose 100 Mhz scope, I
>think the 465B (not the 465) was the best Tek ever made. They sold for
>about $2500 back in the '70s and were worth every penny.
>
>Ok, I'm a bit prejudiced because I worked on the production line for
>both models for three years, testing and calibrating. In that time I
>did about 2000 of them.

Hello Bill,
you specifically say "465B (not the 465) was the best Tek ever made"

Can you elaborate a little bit more there Bill. As a Tekscope
enthusiast, I am just interested to know what the improvements
were to the 465B over the 465 to make it more highly sought after.

Regards,
John Crighton
Sydney

35. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 08:24:23 UTC
From: john_c@tpg.com.au
Message-ID: <43b8d277.34617210@free.teranews.com>
Source record: 14936
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Sun, 01 Jan 2006 18:10:16 -0500, Ken Scharf
<wa2mzeNOTTHIS@bellsouth.net> wrote:

>I have a Tek 454 that I got at a company auction years back where
>I used to work (paid $150 for it). The 453,453A,454, 454A series
>are easy to work on,

Hello Ken,
I also have a Tek 454. I bought that model
because I read on groups like this that it is "easy"
to work on. I must respectively disagree with you.

My 454 is "not easy" to work on and yet I see people
saying that it is. I am just wondering if you are repeating
what you have read on the internet supporting a Myth
that the 454 is easy to work on or speaking from
practical experience.

I would like to clean the switch wafers of the main
timebase switch. My 454 is put together like an onion.
How do I "easily" gain access to this switch,
which is buried in the heart of the onion?

Slip the covers off your instrument, yes that is
very easy, a matter of seconds. Now have a look
and tell me how to clean the timebase switch?
How many hours would it take to remove the soldered
wiring off the boards so that they can be removed to
gain access to the switch and then solder the wires back
with nice factory quality solder joints, not with quick
blob soldering with insulation peeling back off the wires.
Quality work only.

Several minutes work would be easy if there was
connectors on the boards but not in this scope.
When we talk about "hours" we are in a different
category......pain in the butt/difficult.

How long would it take you, Ken, to clean the switch
from woa to go? Scope back up and working?

How long would it take you to remove the fan, fan wiring
tag strips and fan mounting brackets?
How do you get your screw driver on the screws holding
the brackets when there are modules covering them up?

Just have a quick look then come back and tell me
if you still reckon this scope is easy to work on, in the
inner sanctums.

Regards,
John Crighton
Sydney

36. Re: Identifying a mystery diode

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 09:43:23 UTC
From: Paul VK3DIP <pmcmahon@telstra.com>
Message-ID: <%A6uf.166743$V7.71130@news-server.bigpond.net.au>
Source record: 14937

Hi, Thanks everyone for the suggestions.
I tried putting 5 mA through it (approx 1.6v forward voltage) and examining it closely with a camera that I tested as being good at seeing IR and nothing showed. I am leaning towards the high voltage theory of two series silicon diodes in the one package. Anybody know a manufacturer of these sorts of things or even what the package type is called?

Paul.

"Allodoxaphobia" <bit-bucket@config.com> wrote in message news:slrndrdauk.21g6.bit-bucket@shell.config.com...
> On Sat, 31 Dec 2005 00:05:28 GMT, Paul VK3DIP wrote:
>> Hi all I recently purchased a bag of unmarked supposedly diodes and I am
snip
it is the top one
>> in this picture.
>> http://www.users.bigpond.com/pmcmahon/mysterydiode.jpg
>>

>
> Don't count it out as not being an LED. Some opaque-to-the-human-eye
> packages are, in fact, quite clear in either the IR or UV range.
> It could be an IR LED. (There's been many cases where light-sensitive,
> 'ordinary' diodes caused 'problems' in circuits on a well lit workbench.
> The 'thing' would work one way in a buttoned-up case, and another way
> under test.)
>
> HTH
> Jonesy
> --
> Marvin L Jones | jonz | W3DHJ | linux
> Pueblo, Colorado | @ | Jonesy | OS/2 __
> 38.24N 104.55W | config.com | DM78rf | SK

37. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 10:50:58 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dpb0ii0tcp@drn.newsguy.com>
Source record: 14938
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

John Crighton wrote...
>
> I would like to clean the switch wafers of the main
> timebase switch. My 454 is put together like an onion.
> How do I "easily" gain access to this switch,
> which is buried in the heart of the onion?

I hope you're giving a hypothetical example, because if
you really do need to "clean" a Tektronix scope switch,
your scope may already be a lost cause. Time to move on.

--
Thanks,
- Win

38. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 14:16:13 UTC
From: K3HVG <jeepp@adelphia.net>
Message-ID: <uPadnQPsVo01qSTeRVn-pw@adelphia.com>
Source record: 14939
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Gee whiz.. guys... nobody likes the OS-8???? (heh heh)

Too_Many_Tools wrote:
> I need to replace an oscilloscope that has gone to the Great Test Bench
> in the sky.
>
> What Tektronix scope do you prefer?
>
> I have always like the 7000 series...would you recommend these or
> another series?
>
> Thanks
>
> TMT
>

39. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 15:07:38 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <23gir1t52clig3039ng97i7jrmfjj2mj94@4ax.com>
Source record: 14940
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

ORIGINAL MESSAGE:

On Mon, 02 Jan 2006 07:08:18 GMT, john_c@tpg.com.au (John Crighton)
wrote:

>Hello Bill,
>you specifically say "465B (not the 465) was the best Tek ever made"
>
>Can you elaborate a little bit more there Bill. As a Tekscope
>enthusiast, I am just interested to know what the improvements
>were to the 465B over the 465 to make it more highly sought after.
>
>Regards,
>John Crighton
>Sydney

~~~~~~

In spite of having the number in common, the 465 and 465B are
completely different scopes. Their performance specs are nearly
identical but inside the box, their circuitry is completely different.
The "B" is much easier to calibrate and uses soldered-in transistors
instead of socketed ones, a great advantage especially when the scope
gets old and sockets start to get cranky.

I wouldn't turn down a 465 if that was the only thing available, but
all us calibration techs greatly preferred the 465B.

73, Bill W6WRT
~~~~~~

40. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 15:12:25 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <jfgir11s9tpphnmt3h7rhdrb2hv5tedga2@4ax.com>
Source record: 14941
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

ORIGINAL MESSAGE:

On Mon, 02 Jan 2006 08:24:23 GMT, john_c@tpg.com.au (John Crighton)
wrote:

>I also have a Tek 454. I bought that model
>because I read on groups like this that it is "easy"
>to work on. I must respectively disagree with you.

~~~~~~

John is right. Tek scopes are not "easy" to work on, at least not the
solid state ones.

My first day on the job as a 465 calibration tech I went home with a
headache and almost called in the next day and quit. I had done TV
repair for 20 years but had never seen such complicated, unfamiliar
circuitry or construction. Fortunately I stuck it out and came to
appreciate them for what they were: The best scopes in the world.

73, Bill W6WRT
~~~~~~

41. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 15:21:22 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <ongir15okmmp3s09apphqmkfo7bh0gli1u@4ax.com>
Source record: 14942
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

ORIGINAL MESSAGE:

On 2 Jan 2006 02:50:58 -0800, Winfield Hill
<Winfield_member@newsguy.com> wrote:

> I hope you're giving a hypothetical example, because if
> you really do need to "clean" a Tektronix scope switch,
> your scope may already be a lost cause. Time to move on.

~~~~~~

If Tek scopes of that vintage have one Achilles heel, it's the tiny
fork-shaped switch contacts used in many places throughout the unit..

Rarely do they need "cleaning", but rather the contact presssure needs
to be increased slighty. If you know how to do it, it's a quick, easy
fix, but if you don't you can easily destroy the contact.

Because the "fork" of the switch was designed to press against gold
plating, they made the contact pressure as light as possible to
prolong the life of the relatively soft gold. In some cases, it is
just too light and erratic operation is the result.

Here's how to do it right: With a small screwdriver, gently push
against the "U" of the fork, just a tiny amount. The idea is you want
to bend the fork down WITHOUT bending the spring it is attached to.
Under no circumstances try to bend the spring or you will almost
certainly destroy it. Bend only the little gold fork, and bend it only
a very small amount. Done right, it works every time.

73, Bill W6WRT
~~~~~~

42. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 16:19:23 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <pan.2006.01.02.16.19.23.430358@wb6hqk.ampr.org>
Source record: 14943
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Tue, 27 Dec 2005 02:02:15 +0000, James F. Mayer wrote:

> I need to generate 6v DC and 90v DC from a 12v DC automotive electrical
> system to power an RT-70A/GRC surplus military radio. I need about 250 mA
> at +6 volts and about 75 mA at +90 volts. I was thinking about using the
> guts from an old battery back up but it would be a bit of a kluge. Are
> there any 90 volt regulators in the 78xx series? How do I get the voltage
> up to where I can get something that I can get the 90 volts from.

Probably the easiest is to obtain one of the original power supplies.

Most installations using the RT-70 were in conjunction with an RT-66/RT-67
or RT-68 and an audio distribution amplifier. A separate vibrator power
supply was supplied those cases where the RT-70 was used 'stand alone'.
One approach to homebrewing a vehicular power supply is to mimic the
original vibrator supply. Provide the heater supply through dropping
resistors and emulate the vibrator supply by building an inverter using a
pair of switching transistors and a junk 60 Hz power transformer.
Regulation isn't necessary if you get the right transformer. The only
thing the least bit tricky with this approach is properly snubbing the
primary leakage inductance to prevent destroying the switching transistors.

Probably the most compact approach is to build a flyback supply with both
a six and 90 volt output. Regulate the 6 volt output and let the 90 volt
output track. The advantage of the flyback supply is that it can be
designed to operate over a wide range of input voltages while maintaining
a regulated output. In addition, the overall size will be much smaller due
to the high switching frequencies (300 kHz typical) used by modern flyback
controller chips.

>Getting
> the 6 volts doesn't seem to be a problem. A 7806 off the battery should
> work for that unless any of you can see a problem doing that. Maybe the
> common common would be a problem. Right now I'm running it off of an HP6299A
> and an HP6236B with commons jumpered. I'd like to be able to go portable
> with it.

43. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 16:58:15 UTC
From: maxfoo <maxfoo@punkass.com>
Message-ID: <0smir1hrskgtkbkf7v0ocfjidau0f4tovv@4ax.com>
Source record: 14944
Cross-posted to: sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On 1 Jan 2006 12:49:22 -0800, "Too_Many_Tools" <too_many_tools@yahoo.com> wrote:

>I need to replace an oscilloscope that has gone to the Great Test Bench
>in the sky.
>
>What Tektronix scope do you prefer?
>
>I have always like the 7000 series...would you recommend these or
>another series?
>
>Thanks
>
>TMT

Yeah, the 7000's make great boat anchors too ;)

44. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 17:46:36 UTC
From: Andy Cuffe <acuffe@gmail.com>
Message-ID: <1kpir1pop90ql1noi9llnch0e16bfkbddr@4ax.com>
Source record: 14945
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

>
>My 454 is "not easy" to work on and yet I see people
>saying that it is. I am just wondering if you are repeating
>what you have read on the internet supporting a Myth
>that the 454 is easy to work on or speaking from
>practical experience.

Well, it's easy compared to other solid state portable Tek scopes.
Its main advantage is far fewer impossible to find custom parts like
all the later solid state scopes.
Andy Cuffe

acuffe@gmail.com

45. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 17:50:29 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1136224229.374708.216830@g43g2000cwa.googlegroups.com>
Source record: 14946
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Actually this raises the next question that I was going to ask...."What is the easiest Tek scope to work on?"

As I have mentioned before I tend to favor the 5000/7000 line because of the flexibility but my options are open for the next purchase.

I have mentioned that the newer used Tek scopes I have looked into did not seem to have repairability designed into them. I have also heard of more than a few horror stories of parts being unobtainable.

TMT

46. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 17:53:28 UTC
From: PaulCsouls <paulcsouls@worldnet.att.net>
Message-ID: <o0qir15irto6uauuji365c7qqial1qqbvj@4ax.com>
Source record: 14947
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Mon, 02 Jan 2006 07:21:22 -0800, Bill Turner <noway@nohow.com>
wrote:

>
>ORIGINAL MESSAGE:
>
>On 2 Jan 2006 02:50:58 -0800, Winfield Hill
><Winfield_member@newsguy.com> wrote:
>
>> I hope you're giving a hypothetical example, because if
>> you really do need to "clean" a Tektronix scope switch,
>> your scope may already be a lost cause. Time to move on.
>
>
>~~~~~~
>
>If Tek scopes of that vintage have one Achilles heel, it's the tiny
>fork-shaped switch contacts used in many places throughout the unit..
>
>Rarely do they need "cleaning", but rather the contact presssure needs
>to be increased slighty. If you know how to do it, it's a quick, easy
>fix, but if you don't you can easily destroy the contact.
>
>Because the "fork" of the switch was designed to press against gold
>plating, they made the contact pressure as light as possible to
>prolong the life of the relatively soft gold. In some cases, it is
>just too light and erratic operation is the result.
>
>Here's how to do it right: With a small screwdriver, gently push
>against the "U" of the fork, just a tiny amount. The idea is you want
>to bend the fork down WITHOUT bending the spring it is attached to.
>Under no circumstances try to bend the spring or you will almost
>certainly destroy it. Bend only the little gold fork, and bend it only
>a very small amount. Done right, it works every time.
>
>73, Bill W6WRT

I just had a 485 go flaky. I had to push on the front cover to get it
to work. Is there a web site or a book that would help me get it going
again?

Thanks
PaulC

47. Re: RARE admission by Radio Mart L@@K

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 18:07:50 UTC
From: miso@sushi.com
Message-ID: <1136225270.392484.252250@g14g2000cwa.googlegroups.com>
Source record: 14848
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave

Trust me, I don't bid on Radio-Mart (RM) gear. Long before I knew he
was a crook, I saw a radio he had for sale that I wanted to bid. The
private sales turned me off. My thought was what does this asshole have
to hide? The private sales are the perfect way to do shilling.

basfm6 wrote:
> The "private" sales stem from many folks here contacting his bidders warning
> them about his supposed questionable character. One or two folks here found
> his online auctions and started calling him a crook, then many more folks
> who have never had a single dealing with him joined the bandwagon.
> Radio-Mart isn't doing anything different than the normal used gear
> seller... he just doesn't hide his practices as well. Millions of
> salespeople use these tactics all day long. If true problems develop Ebay
> will pull his registered status or kick him off, but he's far from being
> that bad. The situation concerns him, his buyers, and Ebay... everyone else
> is either jealous, enjoys causing trouble, or can't afford his stuff. If you
> don't like his practices, then don't bid.
>
> <miso@sushi.com> wrote in message
> news:1136134407.334669.143990@f14g2000cwb.googlegroups.com...
>
> > If Radio-Mart(RM) was an honest broker, then there would be no need for
> > the private sales.

48. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 19:07:21 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2006.01.02.19.07.27.215209@example.net>
Source record: 14849
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Sun, 01 Jan 2006 12:49:22 -0800, Too_Many_Tools wrote:

> I need to replace an oscilloscope that has gone to the Great Test Bench
> in the sky.
>
> What Tektronix scope do you prefer?
>
> I have always like the 7000 series...would you recommend these or
> another series?
>
> Thanks
>
> TMT

If Tektronix scopes are still as good as I've always known them to be,
then the only consideration should be your budget. Then get the
toppest-of-the-line you can afford.

Have Fun!
Rich

49. Weller parts closeout Washington DC area

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 19:07:46 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <0sOdnWKZccye5yTenZ2dnUVZ_sednZ2d@comcast.com>
Source record: 14850

W. S. Jenks has been having a close-out of excess Weller soldering
inventory.
Some prices good, others as expected in marketplace

Of note for homebrew builders are soldering tip prices for the
"PT" (Weller TCP series stations) at $ 3.62 each

"ET" (Weller EC series and WES51, WESD51 stations) at $ 3.41

IF your are a "Lead Free" assembler - you inquire with Jenks -- since many
distributors are clearing their inventories of earlier products (tips) not
suitable for upcoming "Lead Free" assembly requirements in production
assembly & mfg. rework.

TC205 sponges (most Weller iron stands) .. 66 cents each

They also have earlier Ungar, Edsyn, Antex and Wahl soldering products on
sale as well.

W.S Jenks
953 V Street, NE
Washington, D.C. 20018 US
Tel: 011.202.529.6020
Fax: 011.202.832.3411
Toll Free: 877.WSJENKS
http://www.wsjenks.com/

w9gb

50. Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 19:13:11 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1136229191.768561.62190@g49g2000cwa.googlegroups.com>
Source record: 14851
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

Reading the thread on the Voltaic pile in sci.chem.electrochem.battery,
I started considering what would one have to do to build a "Robinson
Crusoe" battery to power equipment in an emergency.

Assuming a battery of 12v and respectable current to power
communications equipment, how would you do it?

What materials would you use?

How would you charge it?

I look forward to your contributions.

TMT

51. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 19:21:03 UTC
From: Paul Burridge <pb@shove.your.spam.up.your.arse.atlanticstar.co.uk>
Message-ID: <06vir11bgn46e0vsjcveg3ub8oe8psqr14@4ax.com>
Source record: 14853
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Mon, 02 Jan 2006 08:24:23 GMT, john_c@tpg.com.au (John Crighton)
wrote:

>On Sun, 01 Jan 2006 18:10:16 -0500, Ken Scharf
><wa2mzeNOTTHIS@bellsouth.net> wrote:
>
>
>>I have a Tek 454 that I got at a company auction years back where
>>I used to work (paid $150 for it). The 453,453A,454, 454A series
>>are easy to work on,
>
>
>Hello Ken,
>I also have a Tek 454. I bought that model
>because I read on groups like this that it is "easy"
>to work on. I must respectively disagree with you.

I came across this on the 'net, which may or may not be useful in your
particular case, John...

How to FIX the Fuzzy/Wide Trace on Your Tek 465 or 475 Scope!

Cleaning the Volts/Div Attenuator Switch Contacts in Tektronix 4XX
Oscilloscopes

It might work wonders for your classic Tektronix 400-series scope.
And you can probably do it yourself, even if you've never opened a
scope, before!
(C) Copyright 2004, by Thomas P. Gootee

Here is a copy of the procedure that I sent to a guy with a Tek 475
that had a fuzzy trace, and "distorted" when he adjusted the volts/div
knob. His original email is below, followed by my reply.

--------- Original message --------
From: "Mike D"

To: "tomg@fullnet.com"
Date: 01-30-03 08:41

Do you repair scopes? I have a tek 475 that powers up but is very
fuzzy and distorts when adjusting the volts/division knob.

I don't know if its worth repairing or if you can reccomend a better
scope from your stock for a comparable price.

Thank You

Mike

Mike,

Yes. I do repair *lots* of oscilloscopes. I do it mainly for in-house
instruments that are to be resold. But, I also do it occasionally on a
fee-for-service basis.

The symptoms you describe sound familiar and it sounds like a pretty
easy repair job, which I could complete for $50. However, depending on
your location, if you are in the continental USA, the shipping could
be $20 to $30 or more, each way.

So, let me tell you what I would try first and maybe you can do it
yourself. (I'd hate to see someone spend more than $100 for something
that they might be able to do in less than 30 to 60 minutes.)

Without seeing the scope myself, I could easily be wrong. But, from
your description, my opinion is that, most-likely, the switch contacts
in the volts/div attenuators (and/or also in the trigger-view and
bandwidth-limiter) are dirty or oxidized.

They are very easy to get to and to clean. And, although it might
sound a little daunting to a first-timer, it really isn't difficult at
all, requires only very-basic tools and supplies, and will probably
work wonders for your scope's performance.

Here is the basic procedure:

Unplug the scope and place it on a large, flat, smooth surface, such
as a table or floor.

Remove the scope's case: Start by removing the four screws in the rear
panel's cord-wrap feet. They may be either Phillips-head or "star"
(Torx) types. The feet may come off along with the screws. There are
usually also two other screws, near the top and bottom of the rear
panel, in the center. Remove them, too. After all six of the screws
have been removed, rotate the carry-handle up and out of the way of
the front panel, probably to the "straight up" position.

It is recommended that you stand the scope on its front panel end and
pull the case up and off. But, if you DON'T have a front panel COVER,

you can either try it anyway, hopefully on a padded surface (and carefully!), or else just leave the scope sitting on its feet.

From the rear of the scope, with your fingers on the sides of the case, push on the rear panel with your thumbs. If the scope is not standing on its front panel end, you will need to be very careful, as the scope slides out of the case, to also support the front end, keeping it up, so the bottom front edge of the case does not damage any of the internal parts of the scope by scraping against them.

Note that if the scope's CASE is DENTED, especially if it's dented on a corner-edge, it could be *VERY* difficult to remove the scope from its case! It might then require *QUITE* A BIT of brute force, pushing on the rear panel (or pulling on the edges of the front panel) and pulling on the rear edges (or pushing on the front edges) of the case. (Sometimes, in that situation, it helps to alternate between trying to move the left and right sides; and maybe even also to alternate between moving the top and bottom.)

After the scope is out (whew!), see the note in the next paragraph, and then carefully stand the scope on its SIDE, so that the vertical board, on the side of the scope, behind the v/div knobs, is facing UP.

NOTE! I usually try to lift and move the scope's internal assembly ONLY by the edges of the front panel (or CRT bezel) and rear panel, or other solid structural/steel parts. And be careful not to set the scope on any objects or uneven surfaces that might touch any of the internal components.

Just behind the volts/div knobs, inside the scope, there are two silver, metal "boxes", which house the attenuator/switch assemblies.

Remove all of the necessary screws to open the top of one of the boxes. (Do only one box at a time.)

Inside the box, there are four little rectangular, plastic "attenuator modules", each usually labeled with "somenumber X" (e.g. "4X"). Using a longnose pliers, or something similar (or whatever works), grasp one of them and pull *straight* up, to remove it. I'm not sure if they're static-sensitive, or not. But, just in case they are, I would lay it either on an all-metal part of the scope, or on a piece of aluminum foil, or something like that (i.e. on bare metal), with the pins facing down.

I usually only remove one attenuator module at a time, just so I don't get them mixed up. But you could do two at a time, if it's more convenient (which it often is).

While looking at the area of the circuit board where the attenuator module came from, rotate the corresponding v/div switch back and forth, until you can see which positions raise and lower the tiny gold U-shaped double-contact sets, up and down, from/to the circuit board.

Cut a small piece of clean, white paper, as lint-free as possible, into a thin strip, a little wider than one set of contacts, and long enough for you to handle/manipulate (probably something like three or four inches long and 3/16"-or-so wide?). Do not use cloth, which might snag, or anything abrasive. (You may need to cut new pieces, periodically, as you go through this procedure.)

Turn the volts/div knob, to raise the set of contacts that you're about to clean, up and away from the board.

Carefully slide one end of the paper under the contacts.

Apply a drop or two (or three) of isopropyl (rubbing) alcohol to the paper, under the contacts. It's OK to get it on the contacts, board, etc, too. I assume that the more concentrated the isopropyl is, the better. But I've had good results using the plain 70% drugstore type, and the 90% drugstore type. (The results would probably be even better if you use Caig's "De-Oxit" product, for the cleaning, followed by Caig's "Pro-Gold". They're available at Caig's Website.)

Immediately turn the volts/div switch so that the contacts are lowered against the paper and then (carefully!) pull the paper *straight* out from under the contacts. This should probably be repeated several times for each set of contacts.

Be careful. If you bend the contacts, you may be in trouble. And they are *quite* fragile. But, it should be fine as long as you try to pull the paper as parallel to the board as possible. Certainly, don't ever pull straight *upward* on it, and not even more upward than sideways.

Also, NOTE that a couple of the contact-pairs, the two that are nearest to the front of the scope, are raised and lowered by the AC/GND/DC lever-switch, instead of by the volts/div switch.

When all of the visible contacts have been cleaned that way, replace the attenuator module, carefully, by pushing its pins back into the holes in the circuit board and then pushing it all the way in. (It might not hurt to also clean the attenuator module's pins, although I've never needed to, nor tried to.)

[If you *DO* happen to have some of Caig's "De-Oxit" product, it might be good to apply a tiny amount to each pin of each attenuator block. I usually also apply it to the metal shield, wherever it makes contact with the screws or their mountings (and the the screw-posts/mountings themselves), and wherever the shield makes contact with any other metal surfaces, and also on those metal surfaces themselves. And the screws themselves should also be treated, as should any nearby "ground" screws (i.e. loosen, treat/clean, and re-seat). ALSO, make sure that you treat the grounding "spring" that protrudes up from one of the screws, where the crew touches it, and on its top where it touches the scope's case (and also do that part of the inside of the case). You can often SEE the difference in color of the metal, as the oxidation is removed, especially if you use the concentrated form of De-Oxit that comes in the small plastic "needle-dropper" bottle.]

Replace any attenuator modules that won't be in the way, any more. Then, remove the next attenuator module(s) and repeat the above procedures, until you've gotten to all of the switch contacts in the "box".

When one whole channel's switches are done, replace the metal cover over the attenuator/switch assembly and do the second channel in exactly the same way (or, what the heck, maybe *better*, if that was your first time...). [NOTE that the "fingers" that may be on one side of the shield/box need to go back into the same position that they were in before the top was removed.]

Now that you know what the tiny, gold switch contacts LOOK like, you will be able to much-more-easily find the SIMILAR ones that are on the SAME circuit board, but are toward the REAR of the scope, near the middle of the board. There is no cover over them. So they're MUCH easier to get to. There should be one group of four of them and another group of two of them. Moving the Bandwidth-Limiter and Trigger-View controls, on the front panel, will raise and lower them. Clean them in the same way as described above, for the attenuator switch contacts.

One OTHER thing to check: (I'm not sure, at the moment, if this is only for the 465 model, or if it also applies to the 475:) JUST behind the metal attenuator/switch shield "boxes", there may be a screw that connects a metal piece of the box/shield to the circuit board. If that screw is loose (which I have seen on about a third of the 465 scopes I've worked on!), or if it doesn't make good contact, you may see very noticeable effects in the trace(s), such as fuzziness or distortion, and may see trace-distortion effects when adjusting the trigger-level control (possibly especially-so at the highest frequencies), and possibly other triggering problems.

If cleaning the switch contacts doesn't fix the problems you're having with the "fuzzy" or wide trace, and the attenuator switch anomalies, further diagnosis and repair may be necessary.

Let me know if you try this, and how it works. If you would still like me to work on your scope, just let me know.

And let me know if I can be of more help.

Thanks again!

Best regards,

Tom

Tom Gootee
tomg@fullnet.com
http://www.fullnet.com/u/tomg

--

"What is now proved was once only imagin'd" - William Blake

52. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 19:42:35 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1136230955.431454.299390@g43g2000cwa.googlegroups.com>
Source record: 14852
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Yeah, the 7000's make great boat anchors too ;) "

Actually the size has never bothered me.

If you look at the footprint a 7000 series scope takes and then compare
it to the space taken up by a supposely "portable" Tek scope, there is
little difference.

Also since my scope rarely leaves my test bench, the weight difference
(which is small) does not matter.

What does matter is dependability, reliability and cost....all factors
that the newer Tek scopes seem to fail at.

TMT

53. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 20:41:26 UTC
From: Phil Hobbs <pcdhSpamMeSenseless@us.ibm.com>
Message-ID: <43B98FF6.8080307@us.ibm.com>
Source record: 14854
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

John Larkin wrote:

>
> 7104 is an even nicer analog scope, with its phenomenal writing rate.

Seconded. That microchannel plate CRT is a thing of great beauty. I used to use one with the Polaroid film plate on the front when I was a grad student.

They had a pretty nice analog storage scope whose number I forget--it was a portable and looked a lot like a 485.
>
> A used 11801 or 11802 and a sampling head will get you a 12 or 20 GHz
> dual-trace digital scope for under $2K, a *much* nicer sampling system
> than the 7000-series stuff.

I have an 11801A that I use all the time, with the 40 GHz sampling head. I got it for about a fifth of the cost of the overpriced modern version.

LeCroy is selling a 100 GHz sampling scope, which uses the Picosecond Pulse Labs 100 GHz sampler. Used to be that LeCroy made nice user interfaces but couldn't build a vertical amplifier to save their lives.

Cheers,

Phil Hobbs

54. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 21:06:02 UTC
From: phoneme@025379386.for.email.address
Message-ID: <43b98fda.772495@news.clear.net.nz>
Source record: 14855
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

On 2 Jan 2006 11:13:11 -0800, "Too_Many_Tools"
<too_many_tools@yahoo.com> wrote:

>Reading the thread on the Voltaic pile in sci.chem.electrochem.battery,
>I started considering what would one have to do to build a "Robinson
>Crusoe" battery to power equipment in an emergency.
>
>Assuming a battery of 12v and respectable current to power
>communications equipment, how would you do it?

I wonder what you envisage as "respectable"? I guess 0.5 to 2 amps
might be useful. You would certainly want to minimise power usage in
an emergency situation.

>
>What materials would you use?
>
>How would you charge it?

I guess it mostly depends on what you have available.
Your assumption seems to be a "rechargeable" battery - but I suspect
that a primary battery would be easier.
For a rechargeable - a lead cell would be simplest provided you can
find some. If you cannot get acid - sodium bicarbonate works tolerably
well (it works quite well in a number of cells and does not cause the
"chlorine" problems of cells that use salt solution as electrolyte).
Other than having a few solar cells lying around (there are heaps of
them in garden lights in NZ), you might need to rig up some sort of
hand-cranked generator.

Primary cells using large areas of "plate" could provide some current.
I would say use a plastic buckets for each cell, or something of
similar size. Two litre milk bottles with the tops cut off might be
big enough, provided you can stuff enough connected plates in each,
using paper or plastic seperators.
The most common materials for the plates might be aluminium and either
tin plate (food cans), or roofing iron.

However, in the end I suspect that unless I were cast away on a desert
island with no batteries, I would be endeavouring to FIND something
that already works. There are batteries in many items these days -
from cellphones to garden lights to toys.

Much more important is how to keep them charged. This is where a large primary battery (supplying a small current at sufficient voltage), could be used to charge the NiMH and other batteries that are commonly found.

Just my tuppence worth.

Eric

55. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 21:25:02 UTC
From: boB_K7IQ
Message-ID: <t76jr1pq0789ccicuhfipikd8mj8r450en@4ax.com>
Source record: 14856
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

I have thought about this before. I would hope there was at least some
wire to hook up the battery.

How would you make wire ? Maybe this island has some metal of some
sort on it for both purposes.

boB

On Mon, 02 Jan 2006 21:06:02 GMT, phoneme@025379386.for.email.address
(Eric Sears) wrote:

>On 2 Jan 2006 11:13:11 -0800, "Too_Many_Tools"
><too_many_tools@yahoo.com> wrote:
>
>>Reading the thread on the Voltaic pile in sci.chem.electrochem.battery,
>>I started considering what would one have to do to build a "Robinson
>>Crusoe" battery to power equipment in an emergency.
>>
>>Assuming a battery of 12v and respectable current to power
>>communications equipment, how would you do it?
>
>I wonder what you envisage as "respectable"? I guess 0.5 to 2 amps
>might be useful. You would certainly want to minimise power usage in
>an emergency situation.
>
>>
>>What materials would you use?
>>
>>How would you charge it?
>
>I guess it mostly depends on what you have available.
>Your assumption seems to be a "rechargeable" battery - but I suspect
>that a primary battery would be easier.
>For a rechargeable - a lead cell would be simplest provided you can
>find some. If you cannot get acid - sodium bicarbonate works tolerably
>well (it works quite well in a number of cells and does not cause the
>"chlorine" problems of cells that use salt solution as electrolyte).
>Other than having a few solar cells lying around (there are heaps of
>them in garden lights in NZ), you might need to rig up some sort of
>hand-cranked generator.
>
>
>Primary cells using large areas of "plate" could provide some current.
>I would say use a plastic buckets for each cell, or something of

>similar size. Two litre milk bottles with the tops cut off might be
>big enough, provided you can stuff enough connected plates in each,
>using paper or plastic seperators.
>The most common materials for the plates might be aluminium and either
>tin plate (food cans), or roofing iron.
>
>However, in the end I suspect that unless I were cast away on a desert
>island with no batteries, I would be endeavouring to FIND something
>that already works. There are batteries in many items these days -
>from cellphones to garden lights to toys.
>
>Much more important is how to keep them charged. This is where a large
>primary battery (supplying a small current at sufficient voltage),
>could be used to charge the NiMH and other batteries that are commonly
>found.
>
>Just my tuppence worth.
>
>Eric
>

56. Reliable Inexpensive Electronic Weather Instruments

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 21:43:38 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1136238218.674982.221060@z14g2000cwz.googlegroups.com>
Source record: 14857
Cross-posted to: sci.geo.meteorology,sci.electronics.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I am looking for any suggestions as to reliable inexpensive electronic weather instruments.

With several units that I have tested from places like Target, Walmart, Radio Shack I find that they are not repeatable, readings drift and will die when the weather gets cold.

Has anyone found a source or brand that they have had good success with?

Any leads or links to building your own instrumentation?

Thanks

TMT

57. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 21:45:53 UTC
From: john_c@tpg.com.au
Message-ID: <43b98f53.4708397@free.teranews.com>
Source record: 14858
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On 2 Jan 2006 02:50:58 -0800, Winfield Hill
<Winfield_member@newsguy.com> wrote:

>John Crighton wrote...
>>
>> I would like to clean the switch wafers of the main
>> timebase switch. My 454 is put together like an onion.
>> How do I "easily" gain access to this switch,
>> which is buried in the heart of the onion?
>
> I hope you're giving a hypothetical example, because if
> you really do need to "clean" a Tektronix scope switch,
> your scope may already be a lost cause. Time to move on.
>
>
>--
> Thanks,
> - Win

In the 1960s Tek did sell a switch servicing kit for the
large dog kennel size 500 series models with wafer
style rotary switches. I remember a pouch containing
several bightly coloured pencil sized applicators of oil,
grease and various cleaning fluids.

"Time to move on" Oh no! I would never get rid of an
instrument for the want of a bit of effort. My 454 is now on
the reserve bench as back up scope number 3 behind a
couple of 465 scopes. My 454 has a nice clip on metal
cover to protect the front panel. This is the scope I am
more comfortable with lending to friends, knowing that
the front panel is not going to get bashed in transit in the
back of a car.

The slight intermittent problem with the timebase switch
is minor, I can live with that. My 454 from the late 60s
has big wafer switches just like the big 500 series scopes
so cleaning these big wafer switches is easy providing
you can get access to them. Access is the problem
in the 454.

Bill Turner mentioned the U shaped contacts in the
465. Yes that was tricky tending to them but they
are getatable. I would never dump a piece of test

gear because of dodgy switches. I just don't have
the heart to dump any test equipment. I should try
and be stronger but I can't. Being a test equipment
nut is a life crippling disease. :-)

Regards,
John Crighton
Sydney

58. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 21:47:10 UTC
From: Rube <tekscopefan@nospamershere.com>
Message-ID: <43B99F5E.E54DC3CC@nospamershere.com>
Source record: 14859
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

> Here is a link to the Tek forun on Yahoo,
> lots of great info on new and older models.
>
> http://groups.yahoo.com/group/TekScopes/
>
>
> I just had a 485 go flaky. I had to push on the front cover to get it
> to work. Is there a web site or a book that would help me get it going
> again?
>
> Thanks
> PaulC

59. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 21:56:05 UTC
From: kludge@panix.com
Message-ID: <dpc7hlauo1@panix2.panix.com>
Source record: 14860
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

John Crighton <john_c@tpg.com.au> wrote:
>
>My 454 is "not easy" to work on and yet I see people
>saying that it is. I am just wondering if you are repeating
>what you have read on the internet supporting a Myth
>that the 454 is easy to work on or speaking from
>practical experience.

Everything is relative. If you think the 454 is hard to work on, you should
just SEE the insides of the 7000. Likewise the 7000 is a whole lot easier
to work on than the latest generation of digital scopes.

>I would like to clean the switch wafers of the main
>timebase switch. My 454 is put together like an onion.
>How do I "easily" gain access to this switch,
>which is buried in the heart of the onion?

If the switch wafers really are bad, the easiest thing to do is to use
Cramolin with a very long spray tube. You can get it into very small
places without having to do as much dissasembly. But make sure the
contacts are tight, first. I don't see contact cleaning needed on
the scopes of this era, although some of the older ones did.
--scott

--
"C'est un Nagra. C'est suisse, et tres, tres precis."

60. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 21:58:12 UTC
From: Rube <tekscopefan@nospamershere.com>
Message-ID: <43B9A1F2.8483141@nospamershere.com>
Source record: 14861
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

http://www.science-projects.com/RedoxPot/RedoxPotentials.htm

http://latteier.com/potato/

61. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 21:58:13 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <b68jr1ltpcqvvegqsl8m28767srh61h5sv@4ax.com>
Source record: 14862
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Mon, 02 Jan 2006 15:41:26 -0500, Phil Hobbs
<pcdhSpamMeSenseless@us.ibm.com> wrote:

>John Larkin wrote:
>
>>
>> 7104 is an even nicer analog scope, with its phenomenal writing rate.
>
>Seconded. That microchannel plate CRT is a thing of great beauty. I used to
>use one with the Polaroid film plate on the front when I was a grad student.
>
>They had a pretty nice analog storage scope whose number I forget--it was a
>portable and looked a lot like a 485.
>>
>> A used 11801 or 11802 and a sampling head will get you a 12 or 20 GHz
>> dual-trace digital scope for under $2K, a *much* nicer sampling system
>> than the 7000-series stuff.
>
>I have an 11801A that I use all the time, with the 40 GHz sampling head. I
>got it for about a fifth of the cost of the overpriced modern version.

When you start getting powerup timebase errors, which you will, call
me.

>
>LeCroy is selling a 100 GHz sampling scope, which uses the Picosecond Pulse
>Labs 100 GHz sampler. Used to be that LeCroy made nice user interfaces but
>couldn't build a vertical amplifier to save their lives.
>

I'm still mad at Walter for a dirty trick he pulled about 20 years
ago. I built an ff&f equivalent of his 4208 Camac 1 ns TDC module, at
a customer's request. So he cut his price in half the next time he
bid, specifically to kill me. The customer, bless his heart,
disqualified LeCroy on "technical grounds."

John

62. Re: Reliable Inexpensive Electronic Weather Instruments

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 22:07:48 UTC
From: maxfoo <maxfoo@punkass.com>
Message-ID: <es8jr19jct3na974cihs1a8ovlptk275gc@4ax.com>
Source record: 14863
Cross-posted to: sci.geo.meteorology,sci.electronics.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On 2 Jan 2006 13:43:38 -0800, "Too_Many_Tools" <too_many_tools@yahoo.com> wrote:

>I am looking for any suggestions as to reliable inexpensive electronic
>weather instruments.
>
>With several units that I have tested from places like Target, Walmart,
>Radio Shack I find that they are not repeatable, readings drift and
>will die when the weather gets cold.
>
>Has anyone found a source or brand that they have had good success
>with?
>
>Any leads or links to building your own instrumentation?
>
>Thanks
>
>TMT

Circuit cellar had an article on that a year or two ago.
someone's design contest abstract
http://www.circuitcellar.com/design2k/winners/abstracts/WeatherMon.html

63. Re: Reliable Inexpensive Electronic Weather Instruments

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 22:10:59 UTC
From: maxfoo <maxfoo@punkass.com>
Message-ID: <p59jr1pv0uhm3vikhk58lvtekgrk8u68na@4ax.com>
Source record: 14864
Cross-posted to: sci.geo.meteorology,sci.electronics.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Mon, 02 Jan 2006 17:07:48 -0500, maxfoo <maxfoo@punkass.com> wrote:

>On 2 Jan 2006 13:43:38 -0800, "Too_Many_Tools" <too_many_tools@yahoo.com> wrote:
>
>>I am looking for any suggestions as to reliable inexpensive electronic
>>weather instruments.
>>
>>With several units that I have tested from places like Target, Walmart,
>>Radio Shack I find that they are not repeatable, readings drift and
>>will die when the weather gets cold.
>>
>>Has anyone found a source or brand that they have had good success
>>with?
>>
>>Any leads or links to building your own instrumentation?
>>
>>Thanks
>>
>>TMT
>
>Circuit cellar had an article on that a year or two ago.
>someone's design contest abstract
>http://www.circuitcellar.com/design2k/winners/abstracts/WeatherMon.html

here's another...
http://www.circuitcellar.com/msp430/3b.htm

search circuit cellars website you'll come up with a ton of designs.

64. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 22:21:25 UTC
From: kludge@panix.com
Message-ID: <dpc915$do8$1@panix2.panix.com>
Source record: 14865
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On the basic Tektronix thread, I still have this Tek 650HR with a luminance problem. It appears to be the "PLRT INV & TRIG PICK-OFF" chip, which is a Tektronix 155-0216-00. Earlier revisions used a Tektronix 155-0032-00.

Tek says support for the monitor (and probably for the rest of the Group 26 products) was discontinued in 1996. They can't tell me what the original manufacturer's part number is, or even who the original manufacturer of the chip was, and the service manual lists only the house number.

Any Tek technicians happen to have some of these in the junk box, or know what the real part number is? The input that takes the base comparison voltage from the aperture pot is pulling the input way down.
--scott

--
"C'est un Nagra. C'est suisse, et tres, tres precis."

65. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 22:23:25 UTC
From: JR North <jasonrnorth@bigfoot.com>
Message-ID: <GLqdnTGgj_F_OiTeRVn-uQ@seanet.com>
Source record: 14866
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

in an emergency, For materials, I would use a brick to smash Radio
Shack's window and get all the batteries I need.
JR

Too_Many_Tools wrote:
> Reading the thread on the Voltaic pile in sci.chem.electrochem.battery,
> I started considering what would one have to do to build a "Robinson
> Crusoe" battery to power equipment in an emergency.
>
> Assuming a battery of 12v and respectable current to power
> communications equipment, how would you do it?
>
> What materials would you use?
>
> How would you charge it?
>
> I look forward to your contributions.
>
> TMT
>

--

Home Page: http://www.seanet.com/~jasonrnorth

66. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 22:28:54 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <v4ajr15d6ulcj3c9bj0p0i25p9ukdjk14h@4ax.com>
Source record: 14867
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Mon, 02 Jan 2006 13:58:13 -0800, John Larkin
<jjlarkin@highNOTlandTHIStechnologyPART.com> wrote:

[snip]
>
>I'm still mad at Walter for a dirty trick he pulled about 20 years
>ago. I built an ff&f equivalent of his 4208 Camac 1 ns TDC module, at
>a customer's request. So he cut his price in half the next time he
>bid, specifically to kill me. The customer, bless his heart,
>disqualified LeCroy on "technical grounds."
>
>John
>

I've had that happen once. A competing company with nearly 20 staff
quoted 1/3 what I quoted for a design job.

The potential customer said, "Something's fishy", and gave the
contract to me.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

67. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 22:30:54 UTC
From: philo <philo@privacy.net>
Message-ID: <Goednf0gfr84NCTeRVn-hg@athenet.net>
Source record: 14868
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1136229191.768561.62190@g49g2000cwa.googlegroups.com...
> Reading the thread on the Voltaic pile in sci.chem.electrochem.battery,
> I started considering what would one have to do to build a "Robinson
> Crusoe" battery to power equipment in an emergency.
>
> Assuming a battery of 12v and respectable current to power
> communications equipment, how would you do it?
>
> What materials would you use?
>

a "Robinson Crusoe" battery must be one you'd make if stranded on an
island...
so you'd have plenty of sea water.
you could use electrodes of copper and zinc

68. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 22:49:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11rjbfkmhc57t17@corp.supernews.com>
Source record: 14869
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Scott Dorsey wrote:
> On the basic Tektronix thread, I still have this Tek 650HR with a luminance
> problem. It appears to be the "PLRT INV & TRIG PICK-OFF" chip, which is
> a Tektronix 155-0216-00. Earlier revisions used a Tektronix 155-0032-00.
>
> Tek says support for the monitor (and probably for the rest of the Group 26
> products) was discontinued in 1996. They can't tell me what the original
> manufacturer's part number is, or even who the original manufacturer of the
> chip was, and the service manual lists only the house number.
>
> Any Tek technicians happen to have some of these in the junk box, or know
> what the real part number is? The input that takes the base comparison
> voltage from the aperture pot is pulling the input way down.
> --scott

Parts with numbers beginning with 155 are Tek designed and made - they had their own IC design and production facility. So that's the "real" part number. I don't know of any Tek made ICs for which anyone else makes an even roughly equivalent part -- if they did, Tek would have bought them instead of designing and manufacturing their own, which cost a small fortune.

Roy Lewallen, W7EL

69. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-02 23:12:04 UTC
From: TimPerry <timperry@noaspamadelphia.net>
Message-ID: <GtmdndXKbejaLiTeRVn-sg@adelphia.com>
Source record: 14870
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

"philo" <philo@privacy.net> wrote in message
news:Goednf0gfr84NCTeRVn-hg@athenet.net...
>
> "Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
> news:1136229191.768561.62190@g49g2000cwa.googlegroups.com...
> > Reading the thread on the Voltaic pile in sci.chem.electrochem.battery,
> > I started considering what would one have to do to build a "Robinson
> > Crusoe" battery to power equipment in an emergency.
> >
> > Assuming a battery of 12v and respectable current to power
> > communications equipment, how would you do it?
> >
> > What materials would you use?
> >
>
>
> a "Robinson Crusoe" battery must be one you'd make if stranded on an
> island...
> so you'd have plenty of sea water.
> you could use electrodes of copper and zinc
>

get a bunch of coconut shells. place an electric eel in each. wire in
series. make odd numbered cells male eels and even numbered cells female
eels. that way you should have alternating currents :)

70. Re: Reliable Inexpensive Electronic Weather Instruments

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 00:01:37 UTC
From: artie <artie.m@gmail.com>
Message-ID: <020120061601372934%artie.m@gmail.com>
Source record: 14871
Cross-posted to: sci.geo.meteorology,sci.electronics.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

In article <1136238218.674982.221060@z14g2000cwz.googlegroups.com>,
Too_Many_Tools <too_many_tools@yahoo.com> wrote:

> I am looking for any suggestions as to reliable inexpensive electronic
> weather instruments.
>
> With several units that I have tested from places like Target, Walmart,
> Radio Shack I find that they are not repeatable, readings drift and
> will die when the weather gets cold.
>
> Has anyone found a source or brand that they have had good success
> with?
>
> Any leads or links to building your own instrumentation?
>
> Thanks
>
> TMT
>

"reliable" and "inexpensive" are at best orthogonal, if not downright
contradictory...

I just want the stuff to work. Had a heathkit weather station for a
number of years, but when I worked 2m packet, it thought I was on
jupiter -- temperatures zoomed down and barometric pressure went
really, really high (and that was *after* I put RF bypassing on a lot
of high Z nodes, and shielded the thing).

I've had no trouble with the Davis Instruments stuff. Currently run
Vantage Pro2 stations at a number of locations, using the Weather
Display software.

It's not cheap, but it works.

--
Namaste--

71. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 00:05:06 UTC
From: amdx <amdx@worldnet.att.net>
Message-ID: <2dc55$43b9bfbc$18d6b488$19937@KNOLOGY.NET>
Source record: 14872
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

```
"TimPerry" <timperry@noaspamadelphia.net> wrote in message
news:GtmdndXKbejaLiTeRVn-sg@adelphia.com...
>
> "philo" <philo@privacy.net> wrote in message
> news:Goednf0gfr84NCTeRVn-hg@athenet.net...
> >
> > "Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
> > news:1136229191.768561.62190@g49g2000cwa.googlegroups.com...
> > > Reading the thread on the Voltaic pile in
sci.chem.electrochem.battery,
> > > I started considering what would one have to do to build a "Robinson
> > > Crusoe" battery to power equipment in an emergency.
> > >
> > > Assuming a battery of 12v and respectable current to power
> > > communications equipment, how would you do it?
> > >
> > > What materials would you use?
> > >
> >
> >
> > a "Robinson Crusoe" battery must be one you'd make if stranded on an
> > island...
> > so you'd have plenty of sea water.
> > you could use electrodes of copper and zinc
> >
>
> get a bunch of coconut shells. place an electric eel in each. wire in
> series. make odd numbered cells male eels and even numbered cells female
> eels. that way you should have alternating currents :)
>
That's no fair, you saw the professor do that, Then Gilligan ate the eels!
```

72. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 00:11:21 UTC
From: "Dave Plowman (News)" <dave@davenoise.co.uk>
Message-ID: <4de328dd98dave@davenoise.co.uk>
Source record: 14873
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

In article <Goednf0gfr84NCTeRVn-hg@athenet.net>,
philo <philo@privacy.net> wrote:
> a "Robinson Crusoe" battery must be one you'd make if stranded on an
> island... so you'd have plenty of sea water. you could use electrodes of
> copper and zinc

Plenty of that on the average desert island...;-)

--
*It IS as bad as you think, and they ARE out to get you.

Dave Plowman dave@davenoise.co.uk London SW
To e-mail, change noise into sound.

73. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 00:18:02 UTC
From: Jim Yanik <jyanik@abuse.gov>
Message-ID: <Xns973FC4386DA8Cjyanikkuanet@129.250.170.85>
Source record: 14875
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in
news:1136224229.374708.216830@g43g2000cwa.googlegroups.com:

> Actually this raises the next question that I was going to ask...."What
> is the easiest Tek scope to work on?"

T921/22 or T932/35,hands down.

No TEK-made ICs,simple switches,low parts count,all solid-state.
(excluding CRT,of course)
Easy to access all parts of the scope,better than any other TEK scope..

--
Jim Yanik
jyanik
at
kua.net

74. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 00:23:24 UTC
From: Jim Yanik <jyanik@abuse.gov>
Message-ID: <Xns973FC521532B2jyanikkuanet@129.250.170.85>
Source record: 14876
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Rich Grise <richgrise@example.net> wrote in
news:pan.2006.01.02.19.07.27.215209@example.net:

> On Sun, 01 Jan 2006 12:49:22 -0800, Too_Many_Tools wrote:
>
>> I need to replace an oscilloscope that has gone to the Great Test Bench
>> in the sky.
>>
>> What Tektronix scope do you prefer?
>>
>> I have always like the 7000 series...would you recommend these or
>> another series?
>>
>> Thanks
>>
>> TMT
>
> If Tektronix scopes are still as good as I've always known them to be,
> then the only consideration should be your budget. Then get the
> toppest-of-the-line you can afford.
>
> Have Fun!
> Rich
>
>
>

Just do not plan on repairing or calibrating them yourself.
Their "service manuals" have NO component-level schematics or parts lists.
Calibrations are done by PC-based software,and may call for test equipment
you don't have. Power supplies are purchased-parts.

The TDS scopes are engineered to be module-exchange repair only.

--
Jim Yanik
jyanik
at
kua.net

75. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 00:31:06 UTC
From: meow2222@care2.com
Message-ID: <1136248266.774928.135230@o13g2000cwo.googlegroups.com>
Source record: 14874
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

Dave Plowman (News) wrote:
> In article <Goednf0gfr84NCTeRVn-hg@athenet.net>,
> philo <philo@privacy.net> wrote:
> > a "Robinson Crusoe" battery must be one you'd make if stranded on an
> > island... so you'd have plenty of sea water. you could use electrodes of
> > copper and zinc
>
> Plenty of that on the average desert island...;-)

I've been wondering that too. I'd likely pick salt water electrolyte
and carbon and steel electrodes. Assuming there is no ready metal on
the island, hopefully there would be a zip on some clothing, a button
or something. Burnt vegetation could provide the carbon.

I found a little 1" or so bottletop sized cell gave in the region of
half an amp at 1v. The electrodes corrode quickly, in a day.

NT

76. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 00:33:48 UTC
From: Jim Yanik <jyanik@abuse.gov>
Message-ID: <Xns973FC6E4219C3jyanikkuanet@129.250.170.85>
Source record: 14879
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

kludge@panix.com (Scott Dorsey) wrote in
news:dpc915$do8$1@panix2.panix.com:

> On the basic Tektronix thread, I still have this Tek 650HR with a
> luminance problem. It appears to be the "PLRT INV & TRIG PICK-OFF"
> chip, which is a Tektronix 155-0216-00. Earlier revisions used a
> Tektronix 155-0032-00.
>
> Tek says support for the monitor (and probably for the rest of the
> Group 26 products) was discontinued in 1996. They can't tell me what
> the original manufacturer's part number is, or even who the original
> manufacturer of the chip was, and the service manual lists only the
> house number.

155-xxxx-xx and 234-xxxx-xx ICs were made **BY TEK**(they should have told
you that),and they sold off the IC manufacturing unit to Maxim,who turned
around and stopped making them,as TEK did not buy in the volumes Maxim
wanted.

NO other company makes those 155 or 234 prefixed ICs.

>
> Any Tek technicians happen to have some of these in the junk box, or
> know what the real part number is? The input that takes the base
> comparison voltage from the aperture pot is pulling the input way
> down. --scott
>
>

The one good thing is that the 155-0032-xx was used in a lot of TEK
products.You can find them in 465's,IIRC,on the trigger PCB.
Try Ebay,or search electronic salvage companies that sell used TEK
products.

I worked for TEK for 21.5 years as a service tech in their field
offices,repairing and calibrating scopes,TM500,and TV test equipment.

--
Jim Yanik
jyanik
at
kua.net

77. Rockwell GPS recievers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 00:48:45 UTC
From: "Chuck S." <chuckwa3iac@verizon.net>
Message-ID: <NRjuf.3503$i65.1730@trndny05>
Source record: 14877

Has anyone used the Rockwell gps boards to lock a 10MHz oscillator? If so, where can I get one cheep?

--
Yours truly,

Chuck

WA3IAC

FN20la

http://www.qsl.net/wa3iac/

78. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 00:48:55 UTC
From: qrk <SpamTrap@spam.net>
Message-ID: <29ijr15923pim2ih03vovp4rsr3mea6ihl@4ax.com>
Source record: 14878
Cross-posted to: sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Sun, 01 Jan 2006 22:04:57 GMT, Ignoramus32654
<ignoramus32654@NOSPAM.32654.invalid> wrote:

>I will sell the 475 though, two scopes is too much.

Don't you mean "not enough"? Two is sort of a minimum working level. 3
or 4 is nice to have! Can't beat the 465, 475, and 7000 series. Also
use the 305x series when I need storage, math, or documenation.

Mark

79. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 00:54:58 UTC
From: TimPerry <timperry@noaspamadelphia.net>
Message-ID: <vo6dncG4dp_5ViTenZ2dnUVZ_sidnZ2d@adelphia.com>
Source record: 14881
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

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"amdx" <amdx@worldnet.att.net> wrote in message
news:2dc55$43b9bfbc$18d6b488$19937@KNOLOGY.NET...
>
> "TimPerry" <timperry@noaspamadelphia.net> wrote in message
> news:GtmdndXKbejaLiTeRVn-sg@adelphia.com...
> >
> > "philo" <philo@privacy.net> wrote in message
> > news:Goednf0gfr84NCTeRVn-hg@athenet.net...
> > >
> > > "Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
> > > news:1136229191.768561.62190@g49g2000cwa.googlegroups.com...
> > > > Reading the thread on the Voltaic pile in
> sci.chem.electrochem.battery,
> > > > I started considering what would one have to do to build a "Robinson
> > > > Crusoe" battery to power equipment in an emergency.
> > > >
> > > > Assuming a battery of 12v and respectable current to power
> > > > communications equipment, how would you do it?
> > > >
> > > > What materials would you use?
> > > >
> > >
> > >
> > > a "Robinson Crusoe" battery must be one you'd make if stranded on an
> > > island...
> > > so you'd have plenty of sea water.
> > > you could use electrodes of copper and zinc
> > >
> >
> > get a bunch of coconut shells. place an electric eel in each. wire in
> > series. make odd numbered cells male eels and even numbered cells female
> > eels. that way you should have alternating currents :)
> >
> That's no fair, you saw the professor do that, Then Gilligan ate the
eels!
>
how come the professor could make a thermopile out of coconuts but couldn't
fix a 2 foot hole in a boat?
```

80. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 00:55:30 UTC
From: john_c@tpg.com.au
Message-ID: <43b9c718.18987073@free.teranews.com>
Source record: 14880
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Mon, 02 Jan 2006 20:21:03 +0100, Paul Burridge
<pb@shove.your.spam.up.your.arse.atlanticstar.co.uk> wrote:

>I came across this on the 'net, which may or may not be useful in your
>particular case, John...

Hello Paul,
thanks very much for sharing those gems.
I have stored them away.

I had a good laugh at your dining room table
centre piece admisssions and the follow up doily
and scope cosy remarks. Heh Heh heh.....

I must admit when I first got my 465 I just couldn't
keep my hands off it and I had it covered up with
a tea towel in between playing with it.

When you have lusted after something for decades
and you finally get it. Oh what a feeling!

Regards,
John Crighton
Sydney

81. Re: Rockwell GPS recievers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 01:11:49 UTC
From: laura halliday <marsgal42@hotmail.com>
Message-ID: <1136250709.401861.134800@g14g2000cwa.googlegroups.com>
Source record: 14882

Chuck S. <chuckwa3...@verizon.net> wrote:

> Has anyone used the Rockwell gps boards to
> lock a 10MHz oscillator? If so, where can I get
> one cheep?

Define "cheap".

Have you tried EBay? I've picked up a number
of OEM GPS receivers there, both Motorola
OnCore and Rockwell Jupiter units.

Laura Halliday VE7LDH "Yeah but no but
Grid: CN89mg yeah but no but..."
ICBM: 49 16.05 N 122 56.92 W - V. Pollard

82. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 01:54:44 UTC
From: Tony Wesley <tonywesley@gmail.com>
Message-ID: <1136253284.049770.150510@g44g2000cwa.googlegroups.com>
Source record: 14883
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

TimPerry wrote:
> how come the professor could make a thermopile out of coconuts but couldn't
> fix a 2 foot hole in a boat?

He could have fixed the boat but he didn't want to. He was hoping to
get somewhere with Mary Ann.

83. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 02:01:15 UTC
From: Ken Taylor <ken@home.nz>
Message-ID: <hVkuf.12054$vH5.601562@news.xtra.co.nz>
Source record: 14884
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"Bart Rowlett" <bart@wb6hqk.ampr.org> wrote in message
news:pan.2006.01.02.16.19.23.430358@wb6hqk.ampr.org...
> On Tue, 27 Dec 2005 02:02:15 +0000, James F. Mayer wrote:
>
> > I need to generate 6v DC and 90v DC from a 12v DC automotive
electrical
> > system to power an RT-70A/GRC surplus military radio. I need about 250
mA
> > at +6 volts and about 75 mA at +90 volts. I was thinking about using
the
> > guts from an old battery back up but it would be a bit of a kluge. Are
> > there any 90 volt regulators in the 78xx series? How do I get the
voltage
> > up to where I can get something that I can get the 90 volts from.
>
> Probably the easiest is to obtain one of the original power supplies.
>
> Most installations using the RT-70 were in conjunction with an RT-66/RT-67
> or RT-68 and an audio distribution amplifier. A separate vibrator power
> supply was supplied those cases where the RT-70 was used 'stand alone'.
> One approach to homebrewing a vehicular power supply is to mimic the
> original vibrator supply. Provide the heater supply through dropping
> resistors and emulate the vibrator supply by building an inverter using a
> pair of switching transistors and a junk 60 Hz power transformer.
> Regulation isn't necessary if you get the right transformer. The only
> thing the least bit tricky with this approach is properly snubbing the
> primary leakage inductance to prevent destroying the switching
transistors.
>
> Probably the most compact approach is to build a flyback supply with both
> a six and 90 volt output. Regulate the 6 volt output and let the 90 volt
> output track. The advantage of the flyback supply is that it can be
> designed to operate over a wide range of input voltages while maintaining
> a regulated output. In addition, the overall size will be much smaller due
> to the high switching frequencies (300 kHz typical) used by modern flyback
> controller chips.
>
> >Getting
> > the 6 volts doesn't seem to be a problem. A 7806 off the battery should
> > work for that unless any of you can see a problem doing that. Maybe the
> > common common would be a problem. Right now I'm running it off of an
HP6299A
> > and an HP6236B with commons jumpered. I'd like to be able to go portable

> > with it.
>

Here's a reference to 'Silicon Chip' magazine, who ran some articles about these devices.
http://www.siliconchip.com.au/cms/A_30674/article.html

I recall seeing a commercial unit which was a semiconductor equivalent of the vibrator, two AC132 transistors (IIRC) as a multivibrator running into a transformer. The article above gives enough hints to be useful though.

Here's some other useful links:
http://www.radios.freeserve.co.uk/vibrators/vib.htm

Woops, here we go, found the one I was after:
http://www.vmarsmanuals.co.uk/newsletter_articles/vibrator.pdf
Circuit for the solid-state vibrator.

Cheers.

Ken

84. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 02:03:23 UTC
From: john_c@tpg.com.au
Message-ID: <43b9cdbd.20688672@free.teranews.com>
Source record: 14885
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On 2 Jan 2006 16:56:05 -0500, kludge@panix.com (Scott Dorsey) wrote:

>John Crighton <john_c@tpg.com.au> wrote:
>>
>>My 454 is "not easy" to work on and yet I see people
>>saying that it is. I am just wondering if you are repeating
>>what you have read on the internet supporting a Myth
>>that the 454 is easy to work on or speaking from
>>practical experience.
>
>Everything is relative. If you think the 454 is hard to work on, you should
>just SEE the insides of the 7000. Likewise the 7000 is a whole lot easier
>to work on than the latest generation of digital scopes.

Yes I agree everything is relative. An easy to repair
comment should be defined a bit better, perhaps
against time or compared against something else
say removing a hard drive from a home conputer.
Half a dozen screws and the cover is off,
Pull two connectors and remove two or four
mounting screws and the hard drive is out.
I would call that easy.
A job that takes less that 15 minutes I would say is easy.

>>I would like to clean the switch wafers of the main
>>timebase switch. My 454 is put together like an onion.
>>How do I "easily" gain access to this switch,
>>which is buried in the heart of the onion?
>
>If the switch wafers really are bad, the easiest thing to do is to use
>Cramolin with a very long spray tube. You can get it into very small
>places without having to do as much dissasembly. But make sure the
>contacts are tight, first.

I must admit I have never come across Cramolin. I will
ask around. If it is available in Sydney, I'll find it.

> I don't see contact cleaning needed on
>the scopes of this era, although some of the older ones did.
>--scott

Oh, I do!
Going by the dates on the boards, I am guessing that
my 454 was built around 1968 and has spent many

years in someones backyard tin shed. The aluminium metal work is slightly pitted meaning it has been in a damp area. There was no filter for who knows how long, one or two decades maybe longer, so the insides are quite dusty.

Two years shy of forty years of age and the scope still works. Bloody marvellous! Switches in that environment of damp and dust can't be expected to remain clean and reliable. I am just amazed that my 454 scope works as well as it does even with its dodgy switch.

Regards,
John Crighton
Sydney

85. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 02:26:08 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <yeluf.75303$wq.74975@bignews7.bellsouth.net>
Source record: 14886
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

John Crighton wrote:
> On Sun, 01 Jan 2006 18:10:16 -0500, Ken Scharf
> <wa2mzeNOTTHIS@bellsouth.net> wrote:
>
>
>
>>I have a Tek 454 that I got at a company auction years back where
>>I used to work (paid $150 for it). The 453,453A,454, 454A series
>>are easy to work on,
>
>
>
> Hello Ken,
> I also have a Tek 454. I bought that model
> because I read on groups like this that it is "easy"
> to work on. I must respectively disagree with you.
>
> My 454 is "not easy" to work on and yet I see people
> saying that it is. I am just wondering if you are repeating
> what you have read on the internet supporting a Myth
> that the 454 is easy to work on or speaking from
> practical experience.
>
> I would like to clean the switch wafers of the main
> timebase switch. My 454 is put together like an onion.
> How do I "easily" gain access to this switch,
> which is buried in the heart of the onion?
>
> Slip the covers off your instrument, yes that is
> very easy, a matter of seconds. Now have a look
> and tell me how to clean the timebase switch?
> How many hours would it take to remove the soldered
> wiring off the boards so that they can be removed to
> gain access to the switch and then solder the wires back
> with nice factory quality solder joints, not with quick
> blob soldering with insulation peeling back off the wires.
> Quality work only.
>
> Several minutes work would be easy if there was
> connectors on the boards but not in this scope.
> When we talk about "hours" we are in a different
> category......pain in the butt/difficult.

>
> How long would it take you, Ken, to clean the switch
> from woa to go? Scope back up and working?
>
> How long would it take you to remove the fan, fan wiring
> tag strips and fan mounting brackets?
> How do you get your screw driver on the screws holding
> the brackets when there are modules covering them up?
> Just have a quick look then come back and tell me
> if you still reckon this scope is easy to work on, in the
> inner sanctums.
>
> Regards,
> John Crighton
> Sydney
>
My comment was based on what I have read. I have the service manual
for the 454 and it is a well written book. The 454 is a a well designed
scope, and parts are available. Fixing ANY high tech scope is NOT a job
for the faint of heart, but at least the parts in the 454 are not
so small (surface mount) that you need an electron microscope to see them!
The older tube based tek's are what you want if you want to restore a
scope yourself. However, if you want to buy a scope in working condition
that you COULD fix yourself (OK substitute the word POSSIBLE for EASY) then
the 45x series is about as "modern" as you want to go.

86. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 02:55:10 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e238767bc9e345698971f@news-central.giganews.com>
Source record: 14887
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

In article <Wnkuf.11923$EW6.1144@fe26.usenetserver.com>, ignoramus16356
@NOSPAM.16356.invalid says...
> On Tue, 03 Jan 2006 00:48:55 GMT, qrk <SpamTrap@spam.net> wrote:
> > On Sun, 01 Jan 2006 22:04:57 GMT, Ignoramus32654
> ><ignoramus32654@NOSPAM.32654.invalid> wrote:
> >
> >>I will sell the 475 though, two scopes is too much.
> >
> > Don't you mean "not enough"? Two is sort of a minimum working level. 3
> > or 4 is nice to have! Can't beat the 465, 475, and 7000 series. Also
> > use the 305x series when I need storage, math, or documenation.
>
> When would I need two scopes? What kind of practical situation? I am
> not desperate for money, but I am short of space. I am open minded
> regareing this issue.
>
> i
>
>

I just tracked down an intermittent in my 2467B's CRT supply, a process
that would have been a lot tougher if I hadn't had both my 485 and 2430A
clipped to various points. Scopes are cheap these days... you want at
least three.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam
---

87. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 03:09:01 UTC
From: none <Vampyres@nettaxi.com>
Message-ID: <7kqjr1tj1t623qteoo6q3s7ku25qcalr0r@4ax.com>
Source record: 14888
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

On 2 Jan 2006 17:54:44 -0800, "Tony Wesley" <tonywesley@gmail.com>
wrote:

>
>TimPerry wrote:
>> how come the professor could make a thermopile out of coconuts but couldn't
>> fix a 2 foot hole in a boat?
>
>He could have fixed the boat but he didn't want to. He was hoping to
>get somewhere with Mary Ann.

Hey.. We All wanted to get some where with Mary Ann.(And damn if that
Dawn Wells doesn't look just as good today as she did then.)

88. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 04:10:36 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <s8ujr15l62cr4a5d4jctph4ce5a50lgnvu@4ax.com>
Source record: 14889
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Tue, 03 Jan 2006 01:25:10 GMT, Ignoramus16356
<ignoramus16356@NOSPAM.16356.invalid> wrote:

>On Tue, 03 Jan 2006 00:48:55 GMT, qrk <SpamTrap@spam.net> wrote:
>> On Sun, 01 Jan 2006 22:04:57 GMT, Ignoramus32654
>><ignoramus32654@NOSPAM.32654.invalid> wrote:
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>>
>> Don't you mean "not enough"? Two is sort of a minimum working level. 3
>> or 4 is nice to have! Can't beat the 465, 475, and 7000 series. Also
>> use the 305x series when I need storage, math, or documenation.
>
>When would I need two scopes?

You have two eyes don't you? [g]

89. Re: Rockwell GPS recievers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 05:44:26 UTC
From: budgie <me@privacy.net>
Message-ID: <9p3kr1peg342dg34u8fp7dn17t7ng57ena@4ax.com>
Source record: 14890

On Tue, 03 Jan 2006 00:48:45 GMT, "Chuck S." <chuckwa3iac@verizon.net> wrote:

>Has anyone used the Rockwell gps boards to lock a 10MHz oscillator?

Yep

> If so, where can I get one cheep?

Found mine on ebay.

90. Re: Reliable Inexpensive Electronic Weather Instruments

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 06:05:56 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <7LidncNDbaPbiSfenZ2dnUVZ_vmdnZ2d@comcast.com>
Source record: 14891
Cross-posted to: sci.geo.meteorology,sci.electronics.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1136238218.674982.221060@z14g2000cwz.googlegroups.com...
>I am looking for any suggestions as to reliable inexpensive electronic
> weather instruments.
>
> With several units that I have tested from places like Target, Walmart,
> Radio Shack I find that they are not repeatable, readings drift and
> will die when the weather gets cold.
>
> Has anyone found a source or brand that they have had good success
> with?
>
> Any leads or links to building your own instrumentation?
>
> Thanks
>
> TMT
>

The Dallas 1-wire system has been popular.
North American mfg is in Mexico and
I saw that a European mfg started to build the same design.

gb

91. BF981 substituting BF964?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 07:14:55 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <dpd89frhe1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 14892

I've found that the BF981 is lower noise than the BF964.

Does anyone know if it works as a direct substitute, or would I be asking
for trouble if I decided to do this?

Sam

92. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 08:02:52 UTC
From: john_c@tpg.com.au
Message-ID: <43ba2f95.45740294@free.teranews.com>
Source record: 14893
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Mon, 02 Jan 2006 21:26:08 -0500, Ken Scharf
<wa2mzeNOTTHIS@bellsouth.net> wrote:

>John Crighton wrote:
>> On Sun, 01 Jan 2006 18:10:16 -0500, Ken Scharf
>> <wa2mzeNOTTHIS@bellsouth.net> wrote:
>>
>>
>>
>>>I have a Tek 454 that I got at a company auction years back where
>>>I used to work (paid $150 for it). The 453,453A,454, 454A series
>>>are easy to work on,
>>
>>
>>
>> Hello Ken,
>> I also have a Tek 454. I bought that model
>> because I read on groups like this that it is "easy"
>> to work on. I must respectively disagree with you.
>>
>> My 454 is "not easy" to work on and yet I see people
>> saying that it is. I am just wondering if you are repeating
>> what you have read on the internet supporting a Myth
>> that the 454 is easy to work on or speaking from
>> practical experience.
>>
>> I would like to clean the switch wafers of the main
>> timebase switch. My 454 is put together like an onion.
>> How do I "easily" gain access to this switch,
>> which is buried in the heart of the onion?
>>
>> Slip the covers off your instrument, yes that is
>> very easy, a matter of seconds. Now have a look
>> and tell me how to clean the timebase switch?
>> How many hours would it take to remove the soldered
>> wiring off the boards so that they can be removed to
>> gain access to the switch and then solder the wires back
>> with nice factory quality solder joints, not with quick
>> blob soldering with insulation peeling back off the wires.
>> Quality work only.
>>
>> Several minutes work would be easy if there was
>> connectors on the boards but not in this scope.

>> When we talk about "hours" we are in a different
>> category......pain in the butt/difficult.
>>
>> How long would it take you, Ken, to clean the switch
>> from woa to go? Scope back up and working?
>>
>> How long would it take you to remove the fan, fan wiring
>> tag strips and fan mounting brackets?
>> How do you get your screw driver on the screws holding
>> the brackets when there are modules covering them up?
>> Just have a quick look then come back and tell me
>> if you still reckon this scope is easy to work on, in the
>> inner sanctums.
>>
>> Regards,
>> John Crighton
>> Sydney

>My comment was based on what I have read. I have the service manual
>for the 454 and it is a well written book. The 454 is a a well designed
>scope, and parts are available.

Ken,
Remove the covers from your 454 scope and take a look
from the point of view of access to the inner assemblies.
I wonder if you still say that it is well designed?.
Deliberately threading bunches of wires (small loom) through
round holes in brackets or sub panels is weird. Why not slot holes
to the end of brackets/ sub assemblies/metal panels so that
the cable loom or wires can be slipped out of the slot if a
subassembly has to be moved. Threading wires through round
holes in small bits of metalwork so that they are tied in, I don't
like that sort of design.
No thought for the non Tek trained serviceman.

>Fixing ANY high tech scope is NOT a job
>for the faint of heart, but at least the parts in the 454 are not
>so small (surface mount) that you need an electron microscope to see them!

Agreed.

>The older tube based tek's are what you want if you want to restore a
>scope yourself. However, if you want to buy a scope in working condition
>that you COULD fix yourself (OK substitute the word POSSIBLE for EASY) then
>the 45x series is about as "modern" as you want to go.

I settled on the 465 myself. The first was a goer with problems.
The little U shaped contacts that Bill Turner spoke off.
The second was cosmetically very nice but dead. Shorted tantalum
on the 15V suppluy.
The third was partly robbed of bits. Even had an IC fitted
back to front.

All three are working nicely now. I enjoyed repairing them.
You can get access to most of the 465s innermost parts. Not
a nightmare like the the 454 and yet the 454 gets a great right
up on many websites. I don't know why!
Sorry Ken if I appeared to jump on you.

In regard to the old tube monsters, I gave two of those
away to another enthusiast. 533A and 549.
Tubes cost a lot of money, I just could not afford
to restore them but the other chap is dead keen
to get them working. He has contacts in the US
who will send him parcels of junk picked up from
ham field days and trash and treasure markets.
He has put in his list of wanted items to his friends.

All good fun!

Regards,
John Crighton
Sydney

93. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 08:17:23 UTC
From: James Sweet <jamessweet@hotmail.com>
Message-ID: <nqquf.8722$7x.4671@trnddc03>
Source record: 14894
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

>
>
> I just tracked down an intermittent in my 2467B's CRT supply, a process
> that would have been a lot tougher if I hadn't had both my 485 and 2430A
> clipped to various points. Scopes are cheap these days... you want at
> least three.
>

Scopes are cheap, however space is not, at least not here.

I've got two scopes, a 465B and an ancient but beautiful condition 531A.
I'd get rid of the 531A but I need to find a good home for it, it's in
great shape and works perfectly.

94. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 13:13:12 UTC
From: "Kevin G. Rhoads" <kgrhoads@alum.mit.edu>
Message-ID: <43BA7868.84231FFF@alum.mit.edu>
Source record: 14896
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

>That said, I still have a 545 on my bench at work.

What plug-ins?

95. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 13:28:32 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <KcOdnQ_ov_KZ4SfenZ2dnUVZ_smdnZ2d@rcn.net>
Source record: 14895
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

John Crighton wrote:

> I settled on the 465 myself. The first was a goer with problems.
> The little U shaped contacts that Bill Turner spoke off.
> The second was cosmetically very nice but dead. Shorted tantalum
> on the 15V suppluy.
> The third was partly robbed of bits. Even had an IC fitted
> back to front.
> All three are working nicely now. I enjoyed repairing them.
> You can get access to most of the 465s innermost parts. Not
> a nightmare like the the 454 and yet the 454 gets a great right
> up on many websites. I don't know why!

I will second this line of thought. I have worked on both, and
the 465's, and 475's are way easier to work on than the 453/454.
The 465M is modular, and was designed to be serviced by military
module swapping automatons.

And even easier still is the 2445, and 2465. The parts problem
is a nuisance, but the scopes are wide open, and put together
with the serviceman in mind. Not to mention the fact that there
is no scope, of any vintage, that is nicer to use than a 2465.

-Chuck

OBTW, on my bench, you will find a 585A, 475, 2465, 7633/7D20...,
and a 326.

96. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 14:53:39 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1136300019.648997.301840@f14g2000cwb.googlegroups.com>
Source record: 14897
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Oh well, I also wouldn't give up the Tek 454 I have. the best animal in
the analog class.
May be the only concurrent from Tektronis would be a Tek 2465. you can
get one at about 0.6 kilobuck. very nice for the money, with one of the
best triggering circuits I ever saw in 35 years in the field.
Happy new year!
Saandy 4Z5KS

97. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 15:22:51 UTC
From: mkim54@aol.com
Message-ID: <1136301771.166855.147160@g14g2000cwa.googlegroups.com>
Source record: 14748
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I use DeoxIT, works better and comes in a variety of applicators. In
Sydney you can get it from http://www.caprina.com.au/catp.html or see
Caig website for info and other locations, www.caig.com.
I use the deoxIT D5 and DN5 and their proGold products. Great stuff.
Mike

John Crighton wrote:
> On 2 Jan 2006 16:56:05 -0500, kludge@panix.com (Scott Dorsey) wrote:
>
> >John Crighton <john_c@tpg.com.au> wrote:
> >>
> >>My 454 is "not easy" to work on and yet I see people
> >>saying that it is. I am just wondering if you are repeating
> >>what you have read on the internet supporting a Myth
> >>that the 454 is easy to work on or speaking from
> >>practical experience.
> >
> >Everything is relative. If you think the 454 is hard to work on, you should
> >just SEE the insides of the 7000. Likewise the 7000 is a whole lot easier
> >to work on than the latest generation of digital scopes.
>
> Yes I agree everything is relative. An easy to repair
> comment should be defined a bit better, perhaps
> against time or compared against something else
> say removing a hard drive from a home conputer.
> Half a dozen screws and the cover is off,
> Pull two connectors and remove two or four
> mounting screws and the hard drive is out.
> I would call that easy.
> A job that takes less that 15 minutes I would say is easy.
>
>
>
> >>I would like to clean the switch wafers of the main
> >>timebase switch. My 454 is put together like an onion.
> >>How do I "easily" gain access to this switch,
> >>which is buried in the heart of the onion?
> >
> >If the switch wafers really are bad, the easiest thing to do is to use
> >Cramolin with a very long spray tube. You can get it into very small
> >places without having to do as much dissasembly. But make sure the
> >contacts are tight, first.
>

> I must admit I have never come across Cramolin. I will
> ask around. If it is available in Sydney, I'll find it.
>
>
> > I don't see contact cleaning needed on
> >the scopes of this era, although some of the older ones did.
> >--scott
>
> Oh, I do!
> Going by the dates on the boards, I am guessing that
> my 454 was built around 1968 and has spent many
> years in someones backyard tin shed. The aluminium
> metal work is slightly pitted meaning it has been in a
> damp area. There was no filter for who knows how long,
> one or two decades maybe longer, so the insides are
> quite dusty.
>
> Two years shy of forty years of age and the scope still
> works. Bloody marvellous! Switches in that environment
> of damp and dust can't be expected to remain clean and
> reliable. I am just amazed that my 454 scope works as well
> as it does even with its dodgy switch.
>
> Regards,
> John Crighton
> Sydney

98. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 16:48:52 UTC
From: szekeres@pitt.edu
Message-ID: <dpe9tknjl2@usenet01.srv.cis.pitt.edu>
Source record: 14749
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

In article <1136301771.166855.147160@g14g2000cwa.googlegroups.com>, mkim54@aol.com wrote:
>I use DeoxIT, works better and comes in a variety of applicators. In
>Sydney you can get it from http://www.caprina.com.au/catp.html or see
>Caig website for info and other locations, www.caig.com.
>I use the deoxIT D5 and DN5 and their proGold products. Great stuff.
>Mike

I worked on an old Nicolet The switches were terrible, most all of them.
I spent weeks trying to clean all the switches, mostly the rotary ones.
I had to use all my toughest cleaners. The hardest part was getting into the
partly sealed switches. I used my best cleaners, alcohol, Contaclean,
Alcohol-Cramolin, Buffrog cleaner. Over and over. I didn't use Deoxit, because
I ran out. Cramolin is no longer sold as Cramolin. Its called Contaclean by
the Cramolin Co. a German company. Available from InOne, Farnell.

>John Crighton wrote:
>> On 2 Jan 2006 16:56:05 -0500, kludge@panix.com (Scott Dorsey) wrote:
>>
>> >John Crighton <john_c@tpg.com.au> wrote:
>> >>
>> >>My 454 is "not easy" to work on and yet I see people
>> >>saying that it is. I am just wondering if you are repeating
>> >>what you have read on the internet supporting a Myth
>> >>that the 454 is easy to work on or speaking from
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>> >Everything is relative. If you think the 454 is hard to work on, you should
>> >just SEE the insides of the 7000. Likewise the 7000 is a whole lot easier
>> >to work on than the latest generation of digital scopes.
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>> comment should be defined a bit better, perhaps
>> against time or compared against something else
>> say removing a hard drive from a home conputer.
>> Half a dozen screws and the cover is off,
>> Pull two connectors and remove two or four
>> mounting screws and the hard drive is out.
>> I would call that easy.
>> A job that takes less that 15 minutes I would say is easy.
>>
>>
>>
>> >>I would like to clean the switch wafers of the main

>> >>timebase switch. My 454 is put together like an onion.
>> >>How do I "easily" gain access to this switch,
>> >>which is buried in the heart of the onion?
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>> >Cramolin with a very long spray tube. You can get it into very small
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>> ask around. If it is available in Sydney, I'll find it.
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>> >the scopes of this era, although some of the older ones did.
>> >--scott
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>> my 454 was built around 1968 and has spent many
>> years in someones backyard tin shed. The aluminium
>> metal work is slightly pitted meaning it has been in a
>> damp area. There was no filter for who knows how long,
>> one or two decades maybe longer, so the insides are
>> quite dusty.
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>> Two years shy of forty years of age and the scope still
>> works. Bloody marvellous! Switches in that environment
>> of damp and dust can't be expected to remain clean and
>> reliable. I am just amazed that my 454 scope works as well
>> as it does even with its dodgy switch.
>>
>> Regards,
>> John Crighton
>> Sydney
>

99. Re: BF981 substituting BF964?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 16:51:42 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1136307102.361054.226120@o13g2000cwo.googlegroups.com>
Source record: 14750

The BF981 is obsolete.

Leon

100. Re: BF981 substituting BF964?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 17:59:18 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <dpee1m$r1r$1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 14751

What substituted the BF981?

Sam
"Leon" <leon_heller@hotmail.com> wrote in message
news:1136307102.361054.226120@o13g2000cwo.googlegroups.com...
> The BF981 is obsolete.
>
> Leon
>

101. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 18:54:39 UTC
From: kludge@panix.com
Message-ID: <dpeh9fedr1@panix2.panix.com>
Source record: 14752
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Ignoramus16356 <ignoramus16356@NOSPAM.16356.invalid> wrote:
>On Tue, 03 Jan 2006 00:48:55 GMT, qrk <SpamTrap@spam.net> wrote:
>> On Sun, 01 Jan 2006 22:04:57 GMT, Ignoramus32654
>><ignoramus32654@NOSPAM.32654.invalid> wrote:
>>
>>>I will sell the 475 though, two scopes is too much.
>>
>> Don't you mean "not enough"? Two is sort of a minimum working level. 3
>> or 4 is nice to have! Can't beat the 465, 475, and 7000 series. Also
>> use the 305x series when I need storage, math, or documenation.
>
>When would I need two scopes? What kind of practical situation? I am
>not desperate for money, but I am short of space. I am open minded
>regareing this issue.

When one of your scopes breaks. How will you fix it, without a second
scope?
--scott

--
"C'est un Nagra. C'est suisse, et tres, tres precis."

102. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 19:18:40 UTC
From: mkim54@aol.com
Message-ID: <1136315920.530927.218590@g44g2000cwa.googlegroups.com>
Source record: 14753
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I use deoxIt and progold (now DeoxIT GOLD) now since a friend of mine
received it in an Agilent test equipment at work.
I figure if it is spec'ed in there it must be the best. They have an
interesting site, with lots of information and ways of using their
products.
I have a treo 650 which was not charging and communicating - a few
wipes with Progold, oops deoxIT gold and everything is working
perfectly now.

103. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 19:53:01 UTC
From: Paul Burridge <pb@shove.your.spam.up.your.arse.atlanticstar.co.uk>
Message-ID: <lfllr19bnl2ie353p7inf1okmstheuutjc@4ax.com>
Source record: 14754
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Tue, 03 Jan 2006 01:25:10 GMT, Ignoramus16356
<ignoramus16356@NOSPAM.16356.invalid> wrote:

>When would I need two scopes? What kind of practical situation? I am
>not desperate for money, but I am short of space. I am open minded
>regareing this issue.

If you part with that 475, then sooner or later you'll be very, very,
very sorry.
--

"What is now proved was once only imagin'd" - William Blake

104. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 21:08:44 UTC
From: Richard Henry <rphenry@home.com>
Message-ID: <4207ftF1gkspgU1@individual.net>
Source record: 14755
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Ignoramus29795" <ignoramus29795@NOSPAM.29795.invalid> wrote in message
news:BEBuf.1497$1_1.725@fe67.usenetserver.com...
> On Tue, 03 Jan 2006 20:53:01 +0100, Paul Burridge
<pb@shove.your.spam.up.your.arse.atlanticstar.co.uk> wrote:
> > On Tue, 03 Jan 2006 01:25:10 GMT, Ignoramus16356
> ><ignoramus16356@NOSPAM.16356.invalid> wrote:
> >
> >
> > >>When would I need two scopes? What kind of practical situation? I am
> > >>not desperate for money, but I am short of space. I am open minded
> > >>regareing this issue.
> >
> > > If you part with that 475, then sooner or later you'll be very, very,
> > > very sorry.
>
> I changed my mind. I will not sell my 475.
>
> Now... I have little interest in homemade radio or audio stuff. So far
> my little forays into electronics centered around power electronics.
> Given that... Is there any possible reason to keep a spectrum
> analyzer?

Emissions compliance testing.

105. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 21:16:17 UTC
From: daestrom <daestrom@NO_SPAM_HEREtwcny.rr.com>
Message-ID: <BQBuf.74093$ME5.35139@twister.nyroc.rr.com>
Source record: 14756
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

"Dave Plowman (News)" <dave@davenoise.co.uk> wrote in message
news:4de328dd98dave@davenoise.co.uk...
> In article <Goednf0gfr84NCTeRVn-hg@athenet.net>,
> philo <philo@privacy.net> wrote:
>> a "Robinson Crusoe" battery must be one you'd make if stranded on an
>> island... so you'd have plenty of sea water. you could use electrodes of
>> copper and zinc
>
> Plenty of that on the average desert island...;-)
>

Well, if you were shipwrecked, you might pry the anti-corrosion zincs off
the hull, and along with the bronze/brass fittings, you might get some
potential.

Of course, once you've used up the zincs, I think you're pretty much done.

daestrom

106. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 21:46:03 UTC
From: novatech@eskimo.com
Message-ID: <dperar$402$1@eskinews.eskimo.com>
Source record: 14757
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"John-Del" <ohger1s@aol.com> writes:

>I have used a 7603 for about 15 years for general troubleshooting, and
>it's my favorite scope. It's rock solid, and bright and sharp. I
>haven't been able to find a horiz plug-in with TV sync, but the trigger
>is so good I can get it to lock on video anyway. Only problems are the
>huge Mallory capacitors in the power supply that will open without
>warning. Replace all of these and you'll have no trouble at all.

>John

The 7603 is very nice. I use them for the spectrum analyser plug-ins as
the bigger CRT helps. But for normal trouble shooting, I much prefer the
7704A as the basic scope. The same plugins work, but you get a bit more
bandwidth-- up to 200MHz and the fourth slot lets you do some interesting
things with delaying timebases.

For smaller units, I prefer the 475. Nice and solid.

To complement the Tek 3052B digital scopes, I use 7904 with high speed
plugins (like 7A19 and 7B92). The 7904 is the stand for the 3052B.

I use SC502 and SC504 in the TM500 racks when I want to watch something on
the bench without taking up space.

Steve
--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997
206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

107. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 21:59:29 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <YNOdnX7opKF6bifenZ2dnUVZ8qWdnZ2d@pipex.net>
Source record: 14758
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

>>Now... I have little interest in homemade radio or audio stuff. So far
>>my little forays into electronics centered around power electronics.
>>Given that... Is there any possible reason to keep a spectrum
>>analyzer?
>
>
> Emissions compliance testing.

Yes indeed that's is very good purpose if for a spectrum analyser

A long time ago I purchased (in the UK) a spectrum probe useful between
LF and 90 MHz meant for EMC testing in conjunction with a (if you wish
as low as 1 MHz) oscilloscope. I find it a very useful instrument for
homebrewing HF equipment ,although it is of course not a complete
spectrum analyser .

Frank KN6WH / GM0CSZ

108. Re: BF981 substituting BF964?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-03 22:09:04 UTC
From: noexqs <noexqs@noexqs.demon.nl>
Message-ID: <11rltfrkguap74e@corp.supernews.com>
Source record: 14759

BF981 is substituted by BF991 of BF996S.
both DG fets are SMD package SOT143 :(

BF981 is still widely available, but production stopped.

Regards,

Willem
PE2WDO

"Samuel Hunt" <shunt010@hotmail.com> schreef in bericht
news:dpee1m$r1r$1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com...
> What substituted the BF981?
>
>
> Sam
> "Leon" <leon_heller@hotmail.com> wrote in message
> news:1136307102.361054.226120@o13g2000cwo.googlegroups.com...
>> The BF981 is obsolete.
>>
>> Leon
>>
>
>

109. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 00:44:50 UTC
From: Someone <Someone@Someplace.to>
Message-ID: <2j6mr1hpht7vnfjhc6m3p1on0a7mm4nisl@4ax.com>
Source record: 14760
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

On 2 Jan 2006 11:13:11 -0800, "Too_Many_Tools"
<too_many_tools@yahoo.com> used recycled pixels to say:

>Reading the thread on the Voltaic pile in sci.chem.electrochem.battery,
>I started considering what would one have to do to build a "Robinson
>Crusoe" battery to power equipment in an emergency.
>
>Assuming a battery of 12v and respectable current to power
>communications equipment, how would you do it?
>
>What materials would you use?
>
>How would you charge it?
>
>I look forward to your contributions.
>
>TMT

With an emergency (assuming no electricity) you can forget about
"charging it". What you want to do is generate it in my opinion.

110. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 01:11:53 UTC
From: Noone <Noone@wrenchman.com>
Message-ID: <43BB212E.E574999A@wrenchman.com>
Source record: 14761
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

John Crighton wrote:

> On Mon, 02 Jan 2006 20:21:03 +0100, Paul Burridge
> <pb@shove.your.spam.up.your.arse.atlanticstar.co.uk> wrote:
>
> >I came across this on the 'net, which may or may not be useful in your
> >particular case, John...
>
> Hello Paul,
> thanks very much for sharing those gems.
> I have stored them away.
>
> I had a good laugh at your dining room table
> centre piece admisssions and the follow up doily
> and scope cosy remarks. Heh Heh heh.....
>
> I must admit when I first got my 465 I just couldn't
> keep my hands off it and I had it covered up with
> a tea towel in between playing with it.
>
> When you have lusted after something for decades
> and you finally get it. Oh what a feeling!
>
> Regards,
> John Crighton
> Sydney

Now in my mid 50's, I am reminded of something my father said. He had always said, that ever since 1957 , he wanted a Cadillac. In the later years of his life, hefinally got his wish - he bought a 1957 Cadillac.

For years I have been collecting and restoring the iconic untouchables of my early days in Engineering. Scopes are like boats, you can never have too many. But they are useful. My particular weakness has been the HP 141T family of Spectrum Analyzers. What was 20K + then, is now cheap. Winter nights are spent re-Cap-ing, calibrating, and restoring these remnants of the last great Analog Spectrum Analyzer.

Like restoring the automobiles of one's youth, these are tangible links to our own past. Any good tool, kept in working condition is valuable. To see these Cadillacs of the past brought back to their former glory is reward enough.

As John said so well, Oh what a feeling!

Blakely

Blakely LaCroix
Minneapolis, Minnesota.
USA

111. Re: Reliable Inexpensive Electronic Weather Instruments

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 01:27:05 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1136338025.108271.227050@z14g2000cwz.googlegroups.com>
Source record: 14762
Cross-posted to: sci.geo.meteorology,sci.electronics.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Thanks for the leads so far....

Has anyone actually built any of this designs and hooked it to a
laptop?

If so, I would love to hear about it...links and pictures would be
great.

If you look, you will find very few sites talking about actual efforts.

TMT

112. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 01:30:27 UTC
From: "clare at snyder.on.ca"
Message-ID: <h89mr15t61qid5mrhhjfh2ftg0vn4dh1qr@4ax.com>
Source record: 14763
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

On Tue, 03 Jan 2006 19:44:50 -0500, Someone <Someone@Someplace.to>
wrote:

>On 2 Jan 2006 11:13:11 -0800, "Too_Many_Tools"
><too_many_tools@yahoo.com> used recycled pixels to say:
>
>>Reading the thread on the Voltaic pile in sci.chem.electrochem.battery,
>>I started considering what would one have to do to build a "Robinson
>>Crusoe" battery to power equipment in an emergency.
>>
>>Assuming a battery of 12v and respectable current to power
>>communications equipment, how would you do it?
>>
>>What materials would you use?
>>
>>How would you charge it?
>>
>>I look forward to your contributions.
>>
>>TMT
>
>With an emergency (assuming no electricity) you can forget about
>"charging it". What you want to do is generate it in my opinion.
The carbon/iron/saltwater cell is a "primary" cell - and not
rechargeable.

113. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 01:41:21 UTC
From: hchickpeaREMOVEME@hotmail.com
Message-ID: <43bb28f8.467386@localhost>
Source record: 14764
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

```
"daestrom" <daestrom@NO_SPAM_HEREtwcny.rr.com> wrote:

>
>"Dave Plowman (News)" <dave@davenoise.co.uk> wrote in message
>news:4de328dd98dave@davenoise.co.uk...
>> In article <Goednf0gfr84NCTeRVn-hg@athenet.net>,
>> philo <philo@privacy.net> wrote:
>>> a "Robinson Crusoe" battery must be one you'd make if stranded on an
>>> island... so you'd have plenty of sea water. you could use electrodes of
>>> copper and zinc
>>
>> Plenty of that on the average desert island...;-)
>>
>
>Well, if you were shipwrecked, you might pry the anti-corrosion zincs off
>the hull, and along with the bronze/brass fittings, you might get some
>potential.
>
>Of course, once you've used up the zincs, I think you're pretty much done.
>
>daestrom
>

You mean going down with a zincing ship?
```

114. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 02:08:42 UTC
From: qrk <SpamTrap@spam.net>
Message-ID: <k4amr19dpmppckt7u697ni2rb06fnda74u@4ax.com>
Source record: 14765
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Tue, 03 Jan 2006 01:25:10 GMT, Ignoramus16356
<ignoramus16356@NOSPAM.16356.invalid> wrote:

>On Tue, 03 Jan 2006 00:48:55 GMT, qrk <SpamTrap@spam.net> wrote:
>> On Sun, 01 Jan 2006 22:04:57 GMT, Ignoramus32654
>><ignoramus32654@NOSPAM.32654.invalid> wrote:
>>
>>>I will sell the 475 though, two scopes is too much.
>>
>> Don't you mean "not enough"? Two is sort of a minimum working level. 3
>> or 4 is nice to have! Can't beat the 465, 475, and 7000 series. Also
>> use the 305x series when I need storage, math, or documenation.
>
>When would I need two scopes? What kind of practical situation? I am
>not desperate for money, but I am short of space. I am open minded
>regareing this issue.
>
>i

1. As others have said, when you need to fix your other scope. My 465
just took a dump a couple weeks ago. Used the 475 to troubleshoot it.
One of the HV ceramic caps has excess leakage :(At least it's a
replaceable part.

2. It's also nice to have a spare when the other scope goes down.

3. Sometimes you just need two scopes to do the job, especially when
your project is divided up between two racks of equipment.

4. Sometimes you need multiple scopes because your events are
asynchronous.

5. Some scopes are better at doing certain tasks like those nifty
microchannel plate intensified scopes.

6. Sometimes you have multiple projects going and it's nice not having
to disassemble your test setup.

7. You may have a 7000 mainframe, but need a portable scope like the
465.

8. It's also nice to have a modern digital scope for slow events, math
functions, and documentation. But, keep those analog scopes around as
they convey more information about the signal at a glance than any
digital scope I've used.

You also mentioned something about spectrum analyzers. Extremely handy for certain types of work. Depending on the anlyzer, they are great for characterizing filters, amplifiers, noise in low-level amplifiers, EMI issues, unwanted oscillations, impedance, and a host of other things.

Mark

115. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 02:39:16 UTC
From: SolarFlare <sfl.are@hot.mail.invalid>
Message-ID: <vpWdnWPQ6OQ5qSbenZ2dnUVZ_t2dnZ2d@golden.net>
Source record: 14766
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

Whatever floats y'ur boat matie.

"Harry Chickpea" <hchickpeaREMOVEME@hotmail.com> wrote
in message news:43bb28f8.467386@localhost...
> You mean going down with a zincing ship?

116. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 03:02:44 UTC
From: BobG <bobgardner@aol.com>
Message-ID: <1136343764.677404.25190@g47g2000cwa.googlegroups.com>
Source record: 14767
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

We had a dozen citrus trees in the back yard till recently (citrus canker eradication program... the state cut em all down). I wondered about building 'citric acid' electrolye batteries as I picked up garbage cans full of oranges and grapfruit.

117. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 03:11:11 UTC
From: SolarFlare <sfl.are@hot.mail.invalid>
Message-ID: <wo-dnYFiZZWCoSbenZ2dnUVZ_v6dnZ2d@golden.net>
Source record: 14768
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

I wonder if the costs are in the acid or the electrode
materials though?

Some batteries are just lemons when they first come
out.

"BobG" <bobgardner@aol.com> wrote in message
news:1136343764.677404.25190@g47g2000cwa.googlegroups.com...
> We had a dozen citrus trees in the back yard till
recently (citrus
> canker eradication program... the state cut em all
down). I wondered
> about building 'citric acid' electrolye batteries as
I picked up
> garbage cans full of oranges and grapfruit.
>

118. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 05:21:44 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1136352104.767662.194830@g47g2000cwa.googlegroups.com>
Source record: 14769
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

Thanks for the comments so far...

The Professor would be proud. ;<)

How about a few comments from the hams amoung us...doesn't this qualify
as the ultimate Field Day challenge?

TMT

119. Re: Harry E. Landsberg, Jr., CIA Maltese Falcon: Kennedy assassination, IRAN/CONTRA, UFO's

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 05:26:51 UTC
From: Laura <lhann10243@earthlink.net>
Message-ID: <1136352411.244080.108670@g44g2000cwa.googlegroups.com>
Source record: 14770

Vanessa Redgrave, Conchita Llach, Carla Ross-Robertson are in line with Mr. Landsberg (Maltese Falcon.)

Conchita Llach: LLach Jewelers, Miami, FL, frequent trips to Guatemala, home (coffee plantations) in San Salvador, El Salvador, father liaison to the Vatican for El Salvador (or for San Salvador, El Salvador.)

Carla Ross-Robertson married to British Intelligence (Jim Robertson.) They perfect mind control techniques using handicapped children in the state of Virginia.

These people supervised the torture of 800,000,000 infants to end God.

The United States, satanic, has been in communication/trade with the Dog Star System, the Plieades, Saturn, Pluto, Mercury and Venus (and possibly just outside the Milky Way.)

Bonnie, from Mercury, supervises mind control for that world.

John (former Apostle) supervises mind control for Venus. He has worked with actor Bill Murray (DOD, civilian military) on a virtual reality program, "the ritual abuse experience."

Michael, former Archangel, is in contact with the Saturnians.

Please see:

"Mossad and the United States secret government"
http://home.earthlink.net/~sammark4/id175.html

"John is here"
http://home.earthlink.net/~sammark4/id160.html

"re Whitley Strieber, spiritual matters"
http://home.earthlink.net/~sammark4/id194.html

"This person might be impersonating me"
http://home.earthlink.net/~lhann10243/id78.html

Lisa Nicholson is affiliated with Wackenhut and is Vanessa Redgrave's associate in the United States.

"I'm involved in BCCI." -- Lisa

Lisa Nicholson
5013 Paprika Ln.

Palm Beach Gardens, FL 33418
(561) 775-7852
cell (561) 307-2963

Her mother (Betty Nicholson) is a real estate agent in Miami and close friends with Don Shula.

Harry's daughter Mary is involved in the mind control of children in Tampa, FL.

Mary Landsberg
221 W. Knollwood St.
Tampa, FL 33604-6033
(813) 236-8207

She says at MacDill Air Force Base:

http://public.macdill.amc.af.mil/

His son John admits to being a vicious mind controller of children.

John R. Landsberg
4040 W. 124th Ter.
Leawood, KS 66209-2231
(913) 345-1649

Dr. Nisha Chandra is that (Maltese Falcon) for India. Photo:

http://www.angelfire.com/journal2/landsbergphotos2/dr_nisha_chandra.jpg

---

Laura

120. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 05:36:19 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1136352979.670328.321600@g14g2000cwa.googlegroups.com>
Source record: 14771
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Now in my mid 50's, I am reminded of something my father said. He had

always said, that ever since 1957 , he wanted a Cadillac. In the
later
years of his life, hefinally got his wish - he bought a 1957 Cadillac.

For years I have been collecting and restoring the iconic untouchables
of
my early days in Engineering. Scopes are like boats, you can never
have
too many. But they are useful. My particular weakness has been the HP

141T family of Spectrum Analyzers. What was 20K + then, is now cheap.
Winter nights are spent re-Cap-ing, calibrating, and restoring these
remnants of the last great Analog Spectrum Analyzer.

Like restoring the automobiles of one's youth, these are tangible links
to
our own past. Any good tool, kept in working condition is valuable.
To
see these Cadillacs of the past brought back to their former glory is
reward enough.

As John said so well, Oh what a feeling!

Blakely

Blakely LaCroix
Minneapolis, Minnesota.
USA "

Well said.

TMT

121. Re: Harry E. Landsberg, Jr., CIA Maltese Falcon: Kennedy assassination, IRAN/CONTRA, UFO's

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 06:46:48 UTC
From: - exray - <exray@coqui.net>
Message-ID: <11rmrqqi0abj90b@corp.supernews.com>
Source record: 14772

Laura wrote:

> The United States, satanic, has been in communication/trade with the
> Dog Star System, the Plieades, Saturn, Pluto, Mercury and Venus (and
> possibly just outside the Milky Way.)
>
> Bonnie, from Mercury, supervises mind control for that world.

I knew it, I knew it! Now it finally comes out! You can't hide the
truth. How did Art Bell miss something so obvious?
>
> John (former Apostle) supervises mind control for Venus. He has worked
> with actor Bill Murray (DOD, civilian military) on a virtual reality
> program, "the ritual abuse experience."

I knew that Murray guy was weird!

***

Bye Laura, take your meds.

122. Wanted: KAM All-Mode Schematic or Service Manual

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 07:06:25 UTC
From: Bill <bcrann@hotmail.com>
Message-ID: <OtKuf.30557$X25.612574@news20.bellglobal.com>
Source record: 14773

Anyone know where to find a schematic for the KAM All-Mode? My PS blew a transistor and output 20V to the KAM. Now the tuning led stays to the left and I hear a buzzing sound.

Bill

123. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 07:36:01 UTC
From: Litzendraht <k5cey@juno.com>
Message-ID: <1136360161.613945.13180@g47g2000cwa.googlegroups.com>
Source record: 14774
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Does anyone remember the "Jetronics" knockoffs of the Tektronix
'scopes?

When I was going to Army radar school in 1966 / 67, We used a Jetronics
545A (I think that's right).

The Jet was fine for school. Triggered sweep and good to at least 30
Mhz. Before I was drafted, all I had at home was a Simpson
"Handiscope". Rated to 100 Khz, but would see a 262 kc. IF signal.

It's comforting to know that once I was assigned permanent duty at an
Army missile site, all we used were Tektronix and Hickok 'scopes.

John

124. Any Experience?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 13:35:01 UTC
From: Professor <briangriffey@sbcglobal.net>
Message-ID: <1136381701.771972.282590@f14g2000cwb.googlegroups.com>
Source record: 14775

Anyone have any experience with this vendor?
http://www.chuckmartin.com/RFShop/RFShopFrame.htm

Professor
www.telstar-electronics.com

125. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 14:53:37 UTC
From: Rube <tekscopefan@nospammers.com>
Message-ID: <43BBE16F.24D75A5@nospammers.com>
Source record: 14776
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Hi

Caig has DeOxit in 5% and 100% formula,
the 5% works most of the time.
You can get it in standard aerosol (hazmat ship fee ups)
or the pump can D5P (no hazmat fees)
www.caig.com

www.mcmelectronics.com has it in stock

> If the switch wafers really are bad, the easiest thing to do is to use
> Cramolin with a very long spray tube. You can get it into very small
> places without having to do as much dissasembly. But make sure the
> contacts are tight, first. I don't see contact cleaning needed on
> the scopes of this era, although some of the older ones did.
> --scott

126. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 14:55:47 UTC
From: Rube <tekscopefan@nospammers.com>
Message-ID: <43BBE1F1.50AA4F92@nospammers.com>
Source record: 14777
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

DeOxit is standard issue for Xerox service staff,
our service lady told me about it, she is also
a amateur radio operator like me.

127. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 19:35:54 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <on8or19mjejv1cjrmlh43m474fufomqaom@4ax.com>
Source record: 14778
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Hi Blakely

I would like to correspond with you on some problems with a 141T.

My email is garyschafer@comcast.net.

Thanks
Gary K4FMX

On Wed, 04 Jan 2006 01:11:53 GMT, Noone <Noone@wrenchman.com> wrote:

>Now in my mid 50's, I am reminded of something my father said. He had
>always said, that ever since 1957 , he wanted a Cadillac. In the later
>years of his life, hefinally got his wish - he bought a 1957 Cadillac.
>
>For years I have been collecting and restoring the iconic untouchables of
>my early days in Engineering. Scopes are like boats, you can never have
>too many. But they are useful. My particular weakness has been the HP
>141T family of Spectrum Analyzers. What was 20K + then, is now cheap.
>Winter nights are spent re-Cap-ing, calibrating, and restoring these
>remnants of the last great Analog Spectrum Analyzer.
>
>Like restoring the automobiles of one's youth, these are tangible links to
>our own past. Any good tool, kept in working condition is valuable. To
>see these Cadillacs of the past brought back to their former glory is
>reward enough.
>
>As John said so well, Oh what a feeling!
>
>Blakely
>
>Blakely LaCroix
>Minneapolis, Minnesota.
>USA
>
>

128. Re: Harry E. Landsberg, Jr., CIA Maltese Falcon: Kennedy assassination, IRAN/CONTRA, UFO's

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 19:40:06 UTC
From: "John L. Sielke" <w2agnNOSPAM@w2agn.net>
Message-ID: <43BC2496.20005@w2agn.net>
Source record: 14779

Laura wrote:
> Vanessa Redgrave, Conchita Llach, Carla Ross-Robertson are in line with
> Mr. Landsberg (Maltese Falcon.)
>
> Conchita Llach: LLach Jewelers, Miami, FL, frequent trips to Guatemala,
> home (coffee plantations) in San Salvador, El Salvador, father liaison
> to the Vatican for El Salvador (or for San Salvador, El Salvador.)
>
> Carla Ross-Robertson married to British Intelligence (Jim Robertson.)
> They perfect mind control techniques using handicapped children in the
> state of Virginia.
>
> These people supervised the torture of 800,000,000 infants to end God.
>
> The United States, satanic, has been in communication/trade with the
> Dog Star System, the Plieades, Saturn, Pluto, Mercury and Venus (and
> possibly just outside the Milky Way.)
>
> Bonnie, from Mercury, supervises mind control for that world.
>
> John (former Apostle) supervises mind control for Venus. He has worked
> with actor Bill Murray (DOD, civilian military) on a virtual reality
> program, "the ritual abuse experience."
>
> Michael, former Archangel, is in contact with the Saturnians.
>
> Please see:
>
> "Mossad and the United States secret government"
> http://home.earthlink.net/~sammark4/id175.html
>
> "John is here"
> http://home.earthlink.net/~sammark4/id160.html
>
> "re Whitley Strieber, spiritual matters"
> http://home.earthlink.net/~sammark4/id194.html
>
> "This person might be impersonating me"
> http://home.earthlink.net/~lhann10243/id78.html
>
> ----
>
> Lisa Nicholson is affiliated with Wackenhut and is Vanessa Redgrave's

> associate in the United States.
>
> "I'm involved in BCCI." -- Lisa
>
> Lisa Nicholson
> 5013 Paprika Ln.
> Palm Beach Gardens, FL 33418
> (561) 775-7852
> cell (561) 307-2963
>
> Her mother (Betty Nicholson) is a real estate agent in Miami and close
> friends with Don Shula.
>
> ----
>
> Harry's daughter Mary is involved in the mind control of children in
> Tampa, FL.
>
> Mary Landsberg
> 221 W. Knollwood St.
> Tampa, FL 33604-6033
> (813) 236-8207
>
> She says at MacDill Air Force Base:
>
> http://public.macdill.amc.af.mil/
>
> His son John admits to being a vicious mind controller of children.
>
> John R. Landsberg
> 4040 W. 124th Ter.
> Leawood, KS 66209-2231
> (913) 345-1649
>
> ----
>
> Dr. Nisha Chandra is that (Maltese Falcon) for India. Photo:
>
> http://www.angelfire.com/journal2/landsbergphotos2/dr_nisha_chandra.jpg
>
> ----
>
> Laura
>

That has got to be some of the funniest stuff I ever read. Just think, these wackos are actually out among the public, with their aluminum foil hats, etc. And you thought Hams were crazy!

129. yahoo rfamplifiers group

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 22:14:17 UTC
From: Skipp says welcome <skippishere@yahoo.com>
Message-ID: <dphhbp$6u1$2@skeeter.ucdavis.edu>
Source record: 14780

A yahoo group for people with interest in RF and AF Amplifiers.

Please feel free to join in...

http://groups.yahoo.com/group/rfamplifiers/

hope to see you there.

cheers,
skipp

130. Re: HF Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 22:21:16 UTC
From: Skipp from never never land <skippishere@yahoo.com>
Message-ID: <dphhos$6u1$3@skeeter.ucdavis.edu>
Source record: 14781

: Paul M0EME <m0eme432@tiscali.co.uk> wrote:
: Im building a HF linear using four PL519's. Can i use 2oz
: copper PCB for the base to fit the valves too?????? as
: Im not very good at cutting and messing with metal.
: Thanks and 73's de Paul M0EME

Hi Paul,

The work has already been done for you. Simply buy the
Replacement Dentron GLA-1000 conversion to the el-509/519
PC Boards cheap from FAR Circuits.

If you keep air moving in the chassis, you should not
have any problems. Sockets are available from a place
in Florida selling on line.

You might also consider joining the yahoo rfamplifiers
group.

http://groups.yahoo.com/group/rfamplifiers/

cheers,
skipp

131. Re: Ground Plane construction vs pre-printed "protoboards"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 23:36:32 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11ron37q9oon055@corp.supernews.com>
Source record: 14782

Hi Dave,

"Dave Platt" <dplatt@radagast.org> wrote in message
news:11rb2fn95g8dv39@corp.supernews.com...
> One of the recipes for making stable, friendly, and reproducible
> designs at RF seems to be to minimize the impact of parasitic
> reactances.

Certainly true, although my feeling is that 'ugly' construction above a ground plane creates _well controlled_ parasitics that tend not to change much based on, e.g., waving your hand above the PCB, mounting the PCB close to a metal chassis, etc.

132. Re: yahoo rfamplifiers group

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 23:47:37 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <penor1hs1k42o9j4mto07ertpbnq7icorv@4ax.com>
Source record: 14785

ORIGINAL MESSAGE:

On Wed, 4 Jan 2006 22:14:17 +0000 (UTC), Skipp says welcome
<skippishere@yahoo.com> wrote:

>A yahoo group for people with interest in RF and AF Amplifiers.
>
>Please feel free to join in...
>
>http://groups.yahoo.com/group/rfamplifiers/
>
>hope to see you there.
>
>cheers,
>skipp

~~~~~~

Feel free to try it out, but the heavy hitters hang out at

http://lists.contesting.com/mailman/listinfo/Amps

Everyone is welcome to join, but no CB stuff please. Amateur Radio
only.

73, Bill W6WRT
~~~~~~

133. Re: Rockwell GPS recievers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-04 23:56:44 UTC
From: "Chuck S." <chuckwa3iac@verizon.net>
Message-ID: <0hZuf.3732$QI6.1436@trnddc07>
Source record: 14783

Thanks, I did fine some on eBay. Cheep is anything under $50!! hahahah

"budgie" <me@privacy.net> wrote in message
news:9p3kr1peg342dg34u8fp7dn17t7ng57ena@4ax.com...
> On Tue, 03 Jan 2006 00:48:45 GMT, "Chuck S." <chuckwa3iac@verizon.net>
> wrote:
>
>>Has anyone used the Rockwell gps boards to lock a 10MHz oscillator?
>
> Yep
>
>> If so, where can I get one cheep?
>
> Found mine on ebay.

134. Re: Rockwell GPS recievers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 00:02:17 UTC
From: "Chuck S." <chuckwa3iac@verizon.net>
Message-ID: <dmZuf.3735$QI6.1782@trnddc07>
Source record: 14784

OK, one more question, do you need the RS-232 port if you only want to lock a vcxo to the 10kHz? My guess is no, just +5 volts and ground, and take the 10kHz from pin 20 of the connector.

"Chuck S." <chuckwa3iac@verizon.net> wrote in message news:0hZuf.3732$QI6.1436@trnddc07...
> Thanks, I did fine some on eBay. Cheep is anything under $50!! hahahah
>
>
> "budgie" <me@privacy.net> wrote in message
> news:9p3kr1peg342dg34u8fp7dn17t7ng57ena@4ax.com...
>> On Tue, 03 Jan 2006 00:48:45 GMT, "Chuck S." <chuckwa3iac@verizon.net>
>> wrote:
>>
>>>Has anyone used the Rockwell gps boards to lock a 10MHz oscillator?
>>
>> Yep
>>
>>> If so, where can I get one cheep?
>>
>> Found mine on ebay.
>
>

135. Announce: CircuitScout.com now provides circuit search including radio circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 00:39:08 UTC
From: Jerry Russell <jerryrussell@gmail.com>
Message-ID: <1136421548.153692.188490@g14g2000cwa.googlegroups.com>
Source record: 14786

Circuit Scout is a new search engine for the electrical engineering
community to find electronic circuits on the internet. Check it out,
feedback and suggestions are welcomed!

http://circuitscout.com/

Jerry Russell
jerry_AT_circuitscout.com (replace _AT_ with @)

136. Re: Rockwell GPS recievers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 02:32:55 UTC
From: budgie <me@privacy.net>
Message-ID: <7v0pr1pr8evrtpdl3o94gp9if8k808fivo@4ax.com>
Source record: 14787

On Thu, 05 Jan 2006 00:02:17 GMT, "Chuck S." <chuckwa3iac@verizon.net> wrote:

>OK, one more question, do you need the RS-232 port if you only want to lock
>a vcxo to the 10kHz? My guess is no, just +5 volts and ground, and take the
>10kHz from pin 20 of the connector.

No you don't need to concern yourself with the data port (*)(**) for a frequency reference. Just make sure you have the appropriate 0v/5v on the appropriate lines as per the data sheet to get the bootup mode correct.

* Without parsing the $GPRMC sentence you can't tell if you have a valid fix. And that is the ONLY sure way to know your 10kHz is actually locked to the sat source(s) and not derived from the rx oscillator free-running. It's pity one of those N/C pins doesn't have a "valid" flag on it - would save the need for a downstream processor.

** I presume you are (also) talking Rockwell/Conexant Jupiter board.

137. Re: Rockwell GPS recievers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 03:12:07 UTC
From: MetalHead <WanderingMetalHead@DUMPSPAM.yahoo.com>
Message-ID: <b80vf.2796$OU3.2445@news01.roc.ny>
Source record: 14788

Chuck S. wrote:
> OK, one more question, do you need the RS-232 port if you only want to lock
> a vcxo to the 10kHz? My guess is no, just +5 volts and ground, and take the
> 10kHz from pin 20 of the connector.

I have used the older Rockwell GPS stuff and they seem to need to have a recent almanac transferred to them before they will get a fix. Rockwell used to distribute a freebie software package that would help you deal with all the setup stuff. It was called something like Lab_10 or Lab_X or somesuch. The newer stuff may need less handholding.

Good Luck,
Bob

138. Re: Ground Plane construction vs pre-printed "protoboards"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 04:04:14 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11rp6m125kf6p9e@corp.supernews.com>
Source record: 14789

Joel Kolstad wrote:
> Hi Dave,
>
> "Dave Platt" <dplatt@radagast.org> wrote in message
> news:11rb2fn95g8dv39@corp.supernews.com...
>
>>One of the recipes for making stable, friendly, and reproducible
>>designs at RF seems to be to minimize the impact of parasitic
>>reactances.
>
>
> Certainly true, although my feeling is that 'ugly' construction above a ground
> plane creates _well controlled_ parasitics that tend not to change much based
> on, e.g., waving your hand above the PCB, mounting the PCB close to a metal
> chassis, etc.

My experience is that the most common and troublesome parasitic
reactance in modern solid-state circuitry is, by far, the inductance of
the ground system. And that's just where "ugly" construction shines --
it makes that inductance as small as possible.

Roy Lewallen, W7EL

139. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 05:42:45 UTC
From: Atsunori Tamagawa <tamagawa@worldnet.att.net>
Message-ID: <43BCB1D1.4020800@worldnet.att.net>
Source record: 14790
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

John Crighton wrote:
>
> Half a dozen screws and the cover is off,
> Pull two connectors and remove two or four
> mounting screws and the hard drive is out.
> I would call that easy.

I own some scopes. Though, my favorite is not one of Tek ones,
but HP-1741A storage scope.
Anyway, I realized that when I troubleshoot my scopes or fix
something with them, I always got extra screws left.
It is a bit annoying experience because I know those extra screw
were being used somewhere.
I think that test equipment are made of way too many extra screws.

> Two years shy of forty years of age and the scope still
> works. Bloody marvellous!

It's probably a matter of total operating time instead of
how old it is. I heard a story from an old analog engineer
saying that when storage scopes were new, they were
SO EXPENSIVE that you just couldn't keep them turned on,
but only when you need to take a vital measurement you were
allowed to turn it on.
If that is true, I think some old storage scopes are actually
bargains instead of to-be-avoied.

Switches in that environment
> of damp and dust can't be expected to remain clean and
> reliable. I am just amazed that my 454 scope works as well
> as it does even with its dodgy switch.

I owned one 454, and later used one 454A. The 454 seemed to
comsume much more power than 454A. In winter, having the 454
closer was nice.

Atsunori

140. Re: Reliable Inexpensive Electronic Weather Instruments

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 05:56:49 UTC
From: quietguy <quietguy@REMOVE-TO-REPLYconfidential-counselling.com>
Message-ID: <43BCB4F9.C559BBE4@REMOVE-TO-REPLYconfidential-counselling.com>
Source record: 14791
Cross-posted to: sci.geo.meteorology,sci.electronics.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

You might like to have a look at the Silicaon Chip website - they published a weather station not so long ago - I read the articale at the library so don't have a copy, but a search of their site should find it - the windspeed/direction part looks very neat and should be reliable and cheap

David

Too_Many_Tools wrote:

> Thanks for the leads so far....
>
> Has anyone actually built any of this designs and hooked it to a
> laptop?
>
> If so, I would love to hear about it...links and pictures would be
> great.
>
> If you look, you will find very few sites talking about actual efforts.
>
> TMT

141. Re: Ground Plane construction vs pre-printed "protoboards"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 10:49:16 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1136458156.101993.64260@g47g2000cwa.googlegroups.com>
Source record: 14792

I tend to use PCBs, but I make them single-sided on double-sided PCB
stock, so that there is a continous ground plane on the top.

Leon

142. Re: Identifying a mystery diode

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 12:19:57 UTC
From: John A <e455gkf@yahoo.co.uk>
Message-ID: <dpj2vc$i4p$1@newsg3.svr.pol.co.uk>
Source record: 14793

Hi Paul,

That sort of "mini-L" packaging is often used for vhf components, e.g. tuning diodes, hot carrier diodes and PIN diodes - and some of these have forward volt-drops of more than one volt.

You can investigate that suggestion that it is a high-voltage rectifier by applying, say, 200v reverse voltage via a 1Mohm resistor and measuring the breakdown (if any) voltage of the diode, or what current flows. Any of the other suggestions - including mine - will break down.

Are there definitely no markings?

John A
"Paul VK3DIP" <pmcmahon@telstra.com> wrote in message
news:cXjtf.136133$V7.93540@news-server.bigpond.net.au...
> Hi all I recently purchased a bag of unmarked supposedly diodes and I am
> trying to figure out what they are. The clues so far are normal diode
> action on a multimeter (ie conducts one way but not the other) but the
> forward voltage is high at about 1.4 - 1.5 volts. The packaging is a
small
> square black plastic box with flat axial leads one of which has a small
> cross
> piece on it. This packaging suggests small signal or at least low power.
>
> If anyone wants to look at the mystery diode it is the top one
> in this picture.
> http://www.users.bigpond.com/pmcmahon/mysterydiode.jpg
> The bottom one is a normal glass 1N914 just for scale.
>
> There is nowhere for the light to come out (or in) so they are not LEDs
> which is the only other diode like component I have come across with that
> high a forward voltage. Could it be two silicon diodes in series?
>
> Any suggestions or even just identifying the case outline would be
> appreciated.
>
> Thanks
> Paul VK3DIP
>
>
>

143. Re: Rockwell GPS recievers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 12:39:45 UTC
From: budgie <me@privacy.net>
Message-ID: <0f4qr1dfp7utbeoikpvi829qams9u300pg@4ax.com>
Source record: 14794

On Thu, 05 Jan 2006 03:12:07 GMT, MetalHead
<WanderingMetalHead@DUMPSPAM.yahoo.com> wrote:

>Chuck S. wrote:
>> OK, one more question, do you need the RS-232 port if you only want to lock
>> a vcxo to the 10kHz? My guess is no, just +5 volts and ground, and take the
>> 10kHz from pin 20 of the connector.
>
>I have used the older Rockwell GPS stuff and they seem to need to have a
>recent almanac transferred to them before they will get a fix. Rockwell
>used to distribute a freebie software package that would help you deal
>with all the setup stuff. It was called something like Lab_10 or Lab_X
>or somesuch. The newer stuff may need less handholding.

That's an interesting observation, Bob. I was watching the NMEA output from
power-up on the Jupiter I am using doing a "frozen start" out of the box without
an antenna. One sentence showed it checking each sat in turn. When it finds
one (which it obviously doesn't do with no ant) it assigns a Rx channel# to it.

When I finished play mode on the pooter end and connected an ant, it went
through each bird in turn, about one per second. So within a minute it had
acquired a set of birds and began processing. As I am using no form of backup,
the Jupiter starts from ROM each time and does a similar "frozen start" i,e,
factory almanac). It consistently achieves a full fix in under 3 minutes.

144. Re: RARE admission by Radio Mart L@@K

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 14:13:23 UTC
From: MAILFRMPA@AOL.COM
Message-ID: <1136470403.777997.251940@o13g2000cwo.googlegroups.com>
Source record: 14795
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave

Just how high is that horse of yours?

I am neither a dealer or a hamfest tire kicker. I am a collector of sorts. And as a result, I was suckered in by an older Yeasu FT-401 transceiver, "Mint, Restored. I have gone thru this rig and replaced all tubes that needed to replaced, and fitted a new T/R relay."

What I got was a filthy rig in better than average condition, but not mint. The CW filter is non-functioning, the finals were flat(his "new "tubes gave me 10w out on 80m), and the T/R relay is original, not a NOS replacement as he claimed. A bad solder joint in the mixer stage rendered it inoperable until I corrected it.

If you don't think Martin threatens negative feedback, look at his recent feedback to see how many negatives are posted as neutral, or even positve feedbacks. I'm on his "blocked bidders list" because I posted my complaints as negatives, and I can live with that. Ebay would be a safer place if everyone posted negatives that were deserved.

145. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 14:14:06 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <v4edneO2SYsvtCDenZ2dnUVZ_tqdnZ2d@rcn.net>
Source record: 14796
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Atsunori Tamagawa wrote:

> I own some scopes. Though, my favorite is not one of Tek ones,
> but HP-1741A storage scope.

Hmmm? I cannot imagine what you like about the 1741A, but different
strokes for different folks.

Be very careful with that grey horizontal timing switch knob. HP cut two
(or was it 3?) slots that each cover 175 (115?) degrees through the body of the knob.
They did that so that you could see the light mounted on the panel through
the knob. Well, when the switch's lubrication gets a little sticky,
and you get a little enthusiastic (and lord knows the plastic is already
at least 18 years old), you will snap those thin little bits of plastic,
and your knob will be gone, and your scope will be unusable. Forget about
gluing it, as there was barely enough strength with the virgin plastic.

We had dozens of that family of HP scope, and they all went into scrap because
the knobs were unavailable.

Tektronix did the same thing with their horizontal knobs, but they
knew enough about materials engineering to make the body of the knob
out of aluminum, and make the grip surface of the knob out of plastic.

-Chuck

146. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 15:48:52 UTC
From: Richard Henry <rphenry@home.com>
Message-ID: <424tgaF1h9oseU1@individual.net>
Source record: 14797
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Chuck Harris" <cf-NO-SPAM-harris@erols.com> wrote in message
news:v4edneO2SYsvtCDenZ2dnUVZ_tqdnZ2d@rcn.net...
> Atsunori Tamagawa wrote:
>
> > I own some scopes. Though, my favorite is not one of Tek ones,
> > but HP-1741A storage scope.
>
> Hmmm? I cannot imagine what you like about the 1741A, but different
> strokes for different folks.
>
> Be very careful with that grey horizontal timing switch knob. HP cut two
> (or was it 3?) slots that each cover 175 (115?) degrees through the body
of the knob.
> They did that so that you could see the light mounted on the panel through
> the knob. Well, when the switch's lubrication gets a little sticky,
> and you get a little enthusiastic (and lord knows the plastic is already
> at least 18 years old), you will snap those thin little bits of plastic,
> and your knob will be gone, and your scope will be unusable. Forget about
> gluing it, as there was barely enough strength with the virgin plastic.
>
> We had dozens of that family of HP scope, and they all went into scrap
because
> the knobs were unavailable.
>
> Tektronix did the same thing with their horizontal knobs, but they
> knew enough about materials engineering to make the body of the knob
> out of aluminum, and make the grip surface of the knob out of plastic.

I never had a HP scope that I liked, or would use unless there was no Tek
scope available.

147. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 19:30:07 UTC
From: Dave Edwards <kd2e@comcast.net>
Message-ID: <9qGdnSBcZLnC6SDeRVn-ow@comcast.com>
Source record: 14798
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Still using the 275Mhz hp1726A that was given to me when I started working
for HP in '83.
I keep it covered when not being used, so it still looks like new. Perhaps
some day it will crap out, and I'll try a Tek!!

"Richard Henry" <rphenry@home.com> wrote in message
news:424tgaF1h9oseU1@individual.net...
>
> "Chuck Harris" <cf-NO-SPAM-harris@erols.com> wrote in message
> news:v4edneO2SYsvtCDenZ2dnUVZ_tqdnZ2d@rcn.net...
>> Atsunori Tamagawa wrote:
>>
>> > I own some scopes. Though, my favorite is not one of Tek ones,
>> > but HP-1741A storage scope.
>>
>> Hmmm? I cannot imagine what you like about the 1741A, but different
>> strokes for different folks.
>>
>> Be very careful with that grey horizontal timing switch knob. HP cut two
>> (or was it 3?) slots that each cover 175 (115?) degrees through the body
> of the knob.
>> They did that so that you could see the light mounted on the panel
>> through
>> the knob. Well, when the switch's lubrication gets a little sticky,
>> and you get a little enthusiastic (and lord knows the plastic is already
>> at least 18 years old), you will snap those thin little bits of plastic,
>> and your knob will be gone, and your scope will be unusable. Forget
>> about
>> gluing it, as there was barely enough strength with the virgin plastic.
>>
>> We had dozens of that family of HP scope, and they all went into scrap
> because
>> the knobs were unavailable.
>>
>> Tektronix did the same thing with their horizontal knobs, but they
>> knew enough about materials engineering to make the body of the knob
>> out of aluminum, and make the grip surface of the knob out of plastic.
>
> I never had a HP scope that I liked, or would use unless there was no Tek
> scope available.
>
>

148. Building a DAB radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 20:03:57 UTC
From: Mike <fakemail@hotmail.com>
Message-ID: <NYevf.19591$r4.2009@newsfe1-gui.ntli.net>
Source record: 14799

Hello,
has anyone come across any projects or info on building your own DAB radio.

This is my (limited) understanding:

How it's sent: The audio (or whatever) signal is split and sent using Quadrature Amplitude Modulation over many narrow band carriers (each carrier at a different frequency): Ie it's spread spectrum. Error correction Coding is also used, etc.
To decode it: This is where I'm confused; Can I build a receiver which will receive the whole collection of narrow band carriers, then feed it into a computer that will do some FFT?

Not really sure how to move forward; any ideas would be fantastic.

Thankyou all!

(PS It's good to see there's a newsgroup on this topic).

Mike Smith

149. Re: RARE admission by Radio Mart L@@K

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 20:18:56 UTC
From: CaptAmerica <calikid1965@yahoo.com>
Message-ID: <1136492336.515702.302410@g44g2000cwa.googlegroups.com>
Source record: 14800
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave

Well it's damn funny that the only post you've ever made to usenet
under
this anonymous sig is to support Radio-Mart. Nice try Martin!

150. Re: Building a DAB radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 21:13:21 UTC
From: dplatt@radagast.org
Message-ID: <11rr2vhnic0794c@corp.supernews.com>
Source record: 14801

In article <NYevf.19591$r4.2009@newsfe1-gui.ntli.net>,
Mike <fakemail@hotmail.com> wrote:

>Hello,
>has anyone come across any projects or info on building your own DAB radio.
>
>This is my (limited) understanding:
>
>How it's sent: The audio (or whatever) signal is split and sent using
>Quadrature Amplitude Modulation over many narrow band carriers (each
>carrier at a different frequency): Ie it's spread spectrum. Error
>correction Coding is also used, etc.
>To decode it: This is where I'm confused; Can I build a receiver which
>will receive the whole collection of narrow band carriers, then feed it
>into a computer that will do some FFT?

Yes, that's usually how it's done. The approach I've seen is to grab
the whole slice of the RF section, downconvert to a convenient IF (via
superhet or direct conversion), then feed the whole signal into
something which can use DSP to detect and demodulate the individual
carriers.

A common approach for Digital Radio Mondiale broadcasting (which has a
relatively narrow RF bandwidth) is to use a single-sideband receiver
architecture of some sort, downconverting the DRM signal from RF to a
same-width slice of audio spectrum, then feed it into a PC via the
PC's sound card, and doing the DSP work using the PC's CPU.

The commercial high-fidelity DAB systems used in the US may very well
have a bandwidth too wide to allow this simple approach to be used (I
haven't studied them in any detail) but the same basic principles
would apply. Block-convert the RF range you want to an
easily-captured IF range, do an A-to-D on it, and do the rest of the
processing digitally in a CPU or dedicated DSP chip.

Take a look at http://www.gnu.org/software/gnuradio/ for a look at
some open-source software-radio techniques.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

151. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 22:01:53 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <39KdnZtLUbvICiDeRVn-iQ@rcn.net>
Source record: 14802
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Dave Edwards wrote:
> Still using the 275Mhz hp1726A that was given to me when I started working
> for HP in '83.
> I keep it covered when not being used, so it still looks like new. Perhaps
> some day it will crap out, and I'll try a Tek!!

I haven't seen that reliability is a problem with the 1726A. They go and go... Drift is a bad problem, the zero goes all over the place, and needs constant diddling. It is all but impossible to adjust so that the variable volts/division knob doesn't shift the zero (and have it stay adjusted). The horizontal time knob is a really bad problem, as I discussed in an earlier note. If you haven't taken your scope apart, and oiled that switch's shaft, and replaced the grease on the ball detent, I would strongly suggest that you do so. When the knob breaks, it is end of game. I strongly considered turning out the inside of one of the broken knobs, and making an aluminum version of the center of the knob. The 1726A I wanted to fix was a complete cherry otherwise. But, Tek scopes were so easy to find and so cheap, that I couldn't see any real point. Into the scrap bin it went.

-Chuck

152. Re: Rockwell GPS recievers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 22:36:17 UTC
From: "Chuck S." <chuckwa3iac@verizon.net>
Message-ID: <Bbhvf.20455$lf.3738@trnddc05>
Source record: 14803

Thanks budgie, I was talking about the Jupiter bd. Another thought was will it work without an antenna? I guess it will. I will be using it outside on hill tops so should not have a problem a set of birds to lock on. I see an output on pin 19 that is mark Epps that may be use to show a lock condition.

"budgie" <me@privacy.net> wrote in message
news:0f4qr1dfp7utbeoikpvi829qams9u300pg@4ax.com...
> On Thu, 05 Jan 2006 03:12:07 GMT, MetalHead
> <WanderingMetalHead@DUMPSPAM.yahoo.com> wrote:
>
>>Chuck S. wrote:
>>> OK, one more question, do you need the RS-232 port if you only want to
>>> lock
>>> a vcxo to the 10kHz? My guess is no, just +5 volts and ground, and take
>>> the
>>> 10kHz from pin 20 of the connector.
>>
>>I have used the older Rockwell GPS stuff and they seem to need to have a
>>recent almanac transferred to them before they will get a fix. Rockwell
>>used to distribute a freebie software package that would help you deal
>>with all the setup stuff. It was called something like Lab_10 or Lab_X
>>or somesuch. The newer stuff may need less handholding.
>
> That's an interesting observation, Bob. I was watching the NMEA output
> from
> power-up on the Jupiter I am using doing a "frozen start" out of the box
> without
> an antenna. One sentence showed it checking each sat in turn. When it
> finds
> one (which it obviously doesn't do with no ant) it assigns a Rx channel#
> to it.
>
> When I finished play mode on the pooter end and connected an ant, it went
> through each bird in turn, about one per second. So within a minute it
> had
> acquired a set of birds and began processing. As I am using no form of
> backup,
> the Jupiter starts from ROM each time and does a similar "frozen start"
> i,e,
> factory almanac). It consistently achieves a full fix in under 3 minutes.

153. Re: Rockwell GPS recievers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 23:27:41 UTC
From: MetalHead <WanderingMetalHead@DUMPSPAM.yahoo.com>
Message-ID: <NXhvf.1260$qg.168@news02.roc.ny>
Source record: 14804

budgie wrote:
> On Thu, 05 Jan 2006 03:12:07 GMT, MetalHead
> <WanderingMetalHead@DUMPSPAM.yahoo.com> wrote:
>
>
>>Chuck S. wrote:
>>
>>>OK, one more question, do you need the RS-232 port if you only want to lock
>>>a vcxo to the 10kHz? My guess is no, just +5 volts and ground, and take the
>>>10kHz from pin 20 of the connector.
>>
>>I have used the older Rockwell GPS stuff and they seem to need to have a
>>recent almanac transferred to them before they will get a fix. Rockwell
>>used to distribute a freebie software package that would help you deal
>>with all the setup stuff. It was called something like Lab_10 or Lab_X
>>or somesuch. The newer stuff may need less handholding.
>
>
> That's an interesting observation, Bob. I was watching the NMEA output from
> power-up on the Jupiter I am using doing a "frozen start" out of the box without
> an antenna. One sentence showed it checking each sat in turn. When it finds
> one (which it obviously doesn't do with no ant) it assigns a Rx channel# to it.
>
> When I finished play mode on the pooter end and connected an ant, it went
> through each bird in turn, about one per second. So within a minute it had
> acquired a set of birds and began processing. As I am using no form of backup,
> the Jupiter starts from ROM each time and does a similar "frozen start" i,e,
> factory almanac). It consistently achieves a full fix in under 3 minutes.

This surprised me also. As I mentioned earlier, these two system that
this showed up on were very old, 5 channel receivers.

Sitting outside, with a clear view of the sky, the receivers would
search through one sat at a time and find one occasionally, but they
would lose them after several minutes. After a couple of hours, they had
not acquired and held enough SV's to get a fix at any time.

I loaded up an almanac through the tool and either receiver would get a
fix within a few minutes and hold it for the half hour that I left them
to run.

I am assuming that these receivers were running out of ROM as well. Some
GPS systems put an almanac in ROM to improve the cold start fix time,
but I don't know if these are among them.

As for the original poster's other question about needing an antenna, I would say that unless there is one on the Jupiter board, then yes.

Bob

154. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 23:52:41 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43BDB11D.40F42684@earthlink.net>
Source record: 14805
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Richard Henry wrote:
>
> I never had a HP scope that I liked, or would use unless there was no Tek
> scope available.

Microdyne had shelves full of HP scopes, but most of the techs would
grab one of the beat up Leader 508A scopes.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

155. Re: Rockwell GPS recievers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-05 23:56:59 UTC
From: budgie <me@privacy.net>
Message-ID: <f7crr1dh4uf2ms78lt637q6coto71da8ge@4ax.com>
Source record: 14806

On Thu, 05 Jan 2006 22:36:17 GMT, "Chuck S." <chuckwa3iac@verizon.net> wrote:

>Thanks budgie, I was talking about the Jupiter bd. Another thought was will
>it work without an antenna? I guess it will. I will be using it outside on
>hill tops so should not have a problem a set of birds to lock on. I see an
>output on pin 19 that is mark Epps that may be use to show a lock condition.

Mine has 1pps (one pulse per second, time mark) on pin 19. "Epps" sounds
excitingly similar.

The one I have is: www.gpskit.nl/documents/rockwell/jupiter_v230.pdf
which shows pin assignments and gives fairly good guff on the ROM-based start.

156. Re: Rockwell GPS recievers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 00:03:53 UTC
From: budgie <me@privacy.net>
Message-ID: <sicrr1lpnsdl2n9j4je5ei7t7kj6486vhd@4ax.com>
Source record: 14807

On Thu, 05 Jan 2006 23:27:41 GMT, MetalHead
<WanderingMetalHead@DUMPSPAM.yahoo.com> wrote:

(snip)

>>>I have used the older Rockwell GPS stuff and they seem to need to have a
>>>recent almanac transferred to them before they will get a fix. Rockwell
>>>used to distribute a freebie software package that would help you deal
>>>with all the setup stuff. It was called something like Lab_10 or Lab_X
>>>or somesuch. The newer stuff may need less handholding.
>>
>>
>> That's an interesting observation, Bob. I was watching the NMEA output from
>> power-up on the Jupiter I am using doing a "frozen start" out of the box without
>> an antenna. One sentence showed it checking each sat in turn. When it finds
>> one (which it obviously doesn't do with no ant) it assigns a Rx channel# to it.
>>
>> When I finished play mode on the pooter end and connected an ant, it went
>> through each bird in turn, about one per second. So within a minute it had
>> acquired a set of birds and began processing. As I am using no form of backup,
>> the Jupiter starts from ROM each time and does a similar "frozen start" i,e,
>> factory almanac). It consistently achieves a full fix in under 3 minutes.
>
>This surprised me also. As I mentioned earlier, these two system that
>this showed up on were very old, 5 channel receivers.

We obviously have different receivers. Mine is a 12-channel unit.

www.gpskit.nl/documents/rockwell/jupiter_v230.pdf

>Sitting outside, with a clear view of the sky, the receivers would
>search through one sat at a time and find one occasionally, but they
>would lose them after several minutes. After a couple of hours, they had
>not acquired and held enough SV's to get a fix at any time.

With a "sufficient" antenna (I am using a 27dB patch) mine doesn't lose any SV's
unless they drop below the elevation mask. Once it has one, you keep seeing it
in the sentence.

>I loaded up an almanac through the tool and either receiver would get a
>fix within a few minutes and hold it for the half hour that I left them
>to run.
>
>I am assuming that these receivers were running out of ROM as well. Some
>GPS systems put an almanac in ROM to improve the cold start fix time,
>but I don't know if these are among them.

Mine certainly is, but with the 3 minute TTFF from obsolete ROM it's fine for my time/frequency purposes.

>As for the original poster's other question about needing an antenna, I
>would say that unless there is one on the Jupiter board, then yes.

Confirmed. I tried a number of improvised passive antennae on my workbench (where I get good fixes with a Garmin II+ on its standard antenna) and it never found a single SV. Never tried outdoors ona passive, went straight to an active patch on the windowsill ;-)

157. Re: Rockwell GPS recievers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 00:58:19 UTC
From: "Chuck S." <chuckwa3iac@verizon.net>
Message-ID: <Lgjvf.25044$z45.53@trnddc02>
Source record: 14808

I made a type-O :-) it is 1pps

"budgie" <me@privacy.net> wrote in message
news:f7crr1dh4uf2ms78lt637q6coto71da8ge@4ax.com...
> On Thu, 05 Jan 2006 22:36:17 GMT, "Chuck S." <chuckwa3iac@verizon.net>
> wrote:
>
>>Thanks budgie, I was talking about the Jupiter bd. Another thought was
>>will
>>it work without an antenna? I guess it will. I will be using it outside on
>>hill tops so should not have a problem a set of birds to lock on. I see an
>>output on pin 19 that is mark Epps that may be use to show a lock
>>condition.
>
> Mine has 1pps (one pulse per second, time mark) on pin 19. "Epps" sounds
> excitingly similar.
>
> The one I have is: www.gpskit.nl/documents/rockwell/jupiter_v230.pdf
> which shows pin assignments and gives fairly good guff on the ROM-based
> start.

158. FA:MORE AIR VARIABLES + STUFF

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 01:19:15 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <nAjvf.228466$qk4.194348@bgtnsc05-news.ops.worldnet.att.net>
Source record: 14809

I will be listing ~35-45 air variables in the next month in addition to =
ones already listed on Ebay. So, pse check back frequently. Trying to =
clean out stuff. Some new ones are listed now and the mostly used ones =
(receive & transmit) will be added a few each day or every other day. =
Tnx for stopping by:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

73 Joe, heytubeguy

159. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 01:36:10 UTC
From: WA5OES <NOSPAM_wa5oes@comcast.net>
Message-ID: <Xns9742BD36A23C0winterbauercomcastne@216.196.97.136>
Source record: 14810
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in
news:1136229191.768561.62190@g49g2000cwa.googlegroups.com:

> Reading the thread on the Voltaic pile in
sci.chem.electrochem.battery,
> I started considering what would one have to do to build a "Robinson
> Crusoe" battery to power equipment in an emergency.
>
> Assuming a battery of 12v and respectable current to power
> communications equipment, how would you do it?
>
> What materials would you use?
>
> How would you charge it?
>
> I look forward to your contributions.
>
> TMT
>

What would Robinson need the battery for?

160. Re: Building a DAB radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 02:06:27 UTC
From: Mike <fakemail@hotmail.com>
Message-ID: <Dgkvf.70767$7p5.5590@newsfe4-win.ntli.net>
Source record: 14811

Dave Platt wrote:
> In article <NYevf.19591$r4.2009@newsfe1-gui.ntli.net>,
> Mike <fakemail@hotmail.com> wrote:
>
>>Hello,
>>has anyone come across any projects or info on building your own DAB radio.
>>
>>This is my (limited) understanding:
>>
>>How it's sent: The audio (or whatever) signal is split and sent using
>>Quadrature Amplitude Modulation over many narrow band carriers (each
>>carrier at a different frequency): Ie it's spread spectrum. Error
>>correction Coding is also used, etc.
>>To decode it: This is where I'm confused; Can I build a receiver which
>>will receive the whole collection of narrow band carriers, then feed it
>>into a computer that will do some FFT?
>
>
> Yes, that's usually how it's done. The approach I've seen is to grab
> the whole slice of the RF section, downconvert to a convenient IF (via
> superhet or direct conversion), then feed the whole signal into
> something which can use DSP to detect and demodulate the individual
> carriers.

Yeah, that's the sort of idea I thought might work.

> A common approach for Digital Radio Mondiale broadcasting (which has a
> relatively narrow RF bandwidth) is to use a single-sideband receiver
> architecture of some sort, downconverting the DRM signal from RF to a
> same-width slice of audio spectrum, then feed it into a PC via the
> PC's sound card, and doing the DSP work using the PC's CPU.

That's a good idea! I think DRM has more potential than DAB at least
from a technical standpoint, as it will go further (less retransmission,
less power needed). But I'm not really an expert.

> The commercial high-fidelity DAB systems used in the US may very well
> have a bandwidth too wide to allow this simple approach to be used (I
> haven't studied them in any detail) but the same basic principles
> would apply. Block-convert the RF range you want to an
> easily-captured IF range, do an A-to-D on it, and do the rest of the
> processing digitally in a CPU or dedicated DSP chip.

(Sorry, I should have mentioned that I'm in the UK).
I've just found a bbc 'paper' linked to from wikipedia, but now
hosted on web.archive.org at:

http://web.archive.org/web/20040401020811/http%3A//www.bbc.co.uk/rd/pubs/papers/paper_21/paper_21.html
that says a DAB station would occupy up to 1.54MHz of the spectrum,
with the individual carriers spaced 1kHz apart.
I was hoping a PIC might be able to decode it. Most seem to be able to
manage 40MHz, which might not be fast enough... although a pair of them
sharing the task (one getting the raw 1s and 0s, the other doing stuff
with them) might work.

> Take a look at http://www.gnu.org/software/gnuradio/ for a look at
> some open-source software-radio techniques.

Thanks for the hints and advice,
this is the first time I've used a public newsgroup for years
and I'm pleased by a) how helpful it's been and b) that it's still
alive and well. I'll try to help someone else in return.

Thanks Dave! (Your reply's really been helpful!!)

Mike Smith
lionfish _A_T_ uwcs.co.uk

161. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 02:37:01 UTC
From: - exray - <exray@coqui.net>
Message-ID: <11rrluecmg5be60@corp.supernews.com>
Source record: 14812

WA5OES wrote:
>
> What would Robinson need the battery for?

To crank the generator, silly.

-Bill

162. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 02:55:17 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1136516117.111999.263150@o13g2000cwo.googlegroups.com>
Source record: 14820
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

Good question....in the original posting I mention communications
equipment.

It is assuming that Robinson Crusoe wants to be rescued.

The discussion has demonstrated to me how we tend to underestimate how
hard it is to provide basic needs to support our technology based life.

Maybe we should enlarge the scope of the problem and allow active power
generation.

Any ideas as to how to generate power?

TMT

163. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 03:02:39 UTC
From: Mark Moulding <mark@markesystems.no.spam.com>
Message-ID: <j5lvf.9387$UF3.3998@newssvr25.news.prodigy.net>
Source record: 14813
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I've had a 545 (military version), and it was quite good, although it had some calibration issues that I never really got resolved. Most of the time, though, I just used my 475, up until a couple of years ago.

I got rid of the 454 (space reasons), and picked up an HP 54201D digital scope with logic analyzer-type triggering. Although I haven't needed the fancy triggering yet (though it would have been really helpful a couple of times in the past), the scope itself has now become my main scope.

It's good to 300MHz (though I rarely need anything that fast), and I find I'm using the on-screen measurement capabilities and storage abilities quite a lot. Of course, the 475 is still sitting right on top, and in fact I used it to fix a faulty input channel in the 54201D when I first bought it. But really, the 475 rarely gets turned on now.

Oh - the best part was that the 54201D only cost me $50 at a Ham swap meet...
--
Mark
"I prefer heaven for climate, hell for company."

"Richard Henry" <rphenry@home.com> wrote in message
news:424tgaF1h9oseU1@individual.net...
>
> "Chuck Harris" <cf-NO-SPAM-harris@erols.com> wrote in message
> news:v4edneO2SYsvtCDenZ2dnUVZ_tqdnZ2d@rcn.net...
>> Atsunori Tamagawa wrote:
>>
>> > I own some scopes. Though, my favorite is not one of Tek ones,
>> > but HP-1741A storage scope.
>>
>> Hmmm? I cannot imagine what you like about the 1741A, but different
>> strokes for different folks.
>>
>> Be very careful with that grey horizontal timing switch knob. HP cut two
>> (or was it 3?) slots that each cover 175 (115?) degrees through the body
> of the knob.
>> They did that so that you could see the light mounted on the panel
>> through
>> the knob. Well, when the switch's lubrication gets a little sticky,
>> and you get a little enthusiastic (and lord knows the plastic is already
>> at least 18 years old), you will snap those thin little bits of plastic,
>> and your knob will be gone, and your scope will be unusable. Forget
>> about

>> gluing it, as there was barely enough strength with the virgin plastic.
>>
>> We had dozens of that family of HP scope, and they all went into scrap
> because
>> the knobs were unavailable.
>>
>> Tektronix did the same thing with their horizontal knobs, but they
>> knew enough about materials engineering to make the body of the knob
>> out of aluminum, and make the grip surface of the knob out of plastic.
>
> I never had a HP scope that I liked, or would use unless there was no Tek
> scope available.
>
>

164. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 03:08:59 UTC
From: Mark Moulding <mark@markesystems.no.spam.com>
Message-ID: <fblvf.9390$UF3.4876@newssvr25.news.prodigy.net>
Source record: 14814
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Oh, and servicing the HP 54201D scope was pretty easy. It came apart in obvious ways, and the boards were big, double-sided (not multi-layer), and gold plated. There were a couple of scary-looking custom IC's, but the problem in my case was just a burned-up 100 ohm resistor.

I eventually bought (rented and copied, actually) the operator and service manuals for it, from W J Ford, who were quite easy to deal with and had a *really* large stock of old manuals.
--
Mark
"I prefer heaven for climate, hell for company."

165. Re: Reliable Inexpensive Electronic Weather Instruments

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 03:48:45 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1136519325.161321.108260@g14g2000cwa.googlegroups.com>
Source record: 14815
Cross-posted to: sci.geo.meteorology,sci.electronics.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Thanks for the lead, here's the link.

http://www.siliconchip.com.au/cms/A_103238/article.html

166. Re: Rockwell GPS recievers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 05:34:06 UTC
From: budgie <me@privacy.net>
Message-ID: <g70sr19u1mcemj8khkikc368skqjqevvr9@4ax.com>
Source record: 14816

On Fri, 06 Jan 2006 00:58:19 GMT, "Chuck S." <chuckwa3iac@verizon.net> wrote:

>I made a type-O :-) it is 1pps

From my observations - and not contradicted by available documentation - that gives a 1pps from powerup. Yes, even masking that output until a valid fix would have been nice.

167. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 05:38:35 UTC
From: Don Lancaster <don@tinaja.com>
Message-ID: <426e2rF1gra3aU1@individual.net>
Source record: 14817
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Michael A. Terrell wrote:
> Richard Henry wrote:
>
>>I never had a HP scope that I liked, or would use unless there was no Tek
>>scope available.
>

The HP 130C was an excellent oscilloscope.
It has been stadily downhill from there.

--
Many thanks,

Don Lancaster voice phone: (928)428-4073
Synergetics 3860 West First Street Box 809 Thatcher, AZ 85552
rss: http://www.tinaja.com/whtnu.xml email: don@tinaja.com

Please visit my GURU's LAIR web site at http://www.tinaja.com

168. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 06:01:31 UTC
From: James Sweet <jamessweet@hotmail.com>
Message-ID: <%Invf.20506$lf.14477@trnddc05>
Source record: 14818
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Chuck Harris wrote:
> Atsunori Tamagawa wrote:
>
>> I own some scopes. Though, my favorite is not one of Tek ones,
>> but HP-1741A storage scope.
>
>
> Hmmm? I cannot imagine what you like about the 1741A, but different
> strokes for different folks.
>
> Be very careful with that grey horizontal timing switch knob. HP cut two
> (or was it 3?) slots that each cover 175 (115?) degrees through the body
> of the knob.
> They did that so that you could see the light mounted on the panel through
> the knob. Well, when the switch's lubrication gets a little sticky,
> and you get a little enthusiastic (and lord knows the plastic is already
> at least 18 years old), you will snap those thin little bits of plastic,
> and your knob will be gone, and your scope will be unusable. Forget about
> gluing it, as there was barely enough strength with the virgin plastic.
>
> We had dozens of that family of HP scope, and they all went into scrap
> because
> the knobs were unavailable.
>

Scrap? Surely a machinist could make a suitable replacement knob for
less than the value of a good scope.

169. Re: Building a DAB radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 06:20:17 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <c42dnVRDk8yOkSPeRVn-qQ@web-ster.com>
Source record: 14819

Mike wrote:

> Dave Platt wrote:
>
>> In article <NYevf.19591$r4.2009@newsfe1-gui.ntli.net>,
>> Mike <fakemail@hotmail.com> wrote:
>>
>>> Hello,
>>> has anyone come across any projects or info on building your own DAB
>>> radio.
>>>
>>> This is my (limited) understanding:
>>>
>>> How it's sent: The audio (or whatever) signal is split and sent using
>>> Quadrature Amplitude Modulation over many narrow band carriers (each
>>> carrier at a different frequency): Ie it's spread spectrum. Error
>>> correction Coding is also used, etc.
>>> To decode it: This is where I'm confused; Can I build a receiver
>>> which will receive the whole collection of narrow band carriers, then
>>> feed it into a computer that will do some FFT?
>>
>>
>>
>> Yes, that's usually how it's done. The approach I've seen is to grab
>> the whole slice of the RF section, downconvert to a convenient IF (via
>> superhet or direct conversion), then feed the whole signal into
>> something which can use DSP to detect and demodulate the individual
>> carriers.
>
>
> Yeah, that's the sort of idea I thought might work.
>
>> A common approach for Digital Radio Mondiale broadcasting (which has a
>> relatively narrow RF bandwidth) is to use a single-sideband receiver
>> architecture of some sort, downconverting the DRM signal from RF to a
>> same-width slice of audio spectrum, then feed it into a PC via the
>> PC's sound card, and doing the DSP work using the PC's CPU.
>
>
> That's a good idea! I think DRM has more potential than DAB at least
> from a technical standpoint, as it will go further (less retransmission,
> less power needed). But I'm not really an expert.
>
>> The commercial high-fidelity DAB systems used in the US may very well

>> have a bandwidth too wide to allow this simple approach to be used (I
>> haven't studied them in any detail) but the same basic principles
>> would apply. Block-convert the RF range you want to an
>> easily-captured IF range, do an A-to-D on it, and do the rest of the
>> processing digitally in a CPU or dedicated DSP chip.
>
>
> (Sorry, I should have mentioned that I'm in the UK).
> I've just found a bbc 'paper' linked to from wikipedia, but now
> hosted on web.archive.org at:
> http://web.archive.org/web/20040401020811/http%3A//www.bbc.co.uk/rd/pubs/papers/paper_21
/paper_21.html
>
> that says a DAB station would occupy up to 1.54MHz of the spectrum,
> with the individual carriers spaced 1kHz apart.
> I was hoping a PIC might be able to decode it. Most seem to be able to
> manage 40MHz, which might not be fast enough... although a pair of them
> sharing the task (one getting the raw 1s and 0s, the other doing stuff
> with them) might work.
>
>> Take a look at http://www.gnu.org/software/gnuradio/ for a look at
>> some open-source software-radio techniques.
>
>
> Thanks for the hints and advice,
> this is the first time I've used a public newsgroup for years
> and I'm pleased by a) how helpful it's been and b) that it's still
> alive and well. I'll try to help someone else in return.
>
> Thanks Dave! (Your reply's really been helpful!!)
>
> Mike Smith
> lionfish _A_T_ uwcs.co.uk

What you need to do is well beyond the capabilities of even a 40MHz PIC.

You need to sample the data at a good bit over 2x 1.54MHz -- somewhere
between 2.5x and 3x would probably be good, depending on what kind of a
tradeoff you wanted to make between front-end filters and ADC sample
rate. Once you've done that you need to synchronize to the data and do
a 2048-point FFT 1000 times a second. That's going to take on the order
of 40 million multiplies per second -- and there's no way a PIC is going
to be able to do one multiply per clock cycle.

You _might_ be able to do this with a good fast DSP chip -- expect to
need one that clocks at over 100MHz. You could also do this with a
fairly modest FPGA, which may be the best way to do it from a technical
standpoint for a short production run or prototype, but which may be a
bit difficult for a hobbyist -- although once you were done you'd be
ready to go into consulting.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

170. Re: Building a DAB radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 09:59:19 UTC
From: Dan Andersson <dan@andersson.co.uk>
Message-ID: <kLGcnR5N45XkoiPeSa8jmw@karoo.co.uk>
Source record: 14821

Mike wrote:

> Hello,
> has anyone come across any projects or info on building your own DAB
> radio.
>
> This is my (limited) understanding:
>
> How it's sent: The audio (or whatever) signal is split and sent using
> Quadrature Amplitude Modulation over many narrow band carriers (each
> carrier at a different frequency): Ie it's spread spectrum. Error
> correction Coding is also used, etc.
> To decode it: This is where I'm confused; Can I build a receiver which
> will receive the whole collection of narrow band carriers, then feed it
> into a computer that will do some FFT?
>
> Not really sure how to move forward; any ideas would be fantastic.
>
> Thankyou all!
>
> (PS It's good to see there's a newsgroup on this topic).
>
> Mike Smith

Mike,

Look at the converter boards suitable for GnuRadio (DRM). They use fast chips from Analog Devices and you can see the whole design and schematics.

This will give you a good hint on what's needed. Remember that darned Mr Nyquist! You really need the speed!

A good way forward while building the conversion block is to initially use GnuRadio for verification before you start coding with a PIC.

Cheers

Dan

171. Re: Building a DAB radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 10:04:31 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1136541871.040296.119010@g43g2000cwa.googlegroups.com>
Source record: 14822

My BT Aviator DAB radio uses an ADI Blackfin DSP, delivering something
like 500 MIPS.

Leon

172. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 12:49:35 UTC
From: "James F. Mayer" <jfma@ix.netcom.com>
Message-ID: <zHtvf.5537$M%4.5358@newsread3.news.atl.earthlink.net>
Source record: 14823

"- exray -" <exray@coqui.net> wrote in message
news:11rrluecmg5be60@corp.supernews.com...
> WA5OES wrote:
>>
>> What would Robinson need the battery for?
>
>
> To crank the generator, silly.
>

I thought that that is what Gilligan was for.

173. Re: Reliable Inexpensive Electronic Weather Instruments

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 13:22:54 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <PNSdneU6ebqp8iPeRVn-vw@comcast.com>
Source record: 14824
Cross-posted to: sci.geo.meteorology,sci.electronics.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1136238218.674982.221060@z14g2000cwz.googlegroups.com...
>I am looking for any suggestions as to reliable inexpensive electronic
> weather instruments.
>
> With several units that I have tested from places like Target, Walmart,
> Radio Shack I find that they are not repeatable, readings drift and
> will die when the weather gets cold.
>
> Has anyone found a source or brand that they have had good success
> with?
>
> Any leads or links to building your own instrumentation?
>
> Thanks
>
> TMT
>

Texas Weather Instruments developed the 1-WireT Weather Station, using
technology licensed from Dallas Semiconductor (see Sensors magazine June
1998), to solve the problems of attaching multiple cables, power supplies
and consoles associated with weather instruments to a Windows PC.
http://www.txwx.com/1wire_bro1.htm

AAG Electronica (Mexico) makes the kit of parts ($75), the TWI is only an
assembled unit.
http://www.aagelectronica.com/aag/index.html?target=p_1.html&lang=en-us

gb

174. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 13:54:23 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <scydnYswxt8O6yPeRVn-tg@rcn.net>
Source record: 14825
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

James Sweet wrote:
> Chuck Harris wrote:
>> Atsunori Tamagawa wrote:
>>
>>> I own some scopes. Though, my favorite is not one of Tek ones,
>>> but HP-1741A storage scope.
>>
>>
>> Hmmm? I cannot imagine what you like about the 1741A, but different
>> strokes for different folks.
>>
>> Be very careful with that grey horizontal timing switch knob. HP cut two
>> (or was it 3?) slots that each cover 175 (115?) degrees through the
>> body of the knob.
>> They did that so that you could see the light mounted on the panel
>> through
>> the knob. Well, when the switch's lubrication gets a little sticky,
>> and you get a little enthusiastic (and lord knows the plastic is already
>> at least 18 years old), you will snap those thin little bits of plastic,
>> and your knob will be gone, and your scope will be unusable. Forget
>> about
>> gluing it, as there was barely enough strength with the virgin plastic.
>>
>> We had dozens of that family of HP scope, and they all went into scrap
>> because
>> the knobs were unavailable.
>>
>
>
> Scrap? Surely a machinist could make a suitable replacement knob for
> less than the value of a good scope.

You obviously haven't hired a machinist lately. In pristine shape, the
scopes were worth $75 tops, the machine shops charge $100/hour, 1 hour
minimum.

I was going to do the job myself, but balked because even when I was done,
all I would have was a bunch of scopes that no one wanted to buy. We had
them (with the broken/missing knobs in the $15 pile at several hamfests,
and they went nowhere.

-Chuck

175. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 14:44:49 UTC
From: mcalhoun@ksu.edu
Message-ID: <dplvp1$drr@unix1.cc.ksu.edu>
Source record: 14826
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

>....[snip]....
>Maybe we should enlarge the scope of the problem and allow active power
>generation.
>Any ideas as to how to generate power?

The problem needs better definition. May we assume Robinson has been
able to recover large rolls of wire, etc., from his ship, or does he
have to mine the ore, smelt it, make the appropriate dies, pull the
wire, ... (lotsa dots!), or may we assume he has EVERYTHING
EXCEPT a generator (i.e., his island once held a thriving modern-type
civilization but all of its generators have rusted?
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

176. Re: Building a DAB radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 15:34:49 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <VZCdnUT9oYiUEyPeRVn-gQ@web-ster.com>
Source record: 14827

Leon wrote:
> My BT Aviator DAB radio uses an ADI Blackfin DSP, delivering something
> like 500 MIPS.
>
> Leon
>
That certainly fits "Good fast DSP that clocks over 100MHz".

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

177. Re: Building a DAB radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 15:37:37 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <VZCdnUf9oYgsEyPeRVn-gQ@web-ster.com>
Source record: 14828

Dan Andersson wrote:

> Mike wrote:
>
>
>>Hello,
>>has anyone come across any projects or info on building your own DAB
>>radio.
>>
>>This is my (limited) understanding:
>>
>>How it's sent: The audio (or whatever) signal is split and sent using
>>Quadrature Amplitude Modulation over many narrow band carriers (each
>>carrier at a different frequency): Ie it's spread spectrum. Error
>>correction Coding is also used, etc.
>>To decode it: This is where I'm confused; Can I build a receiver which
>>will receive the whole collection of narrow band carriers, then feed it
>>into a computer that will do some FFT?
>>
>>Not really sure how to move forward; any ideas would be fantastic.
>>
>>Thankyou all!
>>
>>(PS It's good to see there's a newsgroup on this topic).
>>
>>Mike Smith
>
>
>
>
> Mike,
>
> Look at the converter boards suitable for GnuRadio (DRM). They use fast
> chips from Analog Devices and you can see the whole design and schematics.
>
> This will give you a good hint on what's needed. Remember that darned Mr
> Nyquist! You really need the speed!
>
> A good way forward while building the conversion block is to initially use
> GnuRadio for verification before you start coding with a PIC.
>
DRM uses a significantly lower bandwidth than the spec the OP linked to.
In fact, you can implement a DRM demodulator in software on a PC. I
wouldn't take anything that works with DRM as an indicator for what

hardware you'd need for the DAB format he's interested in.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

178. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 17:16:45 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1136567805.111748.68830@g43g2000cwa.googlegroups.com>
Source record: 14829
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"The HP 130C was an excellent oscilloscope.
It has been stadily downhill from there. "

I agree.

Why do you think that happened?

TMT

179. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 17:22:18 UTC
From: "M. J. Powell" <mike@pickmere.demon.co.uk>
Message-ID: <fc0c7oKKdqvDFwNn@pickmere.demon.co.uk>
Source record: 14839
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

In message <39KdnZtLUbvICiDeRVn-iQ@rcn.net>, Chuck Harris
<cf-NO-SPAM-harris@erols.com> writes
>Dave Edwards wrote:
>> Still using the 275Mhz hp1726A that was given to me when I started
>>working for HP in '83.
>> I keep it covered when not being used, so it still looks like new.
>>Perhaps some day it will crap out, and I'll try a Tek!!
>
>I haven't seen that reliability is a problem with the 1726A. They go and
>go... Drift is a bad problem, the zero goes all over the place, and needs
>constant diddling. It is all but impossible to adjust so that the variable
>volts/division knob doesn't shift the zero (and have it stay adjusted). The
>horizontal time knob is a really bad problem, as I discussed in an earlier
>note. If you haven't taken your scope apart, and oiled that switch's shaft,
>and replaced the grease on the ball detent, I would strongly suggest that you
>do so. When the knob breaks, it is end of game.

May be relevant. When a plastic eyepiece on my father's WW I binoculars
shattered I found a company that made an exact copy from the other
eyepiece which I sent them. This was some twenty five years ago.

I don't know what the plastic was, possibly some form of Bakelite or
Ebonite.

Mike
--
M.J.Powell

180. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 17:31:48 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1136568708.369005.217670@g44g2000cwa.googlegroups.com>
Source record: 14830
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

I understand your comments but I am trying to not to define the problem in detail. The object of the discussion is to facillate discussion about what a survivor would have to consider, need and build to get power to operate the comm set and hopefully initiate rescue operations.

If one consider poor Crusoe's plight, he is stranded on an island that he doesn't know what is available...he has to find and use what is available. I was hoping the group would speculate on what he might have available. Part of the intent is to consider what the minimum would be needed to pull this off.

I did mention that he had comm gear that would use a 12 volt battery....so I am assuming that parts of his boat/plane washed up on the shore of the island. The battery could just as well power a island built spark generator, a light bulb for night signaling, ignite fires or homemade explosives....again, remember this poor guy is trying to attract attention to his plight.

How about some more wild ideas...Crusoe is getting sick of eating coconuts. ;<)

TMT

181. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 17:36:03 UTC
From: jakdedert <jakdedert@bellsouth.net>
Message-ID: <CSxvf.8682$0y2.4910@bignews2.bellsouth.net>
Source record: 14831
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

mcalhoun@ksu.edu wrote:
>>....[snip]....
>>Maybe we should enlarge the scope of the problem and allow active power
>>generation.
>>Any ideas as to how to generate power?
>
>
> The problem needs better definition. May we assume Robinson has been
> able to recover large rolls of wire, etc., from his ship, or does he
> have to mine the ore, smelt it, make the appropriate dies, pull the
> wire, ... (lotsa dots!), or may we assume he has EVERYTHING
> EXCEPT a generator (i.e., his island once held a thriving modern-type
> civilization but all of its generators have rusted?

Robinson 'could'--with nothing more than the battery and some
wire--transmit radio signals in Morse....

No accounting for range, of course.

jak

182. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 17:58:33 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1136570313.368015.312020@g44g2000cwa.googlegroups.com>
Source record: 14845
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

"Robinson 'could'--with nothing more than the battery and some
wire--transmit radio signals in Morse....
No accounting for range, of course.
jak "

True...but this just shows how important the battery really is...and
that is why I chose to make it the main focus of Crusoe's efforts to
get attention.

TMT

183. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 18:14:38 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11rtd0aq4t0o9c4@corp.supernews.com>
Source record: 14832
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Chuck Harris" <cf-NO-SPAM-harris@erols.com> wrote in message
news:scydnYswxt8O6yPeRVn-tg@rcn.net...
> I was going to do the job myself, but balked because even when I was done,
> all I would have was a bunch of scopes that no one wanted to buy. We had
> them (with the broken/missing knobs in the $15 pile at several hamfests,
> and they went nowhere.

And I imagine you'd already junked a few to use strictly as spare parts to fix
the others?

184. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 18:22:02 UTC
From: hchickpeaREMOVEME@hotmail.com
Message-ID: <43c1b6aa.18751690@localhost>
Source record: 14833
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote:

>How about some more wild ideas...Crusoe is getting sick of eating
>coconuts. ;<)

Electric eels.

185. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 18:46:40 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2006.01.06.18.46.46.767996@example.net>
Source record: 14834
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Thu, 05 Jan 2006 14:30:07 -0500, Dave Edwards top-posted:

> Still using the 275Mhz hp1726A that was given to me when I started working
> for HP in '83.
> I keep it covered when not being used, so it still looks like new. Perhaps
> some day it will crap out, and I'll try a Tek!!
>

Every now and then, one lucks out on a HP scope. For the most part, the HP
scopes I've used have been pretty marginal. There was one that was an
absolute nightmare, but that was a special case, because it was military,
and <oh, shit, apologies in advance> it was in a special case. <rimshot>
The knobs all had little waterproof rubber skirts, which had backlash that
makes ordinary backlash look like nothing at all. You had to go _WAY_ past
the setting you wanted, and hope that when the knob sprang back it would
land on the setting. I remarked to a coworker: "It probably wouldn't even
be a good boat anchor, because it would float."

I _did_ once use an HP that was tolerable.

But If I'm the one who signs the check,
my first choice, of course, would be a Tek. :-)

Cheers!
Rich

>
> "Richard Henry" <rphenry@home.com> wrote in message
> news:424tgaF1h9oseU1@individual.net...
>>
>> "Chuck Harris" <cf-NO-SPAM-harris@erols.com> wrote in message
>> news:v4edneO2SYsvtCDenZ2dnUVZ_tqdnZ2d@rcn.net...
>>> Atsunori Tamagawa wrote:
>>>
>>> > I own some scopes. Though, my favorite is not one of Tek ones, but
>>> > HP-1741A storage scope.
>>>
>>> Hmmm? I cannot imagine what you like about the 1741A, but different
>>> strokes for different folks.
>>>
>>> Be very careful with that grey horizontal timing switch knob. HP cut
>>> two (or was it 3?) slots that each cover 175 (115?) degrees through
>>> the body
>> of the knob.

>>> They did that so that you could see the light mounted on the panel
>>> through
>>> the knob. Well, when the switch's lubrication gets a little sticky,
>>> and you get a little enthusiastic (and lord knows the plastic is
>>> already at least 18 years old), you will snap those thin little bits
>>> of plastic, and your knob will be gone, and your scope will be
>>> unusable. Forget about
>>> gluing it, as there was barely enough strength with the virgin
>>> plastic.
>>>
>>> We had dozens of that family of HP scope, and they all went into scrap
>> because
>>> the knobs were unavailable.
>>>
>>> Tektronix did the same thing with their horizontal knobs, but they
>>> knew enough about materials engineering to make the body of the knob
>>> out of aluminum, and make the grip surface of the knob out of plastic.
>>
>> I never had a HP scope that I liked, or would use unless there was no
>> Tek scope available.
>>
>>

186. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 18:48:15 UTC
From: "Rich Grise, but drunk" <yahright@example.net>
Message-ID: <pan.2006.01.06.18.48.23.737207@example.net>
Source record: 14835
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Fri, 06 Jan 2006 09:16:45 -0800, Too_Many_Tools wrote:

> "The HP 130C was an excellent oscilloscope.
> It has been stadily downhill from there. "
>
> I agree.
>
> Why do you think that happened?
>
> TMT

Because an oscilloscope isn't a Wein (Wien?)-bridge oscillator?

Thanks,
Rich

187. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 19:07:10 UTC
From: Atsunori Tamagawa <tamagawa@worldnet.att.net>
Message-ID: <43BEBFDA.2050907@worldnet.att.net>
Source record: 14836
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Rich Grise, but drunk wrote:
>
>>"The HP 130C was an excellent oscilloscope.
>>It has been stadily downhill from there. "
>>
>>I agree.
>>
>>Why do you think that happened?
>>
>
> Because an oscilloscope isn't a Wein (Wien?)-bridge oscillator?

No, they became short of CRT's because of their success in
network analyzer business, perhaps.

It seems that more people are having trouble with HP scopes
than I thought.
One has to treat scopes gently, just like treating women's body.
Instead of "pushing" buttons, one has to "touch" them.

Atsunori

188. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 19:16:41 UTC
From: phatty mo <ptaylor@nospam.com>
Message-ID: <kmzvf.17$xZ4.410@news.uswest.net>
Source record: 14837
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

Harry Chickpea wrote:
> "Too_Many_Tools" <too_many_tools@yahoo.com> wrote:
>
>
>>How about some more wild ideas...Crusoe is getting sick of eating
>>coconuts. ;<)
>
>
> Electric eels.
>

Look around,You might find some "litter" for the cells..old tin cans,rods,bars,nuts+bolts,fish hooks,whatever.. Maybe you'd get lucky and find a wrecked(,or parts of a) boat or plane,or get really lucky and find parts from the boat/planes electrical gizmos to play with.

Maybe wire up some lights,or a simple (spark gap) transmitter,and send out an SOS.Dunno if anyone would see the lights,or what you'd use for an antenna...anything you can find,I guess.

Or just touch the eels together,Spark-gap and arc-light all on one!

189. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 19:57:27 UTC
From: Tim Williams <tmoranwms@charter.net>
Message-ID: <cZzvf.966$5g1.682@fe02.lga>
Source record: 14838
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Atsunori Tamagawa" <tamagawa@worldnet.att.net> wrote in message
news:43BEBFDA.2050907@worldnet.att.net...
> One has to treat scopes gently, just like treating women's body.
> Instead of "pushing" buttons, one has to "touch" them.

Well, no duh...I mean, which of these looks more like a 'scope?
http://webpages.charter.net/dawill/Images/Man-Woman.jpg

Tim

--
Deep Fryer: a very philosophical monk.
Website: http://webpages.charter.net/dawill/tmoranwms

190. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 20:45:53 UTC
From: "void * clvrmnky()" <clvrmnky-uunet@coldmail.com.invalid>
Message-ID: <5GAvf.8623$43.8388@nnrp.ca.mci.com!nnrp1.uunet.ca>
Source record: 14840
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

On 03/01/2006 8:41 PM, Harry Chickpea wrote:
> "daestrom" <daestrom@NO_SPAM_HEREtwcny.rr.com> wrote:
>
>> "Dave Plowman (News)" <dave@davenoise.co.uk> wrote in message
>> news:4de328dd98dave@davenoise.co.uk...
>>> In article <Goednf0gfr84NCTeRVn-hg@athenet.net>,
>>> philo <philo@privacy.net> wrote:
>>>> a "Robinson Crusoe" battery must be one you'd make if stranded on an
>>>> island... so you'd have plenty of sea water. you could use electrodes of
>>>> copper and zinc
>>> Plenty of that on the average desert island...;-)
>>>
>> Well, if you were shipwrecked, you might pry the anti-corrosion zincs off
>> the hull, and along with the bronze/brass fittings, you might get some
>> potential.
>>
>> Of course, once you've used up the zincs, I think you're pretty much done.
>>
>> daestrom
>>
>
> You mean going down with a zincing ship?

You've certainly proved your mettle with that one.

191. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 20:46:16 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <lJadneq0DquESiPeRVn-tw@rcn.net>
Source record: 14841
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Joel Kolstad wrote:
> "Chuck Harris" <cf-NO-SPAM-harris@erols.com> wrote in message
> news:scydnYswxt8O6yPeRVn-tg@rcn.net...
>> I was going to do the job myself, but balked because even when I was done,
>> all I would have was a bunch of scopes that no one wanted to buy. We had
>> them (with the broken/missing knobs in the $15 pile at several hamfests,
>> and they went nowhere.
>
> And I imagine you'd already junked a few to use strictly as spare parts to fix
> the others?

That's just it, they all had the main knob broken. Some had the pieces intact,
but broken, others had nothing.

All worked, and all had the usual HP problems with drifty vertical amplifiers,
and easy to fool triggers. It wasn't worth fixing them. We also had dozens,
upon dozens of tek 465, 475, 485...

The tek scopes flew out, regardless of condition, the HP's just sat.

-Chuck

192. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-06 22:44:51 UTC
From: Ancient_Hacker <grg2@comcast.net>
Message-ID: <1136587491.782445.289920@g43g2000cwa.googlegroups.com>
Source record: 14847
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Long ago I was given a summer job to repair a palletload of HP 1xx scopes. One had a bad power transformer, unobtainable. The rest just needed new power supply filter capacitors. They seemed like nice scope, within their limits. Not particularly fast or bright or DC stable, but okay for our biomedical lab. I think that one had an actual knob on the DC balance control, it was so shaky.

I know this sounds like faint praise, but there's just something about a scope without a fan, with nice big knobs that go click instead of clunk, and that need no bandwidth limit button to keep the FM-ROCk-101 from fuzzing up the trace.

The HP 175 was an impressive scope-- 50+ 6DJ8's, 50MHz bandwidth, and a super bright CRT. It just ran and ran up until 1995 when the TRANSISTORS in the power supply went bad.

Still use a Tek 475 as my main bench scope.

Have tried several 54xxx digital scopes, don't care for the yucky green or amber screens, or the infuriating menu structure, or the way they don't detect clipping.

I have several Tek 485's on the to-repair shelf. IIRC they have about six power supply voltages and if any one of them gets out of spec the whole thing shuts down. Then it's kinda hard to figure out which one went blooey first. Grrr....

193. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 03:37:20 UTC
From: James Sweet <jamessweet@hotmail.com>
Message-ID: <QHGvf.457$ww5.377@trnddc01>
Source record: 14842
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

>
> You obviously haven't hired a machinist lately. In pristine shape, the
> scopes were worth $75 tops, the machine shops charge $100/hour, 1 hour
> minimum.
>
> I was going to do the job myself, but balked because even when I was done,
> all I would have was a bunch of scopes that no one wanted to buy. We had
> them (with the broken/missing knobs in the $15 pile at several hamfests,
> and they went nowhere.
>

Well no I haven't hired one because friends of mine own a machine shop
so I can get favors like that for free but still, $75 tops? We're
talking a pretty decent scope aren't we? When I bought my Tek 465 a few
years ago I couldn't find anything 100MHz dual trace in working order
for under $275 or so.

194. SolderSmoke #12 -- A Show for Electronics Homebrewers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 07:08:50 UTC
From: bill.meara@gmail.com
Message-ID: <1136617730.514893.106850@g43g2000cwa.googlegroups.com>
Source record: 14843
Cross-posted to: sci.electronics.basics,rec.radio.amateur.homebrew

SOLDERSMOKE!
A SHOW FOR ELECTRONICS HOMEBREWERS!
http://www.ourmedia.org/node/128175

Topics discussed in SolderSmoke 12:
-- Using spreadsheet software to design simple amplifiers.
-- Building an amp for the DDS VFO.
-- A cold solder joint detector.
-- DC to DC converter to power Elecraft rig.
-- Beagle 2 Mars Mission: crash site found?
-- Dobsonian telescopes and London sidewalk astronomy.

Listen at: http://www.ourmedia.org/node/128175

Background:
Tired of listening to Led Zepplin or NPR on your I-Pod? Wouldn't you like to be able to carry with you the kinds of ham radio conversations that you listen to while in your radio shack?
Mike, KL7R, in Juneau, Alaska, and Bill, M0HBR, in London, England meet regularly on the ECHOLINK system to discuss their homebrew radio projects. We are making them available as PODCASTS.

You can subscribe to the program, have them downloaded to your MP-3 player, and listen to them at your convenience. To subscribe, just cut and paste this URL into your I-poder (or similar) software.

http://www.ourmedia.org/mediarss/user/36170

If you don't have an MP3 player you can just go to the site below and listen to the latest program (and earlier editions) using the audio software on your computer.

http://www.ourmedia.org/node/128175

We hope you enjoy the program. Please send us feedback.

73 from London
Bill M0HBR N2CQR CU2JL
http://www.qsl.net/n2cqr

195. Welcome To Ham Radio! (And Don't Get Misled By CBERS!) - A FAQ.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 07:34:31 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1136619271.789630.294240@z14g2000cwz.googlegroups.com>
Source record: 14844
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

What is Ham Radio?

(Preface)
It is becoming increasingly difficult to fly the flag for
decency and for civilised behaviour in Radio Hammery. Even
the Usenet newsgroups dedicated to the cause have degenerated
into a hotbed of abusive onslaughts by those who ought to know better.
However, there still exists the fundamental basis on which Ham
Radio is based, and that will never die. This FAQ ("What Is
Ham Radio?") will be regularly published and will not be
shouted or bullied down. It is important that those of a
technical bent, who are the natural seed-corn of Radio Hammery
and who gravitate towards us to be the real novitiate, can
still find us, (and know that we are still here), their fellows.

-----ooooo-----

Please remember that this FAQ is a _POSITIVE EXHORTATION_
to you to exert yourselves to join our fraternity! (If you find
otherwise, then perhaps you are already classing yourself in the
mediocre groups of those who are criticised in the FAQ and from
whom we _MUST_ dissociate? If so - it's never too late for
a re-taxonomisation on your part - there's nothing elitist about
us, and we welcome all those who are prepared to put themselves
out in order to join our ranks!)

-----ooooo-----
(Article)
So,.....What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One such CB type is the so-called "Not-Ham". Otherwise
known as the CBer-Masquerading-As-A-Radio-Ham, this type
had their background in the hobby that is CB Radio and not
in the technical pursuits that lead up to a coveted Ham licence.
Easily recognised by their boasts of the criminal activity of
11 metre SSB operation, one wonders why they don't go back to
the CB Bands if such bands are dearer in their hearts than are the Ham
Bands? No _REAL Radio Hams associate with those who made an
illegal installation of transmitting equipment before being
in possession of an appropriate licence.

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B
licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

196. Re: Welcome To Ham Radio! (And Don't Get Misled By CBERS!) - A FAQ.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 07:59:01 UTC
From: Idi <idi.amin@hotmail.co.uk>
Message-ID: <1136620741.621752.87000@f14g2000cwb.googlegroups.com>
Source record: 14846
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Forsooth, methinks he doth orate too much

197. SPRAT 125 - G-QRP Journal - Winter 2005/6

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 08:29:18 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1136622558.244000.49370@g49g2000cwa.googlegroups.com>
Source record: 14745
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Arrived in the popst this morning, suggesting that we _DO_
have a national society for _REAL_ Radio Hams in the UK, and
that is the G-QRP club!
Qucikly browsing.....

"Poundshop DC Radio" - converting one of those cheapo scanning
VHF FM Radios into a DC RX for HF.

A 10W AM Top Band Rig - here I criticise the G-QRP club for not
only supporting the gangrenous degeneration that is the M3/CB
Fools' Licence scheme, but also encouraging those who are
licensees thereto to break the terms of their licence - the author
is an M3/CB Fools' Licence and the type of rig is not licensable.

Making leads for the FT817 - well, if the G-QRP club are falling into
the same trap as the RSCB and trying to recruit new members
from anywhare, then articles on CB accessories are an inevitable
result.

Making plug-in coils - but using DIN plugs and not the B9A
favoured by Denco!

78xx regulator circuits

A 2m 10mW AM handheld - odd that his should publ;icise Hans
Summers because his history of Childish Broadcasts (CB) in
this NG directed at me would suggest that his interests lie elsewhere.

RF powered sidetone

Use of a Biro case as a solder dispenser.

HF Antenna for a small garden

All-in-all, a good Ham Radio mag, save for the contributions
from CB types.

198. more hate filled shit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 09:01:15 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1136622897.249261.173890@z14g2000cwz.googlegroups.com>
Source record: 14698
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Orator For Decency wrote:
> What is Ham Radio?
>
cuting the reption of hate filled shit

199. Re: more hate filled shit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 10:24:13 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1136629453.806105.123170@g49g2000cwa.googlegroups.com>
Source record: 14699
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Walt Davidson wrote:
> On 7 Jan 2006 01:01:15 -0800, "an old friend" <kb9rqz@yahoo.com>
> wrote:
>
> >cuting the reption of hate filled shit
>
> How on earth does a person "cute reption"?

by doing so
>
> 73 de G3NYY
>
> --
> Walt Davidson Email: g3nyy @despammed.com

200. FX5000 external frequency input?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 11:09:25 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <dpo7h4$6e8$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 14700

Does anyone happen to know the jumpers to set in the transmitter to make the FX5000 accept an external frequency input?

I would like to run the transmitter from an external 1mhz reference (I believe that's the frequency it needs?)

Ta,

sam

201. More Markie Mularkie: Attn: Walt

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 11:13:47 UTC
From: K4YZ <k4yz@aol.com>
Message-ID: <1136632427.095694.9450@g44g2000cwa.googlegroups.com>
Source record: 14746
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

an_old_friend wrote:
> Walt Davidson wrote:
> > On 7 Jan 2006 01:01:15 -0800, "an old friend" <kb9rqz@yahoo.com>
> > wrote:
> >
> > >cuting the reption of hate filled ####
> >
> > How on earth does a person "cute reption"?
>
> by doing so

Walt, Meet Mark "Markie" Morgan, KB9RQZ. Markie is a functionally illiterate, socially inept, welfare dependent, sexually deviant alcoholic miscreant of American society.

Markie claims to have an IQ of 248. For reasons I am sure you can see, we seriously doubt his honesty (although he gives us dozen of other reasons to do that).

Markie has in the past tried to regale us with his alleged skill and knowledge of all-things-computing, but can't seem to get a spell checker to work.

Go figure.

His latest demonstration of skill is to bomb the NG with over 700 posts in an attempt to harrass me. All it's done is solidify everyone else's opinion on his mental instability. Witness his taglines that have my home address but someone else's phone number. (Oh, by the way...Markie likes to make up screen names of dead children and use them in order to circumvent Google posting limits...)

So...there you go. On behalf of American Amateurs everywhere, I extend my apologies to those of you "across the pond" who ahve to see this creep's foul mouth and childish rantings in this forum.

73

Steve, K4YZ

202. SPRAT #125 - The Saviour of Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 11:55:00 UTC
From: Orator For Decency <aiyr.r.bean@lycos.co.uk>
Message-ID: <1136634900.634706.200590@z14g2000cwz.googlegroups.com>
Source record: 14747
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

The Winter 2005/6 edition of SPRAT would seem to indicate that
the G-QRP club is well placed to act as the guardian of _REAL_
Ham Radio in Britland, now that the RSCB has thrown in the
towel by the metaphorically-mixing act of nailing its colours
("colors" for the non-English-speaking Yanks) to the mast.

A bevy of practical articles, including a suggestion for using
a throw-away VHF FM scanner RX as an HF RX.

One point of criticism, to keep a balance, is that the G-QRP
club supports the gangrenous degeneration that is the M3/CB
Fools' Licence scheme and by publishing a homebrew Top
Band rig by a licensee in the aforementioned scheme is encouraging
the licensees thereof to breach their licence conditions.

203. Re: more hate filled shit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 13:13:27 UTC
From: Walter Raleigh <walterraleigh69@hotmail.com>
Message-ID: <Z7Pvf.4196$j7.93905@news.indigo.ie>
Source record: 14701
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Walt Davidson" <g3nyy@despammed.com> wrote in message
news:3a5vr1h0lrbu5oj938epahm7io3sv6goj7@4ax.com...
> On 7 Jan 2006 01:01:15 -0800, "an old friend" <kb9rqz@yahoo.com>
> wrote:
>
>>cuting the reption of hate filled shit
>
> How on earth does a person "cute reption"?
>

I thought I kill-filed that moron...

--
vy 73 de Walter R.

204. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 15:55:00 UTC
From: Paul Burridge <pb@shove.your.spam.up.your.arse.atlanticstar.co.uk>
Message-ID: <fsovr1lq1bojnqabrh75umss8c8opq7n5q@4ax.com>
Source record: 14703
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Sat, 07 Jan 2006 04:38:08 -0800, xray <notreally@hotmail.invalid>
wrote:

>Sorry, I'm late to this thread but thought I'd add an opinion.

No one can stop you doing that.

>No, Spectum Analysers are useless for anyone outside the government or
>RF extremists.

???
Er, they're extremely useful pieces of test gear for anyone involved
in RF., even hobbyists.

>What are the specifications of the one you have? Maybe I can save you
>grief by taking it off your hands with a preimuim bid since it is just a
>glorified scope?

It's a different thing altogether!

Barely a week went by before I deeply regretted parting with my
spectrum analyser. :-(
--

"What is now proved was once only imagin'd" - William Blake

205. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 16:44:12 UTC
From: SJC <sjc_paul_1@yahoo.com>
Message-ID: <wdSvf.2058$Lh1.188@trnddc01>
Source record: 14702
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1136570313.368015.312020@g44g2000cwa.googlegroups.com...
> "Robinson 'could'--with nothing more than the battery and some
> wire--transmit radio signals in Morse....
> No accounting for range, of course.
> jak "
>
> True...but this just shows how important the battery really is...and
> that is why I chose to make it the main focus of Crusoe's efforts to
> get attention.
>
> TMT
>

It seems that if he is really into renewable and sustainable,
he does not have to be rescued at all.

206. Re: more hate filled shit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 17:13:33 UTC
From: class-a-licensee-pkearn-zaapk@didnt-run-away-from-a-morse-test.es.eircom.com.net
Message-ID: <43bff6aa.1427138@news.iol.ie>
Source record: 14704
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Walter Raleigh" <walterraleigh69@hotmail.com> wrote:

>
> "Walt Davidson" <g3nyy@despammed.com> wrote in message
> news:3a5vr1h0lrbu5oj938epahm7io3sv6goj7@4ax.com...
> > On 7 Jan 2006 01:01:15 -0800, "an old friend" <kb9rqz@yahoo.com>
> > wrote:
> >
> >>cuting the reption of hate filled shit
> >
> > How on earth does a person "cute reption"?
> >
>
> I thought I kill-filed that moron...

what ANOTHER U-TURN ?

typical b-licensee.

207. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 18:38:10 UTC
From: "Rich Grise, but drunk" <yahright@example.net>
Message-ID: <pan.2006.01.07.18.38.17.737702@example.net>
Source record: 14705
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Sat, 07 Jan 2006 16:55:00 +0100, Paul Burridge wrote:

> On Sat, 07 Jan 2006 04:38:08 -0800, xray <notreally@hotmail.invalid>
> wrote:
>
>>Sorry, I'm late to this thread but thought I'd add an opinion.
>
> No one can stop you doing that.
>
>>No, Spectum Analysers are useless for anyone outside the government or
>>RF extremists.
>
> ???
> Er, they're extremely useful pieces of test gear for anyone involved
> in RF., even hobbyists.

Not to mention incredible amounts of fun! :-) :-) :-) (look at a pulse's spectrum sometime, and twirl the PRF and PW knobs and watch the pretty pictures dance...)

>>What are the specifications of the one you have? Maybe I can save you
>>grief by taking it off your hands with a preimuim bid since it is just a
>>glorified scope?
>
> It's a different thing altogether!
>
> Barely a week went by before I deeply regretted parting with my
> spectrum analyser. :-(

Not only that, but its very name is ripe for _so_ many play-on-words jokes! "rectum analyzer?" "spectrum ANAL-izer?" etc.... ;-)

Cheers!
Rich

208. Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 19:28:12 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <5f129$43c01647$4251d54c$538@DIALUPUSA.NET>
Source record: 14706
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Back in the '60s and early '70s I did some work with Impatt and Gunn diodes, building a little self-detecting doppler for speed sensing. However, 35 years have passed and my notebooks for that stuff are somewhere in a dusty archive along with my venerable sliderule.

Is there a cheap source for onesies-twosies of a radar front-end that will give me doppler audio as a function of a large metal object's speed at a range of 20 meters or so? I don't need to go into production on this thing, just build one. A surplus source would be ideal.

It seems that the little kids on our rural country lane have all become teenagers at once and are trying to outdo the others in how fast they can drive daddy's car up and down the lane. We've lost one dog this week and unless I can put up some sort of a siren that goes off when they exceed some agreed upon limit, the carnage will continue.

Regards,

Jim

209. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 19:41:41 UTC
From: Bill Janssen <billj9@ieee.org>
Message-ID: <VPUvf.98$wk5.43@news02.roc.ny>
Source record: 14707
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

RST Engineering wrote:

>Back in the '60s and early '70s I did some work with Impatt and Gunn diodes,
>building a little self-detecting doppler for speed sensing. However, 35
>years have passed and my notebooks for that stuff are somewhere in a dusty
>archive along with my venerable sliderule.
>
>Is there a cheap source for onesies-twosies of a radar front-end that will
>give me doppler audio as a function of a large metal object's speed at a
>range of 20 meters or so? I don't need to go into production on this thing,
>just build one. A surplus source would be ideal.
>
>It seems that the little kids on our rural country lane have all become
>teenagers at once and are trying to outdo the others in how fast they can
>drive daddy's car up and down the lane. We've lost one dog this week and
>unless I can put up some sort of a siren that goes off when they exceed some
>agreed upon limit, the carnage will continue.
>
>
>Regards,
>
>
>Jim
>
>
>
>
>
Yep they are available. I have about a dozen or so of Gunn units that
came from
10 GHz door opening bits They have the Gunn diode and a detector diode.
The rest of the
electronics I threw away.

Two of them can be sent for the cost of postage.

Bill K7NOM

210. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 19:43:09 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <43C019C6.1090301@invalid.invalid>
Source record: 14708
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

RST Engineering wrote:
> It seems that the little kids on our rural country lane have all become
> teenagers at once and are trying to outdo the others in how fast they can
> drive daddy's car up and down the lane. We've lost one dog this week and
> unless I can put up some sort of a siren that goes off when they exceed some
> agreed upon limit, the carnage will continue.

I realize this is way off the subject, and I do honestly wish you
success in getting the neighborhood speed demons under control, but...

as a bicyclist, I find it necessary to point out... that if the
neighborhood dogs are being hit by speeders, those dogs are obviously in
the road. They shouldn't be.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

211. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 19:47:22 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <525cb$43c01ac5$4251d54c$723@DIALUPUSA.NET>
Source record: 14709
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Neither should little kids, but poo happens. With dogs it's "I'm sorry".
With kids it's manslaughter.

Jim

"Doug Smith W9WI" <w9wi@invalid.invalid> wrote in message
news:43C019C6.1090301@invalid.invalid...
>
> as a bicyclist, I find it necessary to point out... that if the
> neighborhood dogs are being hit by speeders, those dogs are obviously in
> the road. They shouldn't be.
> --
> Doug Smith W9WI
> Pleasant View (Nashville), TN EM66
> http://www.w9wi.com
>

212. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 20:01:40 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <sc70s1h9sncitoiqpa5cfljv4hcrmpn26p@4ax.com>
Source record: 14710
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sat, 7 Jan 2006 11:28:12 -0800, "RST Engineering"
<jim@rstengineering.com> wrote:

>Back in the '60s and early '70s I did some work with Impatt and Gunn diodes,
>building a little self-detecting doppler for speed sensing. However, 35
>years have passed and my notebooks for that stuff are somewhere in a dusty
>archive along with my venerable sliderule.
>
>Is there a cheap source for onesies-twosies of a radar front-end that will
>give me doppler audio as a function of a large metal object's speed at a
>range of 20 meters or so? I don't need to go into production on this thing,
>just build one. A surplus source would be ideal.
>
>It seems that the little kids on our rural country lane have all become
>teenagers at once and are trying to outdo the others in how fast they can
>drive daddy's car up and down the lane. We've lost one dog this week and
>unless I can put up some sort of a siren that goes off when they exceed some
>agreed upon limit, the carnage will continue.
>
>
>Regards,
>
>
>Jim
>
>

IIRC I've seen police radar guns as surplus.

It's been quite a few years ago now, so I don't recall the details,
but I bought a "sports gun" for my youngest that he used at dragster
events. I think it was about $100.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

213. Re: more hate filled shit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 20:09:15 UTC
From: Dave Heil <k8mn@earthlink.net>
Message-ID: <LdVvf.32$ee6.31@newsread3.news.pas.earthlink.net>
Source record: 14711
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Walt Davidson wrote:
> On 7 Jan 2006 01:01:15 -0800, "an old friend" <kb9rqz@yahoo.com>
> wrote:
>
>> cuting the reption of hate filled shit
>
> How on earth does a person "cute reption"?

One can work wonders with some doilies and a few candles around the
receiver.

Dave K8MN

214. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 20:12:21 UTC
From: Dan Richardson <>
Message-ID: <5480s11jsh72106tt24q9hqmhqo8n6oiet@4ax.com>
Source record: 14712
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sat, 7 Jan 2006 11:28:12 -0800, "RST Engineering"
<jim@rstengineering.com> wrote:

>Is there a cheap source for onesies-twosies of a radar front-end that will
>give me doppler audio as a function of a large metal object's speed at a
>range of 20 meters or so? I don't need to go into production on this thing,
>just build one. A surplus source would be ideal.

Ramsey makes a kit. You can find the info here:

http://www.youdoitelectronics.com/id558_sg7___speedy_radar_kit.htm

Danny, K6MHE

email: k6mhe<at>arrl<dot>net
http://www.k6mhe.com/

215. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 21:06:31 UTC
From: Rather Play Pinball <123@abc.net>
Message-ID: <s3Wvf.2596$5g1.1948@fe02.lga>
Source record: 14713
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Do a looksie on E-Pay, cheap old style X and K band units are available. With a 12vDC power supply, you can have your very own source. Even if you just buy the head without the counter, the 12vdc will supply the head and it will put out.

Do NOT purchase the Ramsey "kit" for this applicaiton. While it may be fun for a budding electronics wanna-be, it does not put out at a frequency that will trigger radar detectors.

Jack

216. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 21:18:05 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <43c02f51.205440678@news.blueyonder.co.uk>
Source record: 14714
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sat, 7 Jan 2006 11:28:12 -0800, "RST Engineering"
<jim@rstengineering.com> wrote:

>Back in the '60s and early '70s I did some work with Impatt and Gunn diodes,
>building a little self-detecting doppler for speed sensing. However, 35
>years have passed and my notebooks for that stuff are somewhere in a dusty
>archive along with my venerable sliderule.

Jim, take a look at www.shfmicro.com where you'll find 10GHz and
24GHz doppler modules for sale at very favourable prices. They would
certainly be very useful for what you have in mind.

Good luck..

Peter, G3PHO

UK Microwave Group

www.microwavers.org
www.g3pho.org.uk

217. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 21:43:01 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <FBWvf.42956$dO2.13349@newssvr29.news.prodigy.net>
Source record: 14715
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Jim,

> Neither should little kids, but poo happens. With dogs it's "I'm sorry". ...

Not necessarily. It can become wrongful death but you'd have to have
proof of grossly excessive speed. Skidmarks can be such proof if a car
doesn't have ALB. But, of course, the experts for that usually only come
out when a person has been hit.

Regards, Joerg

http://www.analogconsultants.com

218. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 22:15:11 UTC
From: "RST Engineering (jw)" <jim@rstengineering.com>
Message-ID: <c7d1b$43c03d6a$4251d54c$3192@DIALUPUSA.NET>
Source record: 14716
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Why would I care if it triggered a radar detector? In fact, it would be
BETTER if it didn't trigger a detector.

Jim

"Rather Play Pinball" <123@abc.net> wrote in message
news:s3Wvf.2596$5g1.1948@fe02.lga...
>
> Do NOT purchase the Ramsey "kit" for this applicaiton. While it may be
> fun for a budding electronics wanna-be, it does not put out at a frequency
> that will trigger radar detectors.
>
> Jack
>
>
>
>

219. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 22:19:22 UTC
From: "RST Engineering (jw)" <jim@rstengineering.com>
Message-ID: <7452e$43c03e65$4251d54c$3207@DIALUPUSA.NET>
Source record: 14717
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Peter, thanks, but they are a bit pricey for what I have in mind.

Jim

"Peter" <microwaves@blueyonder.co.uk> wrote in message
news:43c02f51.205440678@news.blueyonder.co.uk...
> On Sat, 7 Jan 2006 11:28:12 -0800, "RST Engineering"
> <jim@rstengineering.com> wrote:

>
>
>
> Jim, take a look at www.shfmicro.com where you'll find 10GHz and
> 24GHz doppler modules for sale at very favourable prices. They would
> certainly be very useful for what you have in mind.

220. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 22:24:08 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <m4f0s1tthg1fhhh25928nd2sibaufqnvm7@4ax.com>
Source record: 14718
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sat, 7 Jan 2006 16:06:31 -0500, "Rather Play Pinball" <123@abc.net>
wrote:

>
>Do a looksie on E-Pay, cheap old style X and K band units are available.
>With a 12vDC power supply, you can have your very own source. Even if you
>just buy the head without the counter, the 12vdc will supply the head and it
>will put out.
>
>Do NOT purchase the Ramsey "kit" for this applicaiton. While it may be fun
>for a budding electronics wanna-be, it does not put out at a frequency that
>will trigger radar detectors.

He's not trying to set off detectors, he's trying to set a speed
threshold where a siren goes off.

But what the heck, if you're going to set up an illegal transmitter,
might as well use one big enough to reset the ECM in their cars.

221. 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 22:26:23 UTC
From: JE <JE@nowhere.com>
Message-ID: <eccca$43c0400f$d135c4af$26056@MDI.CA>
Source record: 14719

The common 1N4007 seem to work for HF but what is the max. frequency they can be used as varactors?

And how about zener diodes?

JE

222. PIC Based Freq Readout

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 22:45:02 UTC
From: Howard <howardwj@ntlworld.com>
Message-ID: <OvXvf.13125$W4.3549@newsfe4-gui.ntli.net>
Source record: 14720

Does anyone have circuit and software listing for PIC based freq readout,
preferably with IF offset. 16F84 would be ideal. I've tried to contact
IK3OIL for the software for his counter but am unable to.
Thanks. Howard G3UPZ

223. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 22:47:08 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <23e07$43c044e8$4251d54c$3390@DIALUPUSA.NET>
Source record: 14721
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

What illegal? I can either retune it for a ham band or reduce power if
necessary. I'll find the hardware first and figure out the legal later.

Jim

"Wes Stewart" <n7ws*@*yahoo.com> wrote in message

>
> But what the heck, if you're going to set up an illegal transmitter,
> might as well use one big enough to reset the ECM in their cars.

224. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 23:08:05 UTC
From: maxfoo <maxfoo@punkass.com>
Message-ID: <c7i0s1tobttao7aurcqrtgbgfcev0oukts@4ax.com>
Source record: 14722
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sat, 7 Jan 2006 11:28:12 -0800, "RST Engineering" <jim@rstengineering.com>
wrote:

>Back in the '60s and early '70s I did some work with Impatt and Gunn diodes,
>building a little self-detecting doppler for speed sensing. However, 35
>years have passed and my notebooks for that stuff are somewhere in a dusty
>archive along with my venerable sliderule.
>
>Is there a cheap source for onesies-twosies of a radar front-end that will
>give me doppler audio as a function of a large metal object's speed at a
>range of 20 meters or so? I don't need to go into production on this thing,
>just build one. A surplus source would be ideal.
>
>It seems that the little kids on our rural country lane have all become
>teenagers at once and are trying to outdo the others in how fast they can
>drive daddy's car up and down the lane. We've lost one dog this week and
>unless I can put up some sort of a siren that goes off when they exceed some
>agreed upon limit, the carnage will continue.
>
>
>Regards,
>
>
>Jim
>

Go to your local police department and have them monitor the speeders with a
automated speed display unit. What! they don't have one in your town? bring it
up at the next town meeting... ;)

225. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 23:13:49 UTC
From: Ken Taylor <ken@home.nz>
Message-ID: <wVXvf.13343$vH5.691445@news.xtra.co.nz>
Source record: 14723
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"RST Engineering (jw)" <jim@rstengineering.com> wrote in message
news:c7d1b$43c03d6a$4251d54c$3192@DIALUPUSA.NET...
> Why would I care if it triggered a radar detector? In fact, it would be
> BETTER if it didn't trigger a detector.
>
> Jim
>

Why? Don't you intend to trigger a siren to slow them down? What's it matter
if they slow down because of their dectors - they slow down, and that would
appear to be the important thing.

Cheers.

Ken

>
> "Rather Play Pinball" <123@abc.net> wrote in message
> news:s3Wvf.2596$5g1.1948@fe02.lga...
> >
> > Do NOT purchase the Ramsey "kit" for this applicaiton. While it may be
> > fun for a budding electronics wanna-be, it does not put out at a
frequency
> > that will trigger radar detectors.
> >
> > Jack
> >
> >
> >
> >
>
>

226. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 23:16:02 UTC
From: Ken Taylor <ken@home.nz>
Message-ID: <BXXvf.13344$vH5.691404@news.xtra.co.nz>
Source record: 14724
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

There's a radar speed gun on Ebay *NOW* (not mine, so technically this isn't spam...:-)

Cheers.

Ken

"RST Engineering (jw)" <jim@rstengineering.com> wrote in message news:7452e$43c03e65$4251d54c$3207@DIALUPUSA.NET...
> Peter, thanks, but they are a bit pricey for what I have in mind.
>
> Jim
>
>
> "Peter" <microwaves@blueyonder.co.uk> wrote in message
> news:43c02f51.205440678@news.blueyonder.co.uk...
> > On Sat, 7 Jan 2006 11:28:12 -0800, "RST Engineering"
> > <jim@rstengineering.com> wrote:
>
>
> >
> >
> >
> > Jim, take a look at www.shfmicro.com where you'll find 10GHz and
> > 24GHz doppler modules for sale at very favourable prices. They would
> > certainly be very useful for what you have in mind.
>
>

227. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-07 23:55:41 UTC
From: Brian <nospam@noemail.net>
Message-ID: <1yYvf.31090$q4.16432@newsfe2-gui.ntli.net>
Source record: 14725
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"RST Engineering" <jim@rstengineering.com> wrote in message
news:5f129$43c01647$4251d54c$538@DIALUPUSA.NET...

What a waste of time! If you have a problem with speeding cars just phone
the police, or video record it and phone them at a later date. Also don't
be irresponsible and let dogs out as they might cause an accident or get
killed if they run across roads infront of cars.

228. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 00:00:10 UTC
From: Brian <nospam@noemail.net>
Message-ID: <eCYvf.31091$q4.20536@newsfe2-gui.ntli.net>
Source record: 14726
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"RST Engineering" <jim@rstengineering.com> wrote in message
news:525cb$43c01ac5$4251d54c$723@DIALUPUSA.NET...
> Neither should little kids, but poo happens. With dogs it's "I'm sorry".
> With kids it's manslaughter.
>
> Jim
>
>
>
> "Doug Smith W9WI" <w9wi@invalid.invalid> wrote in message
> news:43C019C6.1090301@invalid.invalid...
>>
>> as a bicyclist, I find it necessary to point out... that if the
>> neighborhood dogs are being hit by speeders, those dogs are obviously in
>> the road. They shouldn't be.
>> --
>> Doug Smith W9WI
>> Pleasant View (Nashville), TN EM66
>> http://www.w9wi.com
>>
>
>
RESPONSIBLE parents do not let their children run out in the road, idiots
that allow dogs to run free in the road need to be aware that they can cause
accidents. I do hope the pathetic owner is held responsible when a dog
which is out of control runs out and causes an accident.
Two seperate arguments, you need to be clear of what it is you want.
Jealousy is a terrible thing, so if that's all it's down to then give up.
That is wht it comes across as. The people concerned probably have their
own cars and don't expect some idiot to allow a dog to run infront of them
in the hope they will hit it. Were you after an insurance claim?
Keep the dogs under control as responsible people keep their children under
control.

229. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 00:01:57 UTC
From: Brian <nospam@noemail.net>
Message-ID: <VDYvf.31092$q4.17473@newsfe2-gui.ntli.net>
Source record: 14727
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
news:FBWvf.42956$dO2.13349@newssvr29.news.prodigy.net...
> Hello Jim,
>
>
>> Neither should little kids, but poo happens. With dogs it's "I'm sorry".
>> ...
>
>
> Not necessarily. It can become wrongful death but you'd have to have proof
> of grossly excessive speed. Skidmarks can be such proof if a car doesn't
> have ALB. But, of course, the experts for that usually only come out when
> a person has been hit.
>
> Regards, Joerg
>
No idea what you mean by ALB as abbreviations are only good for those who
all have an understanding of what is meant.
If you refer to a car with antilock brakes then they DO leave marks that can
be identified. I have investigated enough accident scenes that leave the
same tell tale signs. Boy racers with antilock brakes all assume they can
go faster and no one will know. How wrong they are.

230. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 00:05:43 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <cc92e$43c05752$4251359f$3875@DIALUPUSA.NET>
Source record: 14728
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

A) We aren't in a "town", rather we are pretty far out into the country.

B) It is a private dead-end road owned in mutual easement between the four families that live at the end of it about half a mile off the county road that serves it. The county mounties have nothing to say about what goes on on the road.

C) I realize that this is newsnet and anything goes, but why can't you just ATFQ?

Jim

> Go to your local police department and have them monitor the speeders with
> a
> automated speed display unit. What! they don't have one in your town?
> bring it
> up at the next town meeting... ;)

231. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 00:22:14 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <WWYvf.4115$fb4.3471@newssvr14.news.prodigy.com>
Source record: 14729
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hallo Brian,

>
> No idea what you mean by ALB as abbreviations are only good for those who
> all have an understanding of what is meant.

I used ALB because it was on the insurance papers. They give a discount
for that feature. In Europe they mostly call it ABS.

> If you refer to a car with antilock brakes then they DO leave marks that can
> be identified. I have investigated enough accident scenes that leave the
> same tell tale signs. Boy racers with antilock brakes all assume they can
> go faster and no one will know. How wrong they are.
>
>
True, they do leave regulation patterns. But an accident investigator
told me they are pretty faint and wear off faster by traffic.

Regards, Joerg

http://www.analogconsultants.com

232. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 00:28:59 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <f1Zvf.4116$fb4.459@newssvr14.news.prodigy.com>
Source record: 14730
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Brian,

> Keep the dogs under control as responsible people keep their children under
> control.
>
>
Even then it can still happen and we all have to use our cars carefully.
One kid didn't get injured because I was going 15mph in a 25mph zone
(the street where we live). It dashed out when the garage was opened,
zooming into the road from behind a van. Couldn't see it coming but I
never go faster on that street, for that very reason. I came to a stop
about one foot before the child.

Regards, Joerg

http://www.analogconsultants.com

233. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 00:41:32 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnds0nts.2j0n.bit-bucket@shell.config.com>
Source record: 14731

On Sat, 07 Jan 2006 17:26:23 -0500, JE wrote:

> The common 1N4007 seem to work for HF but what is the max. frequency
> they can be used as varactors?
>
> And how about zener diodes?

I'd expect that all to depend on manufacturer (and, even, date code.)

HNY es 73
Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
Pueblo, Colorado | @ | Jonesy | OS/2 __
38.24N 104.55W | config.com | DM78rf | SK

234. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 00:51:19 UTC
From: "James T. White" <SPAMjtwhiteGUARD@hal-pc.org>
Message-ID: <43c06074$0$502$a726171b@news.hal-pc.org>
Source record: 14732
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"RST Engineering" <jim@rstengineering.com> wrote in message
news:cc92e$43c05752$4251359f$3875@DIALUPUSA.NET...
> B) It is a private dead-end road owned in mutual easement between the
four
> families that live at the end of it about half a mile off the county
road
> that serves it. The county mounties have nothing to say about what
goes on
> on the road.

So go have a talk with the parents in the other three families and ask
them to get control of their kids. Better yet, send the responsible
ones a bill for your new dog.

--
James T. White

235. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 01:03:10 UTC
From: maxfoo <maxfoo@punkass.com>
Message-ID: <b5p0s1hu72cg3md97golle9jksr547euhu@4ax.com>
Source record: 14733
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sat, 7 Jan 2006 16:05:43 -0800, "RST Engineering" <jim@rstengineering.com>
wrote:

>why can't you just
>ATFQ?

because this is newsnet and anything goes. ;)

236. NE602 replacement is NTE7164?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 01:36:28 UTC
From: JE <JE@nowhere.com>
Message-ID: <22a47$43c06c9c$d135c4af$28527@MDI.CA>
Source record: 14734

Anyone know if these NTE7164 is a drop in replacement for NE602?
What are other current IC's being used for mixers by homebrewers?

JE

237. Re: PIC Based Freq Readout

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 02:19:44 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <dppss0$m3k$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 14735

What frequency do you want it to count up to and what accuracy?

Sam

"Howard" <howardwj@ntlworld.com> wrote in message
news:OvXvf.13125$W4.3549@newsfe4-gui.ntli.net...
> Does anyone have circuit and software listing for PIC based freq readout,
> preferably with IF offset. 16F84 would be ideal. I've tried to contact
> IK3OIL for the software for his counter but am unable to.
> Thanks. Howard G3UPZ
>

238. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 02:23:45 UTC
From: "H. P. Friedrichs" <noemail@please.com>
Message-ID: <LrGdncOXvJo16l3enZ2dnUVZ_t6dnZ2d@velocitywest.com>
Source record: 14736
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

A recent QST made reference to wireless telegraphic experiments that
didn't involve the use of any batteries at all. The transmitter was a
length of wire cut to 1/4 wavelength and suspended by a tree or a kite.
The feed end was linked to ground through a key.

An antenna of any length is likely to accumulate a charge from
electrostatic field present in the atmosphere...200 volts/meter if I
remember correctly. Keying that charge to ground produces oscillations
that supposedly could be picked up many miles away....probably even
farther now with modern receivers.

Pete
AC7ZL

Too_Many_Tools wrote:
> "Robinson 'could'--with nothing more than the battery and some
> wire--transmit radio signals in Morse....
> No accounting for range, of course.
> jak "
>
> True...but this just shows how important the battery really is...and
> that is why I chose to make it the main focus of Crusoe's efforts to
> get attention.
>
> TMT
>

239. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 02:25:20 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <268bb$43c0784d$42512485$4526@DIALUPUSA.NET>
Source record: 14737
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

What a fu**ing jerk. I asked a technical question in a technical newsgroup. I expect a technical answer.

As to your political and ethical questions to my question, go find another newsgroup to tell others how to live. Our little tiny community knows how to do it, we all agree on the problem, and we're going to solve it. I'm providing the technical know-how.

And don't tell me how to use local law enforcement or local political action how to do it. I've spent 12 years of my life in local elective office at the highest local levels. I don't need your unsolicited advice on how to work the system.

Please, no more of this crap. Anybody with a source for doppler radars, please post. Others, BUTT OUT.

Jim

"Brian" <nospam@noemail.net> wrote in message news:eCYvf.31091$q4.20536@newsfe2-gui.ntli.net...

> RESPONSIBLE parents do not let their children run out in the road, idiots
> that allow dogs to run free in the road need to be aware that they can
> cause accidents.

240. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 02:26:26 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <e8d4d$43c0784d$42512485$4526@DIALUPUSA.NET>
Source record: 14738
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

What a fu**ing jerk. I asked a technical question in a technical newsgroup. I expect a technical answer.

As to your political and ethical questions to my question, go find another newsgroup to tell others how to live. Our little tiny community knows how to do it, we all agree on the problem, and we're going to solve it. I'm providing the technical know-how.

And don't tell me how to use local law enforcement or local political action how to do it. I've spent 12 years of my life in local elective office at the highest local levels. I don't need your unsolicited advice on how to work the system.

Please, no more of this crap. Anybody with a source for doppler radars, please post. Others, BUTT OUT.

Jim

"Brian" <nospam@noemail.net> wrote in message news:eCYvf.31091$q4.20536@newsfe2-gui.ntli.net...

> RESPONSIBLE parents do not let their children run out in the road, idiots
> that allow dogs to run free in the road need to be aware that they can
> cause accidents.

241. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 02:30:06 UTC
From: "RST Engineering (jw)" <jim@rstengineering.com>
Message-ID: <ebb$43c07929$42512485$4540@DIALUPUSA.NET>
Source record: 14739
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

You are one of the idiots I don't ever want to live next to. We can talk to the parents until we are blue in the face and the kids are going to be ... kids.

Please butt out of this conversation.

Ji

"James T. White" <SPAMjtwhiteGUARD@hal-pc.org> wrote in message news:43c06074$0$502$a726171b@news.hal-pc.org...

> So go have a talk with the parents in the other three families and ask
> them to get control of their kids. Better yet, send the responsible
> ones a bill for your new dog.
>
> --
> James T. White
>
>

242. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 02:33:44 UTC
From: "RST Engineering (jw)" <jim@rstengineering.com>
Message-ID: <aa531$43c07a03$42512485$4554@DIALUPUSA.NET>
Source record: 14740
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

That's because "Brian", an "experienced investigator" hasn't ever seen ALB,
although laymen such as I can translate it rather easily.

Brian is a jerknose.

Jim

.com

243. Re: PIC Based Freq Readout

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 03:07:56 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <4n%vf.77$QZ5.72@fe07.lga>
Source record: 14741

Google Francesco ... I'm pretty sure he has that code on his website still. There must be a hundred variants, all pretty much the same. Weeder is another popular one. I personally like the OM3CPH version. I can probably email you a half-dozen. Most of the 16F84 ones are pretty bad from a code point, making it hard to incorporate your IF, but they all pretty much work.

Unless you have a basketfull of F84's laying around, almost any other part is a better choice. A lot of people use the 628 these days, which is about twice an F84 at a third the price. It usually isn't real tough to make the code changes. (A lot of F84 code, though, it so bad it is hard to make any changes).

If the email on your posting is correct, I'll email you a few.

..

"Howard" <howardwj@ntlworld.com> wrote in message
news:OvXvf.13125$W4.3549@newsfe4-gui.ntli.net...
> Does anyone have circuit and software listing for PIC based freq readout,
> preferably with IF offset. 16F84 would be ideal. I've tried to contact
> IK3OIL for the software for his counter but am unable to.
> Thanks. Howard G3UPZ
>

244. Re: NE602 replacement is NTE7164?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 03:10:39 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <Ct%vf.81$QZ5.7@fe07.lga>
Source record: 14742

NE602, NE612, SA602, SA612 all virtually identical. NE/SA are different manufacturers, 602/612 are different test specs. Generally the 612s are a little cheaper. Same basic specs just tested less extensively.

..

"JE" <JE@nowhere.com> wrote in message news:22a47$43c06c9c$d135c4af$28527@MDI.CA...
> Anyone know if these NTE7164 is a drop in replacement for NE602?
> What are other current IC's being used for mixers by homebrewers?
>
> JE

245. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 03:28:30 UTC
From: Mike Coslo <mremovethiscoslo@adelphia.net>
Message-ID: <97qdnTmqe4IBG13eRVn-qQ@adelphia.com>
Source record: 14743
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

RST Engineering wrote:
> What a fu**ing jerk. I asked a technical question in a technical newsgroup.
> I expect a technical answer.
>
> As to your political and ethical questions to my question, go find another
> newsgroup to tell others how to live. Our little tiny community knows how to
> do it, we all agree on the problem, and we're going to solve it. I'm
> providing the technical know-how.
>
> And don't tell me how to use local law enforcement or local political action
> how to do it. I've spent 12 years of my life in local elective office at
> the highest local levels. I don't need your unsolicited advice on how to
> work the system.
>
> Please, no more of this crap. Anybody with a source for doppler radars,
> please post. Others, BUTT OUT.
>
> Jim
>

Hi Jim,

I don't know if I'm going to be graciously asked to butt out, but what
do you expect to gain by an alarm that goes off when presumably some
pre-set speed is exceeded? I do know that when I was a teenager, I would
have viewed such a thing as an almost irresistible attractant.

If you want a radar-based device, get an old police radar gun, and
design an interface to a camera to photograph the licenses of the cars.
Perhaps the parents of these miscreants might enjoy seeing what their
larvae are doing with the family jitney!

Sorry about the dog. 8^(

- 73 de Mike KB3EIA -

246. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 03:49:09 UTC
From: Mark <makolber@yahoo.com>
Message-ID: <1136692149.669126.208990@z14g2000cwz.googlegroups.com>
Source record: 14562
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

I saw a radar gun for sale at Radio Shack....

Mark

247. Re: NE602 replacement is NTE7164?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 04:38:47 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43C09747.E3D13E02@earthlink.net>
Source record: 14744

JE wrote:
>
> Anyone know if these NTE7164 is a drop in replacement for NE602?
> What are other current IC's being used for mixers by homebrewers?
>
> JE

Go to http://nte01.nteinc.com/webforms.nsf/qcsignin?openform to
download their semicondutor cross reference.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

248. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 05:25:18 UTC
From: osr@uakron.edu
Message-ID: <1136666111.504172.172140@f14g2000cwb.googlegroups.com>
Source record: 14555
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Dan Richardson wrote:
> On Sat, 7 Jan 2006 11:28:12 -0800, "RST Engineering"
> <jim@rstengineering.com> wrote:
>
> >Is there a cheap source for onesies-twosies of a radar front-end that will
> >give me doppler audio as a function of a large metal object's speed at a
> >range of 20 meters or so? I don't need to go into production on this thing,
> >just build one. A surplus source would be ideal.
>
> Ramsey makes a kit. You can find the info here:
>
> http://www.youdoitelectronics.com/id558_sg7___speedy_radar_kit.htm
>
> Danny, K6MHE
>
no offense but:

ramsey's kiit emits all of about 500 microwatts at 1.6 ghz, useless
for dogs, but Ok for part 15 radar of cars.

try www.shfmicro.com

Steve Roberts

249. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 05:26:21 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1136697981.221564.282350@z14g2000cwz.googlegroups.com>
Source record: 14554
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Thanks for the responses so far....

A few more questions...

How many of you use racks for storing your test equipment?

When you have a choice, do you choose equipment that is rack style or
table top in form factor?

Of the racks used, are they full racks or partial racks with storage?

For storage, what do you use...cabinets, shelves, chests?

What do you for lighting?

TMT

250. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 08:48:13 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1136710093.423464.169840@f14g2000cwb.googlegroups.com>
Source record: 14565
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

```
..try Philips . they manufactured once a module working in the X band
for security detectots, doors openers and suchlike. if I remember
correctly iwas named CL-8XXX.
```

251. Re: NE602 replacement is NTE7164?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 08:48:42 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1136710122.633954.154660@z14g2000cwz.googlegroups.com>
Source record: 14563

Philips took over Signetics who made the NE602 etc. and renamed them
SA... They are the same chips, and are sill available.

Leon

252. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 08:57:29 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1136710649.853416.270090@g14g2000cwa.googlegroups.com>
Source record: 14558
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

Too_Many_Tools wrote:
> Reading the thread on the Voltaic pile in sci.chem.electrochem.battery,
> I started considering what would one have to do to build a "Robinson
> Crusoe" battery to power equipment in an emergency.
>
> Assuming a battery of 12v and respectable current to power
> communications equipment, how would you do it?
>
> What materials would you use?
>
> How would you charge it?
>
> I look forward to your contributions.
>
> TMT

Nah, its easy. Find the crashed WW2 B24 in the jungle. Pull out all the radio gear (it would have been "tropic proofed" and so would work - anyway, it was better quality than todays modern plastic junk) - pull a 28 volt generator off one of the engines, and with your Swiss Army Knife carve a propellor to fit it (the original props were wrecked when it crashed) - then, wait for the next windy day, and hit the TX switch. Easy as......

73 de VK3BFA Andrew.

253. Re: More Markie Mularkie: Attn: Walt

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 09:03:29 UTC
From: Jimbo <jim.gm4dhj@ntlworld.com>
Message-ID: <Bz4wf.2205$s65.332@newsfe1-win.ntli.net>
Source record: 14648
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

> Walt, Meet Mark "Markie" Morgan,

wonder if he is related to our Markie twins ?? .....

254. Re: More Markie Mularkie: Attn: Walt

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 09:18:05 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <hN4wf.49304$Dg6.40051@newsfe3-gui.ntli.net>
Source record: 14649
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

on 07/01/2006 11:13 K4YZ said the following:
> an_old_friend wrote:
>
>>Walt Davidson wrote:
>>
>>>On 7 Jan 2006 01:01:15 -0800, "an old friend" <kb9rqz@yahoo.com>
>>>wrote:
>>>
>>>
>>>>cuting the reption of hate filled ####
>>>
>>>How on earth does a person "cute reption"?
>>
>>by doing so
>
>
> Walt, Meet Mark "Markie" Morgan, KB9RQZ. Markie is a functionally
> illiterate, socially inept, welfare dependent, sexually deviant
> alcoholic miscreant of American society.
>
> Markie claims to have an IQ of 248. For reasons I am sure you can
> see, we seriously doubt his honesty (although he gives us dozen of
> other reasons to do that).
>
> Markie has in the past tried to regale us with his alleged skill
> and knowledge of all-things-computing, but can't seem to get a spell
> checker to work.
>
> Go figure.
>
> His latest demonstration of skill is to bomb the NG with over 700
> posts in an attempt to harrass me. All it's done is solidify everyone
> else's opinion on his mental instability. Witness his taglines that
> have my home address but someone else's phone number. (Oh, by the
> way...Markie likes to make up screen names of dead children and use
> them in order to circumvent Google posting limits...)
>
> So...there you go. On behalf of American Amateurs everywhere, I
> extend my apologies to those of you "across the pond" who ahve to see
> this creep's foul mouth and childish rantings in this forum.
>
> 73
>

> Steve, K4YZ
>
Sounds like he should meet Beanie, they have a lot in common. Maybe
they'd get a room somewhere.
--
;-)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

255. Re: More Markie Mularkie: Attn: Walt

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 09:37:02 UTC
From: Mumbling Mark <HoughtonHo@Dimwitted>
Message-ID: <dpqmac$n2f$0@pita.alt.net>
Source record: 14650
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Frank Turner-Smith G3VKI" <g3vki@turner-smith.co.uk> wrote in message
news:hN4wf.49304$Dg6.40051@newsfe3-gui.ntli.net...
on 07/01/2006 11:13 K4YZ said the following:
> an_old_friend wrote:
>
>>Walt Davidson wrote:
>>
>>>On 7 Jan 2006 01:01:15 -0800, "an old friend" <kb9rqz@yahoo.com>
>>>wrote:
>>>
>>>
>>>>cuting the reption of hate filled ####
>>>
>>>How on earth does a person "cute reption"?
>>
>>by doing so
>
>
> Walt, Meet Mark "Markie" Morgan, KB9RQZ. Markie is a functionally
> illiterate, socially inept, welfare dependent, sexually deviant
> alcoholic miscreant of American society.
>
> Markie claims to have an IQ of 248. For reasons I am sure you can
> see, we seriously doubt his honesty (although he gives us dozen of
> other reasons to do that).
>
> Markie has in the past tried to regale us with his alleged skill
> and knowledge of all-things-computing, but can't seem to get a spell
> checker to work.
>
> Go figure.
>
> His latest demonstration of skill is to bomb the NG with over 700
> posts in an attempt to harrass me. All it's done is solidify everyone
> else's opinion on his mental instability. Witness his taglines that
> have my home address but someone else's phone number. (Oh, by the
> way...Markie likes to make up screen names of dead children and use
> them in order to circumvent Google posting limits...)
>
> So...there you go. On behalf of American Amateurs everywhere, I
> extend my apologies to those of you "across the pond" who ahve to see
> this creep's foul mouth and childish rantings in this forum.
>

> 73
>
> Steve, K4YZ
>
Sounds like he should meet Beanie, they have a lot in common. Maybe
they'd get a room somewhere.
--
;-)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

Mark is a classic example of sheer stupidity. He could be forgiven if he was
ignorant, but Mark transcends ignorance.
The guy is, simply, a Dumb Shit.
For Mark? Let me spell it so he can understand...dubm shit.

256. Re: Identifying a mystery diode

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 10:38:51 UTC
From: Paul VK3DIP <pmcmahon@telstra.com>
Message-ID: <%Y5wf.211066$V7.184872@news-server.bigpond.net.au>
Source record: 14651

John,
Thanks for the suggestion, I've got a thousand of the things so I have no problems testing one or two to destruction. However it might take a little while to rig up a power supply etc., I will give it a go and get back to the group. No there are no markings at all, not even an indication of a band or dot to mark the cathode. I too thought they looked like a rf package which is why I bought them.

Paul.

"John A" <e455gkf@yahoo.co.uk> wrote in message
news:dpj2vc$i4p$1@newsg3.svr.pol.co.uk...
> Hi Paul,
>
> That sort of "mini-L" packaging is often used for vhf components, e.g.
> tuning diodes, hot carrier diodes and PIN diodes - and some of these have
> forward volt-drops of more than one volt.
>
> You can investigate that suggestion that it is a high-voltage rectifier by
> applying, say, 200v reverse voltage via a 1Mohm resistor and measuring the
> breakdown (if any) voltage of the diode, or what current flows. Any of the
> other suggestions - including mine - will break down.
>
> Are there definitely no markings?
>
>
> John A
> "Paul VK3DIP" <pmcmahon@telstra.com> wrote in message
> news:cXjtf.136133$V7.93540@news-server.bigpond.net.au...
>> Hi all I recently purchased a bag of unmarked supposedly diodes and I am
>> trying to figure out what they are. The clues so far are normal diode
>> action on a multimeter (ie conducts one way but not the other) but the
>> forward voltage is high at about 1.4 - 1.5 volts. The packaging is a
> small
>> square black plastic box with flat axial leads one of which has a small
>> cross
>> piece on it. This packaging suggests small signal or at least low power.
>>
>> If anyone wants to look at the mystery diode it is the top one
>> in this picture.
>> http://www.users.bigpond.com/pmcmahon/mysterydiode.jpg
>> The bottom one is a normal glass 1N914 just for scale.
>>
>> There is nowhere for the light to come out (or in) so they are not LEDs
>> which is the only other diode like component I have come across with that

>> high a forward voltage. Could it be two silicon diodes in series?
>>
>> Any suggestions or even just identifying the case outline would be
>> appreciated.
>>
>> Thanks
>> Paul VK3DIP
>>
>>
>>
>
>

257. Consti-google-pated?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 11:06:18 UTC
From: Orator For Decency <aiyr.r.bean@lycos.co.uk>
Message-ID: <1136718378.765976.269670@o13g2000cwo.googlegroups.com>
Source record: 14553
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Multitudinous and profuse apologies for
the repetitive creativity - in a number of posts,
I thought I was dreaming - surely I'd posted
but it didn't appear, so I reposted. Now it appears
that I wasn't dreaming and it was simply that
the consti archive was googlepated - seemingly
resolved by a spate of catching-upping diarrhoea
in recent hours.

258. Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 12:56:31 UTC
From: Gary Smith <mygrps@aapt.net.au>
Message-ID: <dpr260aht1@news-01.bur.connect.com.au>
Source record: 14652
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

Hi, i have aquired an old Dick Smith Radio Direction Finder unit but there is no ASU (Antenna Switching Unit) or antennas with it. I would like to know if someone might have information on how to build the antennas and ASU and any more information on the kit itself.

Thanks

Gary

259. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 13:28:25 UTC
From: Simon Templar <usenet@vk3xem.net>
Message-ID: <43c11379$1_2@news.melbourne.pipenetworks.com>
Source record: 14653
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

Gary Smith wrote:
> Hi, i have aquired an old Dick Smith Radio Direction Finder unit but there
> is no ASU (Antenna Switching Unit) or antennas with it. I would like to know
> if someone might have information on how to build the antennas and ASU and
> any more information on the kit itself.
>
> Thanks
>
> Gary

Could you have found any more newsgroups to cross-post to?

--
73 de Simon, VK3XEM.

260. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 13:53:44 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <pPednUu4aJv1hFzenZ2dnUVZ_vmdnZ2d@bright.net>
Source record: 14654
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

How about a gate at the end of the road that can be opened by the users
with a garage door opener, ie a gated community of sorts. If it's a
private road, keep others off.

RST Engineering wrote:

> A) We aren't in a "town", rather we are pretty far out into the country.
>
> B) It is a private dead-end road owned in mutual easement between the four
> families that live at the end of it about half a mile off the county road
> that serves it. The county mounties have nothing to say about what goes on
> on the road.
>
> C) I realize that this is newsnet and anything goes, but why can't you just
> ATFQ?
>
> Jim
>
>
>
>>Go to your local police department and have them monitor the speeders with
>>a
>>automated speed display unit. What! they don't have one in your town?
>>bring it
>>up at the next town meeting... ;)
>
>
>

261. Re: Identifying a mystery diode

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 13:59:45 UTC
From: John A <e455gkf@yahoo.co.uk>
Message-ID: <dpr5um$dn9$1@newsg2.svr.pol.co.uk>
Source record: 14655

There should be no destruction - the 1Mohm resistor will see to that.

John

"Paul VK3DIP" <pmcmahon@telstra.com> wrote in message
news:%Y5wf.211066$V7.184872@news-server.bigpond.net.au...
> John,
> Thanks for the suggestion, I've got a thousand of the things so I have no
> problems testing one or two to destruction. However it might take a little
> while to rig up a power supply etc., I will give it a go and get back to
the
> group. No there are no markings at all, not even an indication of a band
or
> dot to mark the cathode. I too thought they looked like a rf package which
> is why I bought them.
>
> Paul.

262. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 14:14:43 UTC
From: Dave <noone@nowhere.com>
Message-ID: <Aq-dnVewhKvCg1zeRVn-jw@crocker.com>
Source record: 14656
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

they never came with antennas that i know of, you had to build them
yourself. the plans for the asu including circuit board and parts list are
in the manual, they are simple things that you should be able to find at any
radio parts store... assuming you can find one of those today.

"Gary Smith" <mygrps@aapt.net.au> wrote in message
news:dpr260aht1@news-01.bur.connect.com.au...
> Hi, i have aquired an old Dick Smith Radio Direction Finder unit but there
> is no ASU (Antenna Switching Unit) or antennas with it. I would like to
> know if someone might have information on how to build the antennas and
> ASU and any more information on the kit itself.
>
> Thanks
>
> Gary
>

263. Re: More Markie Mularkie: Attn: Walt

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 14:21:44 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <43c11fa2.266961089@news.blueyonder.co.uk>
Source record: 14657
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

On 7 Jan 2006 03:13:47 -0800, "K4YZ" <k4yz@aol.com> wrote:

> So...there you go. On behalf of American Amateurs everywhere, I
>extend my apologies to those of you "across the pond" who ahve to see
>this creep's foul mouth and childish rantings in this forum.
>
>73
>
>Steve, K4YZ

No need to apologise Steve ... we have similar versions of the creep
over here in the UK!

HNY and 73 from

Peter, G3PHO

264. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 14:35:15 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <co62s1ld7g20248o7kgdalgkvegcc10btv@4ax.com>
Source record: 14658
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sat, 7 Jan 2006 14:47:08 -0800, "RST Engineering"
<jim@rstengineering.com> wrote:

>What illegal? I can either retune it for a ham band or reduce power if
>necessary. I'll find the hardware first and figure out the legal later.

Well, I know I'm going to be asked to leave this discussion but,
technically, unless you are IDing with your call sign every 10
minutes. it would be illegal. I seriously doubt that this was in your
plan.

Police radar guns, should you come up with one, are also licensed to
the department, assuming the cops are following the law, always a
dubious proposition.

So, because these are -technical- newsgroups, I was being -technical-.

Now for a "prohibited" non-technical suggestion, here is one that I am
contemplating. I too live on a short, private, single-lane road, that
serves four multi-acre homesites. I am plagued by the guys driving
delivery trucks (DHL, UPS, etc) who roar down the road in a cloud of
dust while delivering to my neighbors. I have complained to UPS
repeatedly without success.

So one of these days, when I'm up to it, after they go by on the way
to the neighbor's house, I'm going to take my truck out and block the
road for 15 minutes. (A second offense will call for a penalty of 30
minutes, etc) UPS seems to have a deal with law enforcement that
exempts them from speed limits on public roads, but in AZ the statutes
say:

28-628. Rights of real property owners

This chapter does not prevent the owner of real property that is used
by the public for purposes of vehicular travel by permission of the
owner and not as a matter of right from:

1. Prohibiting that use.

2. Requiring other, different or additional conditions than those
specified in this chapter.

3. Otherwise regulating the use as deemed best by the owner.

In other words, I get to regulate the speed (I've posted it as 10
MPH). I have no power to fine UPS, but I can still cost them money.

265. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 14:42:32 UTC
From: Fred Bloggs <nospam@nospam.com>
Message-ID: <43C124D6.3080004@nospam.com>
Source record: 14659
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Wes Stewart wrote:

>
> 28-628. Rights of real property owners
>
> This chapter does not prevent the owner of real property that is used
> by the public for purposes of vehicular travel by permission of the
> owner and not as a matter of right from:
>
> 1. Prohibiting that use.
>
> 2. Requiring other, different or additional conditions than those
> specified in this chapter.
>
> 3. Otherwise regulating the use as deemed best by the owner.
>
> In other words, I get to regulate the speed (I've posted it as 10
> MPH). I have no power to fine UPS, but I can still cost them money.

You are not reading the wording carefully; it is the "not as a matter of right from" that you are missing. It very well may be a matter of right if the private road is co-owned by the other property holders and this ownership allows them the right to transact business in the way of receiving deliveries as they choose.

266. Re: SPRAT #125 - The Saviour of Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 14:44:48 UTC
From: Jeff <no@spam.4.me>
Message-ID: <dpr8hf$n28$1@domitilla.aioe.org>
Source record: 14660
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

> One point of criticism, to keep a balance, is that the G-QRP
> club supports the gangrenous degeneration that is the M3/CB
> Fools' Licence scheme and by publishing a homebrew Top
> Band rig by a licensee in the aforementioned scheme is encouraging
> the licensees thereof to breach their licence conditions.

Been upstaged by an M3?

Instead of whinging on the NG why don't you write an article for the G-QRP
Club Mag and share your knowledge with those who you would no doubt class as
REAL Radio Hams?

267. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 14:54:49 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <ln92s1t4quvs2fm4v3uiat7mav9el8lcrt@4ax.com>
Source record: 14661
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sun, 08 Jan 2006 07:35:15 -0700, Wes Stewart <n7ws*@*yahoo.com>
wrote:

>On Sat, 7 Jan 2006 14:47:08 -0800, "RST Engineering"
><jim@rstengineering.com> wrote:
>
>>What illegal? I can either retune it for a ham band or reduce power if
>>necessary. I'll find the hardware first and figure out the legal later.
>
>Well, I know I'm going to be asked to leave this discussion but,
>technically, unless you are IDing with your call sign every 10
>minutes. it would be illegal. I seriously doubt that this was in your
>plan.
>
>Police radar guns, should you come up with one, are also licensed to
>the department, assuming the cops are following the law, always a
>dubious proposition.
>
>So, because these are -technical- newsgroups, I was being -technical-.
>
>Now for a "prohibited" non-technical suggestion, here is one that I am
>contemplating. I too live on a short, private, single-lane road, that
>serves four multi-acre homesites. I am plagued by the guys driving
>delivery trucks (DHL, UPS, etc) who roar down the road in a cloud of
>dust while delivering to my neighbors. I have complained to UPS
>repeatedly without success.
>
>So one of these days, when I'm up to it, after they go by on the way
>to the neighbor's house, I'm going to take my truck out and block the
>road for 15 minutes. (A second offense will call for a penalty of 30
>minutes, etc) UPS seems to have a deal with law enforcement that
>exempts them from speed limits on public roads, but in AZ the statutes
>say:
>
> 28-628. Rights of real property owners
>
>This chapter does not prevent the owner of real property that is used
>by the public for purposes of vehicular travel by permission of the
>owner and not as a matter of right from:
>
>1. Prohibiting that use.
>
>2. Requiring other, different or additional conditions than those

>specified in this chapter.
>
>3. Otherwise regulating the use as deemed best by the owner.
>
>In other words, I get to regulate the speed (I've posted it as 10
>MPH). I have no power to fine UPS, but I can still cost them money.

You're probably going to get into "co-ownership" issues regarding the
access easement. How is the road ownership defined... everyone grant
an easement to the others?

A neighbor may sue you for "interference" in his business.

Where in AZ are you?

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

268. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 15:16:54 UTC
From: Fred Bloggs <nospam@nospam.com>
Message-ID: <43C12CE3.9040904@nospam.com>
Source record: 14662
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

> Back in the '60s and early '70s I did some work with Impatt and Gunn diodes,
> building a little self-detecting doppler for speed sensing. However, 35
> years have passed and my notebooks for that stuff are somewhere in a dusty
> archive along with my venerable sliderule.
>
> Is there a cheap source for onesies-twosies of a radar front-end that will
> give me doppler audio as a function of a large metal object's speed at a
> range of 20 meters or so? I don't need to go into production on this thing,
> just build one. A surplus source would be ideal.
>
> It seems that the little kids on our rural country lane have all become
> teenagers at once and are trying to outdo the others in how fast they can
> drive daddy's car up and down the lane. We've lost one dog this week and
> unless I can put up some sort of a siren that goes off when they exceed some
> agreed upon limit, the carnage will continue.
>

You should just lay down some pressure switch hose and get a Parallax
BASIC STAMP kit from Radio Shack. Parallax has wireless modules on their
site you can order to xmit the data to your house for timestamping,
archiving via a PC etc...The smarts will run off a 9V for months- you
can't say that about a Gunn osc xmtr or any of the other surplus junk.
And then there is the issue of weather-proofing and possible loss due to
vandalism- think hidden wireless camera activated by intrusion alarm in PIC.

269. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 16:21:22 UTC
From: Bill Janssen <billj9@ieee.org>
Message-ID: <6_awf.144$wk5.125@news02.roc.ny>
Source record: 14663
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Wes Stewart wrote:

>On Sat, 7 Jan 2006 14:47:08 -0800, "RST Engineering"
><jim@rstengineering.com> wrote:
>
>
>
>>What illegal? I can either retune it for a ham band or reduce power if
>>necessary. I'll find the hardware first and figure out the legal later.
>>
>>
>
>Well, I know I'm going to be asked to leave this discussion but,
>technically, unless you are IDing with your call sign every 10
>minutes. it would be illegal. I seriously doubt that this was in your
>plan.
>
>Police radar guns, should you come up with one, are also licensed to
>the department, assuming the cops are following the law, always a
>dubious proposition.
>
>
>
There is a frequency near 10.5 GHz assigned for unlicensed door openers etc.
I have a few of the Gunn units that came from door openers.

Bill K7NOM

some stuff snipped

270. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 17:34:21 UTC
From: "David L. Wilson" <dwilson314@adelphia.net>
Message-ID: <aYadnRs0HK-C0FzeRVn-uQ@adelphia.com>
Source record: 14664
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

"Dave" <noone@nowhere.com> wrote in message
news:Aq-dnVewhKvCg1zeRVn-jw@crocker.com...
> they never came with antennas that i know of, you had to build them
> yourself. the plans for the asu including circuit board and parts list
> are in the manual, they are simple things that you should be able to find
> at any radio parts store... assuming you can find one of those today.

They did come with the needed switching diodes which were a weak point in
the design and there was later a suggested replacement.

271. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 17:34:41 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <93e6f$43c14d2b$42512a6a$16866@DIALUPUSA.NET>
Source record: 14665
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Precisely the plan, Wes. The horn serves two purposes. One, it alerts the transgressor that they pushed the button. Two, it alerts me to fire up the truck and block the road.

As others have pointed out, a two pressure hose setup and some simple math in a microprocessor of some sort would serve the same purpose at far less current draw, but I'd like to try the radar gun first.

Hell, Jim Thompson went on for two weeks about how to detect a school bus pulling up in front of the house. I thought this one would go on for at LEAST as long {;-)

BTW, Jim, what was your ultimate solution to that problem?

Jim

> Now for a "prohibited" non-technical suggestion, here is one that I am
> contemplating. I too live on a short, private, single-lane road, that
> serves four multi-acre homesites. I am plagued by the guys driving
> delivery trucks (DHL, UPS, etc) who roar down the road in a cloud of
> dust while delivering to my neighbors. I have complained to UPS
> repeatedly without success.
>
> So one of these days, when I'm up to it, after they go by on the way
> to the neighbor's house, I'm going to take my truck out and block the
> road for 15 minutes. (A second offense will call for a penalty of 30
> minutes, etc) UPS seems to have a deal with law enforcement that
> exempts them from speed limits on public roads, but in AZ the statutes
> say:

272. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 17:42:52 UTC
From: Frank Bemelman <f.bemelmanq@xs4all.invalid.nl>
Message-ID: <43c14eeb$0$10826$e4fe514c@dreader17.news.xs4all.nl>
Source record: 14666
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"RST Engineering" <jim@rstengineering.com> schreef in bericht >
> BTW, Jim, what was your ultimate solution to that problem?

No solution at all, I'd guess. JT is full of shit, being the miserable
piece of shit that he is.

--
Thanks, Frank.
(remove 'q' and '.invalid' when replying by email)

273. Re: SPRAT #125 - The Saviour of Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 17:50:39 UTC
From: mike@g4kfk.co.uk
Message-ID: <1136742639.200373.33580@g49g2000cwa.googlegroups.com>
Source record: 14561
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Jeff wrote:
> > One point of criticism, to keep a balance, is that the G-QRP
> > club supports the gangrenous degeneration that is the M3/CB
> > Fools' Licence scheme and by publishing a homebrew Top
> > Band rig by a licensee in the aforementioned scheme is encouraging
> > the licensees thereof to breach their licence conditions.
>
>
> Been upstaged by an M3?
>
> Instead of whinging on the NG why don't you write an article for the G-QRP
> Club Mag and share your knowledge with those who you would no doubt class as
> _REAL_ Radio Hams?

Good to see G-QRP are encouraging newcomers to the hobby. Plenty of M3s
listed in the members' handbook, and now writing technical articles for
Sprat too!

I also noticed that G3RJV has re-published the transmitter section of
the SC Deluxe in this month's PW, complete with his usual excellent
explanation of how the circuit works, proving that it doesn't need to
be rocket science.

All of which rather belies the rabid drivel that started this thread!

73
Mike G4KFK, G-QRP 6627
www.g4kfk.co.uk
www.gb4sbs.co.uk

274. Re: SPRAT 125 - G-QRP Journal - Winter 2005/6

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 18:26:00 UTC
From: Stuartr@nospam.please
Message-ID: <memo.20060108182634.992A@srnet.compulink.co.uk>
Source record: 14667

> A 10W AM Top Band Rig - here I criticise the G-QRP club for not
> only supporting the gangrenous degeneration that is the M3/CB
> Fools' Licence scheme, but also encouraging those who are
> licensees thereto to break the terms of their licence - the author
> is an M3/CB Fools' Licence and the type of rig is not licensable.

Why is that rig 'not licensable' ?

Stuart.

275. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 18:36:20 UTC
From: Glenn McAllister <glennmca@orcon.net.nz>
Message-ID: <43C15BA4.3F39@orcon.net.nz>
Source record: 14668
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

Gary Smith wrote:
>
> Hi, i have aquired an old Dick Smith Radio Direction Finder unit but there
> is no ASU (Antenna Switching Unit) or antennas with it. I would like to know
> if someone might have information on how to build the antennas and ASU and
> any more information on the kit itself.
>
> Thanks
>
> Gary

I've got one - defective - I think I popped the switching diodes by accidentally transmitting thru it. I know I've got the dox 'somewhere' - just gotta dig 'em out.

From memory, the four pin cable from the main unit sends a rotating DC bias to each of the switching diodes in the box. There's a diode at the antenna base too, by design. I haven't opened the box yet, but the diode at the antenna base is ITT BA 282 Cathode (bar) to coax shield.

If/when I find the dox, I'll get back to you. Let me know how you progress.

Glenn ZL2TLD

276. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 18:54:38 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <dbdwf.20946$0y2.14584@bignews2.bellsouth.net>
Source record: 14669

JE wrote:
> The common 1N4007 seem to work for HF but what is the max. frequency they
> can be used as varactors?
>
> And how about zener diodes?
>
> JE
I suspect any si diode will work to some extent as a varicap or zener.
Not all diodes will be stable as zeners, the 1N506x series will probably
work better as a zeners than the 1n400x series. BTW the 1n5061 will work
as an 850v zener! Also the 1n4007 makes a good poor man's PIN diode for
switching rf.

277. Re: FA:MORE AIR VARIABLES + STUFF

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 18:58:38 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <_edwf.20957$0y2.17641@bignews2.bellsouth.net>
Source record: 14670

Heytubeguy wrote:
> I will be listing ~35-45 air variables in the next month in addition to =
> ones already listed on Ebay. So, pse check back frequently. Trying to =
> clean out stuff. Some new ones are listed now and the mostly used ones =
> (receive & transmit) will be added a few each day or every other day. =
> Tnx for stopping by:
>
> http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy
>
> 73 Joe, heytubeguy
>
>
Wow, I didn't know national made that weird 270 degree type cap
in anything that large (1100pf)! I have one that goes to 140pf
(used in the Regenerative Receiver from the 1950's Boy Electrician).

278. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 19:01:42 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <Rhdwf.20965$0y2.12905@bignews2.bellsouth.net>
Source record: 14671
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

Too_Many_Tools wrote:
> Reading the thread on the Voltaic pile in sci.chem.electrochem.battery,
> I started considering what would one have to do to build a "Robinson
> Crusoe" battery to power equipment in an emergency.
>
> Assuming a battery of 12v and respectable current to power
> communications equipment, how would you do it?
>
> What materials would you use?
>
> How would you charge it?
>
> I look forward to your contributions.
>
> TMT
>
Well the history channel just showed a 2000 year old battery
found in Bhagdad. It had an iron rod negative pole and a copper
cylinder positive pole, and probably used vinegar as the electrolyte.
A clay jar housed the unit. What would a battery be used for 2000
years ago? BION, electroplating gold!

279. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 19:25:49 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <fkp2s1phkeadp1ctuop7tsc92g60fgl2r5@4ax.com>
Source record: 14672
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sun, 8 Jan 2006 09:34:41 -0800, "RST Engineering"
<jim@rstengineering.com> wrote:

>Precisely the plan, Wes. The horn serves two purposes. One, it alerts the
>transgressor that they pushed the button. Two, it alerts me to fire up the
>truck and block the road.
>
>As others have pointed out, a two pressure hose setup and some simple math
>in a microprocessor of some sort would serve the same purpose at far less
>current draw, but I'd like to try the radar gun first.
>
>Hell, Jim Thompson went on for two weeks about how to detect a school bus
>pulling up in front of the house. I thought this one would go on for at
>LEAST as long {;-)
>
>BTW, Jim, what was your ultimate solution to that problem?
>
>Jim
>
[snip]

Sit in my office from 7:45-8:00AM, so I'm looking out the window ;-)

What I am going to try, when I have the time, is a suggestion that
colored LED's make color-sensitive detectors.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

280. Whatever happened to

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 19:40:32 UTC
From: yzordderrex@verizon.net
Message-ID: <1136653023.889804.5600@f14g2000cwb.googlegroups.com>
Source record: 14556

Circuit Board Specialists out of Pueblo Colorado?

They supplies pc boards and parts for ARRL handbook projects.

73
Bob
N9NEO

281. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 20:09:08 UTC
From: JoeSP <olegp@telus.net>
Message-ID: <Ejewf.65520$AP5.6006@edtnps84>
Source record: 14673
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

<meow2222@care2.com> wrote in message
news:1136248266.774928.135230@o13g2000cwo.googlegroups.com...
> Dave Plowman (News) wrote:
>> In article <Goednf0gfr84NCTeRVn-hg@athenet.net>,
>> philo <philo@privacy.net> wrote:
>> > a "Robinson Crusoe" battery must be one you'd make if stranded on an
>> > island... so you'd have plenty of sea water. you could use electrodes
>> > of
>> > copper and zinc
>>
>> Plenty of that on the average desert island...;-)
>
> I've been wondering that too. I'd likely pick salt water electrolyte
> and carbon and steel electrodes. Assuming there is no ready metal on
> the island, hopefully there would be a zip on some clothing, a button
> or something. Burnt vegetation could provide the carbon.
>
> I found a little 1" or so bottletop sized cell gave in the region of
> half an amp at 1v. The electrodes corrode quickly, in a day.

What's the point? You can make a battery out of many, many substances, but
only a few of them are economical, practical or useful.

282. Re: NE602 replacement is NTE7164?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 20:14:08 UTC
From: mzenier@eskimo.com
Message-ID: <dpu7h2$ob3$1@eskinews.eskimo.com>
Source record: 14573

In article <Ct%vf.81$QZ5.7@fe07.lga>,
xpyttl <xpyttl_NOSPAM@earthling.net> wrote:

>"JE" <JE@nowhere.com> wrote in message
>news:22a47$43c06c9c$d135c4af$28527@MDI.CA...
>> Anyone know if these NTE7164 is a drop in replacement for NE602?
>> What are other current IC's being used for mixers by homebrewers?

>NE602, NE612, SA602, SA612 all virtually identical. NE/SA are different
>manufacturers,

No, NE and SA are both Philips prefixes, but different temperature
ratings. NE is the commercial range of 0 to +70 deg C, SA the
mil/industrial range of -40 to +85 deg C.

>602/612 are different test specs. Generally the 612s are a
>little cheaper. Same basic specs just tested less extensively.

Mark Zenier mzenier@eskimo.com
Googleproofaddress(account:mzenier provider:eskimo domain:com)

283. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 20:47:53 UTC
From: Scott in Baltimore <sDcOoNtTtS_PuAnMiMtE_69@yahoo.com>
Message-ID: <5JOdnSO7esrq51zeRVn-vA@comcast.com>
Source record: 14674
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

Glenn McAllister wrote:
> Gary Smith wrote:
>
>>Hi, i have aquired an old Dick Smith Radio Direction Finder unit but there
>>is no ASU (Antenna Switching Unit) or antennas with it. I would like to know
>>if someone might have information on how to build the antennas and ASU and
>>any more information on the kit itself.
>>
>>Thanks
>>
>>Gary
>
>
> I've got one - defective - I think I popped the switching diodes by
> accidentally transmitting thru it. I know I've got the dox 'somewhere'
> - just gotta dig 'em out.
>
> From memory, the four pin cable from the main unit sends a rotating DC
> bias to each of the switching diodes in the box. There's a diode at the
> antenna base too, by design. I haven't opened the box yet, but the
> diode at the antenna base is ITT BA 282 Cathode (bar) to coax
> shield.
>
> If/when I find the dox, I'll get back to you. Let me know how you
> progress.
>
> Glenn ZL2TLD

Maybe they are PIN diodes that turn on (conduct) when forward biased?

http://www.discovercircuits.com/D/direction.htm
Find more:
http://www.google.com/search?hl=en&lr=&q=radio+direction+finder+schematic&tab=ww

284. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 21:41:28 UTC
From: Glenn McAllister <"(callsign)"@orcon.net.nz>
Message-ID: <43C18707.12BE@orcon.net.nz>
Source record: 14675
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

Scott in Baltimore wrote:
>
> Glenn McAllister wrote:
> > Gary Smith wrote:
> >
> >>Hi, i have aquired an old Dick Smith Radio Direction Finder unit but there
> >>is no ASU (Antenna Switching Unit) or antennas with it. I would like to know
> >>if someone might have information on how to build the antennas and ASU and
> >>any more information on the kit itself.
> >>
> >>Thanks
> >>
> >>Gary
> >
> >
> > I've got one - defective - I think I popped the switching diodes by
> > accidentally transmitting thru it. I know I've got the dox 'somewhere'
> > - just gotta dig 'em out.
> >
> > From memory, the four pin cable from the main unit sends a rotating DC
> > bias to each of the switching diodes in the box. There's a diode at the
> > antenna base too, by design. I haven't opened the box yet, but the
> > diode at the antenna base is ITT BA 282 Cathode (bar) to coax
> > shield.
> >
> > If/when I find the dox, I'll get back to you. Let me know how you
> > progress.
> >
> > Glenn ZL2TLD
>
> Maybe they are PIN diodes that turn on (conduct) when forward biased?
>
> http://www.discovercircuits.com/D/direction.htm
> Find more:
> http://www.google.com/search?hl=en&lr=&q=radio+direction+finder+schematic&tab=ww

They sure seem to be :
http://members.aol.com/homingin/DSEfix.html
The ones in the box switch one of the antennas at a time to the RDF, and
the ones at the base of the antennas groung the out-of-use antennas.

Glenn ZL2TLD

285. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 21:45:11 UTC
From: Allison-nospam@nouce.bellatlantic.net
Message-ID: <fs13s1dkegbr428kdn7hkmrfb4edpc565g@4ax.com>
Source record: 14676

On Sat, 07 Jan 2006 17:26:23 -0500, JE <JE@nowhere.com> wrote:

>The common 1N4007 seem to work for HF but what is the max. frequency they
>can be used as varactors?

I've used them at low VHF, the limiting factor there is minimum
capacitance my be too high for some VHF uses.

>And how about zener diodes?

As varicaps? Some are ok some very poor. You require a breakdown
voltage well above the applied bias.

Allison

286. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 22:09:44 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <l4gwf.55708$q%.46987@newssvr12.news.prodigy.com>
Source record: 14677
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Jim,

Since you said this is a road with very little traffic can't you just rig up two IR sensing paths? Like on garage doors? It's unlikely that there'd be two cars passing each other in opposite direction.

Then all you'd need would be a ramp generator that gets started by whichever IR sensor goes first. It is reset by the other sensor. If the reset occurs and the ramp voltage didn't reach a set threshold that means whatever triggered it was going to fast.

Regards, Joerg

http://www.analogconsultants.com

287. Re: Identifying a mystery diode

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 22:15:44 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <dps2ug$bs9$1@puck.litech.org>
Source record: 14678

Paul VK3DIP <pmcmahon@telstra.com> wrote:
> John,
> Thanks for the suggestion, I've got a thousand of the things so I have no
> problems testing one or two to destruction. However it might take a little
> while to rig up a power supply etc., I will give it a go and get back to the
> group. No there are no markings at all, not even an indication of a band or
> dot to mark the cathode. I too thought they looked like a rf package which
> is why I bought them.

I think that the crossbar on the lead marks the cathode. I could be wrong,
of course, in which case it marks the anode.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

288. shit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 22:21:39 UTC
From: an Old friend <kb9rqz@amsat.org>
Message-ID: <1136758899.713029.121490@g49g2000cwa.googlegroups.com>
Source record: 14559
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Walt Davidson wrote:
> On 7 Jan 2006 03:13:47 -0800, "K4YZ" <k4yz@aol.com> wrote:
>
> > Walt, Meet Mark "Markie" Morgan, KB9RQZ. Markie is a functionally
> >illiterate, socially inept, welfare dependent, sexually deviant
> >alcoholic miscreant of American society.
>
> LOL! Yes, I had figured that!

then you are as stupid as stevesince other than my name he has nothing
right just more baseless lie the kind he tells about everyong he
dislikes
>
> 73 de G3NYY
>
> --
> Walt Davidson Email: g3nyy @despammed.com

289. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 22:37:05 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <u803s11nduifs31itgs8ac18rnoku3up6d@4ax.com>
Source record: 14679
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sun, 08 Jan 2006 14:42:32 GMT, Fred Bloggs <nospam@nospam.com>
wrote:

>
>
>Wes Stewart wrote:
>
>>
>> 28-628. Rights of real property owners
>>
>> This chapter does not prevent the owner of real property that is used
>> by the public for purposes of vehicular travel by permission of the
>> owner and not as a matter of right from:
>>
>> 1. Prohibiting that use.
>>
>> 2. Requiring other, different or additional conditions than those
>> specified in this chapter.
>>
>> 3. Otherwise regulating the use as deemed best by the owner.
>>
>> In other words, I get to regulate the speed (I've posted it as 10
>> MPH). I have no power to fine UPS, but I can still cost them money.
>
>You are not reading the wording carefully; it is the "not as a matter of
>right from" that you are missing. It very well may be a matter of right
>if the private road is co-owned by the other property holders and this
>ownership allows them the right to transact business in the way of
>receiving deliveries as they choose.

Gray area. The road is not co-owned by the other property owners. At
least my deed doesn't say a thing about me co-owning a piece of the
property between the public street and me.

Besides, I'm not going to stop the delivery, I'm just going to do some
"traffic calming" when the truch is leaving.

What you're trying to tell me is that I've given up complete control
of an easement and if the truck drivers want to go 100 MPH I have no
say in the matter. If I were to call the Sheriff's office I'd be
told, "It's private property, we can't do a thing." If I asked the
county to grade it I would be told to kiss off. If someone got hurt
on the easement, I would be liable. When I bought the place the title
company had a hissy fit because there wasn't a road maintenance

agreement in place. It took the appraiser writing something to the effect that this was a typical situation in this area, and that each property owner maintained the road on his easement, before the company would issue title insurance.

Sounds to me like I do have some say so over the property.

290. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 23:02:05 UTC
From: clifto <clifto@clifto.com>
Message-ID: <d8i893-qkp.ln1@remote.clifto.com>
Source record: 14682
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Paul Burridge wrote:
> xray <notreally@hotmail.invalid> wrote:
>>No, Spectum Analysers are useless for anyone outside the government or
>>RF extremists.
>
> ???
> Er, they're extremely useful pieces of test gear for anyone involved
> in RF., even hobbyists.

No, they're garbage.

I have a really nice garbage can in case anyone wants.

--
If John McCain gets the 2008 Republican Presidential nomination,
my vote for President will be a write-in for Jiang Zemin.

291. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 23:03:41 UTC
From: Al Klein <rukbat@invalid.net>
Message-ID: <a863s15jsisveq0ghaag6ec4fcj7csg3ei@4ax.com>
Source record: 14680
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

On Sun, 8 Jan 2006 23:56:31 +1100, "Gary Smith" <mygrps@aapt.net.au>
wrote:

There are probably at least a dozen other RDF designs nased on the
same idea floating around on the web. A look at any of them, and a
schematic of what you have (draw one if necessary), will tell you how
to make what you need.

The antennas are usually 1/2 wave dipoles at whatever frequency the
unit will be used. Copperweld or wire hangers make decent antennas,
although I prefer stainless control wire of the type used on model
planes.

292. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 23:04:44 UTC
From: clifto <clifto@clifto.com>
Message-ID: <cdi893-qkp.ln1@remote.clifto.com>
Source record: 14681
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

jakdedert wrote:
> Robinson 'could'--with nothing more than the battery and some
> wire--transmit radio signals in Morse....

Yeah, but all the people who understand Morse would be too old to be
traveling around deserted islands.

--
If John McCain gets the 2008 Republican Presidential nomination,
my vote for President will be a write-in for Jiang Zemin.

293. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 23:32:54 UTC
From: Gary Smith <mygrps@aapt.net.au>
Message-ID: <dps7h9be1@news-01.bur.connect.com.au>
Source record: 14683
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

Well, i thought if you need information why not get as much as you can in one go?
Seems logical to me. And it's not like i'm posting some dribble, bs, flame.
I am getting some good replies so far.

Gary

294. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 23:34:40 UTC
From: Gary Smith <mygrps@aapt.net.au>
Message-ID: <dps7ihcj1@news-01.bur.connect.com.au>
Source record: 14684
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

Dave, if i had a manual with info on how to build one i'd be down the electronics shop getting the bits and building one as we speak :>

Gary

"Dave" <noone@nowhere.com> wrote in message news:Aq-dnVewhKvCg1zeRVn-jw@crocker.com...
> they never came with antennas that i know of, you had to build them
> yourself. the plans for the asu including circuit board and parts list
> are in the manual, they are simple things that you should be able to find
> at any radio parts store... assuming you can find one of those today.

295. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 23:44:30 UTC
From: Gary Smith <mygrps@aapt.net.au>
Message-ID: <dps850$15l$1@news-01.bur.connect.com.au>
Source record: 14685
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

Thanks Al, but i'm not too good at working out stuff like that, if it's all laid out in kit form i'm ok. and i thought that seeing these things are reasonably critical (antenna units) that if i tried another design i may be waisting my time and parts on something that isn't suited. Thanks for your input.

Gary

"Al Klein" <rukbat@invalid.net> wrote in message news:a863s15jsisveq0ghaag6ec4fcj7csg3ei@4ax.com...
> On Sun, 8 Jan 2006 23:56:31 +1100, "Gary Smith" <mygrps@aapt.net.au>
> wrote:
>
> There are probably at least a dozen other RDF designs nased on the
> same idea floating around on the web. A look at any of them, and a
> schematic of what you have (draw one if necessary), will tell you how
> to make what you need.
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> The antennas are usually 1/2 wave dipoles at whatever frequency the
> unit will be used. Copperweld or wire hangers make decent antennas,
> although I prefer stainless control wire of the type used on model
> planes.

296. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-08 23:45:22 UTC
From: Gary Smith <mygrps@aapt.net.au>
Message-ID: <dps86k$171$1@news-01.bur.connect.com.au>
Source record: 14686
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

Glenn that would be great if you could possibly scan the docs and email them, really appreciate that, Thanks.

Gary

> I've got one - defective - I think I popped the switching diodes by
> accidentally transmitting thru it. I know I've got the dox 'somewhere'
> - just gotta dig 'em out.
>
> From memory, the four pin cable from the main unit sends a rotating DC
> bias to each of the switching diodes in the box. There's a diode at the
> antenna base too, by design. I haven't opened the box yet, but the
> diode at the antenna base is ITT BA 282 Cathode (bar) to coax
> shield.
>
> If/when I find the dox, I'll get back to you. Let me know how you
> progress.
>
> Glenn ZL2TLD

297. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 00:00:51 UTC
From: maxfoo <maxfoo@punkass.com>
Message-ID: <2s93s1l8iagor2vo188n6h3cjvk0nfgn1m@4ax.com>
Source record: 14687
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Sun, 08 Jan 2006 17:02:05 -0600, clifto <clifto@clifto.com> wrote:

>Paul Burridge wrote:
>> xray <notreally@hotmail.invalid> wrote:
>>>No, Spectum Analysers are useless for anyone outside the government or
>>>RF extremists.
>>
>> ???
>> Er, they're extremely useful pieces of test gear for anyone involved
>> in RF., even hobbyists.
>
>No, they're garbage.
>
>I have a really nice garbage can in case anyone wants.

Will it do phase noise measurements for me?

298. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 01:31:40 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1136770300.583119.201460@g43g2000cwa.googlegroups.com>
Source record: 14688
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Thanks for the responses....

Of those who use racks to hold their equipment, how do you have the
equipment arranged and how are the racks distributed?

For storage, what do you use? What works and what does not?

How about lighting?

Thanks

TMT

299. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 02:38:01 UTC
From: osr@uakron.edu
Message-ID: <1136666101.395786.254420@g14g2000cwa.googlegroups.com>
Source record: 14557
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Dan Richardson wrote:
> On Sat, 7 Jan 2006 11:28:12 -0800, "RST Engineering"
> <jim@rstengineering.com> wrote:
>
> >Is there a cheap source for onesies-twosies of a radar front-end that will
> >give me doppler audio as a function of a large metal object's speed at a
> >range of 20 meters or so? I don't need to go into production on this thing,
> >just build one. A surplus source would be ideal.
>
> Ramsey makes a kit. You can find the info here:
>
> http://www.youdoitelectronics.com/id558_sg7___speedy_radar_kit.htm
>
> Danny, K6MHE
>
no offense but:

ramsey's kiit emits all of about 500 microwatts at 1.6 ghz, useless
for dogs, but Ok for part 15 radar of cars.

try www.shfmicro.com

Steve Roberts

300. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 02:58:29 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1136694189.674426.115940@g14g2000cwa.googlegroups.com>
Source record: 14689
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Thanks for all the responses....

A few more questions....

How many of you use racks to hold your test equipment?

If you do use racks, how do you have your equipment arranged?

Are the racks full length racks or do you have part rack and part
cabinet?

How do you handle parts storage?

How about lighting?

TMT

301. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 03:07:13 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <8skwf.41619$Mi5.38422@dukeread07>
Source record: 14690
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

http://radioatticarchives.com/features/fun/bertini.jpg

Rotary parts storage bin in corner. Tools are in the black tool chest. BTW,
the test gear
has doubled since this photo was taken.

Pete k1zjh

302. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 03:33:39 UTC
From: "James T. White" <SPAMjtwhiteGUARD@hal-pc.org>
Message-ID: <43c1d7fb$0$501$a726171b@news.hal-pc.org>
Source record: 14691
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"Wes Stewart" <n7ws*@*yahoo.com> wrote in message
news:u803s11nduifs31itgs8ac18rnoku3up6d@4ax.com...
>
> Gray area. The road is not co-owned by the other property owners. At
> least my deed doesn't say a thing about me co-owning a piece of the
> property between the public street and me.
>
> Besides, I'm not going to stop the delivery, I'm just going to do some
> "traffic calming" when the truch is leaving.
>
> What you're trying to tell me is that I've given up complete control
> of an easement and if the truck drivers want to go 100 MPH I have no
> say in the matter. If I were to call the Sheriff's office I'd be
> told, "It's private property, we can't do a thing." If I asked the
> county to grade it I would be told to kiss off. If someone got hurt
> on the easement, I would be liable. When I bought the place the title
> company had a hissy fit because there wasn't a road maintenance
> agreement in place. It took the appraiser writing something to the
> effect that this was a typical situation in this area, and that each
> property owner maintained the road on his easement, before the company
> would issue title insurance.
>
> Sounds to me like I do have some say so over the property.
>

Wes,

Since you have to maintain your portion of the easement, why not build
some "road humps" so the delivery trucks have to slow down or risk
having to resort all the parcels in the back?

--
James T. White

303. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 03:51:20 UTC
From: "James T. White" <SPAMjtwhiteGUARD@hal-pc.org>
Message-ID: <43c1dc1f$0$504$a726171b@news.hal-pc.org>
Source record: 14692
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

" Uncle Peter" <radioconnectionNO@cox.netSPAM> wrote in message
news:8skwf.41619$Mi5.38422@dukeread07...
> http://radioatticarchives.com/features/fun/bertini.jpg
>
> Rotary parts storage bin in corner. Tools are in the black tool chest.
BTW,
> the test gear
> has doubled since this photo was taken.
>

Pete,

Hopefully you added some additional vertical support on those long
shelves....

--
James T. White

304. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 03:56:21 UTC
From: JE <JE@nowhere.com>
Message-ID: <aad93$43c1dee5$d135c4af$19321@MDI.CA>
Source record: 14693

Maybe 2N4401 will work, I built some simple 1 transistor FM transmitters
that modulate the base.

If not, who sells dual varactors in small quantities?

JE

> On Sat, 07 Jan 2006 17:26:23 -0500, JE <JE@nowhere.com> wrote:
>
>>The common 1N4007 seem to work for HF but what is the max. frequency
>>they can be used as varactors?
>
> I've used them at low VHF, the limiting factor there is minimum
> capacitance my be too high for some VHF uses.
>
>>And how about zener diodes?
>
> As varicaps? Some are ok some very poor. You require a breakdown
> voltage well above the applied bias.
>
> Allison
>

305. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 04:00:17 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <a868b$43c1dfd2$42513109$23571@DIALUPUSA.NET>
Source record: 14694
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Good idea, Joerg. Where do I get onesie-twosie IR sensors that will trigger at 3 meters or better?

Jim

"Joerg" <notthisjoergsch@removethispacbell.net> wrote in message news:I4gwf.55708$q%.46987@newssvr12.news.prodigy.com...
> Hello Jim,
>
> Since you said this is a road with very little traffic can't you just rig
> up two IR sensing paths?

306. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 04:01:54 UTC
From: "James T. White" <SPAMjtwhiteGUARD@hal-pc.org>
Message-ID: <43c1de9a$0$506$a726171b@news.hal-pc.org>
Source record: 14695
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"RST Engineering (jw)" <jim@rstengineering.com> wrote in message
news:ebb$43c07929$42512485$4540@DIALUPUSA.NET...
> You are one of the idiots I don't ever want to live next to. We can
talk to
> the parents until we are blue in the face and the kids are going to be
...
> kids.
>
> Please butt out of this conversation.
>
> Ji
>
Jim,

What makes you think the kids won't drive as fast as they can just to
set off your new speed activated siren and piss you off?

--
James T. White

307. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 04:06:47 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <4c099$43c1e159$42513109$23598@DIALUPUSA.NET>
Source record: 14696
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Wes...

I'm not a lawyer, nor do I play one on newsgroups. However, having spent a dozen years in the highest public office in this county and sorting this sort of crap out week after week, you have ABSOLUTE control over the easement.

You cannot PROHIBIT transit over the easement, but you can establish "reasonable" controls over passage. A locked gate with "reasonable" access to the keys is OK. A chain that you have to get out of your vehicle to unlock is reasonable. Ten gates with keys may be reasonable or unreasonable, depending on your county judge.

Best wishes, and thanks for your help.

Jim

> What you're trying to tell me is that I've given up complete control
> of an easement

308. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 04:09:39 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <3602b$43c1e206$42513109$23602@DIALUPUSA.NET>
Source record: 14697
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Because road humps expose you to liability for that sort of stuff...like wheel alignments and the like due to the fact that there is no national or regional standard for "road humps". Trust me, I'm in a court case like this right now and nobody can present evidence for the correct design of "road humps".

Jim

> Since you have to maintain your portion of the easement, why not build
> some "road humps" so the delivery trucks have to slow down or risk
> having to resort all the parcels in the back?

309. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 04:14:19 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <1bff0$43c1e31d$42513109$23615@DIALUPUSA.NET>
Source record: 14548
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Quite frankly, I don't give a hairy rat's ass for your practical or
political opinion. ATFQ from a technical point of view or butt out. I can
take care of the rest of it myself.

Jim

"James T. White" <SPAMjtwhiteGUARD@hal-pc.org> wrote in message
news:43c1de9a$0$506$a726171b@news.hal-pc.org...
> What makes you think the kids won't drive as fast as they can just to
> set off your new speed activated siren and piss you off?
>
> --
> James T. White
>
>

310. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 04:57:05 UTC
From: Clark <CP@comcast.net>
Message-ID: <Hs-dnUnzAKbbcFzenZ2dnUVZ_t2dnZ2d@comcast.com>
Source record: 14549
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

There were several modes to the unit , as it was the filter in it was very bad.

"Gary Smith" <mygrps@aapt.net.au> wrote in message
news:dps850$15l$1@news-01.bur.connect.com.au...
> Thanks Al, but i'm not too good at working out stuff like that, if it's
> all laid out in kit form i'm ok. and i thought that seeing these things
> are reasonably critical (antenna units) that if i tried another design i
> may be waisting my time and parts on something that isn't suited. Thanks
> for your input.
>
> Gary
>
> "Al Klein" <rukbat@invalid.net> wrote in message
> news:a863s15jsisveq0ghaag6ec4fcj7csg3ei@4ax.com...
>> On Sun, 8 Jan 2006 23:56:31 +1100, "Gary Smith" <mygrps@aapt.net.au>
>> wrote:
>>
>> There are probably at least a dozen other RDF designs nased on the
>> same idea floating around on the web. A look at any of them, and a
>> schematic of what you have (draw one if necessary), will tell you how
>> to make what you need.
>>
>> The antennas are usually 1/2 wave dipoles at whatever frequency the
>> unit will be used. Copperweld or wire hangers make decent antennas,
>> although I prefer stainless control wire of the type used on model
>> planes.
>
>

311. LMX2322?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 05:59:25 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <5da6a$43c1fbbd$d135c4af$24772@MDI.CA>
Source record: 14550

I can't find the LMX2322 on National Semi site.
Can someone tell me a suitable replacement as I just need the 64x prescaler function.

Thanks

JE

312. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 06:01:54 UTC
From: clifto <clifto@clifto.com>
Message-ID: <ira993-t0q.ln1@remote.clifto.com>
Source record: 14551
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

maxfoo wrote:
> On Sun, 08 Jan 2006 17:02:05 -0600, clifto <clifto@clifto.com> wrote:
>>Paul Burridge wrote:
>>> xray <notreally@hotmail.invalid> wrote:
>>>>No, Spectum Analysers are useless for anyone outside the government or
>>>>RF extremists.
>>>
>>> ???
>>> Er, they're extremely useful pieces of test gear for anyone involved
>>> in RF., even hobbyists.
>>
>>No, they're garbage.
>>
>>I have a really nice garbage can in case anyone wants.
>
> Will it do phase noise measurements for me?

Only if someone sends me the right kind of garbage.

--
If John McCain gets the 2008 Republican Presidential nomination,
my vote for President will be a write-in for Jiang Zemin.

313. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 06:48:22 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e2ba7121852bd8e989721@news-central.giganews.com>
Source record: 14552
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <ebb$43c07929$42512485$4540@DIALUPUSA.NET>,
jim@rstengineering.com says...
> You are one of the idiots I don't ever want to live next to. We can talk to
> the parents until we are blue in the face and the kids are going to be ...
> kids.

Gee, and technological solutions to social problems always work SO well.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam
---

314. Compensating frequency response of wideband amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 09:02:01 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11s49mnbl1hmg3e@corp.supernews.com>
Source record: 14560

Could someone point me in the direction of how you might go about flattening the frequency response of a wideband amplifier MMIC? I'm looking at something like the Watkin-Johnson ECG003 (http://www.wj.com/pdf/ECG003.pdf) and noticing that the response drops a little over 2dB from 500MHz to 2.5GHz. Assuming that I've got plenty of SNR, component count isn't a big deal, and I don't mind tweaking trimmers, how might I go about flattening that respone to, say, 0.5dB or better across that range? Or is it just not very practical?

Thanks,
---Joel Kolstad

315. APRSPoint new version available !

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 09:26:07 UTC
From: "hxc98@yahoo.com" <hxc98@yahoo.com>
Message-ID: <1136798767.854451.183020@g44g2000cwa.googlegroups.com>
Source record: 14564

APRSPoint 2.2 is released. New features include,

1. Added TNC data view and TNC data log,
2. Enabled auto connect for AGW packet engine,
3. Fixed a bug handling weather station data,
4. Ability to load a default map view at startup,
5. Restore TNC settings when program exits.

and many more. The holiday sale is also extended for 2 more days.
Visist http://www.aprspoint.com for details. Thanks.

316. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 14:36:16 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <8hs4s1tlpc1828vv1ajr959tfos1b14kkd@4ax.com>
Source record: 14566
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sun, 8 Jan 2006 20:06:47 -0800, "RST Engineering"
<jim@rstengineering.com> wrote:

>Wes...
>
>I'm not a lawyer, nor do I play one on newsgroups. However, having spent a
>dozen years in the highest public office in this county and sorting this
>sort of crap out week after week, you have ABSOLUTE control over the
>easement.
>
>You cannot PROHIBIT transit over the easement, but you can establish
>"reasonable" controls over passage. A locked gate with "reasonable" access
>to the keys is OK. A chain that you have to get out of your vehicle to
>unlock is reasonable. Ten gates with keys may be reasonable or
>unreasonable, depending on your county judge.

Actually, there is a gate at the street. We used to close it at least
at night, although for some reason that slowly ended. It was never
locked, but the sight of it closed stopped a lot of casual traffic
that didn't belong here.

>
>Best wishes, and thanks for your help.

Good luck with the project!

317. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 15:15:59 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <4cv4s1h2tusoukac1mq2vea7va0c3aciu3@4ax.com>
Source record: 14567
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sun, 8 Jan 2006 20:09:39 -0800, "RST Engineering"
<jim@rstengineering.com> wrote:

>Because road humps expose you to liability for that sort of stuff...like
>wheel alignments and the like due to the fact that there is no national or
>regional standard for "road humps". Trust me, I'm in a court case like this
>right now and nobody can present evidence for the correct design of "road
>humps".
>
>Jim
>
>
>> Since you have to maintain your portion of the easement, why not build
>> some "road humps" so the delivery trucks have to slow down or risk
>> having to resort all the parcels in the back?
>

There are speed bumps all over this valley on CITY-maintained streets,
as well as speed bumps in many shopping centers.

Since I've not heard of a suit, you might look into Arizona law as to
what's legal and extrapolate to your situation.

BTW, Scottsdale also uses tight-ass round-abouts to slow traffic...
you have to slow or you'll rollover.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

318. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 15:53:36 UTC
From: Richard Henry <rphenry@home.com>
Message-ID: <42ff9iF1irg5vU1@individual.net>
Source record: 14568
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"Jim Thompson" <To-Email-Use-The-Envelope-Icon@My-Web-Site.com> wrote in
message news:4cv4s1h2tusoukac1mq2vea7va0c3aciu3@4ax.com...
> BTW, Scottsdale also uses tight-ass round-abouts to slow traffic...
> you have to slow or you'll rollover.

Can you give me the address of such an intersection? I'd like to look at
some on google maps for background on a local street-improvement project.

319. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 16:02:43 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <dpu1f3iba1@puck.litech.org>
Source record: 14569
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In rec.radio.amateur.homebrew Richard Henry <rphenry@home.com> wrote:

> "Jim Thompson" <To-Email-Use-The-Envelope-Icon@My-Web-Site.com> wrote in
> message news:4cv4s1h2tusoukac1mq2vea7va0c3aciu3@4ax.com...
>> BTW, Scottsdale also uses tight-ass round-abouts to slow traffic...
>> you have to slow or you'll rollover.

> Can you give me the address of such an intersection? I'd like to look at
> some on google maps for background on a local street-improvement project.

Google for "chicane"; that's the generic name for tight wiggle-like
features built into roads and streets to force traffic to slow down.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

320. Re: Whatever happened to

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 16:48:22 UTC
From: Nightingale <htcx3@alltel.net>
Message-ID: <1f46a$43c29363$a6661e10$12080@ALLTEL.NET>
Source record: 14570

yzordderrex@verizon.net wrote:
> Circuit Board Specialists out of Pueblo Colorado?
>
> They supplies pc boards and parts for ARRL handbook projects.
>
> 73
> Bob
> N9NEO
>

I don't know about Circuit Board Specialists, but doesn't Far Circuits
provide this service?

-N

321. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 16:49:51 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <1h45s1htokfokma462vsi864j086s3sqnf@4ax.com>
Source record: 14571
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Mon, 9 Jan 2006 07:53:36 -0800, "Richard Henry" <rphenry@home.com>
wrote:

>
>"Jim Thompson" <To-Email-Use-The-Envelope-Icon@My-Web-Site.com> wrote in
>message news:4cv4s1h2tusoukac1mq2vea7va0c3aciu3@4ax.com...
>> BTW, Scottsdale also uses tight-ass round-abouts to slow traffic...
>> you have to slow or you'll rollover.
>
>Can you give me the address of such an intersection? I'd like to look at
>some on google maps for background on a local street-improvement project.
>

Google Earth...

Intersection of Cholla St. and 68th St., Scottsdale, AZ 85254

LAT 33.589390ï¿½

LON -111.935610ï¿½

There are quite a few of this type in Scottsdale and in Carefree/Cave
Creek, AZ.

Phoenix tends toward speed bumps, but is also looking into
round-abouts.

Scroll a few blocks SW from there to the NW corner of Desert Cove and
66th St., and you'll see the acre I lived on from 1969 to 1994.

I always referred to the Cholla/68th St. intersection as the "drunk
catcher", because there's a dip there as well... rain drain channel
;-)

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

322. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 17:13:51 UTC
From: cs_posting@hotmail.com
Message-ID: <1136826831.356067.98810@g49g2000cwa.googlegroups.com>
Source record: 14572
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Scott wrote:
> How about a gate at the end of the road that can be opened by the users
> with a garage door opener, ie a gated community of sorts. If it's a
> private road, keep others off.

How about a gate that opens automatically if approached below a certain
speed, but if approached above it locks closed and will not open until
the vehicle backs up 100 feet and returns slowly.

323. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 17:48:28 UTC
From: Richard Henry <rphenry@home.com>
Message-ID: <42fm0vF1igcdhU1@individual.net>
Source record: 14574
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"Mike Andrews" <mikea@mikea.ath.cx> wrote in message
news:dpu1f3iba1@puck.litech.org...
> In rec.radio.amateur.homebrew Richard Henry <rphenry@home.com> wrote:
>
> > "Jim Thompson" <To-Email-Use-The-Envelope-Icon@My-Web-Site.com> wrote in
> > message news:4cv4s1h2tusoukac1mq2vea7va0c3aciu3@4ax.com...
> >> BTW, Scottsdale also uses tight-ass round-abouts to slow traffic...
> >> you have to slow or you'll rollover.
>
> > Can you give me the address of such an intersection? I'd like to look
at
> > some on google maps for background on a local street-improvement
project.
>
> Google for "chicane"; that's the generic name for tight wiggle-like
> features built into roads and streets to force traffic to slow down.

Our local problem is a street that is normally lightly-travelled, but gets congested during the morning and afternoon because of traffic to/from the high school. The city has proposed widening the whole length (it varies from 50-year-old twisty 2-lane to modern 6-lane boulevard over the stretch in question) and a local group has proposed traffic circles at 4 critical interrsections.

324. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 18:21:17 UTC
From: Professor <briangriffey@sbcglobal.net>
Message-ID: <1136830877.491008.313520@g43g2000cwa.googlegroups.com>
Source record: 14575

Why not just use a varactor... as a varactor... LOL
They are available in small quanities at www.mouser.com searchword
"varactor"...

Professor
www.telstar-electronics.com

325. Re: Compensating frequency response of wideband amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 19:23:54 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e2c58276a2da3e9989722@news-central.giganews.com>
Source record: 14576

In article <11s49mnbl1hmg3e@corp.supernews.com>,
JKolstad71HatesSpam@yahoo.com says...
> Could someone point me in the direction of how you might go about flattening
> the frequency response of a wideband amplifier MMIC? I'm looking at something
> like the Watkin-Johnson ECG003 (http://www.wj.com/pdf/ECG003.pdf) and noticing
> that the response drops a little over 2dB from 500MHz to 2.5GHz. Assuming
> that I've got plenty of SNR, component count isn't a big deal, and I don't
> mind tweaking trimmers, how might I go about flattening that respone to, say,
> 0.5dB or better across that range? Or is it just not very practical?
>
> Thanks,
> ---Joel Kolstad
>
>
>
>

Why would you need specs like that? You don't ordinary rely on an
amplifier to provide that kind of flatness. You need a detector and a
PIN modulator in a closed loop.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam
---

326. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 19:43:34 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <sje5s1htn9or5ht6k1p7nubsiidtagpmcu@4ax.com>
Source record: 14577
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Mon, 9 Jan 2006 07:53:36 -0800, "Richard Henry" <rphenry@home.com>
wrote:

>
>"Jim Thompson" <To-Email-Use-The-Envelope-Icon@My-Web-Site.com> wrote in
>message news:4cv4s1h2tusoukac1mq2vea7va0c3aciu3@4ax.com...
>> BTW, Scottsdale also uses tight-ass round-abouts to slow traffic...
>> you have to slow or you'll rollover.
>
>Can you give me the address of such an intersection? I'd like to look at
>some on google maps for background on a local street-improvement project.

http://trafficcalming.org/

327. Re: Whatever happened to

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 20:03:36 UTC
From: Zack <zlau@arrl.org>
Message-ID: <1136833574.063048.203200@g49g2000cwa.googlegroups.com>
Source record: 14578

I think they went out of business when the owner, Bob Shriner, WA0UZO,
passed away around 1983.

328. Re: NE602 replacement is NTE7164?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 20:26:15 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <VFzwf.63$f01.13@fe03.lga>
Source record: 14579

"Mark Zenier" <mzenier@eskimo.com> wrote in message
news:dpu7h2$ob3$1@eskinews.eskimo.com...

> No, NE and SA are both Philips prefixes, but different temperature
> ratings. NE is the commercial range of 0 to +70 deg C, SA the
> mil/industrial range of -40 to +85 deg C.

Since Phillips bought up Signetics, it makes sense they would keep the part number. And it occurred to me that I have gotten NE602's long after the SA parts appeared.

HOWEVER, Phillips lists no NE parts under their RF parts, nor as parts "similar to" the SA602. Although it is certainly not exhaustive, all the "NE" parts still in my parts drawer have Signetics logos (no 602's tho - 604/605/614/615 all my 602/612's are SA).

..

329. Re: Compensating frequency response of wideband amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 20:32:08 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <11s5i26huon5p5e@corp.supernews.com>
Source record: 14580

"John Miles" <jmiles@pop.removethistomailme.net> wrote in message
news:MPG.1e2c58276a2da3e9989722@news-central.giganews.com...
> Why would you need specs like that?

Obscenely wideband (>500MHz) software-defined radios. There are people out there asking for such things to be built -- hence the question! (And wondering whether or they're just having pipe dreams and technology just isn't there yet...)

330. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 20:59:12 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1136840352.258215.5570@g47g2000cwa.googlegroups.com>
Source record: 14581

Since the 1N4007 isn't a dual, why do you require a dual varactor? I'd expect diodes specifically made to be varactors would have less variation from part to part with respect to capacitance than would some other random diode.

Have you tried Mouser (as Professor suggests) or DigiKey, or some of the surplus places like MPJA?

I've heard that 1N4007s commonly make decent PIN diodes. If that's the case, if they really are made as a PIN structure, I would think they'd make lousy varactors. Wide-tuning-range varactors are commonly "hyper-abrupt" junctions, NOT PINs.

Cheers,
Tom

331. Re: Consti-google-pated?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 21:12:27 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dpujfl$4p0$1@newsg3.svr.pol.co.uk>
Source record: 14582
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

<lucifer@eternal-flames.gov> wrote in message
news:7rc5s1p75c84cdlh0lb20klorlkjeotef9@4ax.com...
> On 8 Jan 2006 03:06:18 -0800, "Orator For Decency"
> <aiyr.r.bean@lycos.co.uk> wrote:
>
> >Multitudinous and profuse apologies for
> >the repetitive creativity - in a number of posts,
> >I thought I was dreaming - surely I'd posted
> >but it didn't appear, so I reposted. Now it appears
> >that I wasn't dreaming and it was simply that
> >the consti archive was googlepated
>
> It's due to all of the crap you keep posting.
>
> HTH
>
> Old Nick.

Oh my god, I'm in agreement with you once more...
Please forgive me :o)

Graham
--
-.-. -... / .-. .- -.. .. ---

Radio is only a Hobby. Don't let it rule your life...

73/51 - Graham, 26-Golf Charlie-19

332. Re: Compensating frequency response of wideband amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 21:16:56 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <S4ydndbNJslfT1_eRVn-qQ@web-ster.com>
Source record: 14583

Joel Kolstad wrote:

> Could someone point me in the direction of how you might go about flattening
> the frequency response of a wideband amplifier MMIC? I'm looking at something
> like the Watkin-Johnson ECG003 (http://www.wj.com/pdf/ECG003.pdf) and noticing
> that the response drops a little over 2dB from 500MHz to 2.5GHz. Assuming
> that I've got plenty of SNR, component count isn't a big deal, and I don't
> mind tweaking trimmers, how might I go about flattening that respone to, say,
> 0.5dB or better across that range? Or is it just not very practical?
>
> Thanks,
> ---Joel Kolstad
>
>
>
A lead-lag filter with the pole out beyond 2.5GHz may do it for you, but
I have no idea how you'd actually implement it.

Ditto for cleverly placed stubs.

And don't call me when the next batch has slightly different
characteristics, or when the one you have varies with temperature.

I recall someone writing about this in QEX quite a while back -- it was
his first time designing an IF for a radar, and it had to be WIDE band.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

333. Re: Compensating frequency response of wideband amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 21:17:42 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <S4ydndHNJslyT1_eRVn-qQ@web-ster.com>
Source record: 14584

Joel Kolstad wrote:

> "John Miles" <jmiles@pop.removethistomailme.net> wrote in message
> news:MPG.1e2c58276a2da3e9989722@news-central.giganews.com...
>
>>Why would you need specs like that?
>
>
> Obscenely wideband (>500MHz) software-defined radios. There are people out
> there asking for such things to be built -- hence the question! (And
> wondering whether or they're just having pipe dreams and technology just
> isn't there yet...)
>
>
>
You have a digital system, which can presumably fix this in software,
and you want to go sticking _trimmers_ in your circuit?!?

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

334. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 21:45:23 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <TPAwf.57313$q%.34494@newssvr12.news.prodigy.com>
Source record: 14585
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Jim,

> Good idea, Joerg. Where do I get onesie-twosie IR sensors that will trigger
> at 3 meters or better?
>

No idea but one source might be remote controls and the corresponding receiver diode in the set or from a stereo. I bet that Radio Shack will have something if there still is one in your area (our became a cell phone store). You'd need a crude reflector on the other side, piece of metal or white board.

Another source might be if someone replaces their garage door opener. They usually come complete with the child protect barrier and most people will throw out the old one.

Thing is, you need at least two sets. The LEDs could be running all the time and you just have to sense the receive elements.

There is yet one more method: Two coils next to the road, each with oscillator. On fence posts, wherever. A car will de-tune it or, if set on the edge of the stable feedback range, would stop the oscillator momentarily. In contrast to the IR method and the Doppler method this can be made pretty weather proof from cheap wire.

Regards, Joerg

http://www.analogconsultants.com

335. Dual jfet

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 22:01:59 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <S0Bwf.21079$__4.19198@bignews1.bellsouth.net>
Source record: 14586

I'm building a circuit that calls for a dual monolithic
jfet. Can I use two discrete jfets that I have matched
for IDSS in the circuit? They are in TO92 plastic
cases, I can glue the two in contact with each other
so they end up at the same temperature.

336. Re: Compensating frequency response of wideband amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 22:10:24 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11s5nt124ecohfd@corp.supernews.com>
Source record: 14587

Hi Tim,

"Tim Wescott" <tim@seemywebsite.com> wrote in message
news:S4ydndHNJslyT1_eRVn-qQ@web-ster.com...
> You have a digital system, which can presumably fix this in software, and
> you want to go sticking _trimmers_ in your circuit?!?

The amps are well before the ADCs -- ADCs that sample at anything approaching
1Gsps have atrocious dynamic range compared to an analog signal processing
chain with a decent noise floor (e.g., 6 bits giving about 40dB dynamic range
vs. 80-100dB dynamic range back in the analog domain).

337. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 22:18:57 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dpungihjr1@engnntp2.cig.mot.com>
Source record: 14597
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Gary,
I'm in the process of finishing a new display for my "Roanoke Doppler".
Do a search on that name and you'll get many hits. For just the antenna,
the Homing In Web site has info on both main types in common use. I'm not
sure what the Dick Smith does, but perhaps Homing-In talks about it.

Homing In is the place to start:
http://members.aol.com/homingin/index.html

It has antenna system (typically 1/4 wave whips for the Ham units)
references:
Down a ways on the main page under Home Built:
http://members.aol.com/homingin/newdopant2.html

This specificlly addresses the Dick Smith unit:
http://members.aol.com/homingin/DSEfix.html

You can always email K0OV.

73, Steve, K,9.D;C'I

"Gary Smith" <mygrps@aapt.net.au> wrote in message
news:dps7ihcj1@news-01.bur.connect.com.au...
> Dave, if i had a manual with info on how to build one i'd be down the
> electronics shop getting the bits and building one as we speak :>
>
> Gary
>
> "Dave" <noone@nowhere.com> wrote in message
> news:Aq-dnVewhKvCg1zeRVn-jw@crocker.com...
> > they never came with antennas that i know of, you had to build them
> > yourself. the plans for the asu including circuit board and parts list
> > are in the manual, they are simple things that you should be able to
find
> > at any radio parts store... assuming you can find one of those today.
>
>

338. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 22:24:30 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dpunquhtj1@engnntp2.cig.mot.com>
Source record: 14596
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Glenn McAllister" <"(callsign)"@orcon.net.nz> wrote in message
news:43C18707.12BE@orcon.net.nz...
> ...
> The ones in the box switch one of the antennas at a time to the RDF, and
> the ones at the base of the antennas groung the out-of-use antennas.
>
> Glenn ZL2TLD

The standard advise from K0OV is to NOT ground the unused antennas, but to leave them open which is in a non resonant state. This is so they have minimal effect on the active antenna and thus do not act like a parasitic element. I'm not sure why, but he recommends having NO amplitude (pattern) effects in your system.

73, Steve, K9DCI.

339. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 22:28:17 UTC
From: "Rich Grise, but drunk" <yahright@example.net>
Message-ID: <pan.2006.01.09.22.28.32.840987@example.net>
Source record: 14588
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sat, 07 Jan 2006 11:28:12 -0800, RST Engineering wrote:

> Back in the '60s and early '70s I did some work with Impatt and Gunn diodes,
> building a little self-detecting doppler for speed sensing. However, 35
> years have passed and my notebooks for that stuff are somewhere in a dusty
> archive along with my venerable sliderule.
>
> Is there a cheap source for onesies-twosies of a radar front-end that will
> give me doppler audio as a function of a large metal object's speed at a
> range of 20 meters or so? I don't need to go into production on this thing,
> just build one. A surplus source would be ideal.
>
> It seems that the little kids on our rural country lane have all become
> teenagers at once and are trying to outdo the others in how fast they can
> drive daddy's car up and down the lane. We've lost one dog this week and
> unless I can put up some sort of a siren that goes off when they exceed some
> agreed upon limit, the carnage will continue.

Just call your local cop shop, and find out where they get their radar
guns - if these kids are posing a threat to life and limb, the cops might
come out and do it for you.

Good Luck!
Rich

340. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 22:31:17 UTC
From: "Rich Grise, but drunk" <yahright@example.net>
Message-ID: <pan.2006.01.09.22.31.32.308051@example.net>
Source record: 14589
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sat, 07 Jan 2006 11:28:12 -0800, RST Engineering wrote:

> Back in the '60s and early '70s I did some work with Impatt and Gunn diodes,
> building a little self-detecting doppler for speed sensing. However, 35
> years have passed and my notebooks for that stuff are somewhere in a dusty
> archive along with my venerable sliderule.
>
> Is there a cheap source for onesies-twosies of a radar front-end that will
> give me doppler audio as a function of a large metal object's speed at a
> range of 20 meters or so? I don't need to go into production on this thing,
> just build one. A surplus source would be ideal.
>
> It seems that the little kids on our rural country lane have all become
> teenagers at once and are trying to outdo the others in how fast they can
> drive daddy's car up and down the lane. We've lost one dog this week and
> unless I can put up some sort of a siren that goes off when they exceed some
> agreed upon limit, the carnage will continue.

Get a piece of baling wire, and tie two garbage cans together, one on
either side of the alleyway, with the wire about 18" (1/2M) off the ground.

That should slow the little bastards down! >:->

Good Luck!
Rich

341. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 22:34:22 UTC
From: "Rich Grise, but drunk" <yahright@example.net>
Message-ID: <pan.2006.01.09.22.34.37.381118@example.net>
Source record: 14590
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sun, 08 Jan 2006 00:28:59 +0000, Joerg wrote:

> Hello Brian,
>
>> Keep the dogs under control as responsible people keep their children under
>> control.
>>
> Even then it can still happen and we all have to use our cars carefully.
> One kid didn't get injured because I was going 15mph in a 25mph zone
> (the street where we live). It dashed out when the garage was opened,
> zooming into the road from behind a van. Couldn't see it coming but I
> never go faster on that street, for that very reason. I came to a stop
> about one foot before the child.
>

I was once in a parking lot, and just kind of _knew_ that some kid was
going to run out in front of me, and not a second later, there came the
ball and the kid. I had already stopped.

Cheers!
Rich

342. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 22:38:29 UTC
From: "Rich Grise, but drunk" <yahright@example.net>
Message-ID: <pan.2006.01.09.22.38.44.214687@example.net>
Source record: 14591
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sun, 08 Jan 2006 12:13:49 +1300, Ken Taylor wrote:

> "RST Engineering (jw)" <jim@rstengineering.com> wrote in message
> news:c7d1b$43c03d6a$4251d54c$3192@DIALUPUSA.NET...
>> Why would I care if it triggered a radar detector? In fact, it would be
>> BETTER if it didn't trigger a detector.
>>
>> Jim
>
> Why? Don't you intend to trigger a siren to slow them down? What's it matter
> if they slow down because of their dectors - they slow down, and that would
> appear to be the important thing.
>

Nah - It's Jim @ RST - he wants to nail somebody so he can kick their ass.

Cheers!
Rich

343. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 22:40:40 UTC
From: "Rich Grise, but drunk" <yahright@example.net>
Message-ID: <pan.2006.01.09.22.40.52.398229@example.net>
Source record: 14592
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sun, 08 Jan 2006 07:35:15 -0700, Wes Stewart wrote:

> On Sat, 7 Jan 2006 14:47:08 -0800, "RST Engineering"
> <jim@rstengineering.com> wrote:
>
>>What illegal? I can either retune it for a ham band or reduce power if
>>necessary. I'll find the hardware first and figure out the legal later.
>
> Well, I know I'm going to be asked to leave this discussion but,
> technically, unless you are IDing with your call sign every 10
> minutes. it would be illegal. I seriously doubt that this was in your
> plan.
>
> Police radar guns, should you come up with one, are also licensed to
> the department, assuming the cops are following the law, always a
> dubious proposition.
>
> So, because these are -technical- newsgroups, I was being -technical-.
>
> Now for a "prohibited" non-technical suggestion, here is one that I am
> contemplating. I too live on a short, private, single-lane road, that
> serves four multi-acre homesites. I am plagued by the guys driving
> delivery trucks (DHL, UPS, etc) who roar down the road in a cloud of
> dust while delivering to my neighbors. I have complained to UPS
> repeatedly without success.
>
> So one of these days, when I'm up to it, after they go by on the way
> to the neighbor's house, I'm going to take my truck out and block the
> road for 15 minutes. (A second offense will call for a penalty of 30
> minutes, etc) UPS seems to have a deal with law enforcement that
> exempts them from speed limits on public roads, but in AZ the statutes
> say:
>
> 28-628. Rights of real property owners
>
> This chapter does not prevent the owner of real property that is used
> by the public for purposes of vehicular travel by permission of the
> owner and not as a matter of right from:
>
> 1. Prohibiting that use.
>
> 2. Requiring other, different or additional conditions than those
> specified in this chapter.

>
> 3. Otherwise regulating the use as deemed best by the owner.
>
> In other words, I get to regulate the speed (I've posted it as 10
> MPH). I have no power to fine UPS, but I can still cost them money.

Put up a gate and charge them $1.00 in and $100.00 out. ;-)

Good Luck!
Rich

344. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 22:43:06 UTC
From: "Rich Grise, but drunk" <yahright@example.net>
Message-ID: <pan.2006.01.09.22.43.19.908128@example.net>
Source record: 14593
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sun, 08 Jan 2006 15:37:05 -0700, Wes Stewart wrote:

> On Sun, 08 Jan 2006 14:42:32 GMT, Fred Bloggs <nospam@nospam.com>
> wrote:
>
>>
>>
>>Wes Stewart wrote:
>>
>>>
>>>> 28-628. Rights of real property owners
>>>
>>>> This chapter does not prevent the owner of real property that is used
>>>> by the public for purposes of vehicular travel by permission of the
>>>> owner and not as a matter of right from:
>>>
>>>> 1. Prohibiting that use.
>>>
>>>> 2. Requiring other, different or additional conditions than those
>>>> specified in this chapter.
>>>
>>>> 3. Otherwise regulating the use as deemed best by the owner.
>>>
>>>> In other words, I get to regulate the speed (I've posted it as 10
>>>> MPH). I have no power to fine UPS, but I can still cost them money.
>>
>>You are not reading the wording carefully; it is the "not as a matter of
>>right from" that you are missing. It very well may be a matter of right
>>if the private road is co-owned by the other property holders and this
>>ownership allows them the right to transact business in the way of
>>receiving deliveries as they choose.
>
> Gray area. The road is not co-owned by the other property owners. At
> least my deed doesn't say a thing about me co-owning a piece of the
> property between the public street and me.
>
> Besides, I'm not going to stop the delivery, I'm just going to do some
> "traffic calming" when the truch is leaving.
>
> What you're trying to tell me is that I've given up complete control
> of an easement and if the truck drivers want to go 100 MPH I have no
> say in the matter. If I were to call the Sheriff's office I'd be
> told, "It's private property, we can't do a thing." If I asked the

> county to grade it I would be told to kiss off. If someone got hurt
> on the easement, I would be liable. When I bought the place the title
> company had a hissy fit because there wasn't a road maintenance
> agreement in place. It took the appraiser writing something to the
> effect that this was a typical situation in this area, and that each
> property owner maintained the road on his easement, before the company
> would issue title insurance.
>
> Sounds to me like I do have some say so over the property.

Can you say, "speed bump?"

Good Luck!
Rich

345. Re: Identifying a mystery diode

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 22:49:24 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dpup9k$iu3$1@engnntp2.cig.mot.com>
Source record: 14598

From the looks of the package, Varactor or PIN diode. I think varactors
will have a 0.7 Vf possibly eliminating that, but don't recall PIN diode Vf.
Been too long...Do IR LEDS have that voltage?

Crack some open. There may be multiple die or something.

Steve K9DCI

"Paul VK3DIP" <pmcmahon@telstra.com> wrote in message
news:cXjtf.136133$V7.93540@news-server.bigpond.net.au...
> Hi all I recently purchased a bag of unmarked supposedly diodes and I am
> trying to figure out what they are. The clues so far are normal diode
> action on a multimeter (ie conducts one way but not the other) but the
> forward voltage is high at about 1.4 - 1.5 volts. The packaging is a
small
> square black plastic box with flat axial leads one of which has a small
> cross
> piece on it. This packaging suggests small signal or at least low power.
>
> If anyone wants to look at the mystery diode it is the top one
> in this picture.
> http://www.users.bigpond.com/pmcmahon/mysterydiode.jpg
> The bottom one is a normal glass 1N914 just for scale.
>
> There is nowhere for the light to come out (or in) so they are not LEDs
> which is the only other diode like component I have come across with that
> high a forward voltage. Could it be two silicon diodes in series?
>
> Any suggestions or even just identifying the case outline would be
> appreciated.
>
> Thanks
> Paul VK3DIP
>
>
>

346. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 22:49:26 UTC
From: "Rich Grise, but drunk" <yahright@example.net>
Message-ID: <pan.2006.01.09.22.49.41.466330@example.net>
Source record: 14594
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sat, 07 Jan 2006 18:30:06 -0800, RST Engineering (jw) wrote:

> You are one of the idiots I don't ever want to live next to. We can talk to
> the parents until we are blue in the face and the kids are going to be ...
> kids.
>
> Please butt out of this conversation.
>

If this is the kind of attitude that you're displaying to your neighbors,
then it's no wonder that the kids are punishing you.

Are you such a crusty old crank in real life?

Just shoot their tires out then.

Thanks,
Rich

> Ji
>
>
>
> "James T. White" <SPAMjtwhiteGUARD@hal-pc.org> wrote in message
> news:43c06074$0$502$a726171b@news.hal-pc.org...
>
>> So go have a talk with the parents in the other three families and ask
>> them to get control of their kids. Better yet, send the responsible
>> ones a bill for your new dog.
>>
>> --
>> James T. White
>>
>>

347. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 22:51:31 UTC
From: "Rich Grise, but drunk" <yahright@example.net>
Message-ID: <pan.2006.01.09.22.51.46.693915@example.net>
Source record: 14595
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sun, 08 Jan 2006 20:00:17 -0800, RST Engineering wrote:

> Good idea, Joerg. Where do I get onesie-twosie IR sensors that will trigger
> at 3 meters or better?
>

Look at garage door opener safety electric eye thingies. ;-)

Cheers!
Rich

> Jim
>
>
>
> "Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
> news:I4gwf.55708$q%.46987@newssvr12.news.prodigy.com...
>> Hello Jim,
>>
>> Since you said this is a road with very little traffic can't you just rig
>> up two IR sensing paths?

348. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 23:00:44 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dpupusjda1@engnntp2.cig.mot.com>
Source record: 14599
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

I don't know where this thread went, but... Perhaps I missed it, but try searching on Gunplexer.

That should get you to the ham sites where such things are talked about and sources named. Hams use them on 10 GHz and it would be a simple matter to detect the Doppler freq and do some sort of frequency detect.

Oh hell. here's some of my links:
http://www.g3pho.free-online.co.uk/microwaves/wideband.htm
http://www.kwarc.org/10ghz/10GHZ-4.htm

73, Steve, K,9.D;C'I

"RST Engineering" <jim@rstengineering.com> wrote in message news:5f129$43c01647$4251d54c$538@DIALUPUSA.NET...
> Back in the '60s and early '70s I did some work with Impatt and Gunn diodes,
> building a little self-detecting doppler for speed sensing. However, 35
> years have passed and my notebooks for that stuff are somewhere in a dusty
> archive along with my venerable sliderule.
>
> Is there a cheap source for onesies-twosies of a radar front-end that will
> give me doppler audio as a function of a large metal object's speed at a
> range of 20 meters or so? I don't need to go into production on this thing,
> just build one. A surplus source would be ideal.
>
> It seems that the little kids on our rural country lane have all become
> teenagers at once and are trying to outdo the others in how fast they can
> drive daddy's car up and down the lane. We've lost one dog this week and
> unless I can put up some sort of a siren that goes off when they exceed some
> agreed upon limit, the carnage will continue.
>
>
> Regards,
>
>
> Jim
>
>
>

349. Re: Whatever happened to

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-09 23:10:03 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dpuqgbjqn1@engnntp2.cig.mot.com>
Source record: 14600

Yep and for QST articles. Fred does a good job, as I understand.
73, Steve, K,9.D;C'I

"Nightingale" <htcx3@alltel.net> wrote in message
news:1f46a$43c29363$a6661e10$12080@ALLTEL.NET...
> yzordderrex@verizon.net wrote:
> > Circuit Board Specialists out of Pueblo Colorado?
> >
> > They supplies pc boards and parts for ARRL handbook projects.
> >
> > 73
> > Bob
> > N9NEO
> >
>
> I don't know about Circuit Board Specialists, but doesn't Far Circuits
> provide this service?
>
> -N

350. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 00:34:38 UTC
From: DRGrok@munged.net
Message-ID: <fvudnXpsnMvunV7eRVn-jA@rcn.net>
Source record: 14601

Maybe I'm confusing this with something else but I always thought 1N4007's were 1000 V PIV, 1 A rectifiers.

I believe "any" diode has varactor characteristics to some extent but if you need a varactor you'd be better off using one designed as a varactor.

Dr. G.

In article <eccca$43c0400f$d135c4af$26056@MDI.CA>, JE <JE@nowhere.com> wrote:
>The common 1N4007 seem to work for HF but what is the max. frequency they
>can be used as varactors?
>
>And how about zener diodes?
>
>JE

351. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 01:01:43 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <mFDwf.21550$__4.11473@bignews1.bellsouth.net>
Source record: 14602

Dr. Grok wrote:
> Maybe I'm confusing this with something else but I always thought 1N4007's
> were 1000 V PIV, 1 A rectifiers.
>
> I believe "any" diode has varactor characteristics to some extent but if you
> need a varactor you'd be better off using one designed as a varactor.
>
> Dr. G.
>
>
>
> In article <eccca$43c0400f$d135c4af$26056@MDI.CA>, JE <JE@nowhere.com> wrote:
>
>>The common 1N4007 seem to work for HF but what is the max. frequency they
>>can be used as varactors?
>>
>>And how about zener diodes?
>>
>>JE
All diodes exhibit varactor and zener traits but not all are stable
as such. All diodes when reverse biased exhibit a value of capacitance
across them. In most cases it's usually quite small, less than 5 to 10pf.
Increase the reverse bias and the capacitance goes down. At very high frequencies
the capacitance change is enough to make a useful tuning diode. If you need
a varactor to work at medium to high frequencies the tuning effect won't be
very useful and you should use a true varactor diode. Such diodes have
either larger areas, or thinner substrates to increase th capacitance.

Any diode will work as a Zener, the zener voltage is where the reverse breakdown
occurs. In a true Zener, the breakdown voltage is stable over a large range
of current without the diode self destructing. Using a common diode as a zener
requires limiting the reverse current to a small value, but if the current isn't
large enough the zener voltage won't be stable.

And yes the 1n4007 is a 1000 vpiv rectifier diode. It also makes a good
rf switching diode thanks to it's PIN like structure. It's also quite cheap.

352. Re: Compensating frequency response of wideband amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 01:08:03 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1136855283.581896.237030@o13g2000cwo.googlegroups.com>
Source record: 14603

Wouldn't it be a lot easier to just use a part that's inherently flatter? How about a Sirenza SBB-4089, for example.

If you really want to compensate a part that has some rolloff, you could try, along your 50 ohm transmission line, putting in series a shunt combination of an R and a C. The R adds some attenuation, and the C shorts it out at high frequencies. You need to use tiny parts to avoid problems with parasitic C and L. 0603 or 0402 should work OK. You need to take into account the driving amplifier's output impedance, and the load's impedance, and their variation with frequency. If you use multiple sections like that, you can tailor the response better than you can do with a single section. You could add in some inductance in series with resistance, shunt to ground, if you could find some inductance that behaves nicely at 2.5GHz. Maybe a shorted stub? That would let you keep a more constant load impedance versus frequency for the driving amplifier.

And what use would a 6 bit wideband system be anyway? What are you receiving with it that doesn't require more dynamic range than you'll get with 6 bits? And if you're only sampling at 1GHz, why are you worried about anything more than about 400MHz bandwidth?

Much more interesting to be looking at 14 or more bits...I keep telling the ADC manufacturers that I'd like 18 bits, with noise and distortion to match. Haven't been demanding a 5Gs/s rate yet though. Wouldn't quite know what to do with the data stream.

Cheers,
Tom

353. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 01:16:14 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <rh26s1hd9nqlc1r0dcbak5sv15asr3tpb1@4ax.com>
Source record: 14604
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Mon, 9 Jan 2006 17:00:44 -0600, "Steve Nosko"
<suteuve.nosukowicuz@moutouroula.com> wrote:

>I don't know where this thread went, but... Perhaps I missed it, but try
>searching on Gunplexer.

It went the way of all neighborly, over the backyard fence
discussions.

This is usenet, remember. Totally typical and often informative (and
often not) [g].

354. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 02:07:47 UTC
From: "Paul Hovnanian P.E." <Paul@Hovnanian.com>
Message-ID: <43C316F3.CCBBC619@Hovnanian.com>
Source record: 14605
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

RST Engineering wrote:
>
> Back in the '60s and early '70s I did some work with Impatt and Gunn diodes,
> building a little self-detecting doppler for speed sensing. However, 35
> years have passed and my notebooks for that stuff are somewhere in a dusty
> archive along with my venerable sliderule.
>
> Is there a cheap source for onesies-twosies of a radar front-end that will
> give me doppler audio as a function of a large metal object's speed at a
> range of 20 meters or so? I don't need to go into production on this thing,
> just build one. A surplus source would be ideal.
>
> It seems that the little kids on our rural country lane have all become
> teenagers at once and are trying to outdo the others in how fast they can
> drive daddy's car up and down the lane. We've lost one dog this week and
> unless I can put up some sort of a siren that goes off when they exceed some
> agreed upon limit, the carnage will continue.

A strobe light. The radar 'your speed is..' signs don't do much to
discourage the a*holes. They just try to see what sort of quarter mile
speed they can hit.

The ones with the strobe make them wonder whether they'll be getting one
of those photo tickets in the mail.

--
Paul Hovnanian mailto:Paul@Hovnanian.com

When cryptography is outlawed, bayl bhgynjf jvyy unir cevinpl.
-- Etaoin Shrdlu

355. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 02:23:32 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <vi66s1tdhg7r5dced6neq2qc8j2sqtjt0o@4ax.com>
Source record: 14606
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Mon, 09 Jan 2006 18:07:47 -0800, "Paul Hovnanian P.E."
<Paul@Hovnanian.com> wrote:

>RST Engineering wrote:
>>
>> Back in the '60s and early '70s I did some work with Impatt and Gunn diodes,
>> building a little self-detecting doppler for speed sensing. However, 35
>> years have passed and my notebooks for that stuff are somewhere in a dusty
>> archive along with my venerable sliderule.
>>
>> Is there a cheap source for onesies-twosies of a radar front-end that will
>> give me doppler audio as a function of a large metal object's speed at a
>> range of 20 meters or so? I don't need to go into production on this thing,
>> just build one. A surplus source would be ideal.
>>
>> It seems that the little kids on our rural country lane have all become
>> teenagers at once and are trying to outdo the others in how fast they can
>> drive daddy's car up and down the lane. We've lost one dog this week and
>> unless I can put up some sort of a siren that goes off when they exceed some
>> agreed upon limit, the carnage will continue.
>
>A strobe light. The radar 'your speed is..' signs don't do much to
>discourage the a*holes. They just try to see what sort of quarter mile
>speed they can hit.
>
>The ones with the strobe make them wonder whether they'll be getting one
>of those photo tickets in the mail.

How about a sign that says, "Shotgun automatically triggered when
speed exceeds 25MPH" ?:-)

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

356. Re: Dual jfet

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 02:29:05 UTC
From: Allison-nospam@nouce.bellatlantic.net
Message-ID: <9p66s19rmkku9upjssedmbh4m4l7089dlu@4ax.com>
Source record: 14607

On Mon, 09 Jan 2006 17:01:59 -0500, Ken Scharf
<wa2mzeNOTTHIS@bellsouth.net> wrote:

>I'm building a circuit that calls for a dual monolithic
>jfet. Can I use two discrete jfets that I have matched
>for IDSS in the circuit? They are in TO92 plastic
>cases, I can glue the two in contact with each other
>so they end up at the same temperature.

Yes, you can but the closer the match the better.
Two parts form the same lot/datecode with the same
IDSS should be ok.

I've done this with MPF102s (a wide tolerence part)
with good results in all but extremely critical designs.

Allison

357. Re: Compensating frequency response of wideband amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 03:01:56 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1136862116.067563.29390@z14g2000cwz.googlegroups.com>
Source record: 14608

Further to the frequency response compensation:

In a world of ideal R, L and C components, you can insert an attenuator into a transmission line, matched to the line's characteristic impedance, to get frequency-independent attenuation while maintaining good return-loss from both input and output ports. If you then modify that circuit by shunting a capacitor across the attenuator, and lifting the ground-return of the attenuator and inserting an inductor in series to ground, and the inductor and capacitor each have reactances equal in magnitude to the line's impedance at some frequency F (assuming a non-reactive, constant impedance line here), the system will still have good return loss at all frequencies, and will have attenuation equal to that of the attenuator alone at DC, and no attenuation at frequencies far enough above F. In the transition region, the maximum slope of the attenuation will be 6dB/octave. That maximum will not be reached for low values of attenuation. If you cascade such sections, with each section having a different frequency F and perhaps differing attenuations, you can make a tailored response adjustment. Cascading identical sections of high enough ultimate attenuation results in maximum slopes in excess of 6dB/octave. Obviously trading the places of the inductor and capacitor give you the opposite shape: more attenuation at higher frequencies.

I have a little RFSim99 circuit that illustrates this idea--email if you'd like the file.

It's going to get really difficult to make this work right at high frequencies, because of the size of the parts and the parasitics involved. But with modern parts, you might be able to make it work well out to a couple GHz.

Cheers,
Tom

358. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 03:40:59 UTC
From: "Rich Grise, but drunk" <yahright@example.net>
Message-ID: <pan.2006.01.10.03.41.14.539326@example.net>
Source record: 14609
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Mon, 09 Jan 2006 19:23:32 -0700, Jim Thompson wrote:
> On Mon, 09 Jan 2006 18:07:47 -0800, "Paul Hovnanian P.E."
>>RST Engineering wrote:
...
>>> It seems that the little kids on our rural country lane have all become
>>> teenagers at once and are trying to outdo the others in how fast they can
>>> drive daddy's car up and down the lane. We've lost one dog this week and
>>> unless I can put up some sort of a siren that goes off when they exceed some
>>> agreed upon limit, the carnage will continue.
>>
>>A strobe light. The radar 'your speed is..' signs don't do much to
>>discourage the a*holes. They just try to see what sort of quarter mile
>>speed they can hit.
>>
>>The ones with the strobe make them wonder whether they'll be getting one
>>of those photo tickets in the mail.
>
> How about a sign that says, "Shotgun automatically triggered when
> speed exceeds 25MPH" ?:-)
>
> ...Jim Thompson

Leave it to Thompson to come up with one that involves lethal violence.
At least the booby-trap I suggested only involves noise and damage to
the car's paint (and maybe sheet metal, depending how fast they're going
and what's in the garbage cans.)

Cheers!
Rich

359. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 04:16:24 UTC
From: none <Vampyres@nettaxi.com>
Message-ID: <2kc6s1hjn2v97b43omppirch2t4f9lr066@4ax.com>
Source record: 14610
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On 8 Jan 2006 18:58:29 -0800, "Too_Many_Tools"
<too_many_tools@yahoo.com> wrote:

>Thanks for all the responses....
>
>A few more questions....
>
>How many of you use racks to hold your test equipment?
>
Mostly shelves especially sized for the test gear.
>If you do use racks, how do you have your equipment arranged?
>
Most frequently used test jigs front and center on the shelf directly
over my bench, less often used jigs to either side and portable
meters(vom's esr's etc...) on the test bench to the rear or stored in
drawers directly under the bench.(hand tools such as screwdrivers and
such are mounted on the wall in 2x4's with drilled holes or
clamps/hooks to hold them.)
>Are the racks full length racks or do you have part rack and part
>cabinet?
>
>How do you handle parts storage?
Metal storage cabinets for some parts.(most frequently used.) others
stored in plastic storage tubs with lids(pushed under cabinets or
shelves) Also some metal shop shelves for
aerosols/cleaners/abrasives/paints etc...

I've also been fortunate in obtaining metal storage cabinets with
drawers from local hardware stores that toss them when remodeling,
indispensable when trying to collate the massive amount of
nuts/bolts/screw and small parts I accumulate from scrap salvage or
toss offs of others.(I probably hold the title for worlds biggest
parts scrounge.)
>
>How about lighting?
>
>TMT

360. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 04:25:42 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11s6dq7ekpo3o30@corp.supernews.com>
Source record: 14611

Ken Scharf wrote:
>
> All diodes exhibit varactor and zener traits but not all are stable
> as such. All diodes when reverse biased exhibit a value of capacitance
> across them. In most cases it's usually quite small, less than 5 to 10pf.
> Increase the reverse bias and the capacitance goes down. At very high frequencies
> the capacitance change is enough to make a useful tuning diode. If you need
> a varactor to work at medium to high frequencies the tuning effect won't be
> very useful and you should use a true varactor diode. Such diodes have
> either larger areas, or thinner substrates to increase th capacitance.
> . . .

Zener diodes have much more capacitance than this, with the amount of C being greater as the zener voltage gets lower. It's been a long time since I've looked at this, but as I recall you can get well over 100 pF from something like a 5 V zener. For the same reason, reverse biased E-B junctions can give quite a bit of C. Of course, the limited breakdown voltage limits your tuning range. Higher power zeners have higher C yet.

I've used zeners for varicaps many times in HF rigs, to offset a VFO when switching bands, and for RIT. Haven't tried one as the main tuning capacitor, but I haven't tried a regular varicap, either.

Diodes specified for varicap use have more predictable capacitance-vs-voltage characteristics, and you can get a variety of different characteristics. They might have lower noise, too, but I've never used one in an application where that was critical, so don't know if that's the case. But for a lot of one-off projects, zeners work fine as varicaps.

As for using something else as zeners, emitter-base junctions work well. You don't get much variety, though -- most break down at around 5-6 volts. I've got a power supply I built over 30 years ago which uses a couple of series transistor E-B junctions as the voltage reference. It's still my main bench supply.

Roy Lewallen, W7EL

361. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 04:29:42 UTC
From: none <Vampyres@nettaxi.com>
Message-ID: <b9d6s1h6te7hp4mrlf4k2gcso5ourculkh@4ax.com>
Source record: 14612
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On 8 Jan 2006 17:31:40 -0800, "Too_Many_Tools"
<too_many_tools@yahoo.com> wrote:

>Thanks for the responses....
>
>Of those who use racks to hold their equipment, how do you have the
>equipment arranged and how are the racks distributed?
>
>For storage, what do you use? What works and what does not?
>
>How about lighting?
Flourescent, mainly because I can get the fixtures for nothing. People
are always tossing them out in all shapes and sizes.(Some can be
extremely wasteful when remodeling or rebuilding.)
Also flouro is of course much more efficient resulting in much lower
electricity bills for your shop.
I also have a number of the flex-arm work lights, both flourescent as
well as incandescent. I have one mounted on the corner of my work
bench for all the close up work I have to do.(The incandescent
flex-arm lamps can easily be converted to flouro for general work by
using a screw in spiral tube flourescent bulb , or converted back to
high watt incandescent for work requiring more intense light.)

People toss out those flourescent aquarium light fixtures all the
time.
Most are 18 inch and make excellent under shelf light fixtures for
light directly on the bench.
The tubes are easily swapped out for normal balanced tubes and the
black plastic housing usually have open spaces on either end to allow
drilling holes for mounting to the under shelf.(I use #8 x 1 inch
sheet metal screws with fender washers to mount them. takes just a
couple of minutes and you've got a nifty under shelf light for next to
nothing.)
>
>Thanks
>
>TMT

362. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 04:38:29 UTC
From: JE <JE@nowhere.com>
Message-ID: <eb7e$43c33a45$d135c4af$24670@MDI.CA>
Source record: 14613

It was just that they are dirt cheap and available.
I'll pony up for real ones.

JE

363. Re: LMX2322?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 04:40:21 UTC
From: JE <JE@nowhere.com>
Message-ID: <70af8$43c33ab5$d135c4af$24670@MDI.CA>
Source record: 14614

Not much feedback.
Anyone suggest a prescaler, preferably hard wired to divide by say 64?

JE

364. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 05:23:42 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43C344B3.E0082999@earthlink.net>
Source record: 14615
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Jim Thompson wrote:
>
> How about a sign that says, "Shotgun automatically triggered when
> speed exceeds 25MPH" ?:-)
>
> Jim Thompson

This from someone who brags about speeding? I say go for it,
anywhere you normally drive. If it works out ok on you, they can try it
in other cities.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

365. Re: Compensating frequency response of wideband amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 05:44:53 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <11s6iejqofn2eb0@corp.supernews.com>
Source record: 14616

Thanks for the hints, Tom, I'll look into them.

"K7ITM" <k7itm@msn.com> wrote in message
news:1136855283.581896.237030@o13g2000cwo.googlegroups.com...
> And what use would a 6 bit wideband system be anyway? What are you
> receiving with it that doesn't require more dynamic range than you'll
> get with 6 bits?

As far as I'm aware, pretty much all high data rate digital modulation
schemes can be recovered with 6 bits (or less).

> And if you're only sampling at 1GHz, why are you
> worried about anything more than about 400MHz bandwidth?

OK, 1.25Gsps? :-) I'm just talking ballpark figures.

---Joel

366. Re: Compensating frequency response of wideband amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 07:19:40 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1136877579.996427.266290@z14g2000cwz.googlegroups.com>
Source record: 14617

"radio" implied to me that you are dealing with a multitude of signals in that bandwidth, not just one, and my practical experience tells me that you will have to deal with a wide dynamic range. What do you do with the interfering signal that's 20dB above your signal of interest? If you're wired between the source and the receiver with no outside signals getting in, I wonder if you're engaging in overkill for the receiver...

OK, so 1.25Gsps gets you to maybe 500MHz bandwidth. That's still a far cry from 2GHz. Why would you be worried about the flatness over 2GHz when your bandwidth is "only" 500MHz?

Of course, there are 'scopes available these days that sample a lot faster than that.

Cheers,
Tom

367. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 07:24:17 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <pkl6s156j3ke8dddgf01l8hen4fl6adtja@4ax.com>
Source record: 14618
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sat, 7 Jan 2006 18:25:20 -0800, "RST Engineering"
<jim@rstengineering.com> wrote:

>What a fu**ing jerk. I asked a technical question in a technical newsgroup.
>I expect a technical answer.
>
>As to your political and ethical questions to my question, go find another
>newsgroup to tell others how to live.

I just wonder why you are posting to an amateur radio newsgroup ?

Your rambling about speed traps has nothing to do with amateur radio.

Paul OH3LWR

368. Re: Compensating frequency response of wideband amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 09:12:52 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <11s6ukhn6r1v9c8@corp.supernews.com>
Source record: 14619

Hi Tom,

"K7ITM" <k7itm@msn.com> wrote in message
news:1136877579.996427.266290@z14g2000cwz.googlegroups.com...
> "radio" implied to me that you are dealing with a multitude of signals
> in that bandwidth, not just one, and my practical experience tells me
> that you will have to deal with a wide dynamic range. What do you do
> with the interfering signal that's 20dB above your signal of interest?

Ah, the classic wideband SDR problem! You filter it out, of course, with an adjustable notch filter (or two or three or...). Or at least that's all I know to do about them...

> OK, so 1.25Gsps gets you to maybe 500MHz bandwidth. That's still a far
> cry from 2GHz. Why would you be worried about the flatness over 2GHz
> when your bandwidth is "only" 500MHz?

So that you can tune around over 2 or 3GHz and everything's still flat. I realize that's probably not really absolutely necessary, but as I say, people are asking for these levels of flatness, and if it's readily doable sometimes it's easier just to do what's ask rather than try to educate them about why their request isn't really needed. :-)

---Joel

369. Re: LMX2322?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 12:16:09 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1136895369.504368.261480@g43g2000cwa.googlegroups.com>
Source record: 14620

JE wrote:
> Not much feedback.
> Anyone suggest a prescaler, preferably hard wired to divide by say 64?

You could use a small CPLD.

73, Leon

370. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 12:44:12 UTC
From: Allison-nospam@nouce.bellatlantic.net
Message-ID: <7ma7s1pfp5ouldahdnkhek1bfglncb8qo4@4ax.com>
Source record: 14621

On Mon, 09 Jan 2006 23:38:29 -0500, JE <JE@nowhere.com> wrote:

>It was just that they are dirt cheap and available.
>I'll pony up for real ones.
>
>JE

I'd go with try it first.

Also base collector junction of many transistors is fairly decent
varactor. Low power transistors tend to be low capacitance
and the amount of capacitance increases with device dies size
(power level).

Allison

371. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 14:49:12 UTC
From: Ian <Ian_Buckner_not_@agilent.com>
Message-ID: <1136903656.80601@newsreg.cos.agilent.com>
Source record: 14622
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"Jim Thompson" <To-Email-Use-The-Envelope-Icon@My-Web-Site.com> wrote in
message news:1h45s1htokfokma462vsi864j086s3sqnf@4ax.com...
<snip>
> Google Earth...
>
> Intersection of Cholla St. and 68th St., Scottsdale, AZ 85254
>
> LAT 33.589390
>
> LON -111.935610
>
> There are quite a few of this type in Scottsdale and in Carefree/Cave
> Creek, AZ.
>
> Phoenix tends toward speed bumps, but is also looking into
> round-abouts.
>
> Scroll a few blocks SW from there to the NW corner of Desert Cove and
> 66th St., and you'll see the acre I lived on from 1969 to 1994.
>
> I always referred to the Cholla/68th St. intersection as the "drunk
> catcher", because there's a dip there as well... rain drain channel
> ;-)
>
> ...Jim Thompson

Anyone point me to how do you enter Latitude and Longitude into Google
Earth?

Regards
Ian

372. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 15:23:20 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <97k7s1lg82b4b349paksibsdb68uab9lre@4ax.com>
Source record: 14623
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Tue, 10 Jan 2006 14:49:12 -0000, "Ian"
<Ian_Buckner_not_@agilent.com> wrote:

>
>"Jim Thompson" <To-Email-Use-The-Envelope-Icon@My-Web-Site.com> wrote in
>message news:1h45s1htokfokma462vsi864j086s3sqnf@4ax.com...
><snip>
>> Google Earth...
>>
>> Intersection of Cholla St. and 68th St., Scottsdale, AZ 85254
>>
>> LAT 33.589390ï¿½
>>
>> LON -111.935610ï¿½
>>
>> There are quite a few of this type in Scottsdale and in Carefree/Cave
>> Creek, AZ.
>>
>> Phoenix tends toward speed bumps, but is also looking into
>> round-abouts.
>>
>> Scroll a few blocks SW from there to the NW corner of Desert Cove and
>> 66th St., and you'll see the acre I lived on from 1969 to 1994.
>>
>> I always referred to the Cholla/68th St. intersection as the "drunk
>> catcher", because there's a dip there as well... rain drain channel
>> ;-)
>>
>> ...Jim Thompson
>
>Anyone point me to how do you enter Latitude and Longitude into Google
>Earth?
>
>Regards
> Ian
>

I don't know either, I just put in Cholla & Scottsdale Rd, Scottsdale,
AZ 85254 and then scrolled west.

I then read off and noted the latitude and longitude in case someone
knew how to do it directly.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

373. Re: Dual jfet

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 16:17:45 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dq0mn9$165$1@engnntp2.cig.mot.com>
Source record: 14625

Depends on the particular application, but this sounds reasonable. However,
rather than IDss, I'd shoot for what ever bias current they are operated at,
though IDss may work,
73, K,9.D;C'I

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:S0Bwf.21079$__4.19198@bignews1.bellsouth.net...
> I'm building a circuit that calls for a dual monolithic
> jfet. Can I use two discrete jfets that I have matched
> for IDSS in the circuit? They are in TO92 plastic
> cases, I can glue the two in contact with each other
> so they end up at the same temperature.

374. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 16:28:36 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dq0nbk$1ku$1@engnntp2.cig.mot.com>
Source record: 14626

Dr. G,
You are correct, but many circuits have used the 1N4000 series diodes as varactors with acceptable results. Any diode is a varactor (even transistor junctions), but those called varactors are just optimized for and measured/spec'ed as variable caps. If the cap value works in the circuit and losses/noise/whatever-else aren't a problem, then no problem. I chalk it up to: Some of us don't have the luxury of either well stocked basements or pocket books, or perhaps the willingness to run out to the local parts store (if you have one) and pick something out just to throw some neat little thingy together.

Don't (some) zeners generate noise???...or is that only near the breakdown reigion?

73, Steve, K.9/D;C'I

"Dr. Grok" <DRGrok@munged.net> wrote in message
news:fvudnXpsnMvunV7eRVn-jA@rcn.net...
> Maybe I'm confusing this with something else but I always thought 1N4007's
> were 1000 V PIV, 1 A rectifiers.
>
> I believe "any" diode has varactor characteristics to some extent but if
you
> need a varactor you'd be better off using one designed as a varactor.
>
> Dr. G.
>
>
>
> In article <eccca$43c0400f$d135c4af$26056@MDI.CA>, JE <JE@nowhere.com>
wrote:
> >The common 1N4007 seem to work for HF but what is the max. frequency they
> >can be used as varactors?
> >
> >And how about zener diodes?
> >
> >JE

375. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 16:40:05 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <5do7s1tf2t4q8i622q5v6hs3ta04ftani1@4ax.com>
Source record: 14624
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Tue, 10 Jan 2006 08:23:20 -0700, the renowned Jim Thompson
<To-Email-Use-The-Envelope-Icon@My-Web-Site.com> wrote:

>On Tue, 10 Jan 2006 14:49:12 -0000, "Ian"
><Ian_Buckner_not_@agilent.com> wrote:
>
>>
>>"Jim Thompson" <To-Email-Use-The-Envelope-Icon@My-Web-Site.com> wrote in
>>message news:1h45s1htokfokma462vsi864j086s3sqnf@4ax.com...
>><snip>
>>> Google Earth...
>>>
>>> Intersection of Cholla St. and 68th St., Scottsdale, AZ 85254
>>>
>>> LAT 33.589390ï¿½
>>>
>>> LON -111.935610ï¿½
>>>
>>> There are quite a few of this type in Scottsdale and in Carefree/Cave
>>> Creek, AZ.
>>>
>>> Phoenix tends toward speed bumps, but is also looking into
>>> round-abouts.
>>>
>>> Scroll a few blocks SW from there to the NW corner of Desert Cove and
>>> 66th St., and you'll see the acre I lived on from 1969 to 1994.
>>>
>>> I always referred to the Cholla/68th St. intersection as the "drunk
>>> catcher", because there's a dip there as well... rain drain channel
>>> ;-)
>>>
>>> ...Jim Thompson
>>
>>Anyone point me to how do you enter Latitude and Longitude into Google
>>Earth?
>>
>>Regards
>> Ian
>>
>
>I don't know either, I just put in Cholla & Scottsdale Rd, Scottsdale,
>AZ 85254 and then scrolled west.
>

>I then read off and noted the latitude and longitude in case someone
>knew how to do it directly.
>
> ...Jim Thompson

Try pasting this into the search bar:

33 30 11.57N 111 55 46.22W

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

376. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 18:58:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11s84epqccvti43@corp.supernews.com>
Source record: 14628

Steve Nosko wrote:
> . . .
> Don't (some) zeners generate noise???...or is that only near the breakdown
> reigion?

Some are very noisy. The noisiest I've seen have been ones in the 12 - 15 volt range when biased at considerably less than a mA. I've used one, followed by a 50 ohm amplifier "pill" IC, as a broadband noise source to see filter responses with a spectrum analyzer. The noise is easily visible well up into the UHF region.

But all zeners generate some noise, so you have to use appropriate filtering in sensitive applications. In my experience, though, band gap references can be even noisier than a typical zener.

Roy Lewallen, W7EL

377. Re: Dual jfet

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 19:01:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11s84kphlachbc4@corp.supernews.com>
Source record: 14629

If you match both Idss and Vp, they'll have the same Gm at all currents
-- in theory.

Roy Lewallen, W7EL

Steve Nosko wrote:
> Depends on the particular application, but this sounds reasonable. However,
> rather than IDss, I'd shoot for what ever bias current they are operated at,
> though IDss may work,
> 73, K,9.D;C'I
>
>
> "Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
> news:S0Bwf.21079$__4.19198@bignews1.bellsouth.net...
>
>>I'm building a circuit that calls for a dual monolithic
>>jfet. Can I use two discrete jfets that I have matched
>>for IDSS in the circuit? They are in TO92 plastic
>>cases, I can glue the two in contact with each other
>>so they end up at the same temperature.
>
>
>

378. Re: LMX2322?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 19:40:05 UTC
From: OZ1LQB <a@a>
Message-ID: <43c40d8c$0$199$edfadb0f@dread11.news.tele.dk>
Source record: 14627

"JJ" <JJ@nowhere.com> skrev i en meddelelse
news:5da6a$43c1fbbd$d135c4af$24772@MDI.CA...
> I can't find the LMX2322 on National Semi site.
> Can someone tell me a suitable replacement as I just need the 64x
prescaler
Hi..
have a look here.
http://hem.passagen.se/communication/component.html
oz1lqb

379. Zener Noise (was: 1N4007 varactors)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 22:30:01 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <8e44$43c43569$42513d75$6585@DIALUPUSA.NET>
Source record: 14630
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Roy ...

I've been playing around (ahem, excuse me, heuristically engineering) with zener noise sources for a while using the same spectrum analyzer trick and as yet I haven't been able to make the noise as "flat" across the passband as I'd like. I've tried varying the bias, the voltage, and a few other tricks, but as yet, no joy.

Can you shed some light on what you've found to make the noise power/voltage fairly level across the band?

Jim

> Some are very noisy. The noisiest I've seen have been ones in the 12 - 15
> volt range when biased at considerably less than a mA. I've used one,
> followed by a 50 ohm amplifier "pill" IC, as a broadband noise source to
> see filter responses with a spectrum analyzer. The noise is easily visible
> well up into the UHF region.
>
> But all zeners generate some noise, so you have to use appropriate
> filtering in sensitive applications. In my experience, though, band gap
> references can be even noisier than a typical zener.
>
> Roy Lewallen, W7EL

380. Re: Zener Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 22:46:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11s8hr3n9s6j360@corp.supernews.com>
Source record: 14632
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

RST Engineering wrote:
> Roy ...
>
> I've been playing around (ahem, excuse me, heuristically engineering) with
> zener noise sources for a while using the same spectrum analyzer trick and
> as yet I haven't been able to make the noise as "flat" across the passband
> as I'd like. I've tried varying the bias, the voltage, and a few other
> tricks, but as yet, no joy.
>
> Can you shed some light on what you've found to make the noise power/voltage
> fairly level across the band?

It's not particularly flat over the whole band, and I haven't attempted to make it be. My interest has been mostly in relatively narrow band filters, or the shape of a main filter rolloff. The noise is adequately flat over the bandwidths I've been interested in. It's been a while since I've fooled with it, but as I recall, the shape of the noise spectral distribution changed all over the map as I changed the diode bias. I imagine that it changes with temperature and with individual diodes, too. So any circuit used to flatten it would only work for a particular diode, current, and probably temperature. The bottom line is that it's probably a lousy way to try to generate a flat broadband noise spectrum.

Roy Lewallen, W7EL

381. Re: Zener Noise (was: 1N4007 varactors)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-10 23:19:31 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dq1fe302oh3@drn.newsguy.com>
Source record: 14631
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

RST Engineering wrote...
>
>Roy ...
>
>I've been playing around (ahem, excuse me, heuristically engineering) with
>zener noise sources for a while using the same spectrum analyzer trick and
>as yet I haven't been able to make the noise as "flat" across the passband
>as I'd like. I've tried varying the bias, the voltage, and a few other
>tricks, but as yet, no joy.
>
>Can you shed some light on what you've found to make the noise power/voltage
>fairly level across the band?

Good zener noise sources are carefully bred and tested, they
do _not_ come naturally from garden-variety zener diodes. I
suggest you go read the hundred or so messages in the famous
zener oscillation thread a few years back here on s.e.d. In
this you'll learn of my substantial investigations into the
topic, some physics - and, very important, learn what a zener
microplasma is. You'll see my ASCII waveform plots of actual
bench measurements showing exactly what's going on. After all
this you may decide to avoid using zener diodes for calibrated
noise sources. Sorry about that!

--
Thanks,
- Win

382. Re: Zener Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 00:07:55 UTC
From: Sjouke Burry <burrynulnulfour@ppllaanneett.nnlll>
Message-ID: <43c44c5b$0$10089$ba620dc5@text.nova.planet.nl>
Source record: 14633
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

RST Engineering wrote:
> Roy ...
>
> I've been playing around (ahem, excuse me, heuristically engineering) with
> zener noise sources for a while using the same spectrum analyzer trick and
> as yet I haven't been able to make the noise as "flat" across the passband
> as I'd like. I've tried varying the bias, the voltage, and a few other
> tricks, but as yet, no joy.
>
> Can you shed some light on what you've found to make the noise power/voltage
> fairly level across the band?
>
> Jim
>
>
>
>
>>Some are very noisy. The noisiest I've seen have been ones in the 12 - 15
>>volt range when biased at considerably less than a mA. I've used one,
>>followed by a 50 ohm amplifier "pill" IC, as a broadband noise source to
>>see filter responses with a spectrum analyzer. The noise is easily visible
>>well up into the UHF region.
>>
>>But all zeners generate some noise, so you have to use appropriate
>>filtering in sensitive applications. In my experience, though, band gap
>>references can be even noisier than a typical zener.
>>
>>Roy Lewallen, W7EL
>
>
>
What I did for some project which needed equal amplitude
uncorrelated noise,is amplify the zener noise with a wide
band video opamp,with high pass and lowpass filtering.
Used the low pass as input for a zero cross detector,
delayed the zerocrossing 10 microseconds,and used that
for clock to a circulating bit in a shift register.
each parallel output of that register controlled a
sample/hold opamp,sampling the highpass signal.
Voila!! 8 audio frequency, non-correlated noise sources.
The zerocrossing clock was made this way,to avoid detectable
clock tones int the output.(2 to 20 microsec between
crossings)

the 10 microsecond delay was used to get a voltage at
the sample and hold opamp which was not correlated to the
zerocrossing.
If you need only one signal ,leave out the shift register,
and just use a 10 and a 1 microsec. oneshot for the s/h
opamp clock.
The application? A wind and engine noise generator for a
car simulator.

383. Hewlitt Packard 606A Sig gen..

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 00:12:04 UTC
From: mrhaney <w4pqw@cox.net>
Message-ID: <1136938324.782226.49880@g49g2000cwa.googlegroups.com>
Source record: 14634

Anyone have a manual,copy,or a schematic for the HP 606A . I want to connect an external freq. counter and need a schematic.. tnx W4PQW.... w4pqw@cox.net

384. Re: Zener Noise (was: 1N4007 varactors)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 00:23:25 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <0vj8s1p1ef4sroo1q2pe6klvqvpps0mmm6@4ax.com>
Source record: 14635
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Tue, 10 Jan 2006 14:30:01 -0800, "RST Engineering"
<jim@rstengineering.com> wrote:

>Roy ...
>
>I've been playing around (ahem, excuse me, heuristically engineering) with
>zener noise sources for a while using the same spectrum analyzer trick and
>as yet I haven't been able to make the noise as "flat" across the passband
>as I'd like. I've tried varying the bias, the voltage, and a few other
>tricks, but as yet, no joy.
>
>Can you shed some light on what you've found to make the noise power/voltage
>fairly level across the band?
>
>Jim
>
>
>
>>
>> Some are very noisy. The noisiest I've seen have been ones in the 12 - 15
>> volt range when biased at considerably less than a mA. I've used one,
>> followed by a 50 ohm amplifier "pill" IC, as a broadband noise source to
>> see filter responses with a spectrum analyzer. The noise is easily visible
>> well up into the UHF region.
>>
>> But all zeners generate some noise, so you have to use appropriate
>> filtering in sensitive applications. In my experience, though, band gap
>> references can be even noisier than a typical zener.
>>
>> Roy Lewallen, W7EL
>

These folks will sell you serious noise diodes...

http://www.noisecom.com/NC/default.htm

John

385. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 00:50:49 UTC
From: DRGrok@munged.net
Message-ID: <XJCdnbNiVekgyFneRVn-qg@rcn.net>
Source record: 14636

Zeners are also often used as noise sources, which might be a good reason NOT
to use them for the tuning, especially in a receiver.

Dr. G.

In article <11s6dq7ekpo3o30@corp.supernews.com>, Roy Lewallen <w7el@eznec.com>
wrote:
>Ken Scharf wrote:
>>
>> All diodes exhibit varactor and zener traits but not all are stable
>> as such. All diodes when reverse biased exhibit a value of capacitance
>> across them. In most cases it's usually quite small, less than 5 to 10pf.
>> Increase the reverse bias and the capacitance goes down. At very high
> frequencies
>> the capacitance change is enough to make a useful tuning diode. If you need
>> a varactor to work at medium to high frequencies the tuning effect won't be
>> very useful and you should use a true varactor diode. Such diodes have
>> either larger areas, or thinner substrates to increase th capacitance.
>> . . .
>
>Zener diodes have much more capacitance than this, with the amount of C
>being greater as the zener voltage gets lower. It's been a long time
>since I've looked at this, but as I recall you can get well over 100 pF
>from something like a 5 V zener. For the same reason, reverse biased E-B
>junctions can give quite a bit of C. Of course, the limited breakdown
>voltage limits your tuning range. Higher power zeners have higher C yet.
>
>I've used zeners for varicaps many times in HF rigs, to offset a VFO
>when switching bands, and for RIT. Haven't tried one as the main tuning
>capacitor, but I haven't tried a regular varicap, either.
>
>Diodes specified for varicap use have more predictable
>capacitance-vs-voltage characteristics, and you can get a variety of
>different characteristics. They might have lower noise, too, but I've
>never used one in an application where that was critical, so don't know
>if that's the case. But for a lot of one-off projects, zeners work fine
>as varicaps.
>
>As for using something else as zeners, emitter-base junctions work well.
>You don't get much variety, though -- most break down at around 5-6
>volts. I've got a power supply I built over 30 years ago which uses a
>couple of series transistor E-B junctions as the voltage reference. It's
>still my main bench supply.
>
>Roy Lewallen, W7EL

386. Inexpensive Digital Strip Chart Recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 01:07:07 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1136941627.419160.149340@o13g2000cwo.googlegroups.com>
Source record: 14637
Cross-posted to:
sci.electronics.equipment,comp.arch.embedded,comp.sys.palmtops,sci.electronics.design,rec.radio.amateur.homebrew

I am looking for an inexpensive digital strip chart recorder.

Does something like this exist?

Are there addons for a laptop, pda or pocket pc that allows one to
record, store and display analog data similar to the good old chart
recorder?

Thanks for any leads.

TMT

387. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 01:14:14 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11s8qfmj6pdv837@corp.supernews.com>
Source record: 14645

Dr. Grok wrote:
> Zeners are also often used as noise sources, which might be a good reason NOT
> to use them for the tuning, especially in a receiver.

You mean that a zener diode biased at less than breakdown voltage generates more noise than a diode specified for varactor use biased at less than breakdown? I assume this noise would be in the form of time jitter of the capacitance, since the leakage current would be very small. Have you seen this in some specification, or is it from experience?

Roy Lewallen, W7EL

388. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 01:16:14 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11s8qjeohg2n8c1@corp.supernews.com>
Source record: 14646
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Ron wrote:
>
> Not to mention, Audio.
>
> THD is usefult to a point, but can't really tell how pleasant,
> subjectively, the sound will be. A spectrum display provides the
> missing insight.
>

Wow. Does it show you the improvement from cryogenically treated,
oxygen-free speaker cables?

Roy Lewallen, W7EL

389. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 01:16:43 UTC
From: Allison-nospam@nouce.bellatlantic.net
Message-ID: <bvm8s15otvklo4puba78qgo5844d5hkgig@4ax.com>
Source record: 14638

On Wed, 11 Jan 2006 00:50:49 GMT, DRGrok@munged.net (Dr. Grok) wrote:

>Zeners are also often used as noise sources, which might be a good reason NOT
>to use them for the tuning, especially in a receiver.

In the breakdown region yes, in the revserse bias region no. I've
tried some .4w 22V Zeners and they are decent varactors save for
you need to keep far enough from the 22V and -.5V or they exhibit
their other charactersistics.

Allison

>
>Dr. G.
>
>
>In article <11s6dq7ekpo3o30@corp.supernews.com>, Roy Lewallen <w7el@eznec.com>
>wrote:
>>Ken Scharf wrote:
>>>
>>> All diodes exhibit varactor and zener traits but not all are stable
>>> as such. All diodes when reverse biased exhibit a value of capacitance
>>> across them. In most cases it's usually quite small, less than 5 to 10pf.
>>> Increase the reverse bias and the capacitance goes down. At very high
>> frequencies
>>> the capacitance change is enough to make a useful tuning diode. If you need
>>> a varactor to work at medium to high frequencies the tuning effect won't be
>>> very useful and you should use a true varactor diode. Such diodes have
>>> either larger areas, or thinner substrates to increase th capacitance.
>>> . . .
>>
>>Zener diodes have much more capacitance than this, with the amount of C
>>being greater as the zener voltage gets lower. It's been a long time
>>since I've looked at this, but as I recall you can get well over 100 pF
>>from something like a 5 V zener. For the same reason, reverse biased E-B
>>junctions can give quite a bit of C. Of course, the limited breakdown
>>voltage limits your tuning range. Higher power zeners have higher C yet.
>>
>>I've used zeners for varicaps many times in HF rigs, to offset a VFO
>>when switching bands, and for RIT. Haven't tried one as the main tuning
>>capacitor, but I haven't tried a regular varicap, either.
>>
>>Diodes specified for varicap use have more predictable
>>capacitance-vs-voltage characteristics, and you can get a variety of
>>different characteristics. They might have lower noise, too, but I've

>>never used one in an application where that was critical, so don't know
>>if that's the case. But for a lot of one-off projects, zeners work fine
>>as varicaps.
>>
>>As for using something else as zeners, emitter-base junctions work well.
>>You don't get much variety, though -- most break down at around 5-6
>>volts. I've got a power supply I built over 30 years ago which uses a
>>couple of series transistor E-B junctions as the voltage reference. It's
>>still my main bench supply.
>>
>>Roy Lewallen, W7EL

390. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 01:33:34 UTC
From: Ron <ronami@yahoo.com>
Message-ID: <8pn8s1p5852vjcnf9qdgamk32dnf3q3vi0@4ax.com>
Source record: 14639
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Sun, 01 Jan 2006 21:20:47 +0000, Pooh Bear
<rabbitsfriendsandrelations@hotmail.com> wrote:

>
>
>Scott Dorsey wrote:
>
>> Too_Many_Tools <too_many_tools@yahoo.com> wrote:
>> >I need to replace an oscilloscope that has gone to the Great Test Bench
>> >in the sky.
>> >
>> >What Tektronix scope do you prefer?
>> >
>> >I have always like the 7000 series...would you recommend these or
>> >another series?
>>
>> The 7000 series is hard to beat. It's stable, it's not that hard to
>> work on, and there are plenty of useful plug-ins available at reasonable
>> prices.
>>
>> That said, I still have a 545 on my bench at work. The calibration contract
>> just went over to a new company and the new cal guys aren't really sure what
>> to make of it....
>
>Goodness. I had to get rid of a couple of 545s years ago (no room to keep them
>).
>
>My current scope at home is a 465. Basic but nice.

Interesting coincidence... I got a 545, complete with cart and
probes, for free, several years ago. A bit cumbersome in my limited
lab space in the basement, but the price couldn't be beat.

It finally died on me. I sold it for parts and bought a nice 465B
(off the e-place, where else) that now sits on the same cart. What I
got for the 545 bought me a copule of probes -- all's well that ends
well...

-- Ron

>Graham

391. Re: Inexpensive Digital Strip Chart Recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 01:35:44 UTC
From: Donald <donald@dontdoithere.com>
Message-ID: <O4idnf1oPa1w_VneRVn-sw@forethought.net>
Source record: 14640
Cross-posted to:
sci.electronics.equipment,comp.arch.embedded,comp.sys.palmtops,sci.electronics.design,rec.radio.amateur.homebrew

Too_Many_Tools wrote:
> I am looking for an inexpensive digital strip chart recorder.
>
> Does something like this exist?
>
> Are there addons for a laptop, pda or pocket pc that allows one to
> record, store and display analog data similar to the good old chart
> recorder?
>
> Thanks for any leads.
>
> TMT
>
Inexpensive and "strip chart recorder" are mutually exclusive.

Yes, there are lots of addons, google gets tons of hits
"http://www.google.com/search?hl=en&q=analog+data+recorders"

The next question is: "how much do you want to spend ?? "

Portable, USB, serial, ... lots of questions.

What are you trying to measure will determine what kind of analog data
recorder to buy.

donald

392. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 01:40:50 UTC
From: Ron <ronami@yahoo.com>
Message-ID: <t9o8s15g4phnk1amuh23u81l0209c157q7@4ax.com>
Source record: 14641
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Sat, 07 Jan 2006 16:55:00 +0100, Paul Burridge
<pb@shove.your.spam.up.your.arse.atlanticstar.co.uk> wrote:

>On Sat, 07 Jan 2006 04:38:08 -0800, xray <notreally@hotmail.invalid>
>wrote:
>
>>[........]
>>
>>No, Spectum Analysers are useless for anyone outside the government or
>>RF extremists.
>
>???
>Er, they're extremely useful pieces of test gear for anyone involved
>in RF., even hobbyists.

Not to mention, Audio.

THD is usefult to a point, but can't really tell how pleasant,
subjectively, the sound will be. A spectrum display provides the
missing insight.

-- Ron

393. Re: Zener Noise (was: 1N4007 varactors)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 01:43:51 UTC
From: JeffM <jeffm_@email.com>
Message-ID: <1136943831.540185.298540@z14g2000cwz.googlegroups.com>
Source record: 14642
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

>...the famous zener oscillation thread a few years back
>...my ASCII waveform plots of actual bench measurements
>showing exactly what's going on.
> Winfield Hill

http://groups.google.com/group/sci.electronics.design/browse_frm/thread/399b6a0bf6cfa4f5/16aa533d72a79d11?q=microplasma+zener+Oscillation&fwc=1

394. Re: Inexpensive Digital Strip Chart Recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 01:47:31 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1136944051.369424.311940@z14g2000cwz.googlegroups.com>
Source record: 14643
Cross-posted to:
sci.electronics.equipment,comp.arch.embedded,comp.sys.palmtops,sci.electronics.design,rec.radio.amateur.homebrew

I would agree...I am surprised that in today's world of electronics
that an inexpensive turnkey appliance is not available.

The uses for something like this is many....and I am not trying to be
specific since this will be used to measure a number of physical
parameters.

Let's say one wants a digital solution to what a old HP 680 Strip Chart
Recorder would work for...is there anything out there today that works
the same?

TMT

395. Re: Inexpensive Digital Strip Chart Recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 02:02:10 UTC
From: "Harold E. Johnson" <w4zcb@mchsi.com>
Message-ID: <CGZwf.696587$_o.442113@attbi_s71>
Source record: 14644
Cross-posted to:
sci.electronics.equipment,comp.arch.embedded,comp.sys.palmtops,sci.electronics.design,rec.radio.amateur.homebrew

>I would agree...I am surprised that in today's world of electronics
> that an inexpensive turnkey appliance is not available.
>
> The uses for something like this is many....and I am not trying to be
> specific since this will be used to measure a number of physical
> parameters.
>
> Let's say one wants a digital solution to what a old HP 680 Strip Chart
> Recorder would work for...is there anything out there today that works
> the same?
>
> TMT

Radio Shack used to sell a Metex VOM (Metex ME-11) that had a serial port output and software that made essentially a data logger which you could then pop into an excel or Quattro spreadsheet and massage the data anyway you liked. I bought two of them from their on-line catalog when they were on sale maybe 3 years ago, suspect you can still find them, maybe with an USB port these days. I use one of mine for metering the transmitted signal from NAA to detect SIDS. Lots more practical than my old Rustrak strip chart recorder, I can just throw away the "uninteresting" data and not use any paper at all. The other one is just a backup for my Fluke 77.

W4ZCB

396. Re: Hewlitt Packard 606A Sig gen..

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 02:43:17 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43C47080.D4567C2A@earthlink.net>
Source record: 14647

mrhaney wrote:
>
> Anyone have a manual,copy,or a schematic for the HP 606A . I want to
> connect an external freq. counter and need a schematic.. tnx W4PQW....
> w4pqw@cox.net

ftp://bama.edebris.com/bama/hp/606a/606a.pdf
--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

397. Re: LMX2322?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 03:05:48 UTC
From: JE <JE@nowhere.com>
Message-ID: <8a53b$43c4760c$d135c4af$3194@MDI.CA>
Source record: 14499

Great. I found the LMX2346 is a newer part and pin for pin compatible.
Is there a simple primer on how to program this thing?
I know there is the datssheet but it is a bit complicated, I am also trying
to learn the PIC16F870.

JE

>> I can't find the LMX2322 on National Semi site.
>> Can someone tell me a suitable replacement as I just need the 64x
> prescaler
> Hi..
> have a look here.
> http://hem.passagen.se/communication/component.html
> oz1lqb
>
>

398. Re: Inexpensive Digital Strip Chart Recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 03:06:45 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <U8GdnXrYmOnQ6FneRVn-iQ@adelphia.com>
Source record: 14498
Cross-posted to:
sci.electronics.equipment,comp.arch.embedded,comp.sys.palmtops,sci.electronics.design,rec.radio.amateur.homebrew

Too_Many_Tools wrote:
> I am looking for an inexpensive digital strip chart recorder.
>
> Does something like this exist?
>
> Are there addons for a laptop, pda or pocket pc that allows one to
> record, store and display analog data similar to the good old chart
> recorder?
>
> Thanks for any leads.
>
> TMT
>
I don't know if the software is available, separately, but for $25 you
can buy a 4 channel analog digitizer that comes with such software.
http://www.dataq.com/194.htm

399. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 03:14:12 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <OvSdnbCUoLiR6lneRVn-ug@adelphia.com>
Source record: 14500

Steve Nosko wrote:
(snip)
> Don't (some) zeners generate noise???...or is that only near the breakdown
> reigion?

I think that whether noisy or not, the noise generation mechanism kicks in, only when the zeners are reverse conducting via the zener breakdown process, so if you keep the voltage well below the zener knee, say, half of that, they are not particularly noisy compared to other diodes. So, yes, only near the breakdown region, especially just below the rated voltage (low reverse current).

400. Re: Inexpensive Digital Strip Chart Recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 03:19:13 UTC
From: Rich Webb <bbew.ar@mapson.nozirev.ten>
Message-ID: <vot8s11m7ck5bb8ljlvfpgbkn8c4p08ipc@4ax.com>
Source record: 14501
Cross-posted to:
sci.electronics.equipment,comp.arch.embedded,comp.sys.palmtops,sci.electronics.design,rec.radio.amateur.homebrew

On 10 Jan 2006 17:47:31 -0800, "Too_Many_Tools"
<too_many_tools@yahoo.com> wrote:

>I would agree...I am surprised that in today's world of electronics
>that an inexpensive turnkey appliance is not available.
>
>The uses for something like this is many....and I am not trying to be
>specific since this will be used to measure a number of physical
>parameters.
>
>Let's say one wants a digital solution to what a old HP 680 Strip Chart
>Recorder would work for...is there anything out there today that works
>the same?

Something like the USB-1208LS from Measurement Computing (I'd post a
link but their referral/tag/cookie system seems to want two or three
lines for the URL) plus an old laptop PC might do the trick.

It's a relatively inexpensive USB gadget that comes with basic "strip
chart" software as a demo app. They have other, faster, and more
expensive models and more software, of course. IIRC, they still include
their Universal Library w/ the device, so you can write your own apps
with your own look & feel.

Higher end stuff is available from places like http://www.astro-med.com/
... and priced accordingly. Good gear, though.

--
Rich Webb Norfolk, VA

401. Re: Inexpensive Digital Strip Chart Recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 03:21:35 UTC
From: Donald <donald@dontdoithere.com>
Message-ID: <c--dnUbPgpMh5FneRVn-ug@forethought.net>
Source record: 14502
Cross-posted to:
sci.electronics.equipment,comp.arch.embedded,comp.sys.palmtops,sci.electronics.design,rec.radio.amateur.homebrew

Too_Many_Tools wrote:
> I would agree...I am surprised that in today's world of electronics
> that an inexpensive turnkey appliance is not available.
>
> The uses for something like this is many....and I am not trying to be
> specific since this will be used to measure a number of physical
> parameters.
>
> Let's say one wants a digital solution to what a old HP 680 Strip Chart
> Recorder would work for...is there anything out there today that works
> the same?
>
> TMT
>
OK,

So the spec's are: not battery operated and must weight in at about 15
pounds. ;-)

I have used some of the smaller devices at :
http://www.dataq.com/c_cr/index.htm

There will be trade offs on "chart speed" = sample rate and resolution
(step size) and max input voltage.

good luck

donald

402. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 03:35:46 UTC
From: Clif Holland <clif@avvid.com>
Message-ID: <m2%wf.22497$em5.15410@trnddc05>
Source record: 14503
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Sure it does Ray. Just like the two hams on 40 today. One had installed RG8
in place of 58 and wanted to know how much better his signal sounded. I
almost fell off my stool....

--

Clif Holland KA5IPF
www.avvid.com

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:11s8qjeohg2n8c1@corp.supernews.com...
> Ron wrote:
>>
>> Not to mention, Audio.
>>
>> THD is usefult to a point, but can't really tell how pleasant,
>> subjectively, the sound will be. A spectrum display provides the
>> missing insight.
>>
>
> Wow. Does it show you the improvement from cryogenically treated,
> oxygen-free speaker cables?
>
> Roy Lewallen, W7EL

403. glass-mount omnidirectional antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 04:01:17 UTC
From: kevincw01 <kevincw01@gmail.com>
Message-ID: <1136950193.497960.83860@g47g2000cwa.googlegroups.com>
Source record: 14504

I used to have a in-car cell phone system and it had a glass-mount antenna which didn't require drilling. Basically, there was coax(conntected to the cell) to a plate that stuck to the inside of the rear window. Then on the outside of that window was another plate with the antenna attached to it. You can buy these a radio shack I noticed. I've also seem the same done for XM/Sirius Satellite radio.

I have searched and searched and so far have not found the same thing for 2.4 ghz wifi. Does anyone know where I can find one? If not, could it be as simple as removing the cell antenna from the exterior plate(of the radio shack cellular version) and reattaching a 2.4 ghz omni? Or maybe I could modify the existing cell antenna to the correct 1/2 wavelength of 2.4ghz?

Your suggestions / help / tips are appreciated.

-Kevin

404. Re: LMX2322?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 05:01:07 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e2e30f186e273f3989723@news-central.giganews.com>
Source record: 14505

In article <8a53b$43c4760c$d135c4af$3194@MDI.CA>, JE@nowhere.com says...
> Great. I found the LMX2346 is a newer part and pin for pin compatible.
> Is there a simple primer on how to program this thing?
> I know there is the datssheet but it is a bit complicated, I am also trying
> to learn the PIC16F870.
>
> JE

If all you need is a /64 prescaler, then you shouldn't need to program
anything, with a PIC or otherwise. (Hint: ditch the PIC and move to
Atmel, where there's a nice free C/C++ compiler for the Googling).

Those LMX parts do a lot more than just divide. Have you tried punching
"prescaler" into the search boxes at digikey.com and mouser.com? It
could save quite a bit of work with a chip that's not exactly right for
your needs...

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam
---

405. Re: glass-mount omnidirectional antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 05:37:18 UTC
From: budgie <me@privacy.net>
Message-ID: <m969s19v456ee7e7ioqtqm5v3r8svd0sa8@4ax.com>
Source record: 14506

On 10 Jan 2006 20:01:17 -0800, "kevincw01" <kevincw01@gmail.com> wrote:

>I used to have a in-car cell phone system and it had a glass-mount
>antenna which didn't require drilling. Basically, there was
>coax(conntected to the cell) to a plate that stuck to the inside of the
>rear window. Then on the outside of that window was another plate with
>the antenna attached to it. You can buy these a radio shack I noticed.
> I've also seem the same done for XM/Sirius Satellite radio.
>
>I have searched and searched and so far have not found the same thing
>for 2.4 ghz wifi. Does anyone know where I can find one? If not,
>could it be as simple as removing the cell antenna from the exterior
>plate(of the radio shack cellular version) and reattaching a 2.4 ghz
>omni? Or maybe I could modify the existing cell antenna to the correct
>1/2 wavelength of 2.4ghz?

Haven't seen a 2.4G unit, which doesn't mean they aren't out there.

But the through-glass coupling is fairly narrowband and incorporates tuning
elements. The 800/900 MHz units would present a shocking SWR at 2.4G.

406. Re: Inexpensive Digital Strip Chart Recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 05:46:05 UTC
From: Neil Kurzman <nsk@mail.asb.com>
Message-ID: <43C49A6F.5366A0D7@mail.asb.com>
Source record: 14507
Cross-posted to:
sci.electronics.equipment,comp.arch.embedded,comp.sys.palmtops,sci.electronics.design,rec.radio.amateur.homebrew

Too_Many_Tools wrote:

> I am looking for an inexpensive digital strip chart recorder.
>
> Does something like this exist?
>
> Are there addons for a laptop, pda or pocket pc that allows one to
> record, store and display analog data similar to the good old chart
> recorder?
>
> Thanks for any leads.
>
> TMT

Sure

Look For Data loggers.

DataQ makes some cheap ones www.DataQ.com

407. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 07:30:33 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <M5GdnbRMIunbKVnenZ2dnUVZ8qWdnZ2d@pipex.net>
Source record: 14508
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

> When you have a choice, do you choose equipment that is rack style or
> table top in form factor?
>
> Of the racks used, are they full racks or partial racks with storage?
>
> For storage, what do you use...cabinets, shelves, chests?
>
> What do you for lighting?
==========
I use vertical double-slotted wall mounted support strips , such that brackets for desk tops and shelves can be positioned at will also below desk level for extra storage. Larger test equipment like scopes ,variable PSUs , Variac , HiPot tester all sit on shelves. Handheld test equipment is kept in a cupboard.
Desk lighting are a number of 12V Halogen reflector bulbs (encapped in glass ......watch UV radiation,possibly causing skin cancer, when using open reflectors with replacable bulbs) ,fitted on a rail clamped to lower shelf edge
On separate smaller desk where soldering is done I have a circular fluorescent light combined with a magnifying glass (at my age essential for doing sm work)
Components are stored either in wall-mounted plastic drawers or in separate plastic boxes incl those normally used for icecream etc.

Main operating /testing desk is 3 metres (approx 10ft) long ,desk top is 750 mm (approx 30 inches) from floor ,eg slightly higher than a normal table. Reason : comfortable height ,such that when sitting on a adjustable (pneumatic) office chair ,the angle between upper and lower leg is slighly larger than 90 degrees with lower leg at right angle with floor.

Desktop is composite board with 'formica' (hard plastic) lining (in the UK at least) normally used for kitchen tops .Desk top depth is 900 mm or approx 36 inches ,such that with CRT VDU and pre-1990 size transceivers ,there is adequate desk space for (log) book and other paperwork.

Note : The adjustable shelving bracket system enables change of shelving height and distance to suit dimensions of new (test) equipment.
Vertical wall mounted slotted support strips are spaced 600 mm (approx 2 ft) to enable carrying of relatively heavy equipment. The slotted strips are 2.5 metres long . This means they run almost from floor level to a level an 'A4 binder height' above the upper shelf to enable fitting

of matching book supports .Also to fit brackets and shelves below
desktop level ,for extra storage.

Frank KN6WH / GM0CSZ (still a few days to come in W6-land)
now partly migrated to Linux.

408. Re: glass-mount omnidirectional antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 07:57:15 UTC
From: kevincw01 <kevincw01@gmail.com>
Message-ID: <1136966235.241155.285760@z14g2000cwz.googlegroups.com>
Source record: 14509

sorry to have to ask but what is SWR? My guess is sound to [somthing]
ratio?

409. Re: Inexpensive Digital Strip Chart Recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 08:33:24 UTC
From: Frithiof Andreas Jensen <frithiof.jensen@die_spammer_die.ericsson.com>
Message-ID: <dq2fsl$l51$1@news.al.sw.ericsson.se>
Source record: 14510
Cross-posted to:
sci.electronics.equipment,comp.arch.embedded,comp.sys.palmtops,sci.electronics.design,rec.radio.amateur.homebrew

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1136941627.419160.149340@o13g2000cwo.googlegroups.com...
> I am looking for an inexpensive digital strip chart recorder.
>
> Does something like this exist?
>
> Are there addons for a laptop, pda or pocket pc that allows one to
> record, store and display analog data similar to the good old chart
> recorder?

"Round Robin Database Tool" - RRDTool - can possibly be hacked into
submission: http://people.ee.ethz.ch/~oetiker/webtools/rrdtool/

>

410. Re: Identifying a mystery diode

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 09:34:48 UTC
From: Paul VK3DIP <pmcmahon@telstra.com>
Message-ID: <Yi4xf.213597$V7.18198@news-server.bigpond.net.au>
Source record: 14511

John A,
Spot on we have reverse breakdown at around 15 to 20 volts dependant on current, this is obviously not a high voltage diode!!!
By the way yes the cross bar is the cathode. All the (known) varactors I have measure a vf around the 0.6-0.7 volt and so do the PIN's I have, though I don't have a really extensive collection of either, this is why I had ruled them out but if you know of other examples then its sounding good.

So so far we know:
Forward Voltage ~ 1.4 -1.5 V
Reverse Voltage Breakdown ~ 15-20V
No Visible or IR light emitted.
Small Signal RF like packaging with cross bar indicating cathode.

So what is left?, 2 series 10V Zeners?

I may have to break one open and get out a microscope yet.

Paul.

"John A" <e455gkf@yahoo.co.uk> wrote in message
news:dpj2vc$i4p$1@newsg3.svr.pol.co.uk...
> Hi Paul,
>
> That sort of "mini-L" packaging is often used for vhf components, e.g.
> tuning diodes, hot carrier diodes and PIN diodes - and some of these have
> forward volt-drops of more than one volt.
>
> You can investigate that suggestion that it is a high-voltage rectifier by
> applying, say, 200v reverse voltage via a 1Mohm resistor and measuring the
> breakdown (if any) voltage of the diode, or what current flows. Any of the
> other suggestions - including mine - will break down.
>
> Are there definitely no markings?
>
>
> John A
> "Paul VK3DIP" <pmcmahon@telstra.com> wrote in message
> news:cXjtf.136133$V7.93540@news-server.bigpond.net.au...
>> Hi all I recently purchased a bag of unmarked supposedly diodes and I am
>> trying to figure out what they are. The clues so far are normal diode
>> action on a multimeter (ie conducts one way but not the other) but the
>> forward voltage is high at about 1.4 - 1.5 volts. The packaging is a
> small
>> square black plastic box with flat axial leads one of which has a small
>> cross

>> piece on it. This packaging suggests small signal or at least low power.
>>
>> If anyone wants to look at the mystery diode it is the top one
>> in this picture.
>> http://www.users.bigpond.com/pmcmahon/mysterydiode.jpg
>> The bottom one is a normal glass 1N914 just for scale.
>>
>> There is nowhere for the light to come out (or in) so they are not LEDs
>> which is the only other diode like component I have come across with that
>> high a forward voltage. Could it be two silicon diodes in series?
>>
>> Any suggestions or even just identifying the case outline would be
>> appreciated.
>>
>> Thanks
>> Paul VK3DIP
>>
>>
>>
>
>

411. Re: Zener Noise (was: 1N4007 varactors)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 09:48:16 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dq2k900109@drn.newsguy.com>
Source record: 14514
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

JeffM wrote...
>
>>...the famous zener oscillation thread a few years back
>>...my ASCII waveform plots of actual bench measurements
>>showing exactly what's going on.
>> Winfield Hill
>
>http://groups.google.com/group/sci.electronics.design/browse_frm/thread/399b6a0bf6cfa4f5/16aa533d72a79d11?q=microplasma+zener+Oscillation&fwc=1

That's one thread, perhaps the first in a series. That thread doesn't have the waveforms I was referring to (although there are some waveforms in posts 51 and 66). Tony, Bill, Roy and I, and some others here wasted masses of time on this subject over a period of a few months, eight and a half years ago. We took bench measurements, did calculations, found the scientific literature (it was a subject that occupied physicists in the late 50s, see posts 72-76), and we did plenty of speculation.

--
Thanks,
- Win

412. Re: Inexpensive Digital Strip Chart Recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 10:07:32 UTC
From: bill.sloman@ieee.org
Message-ID: <1136974052.420323.117030@g43g2000cwa.googlegroups.com>
Source record: 14512
Cross-posted to:
sci.electronics.equipment,comp.arch.embedded,comp.sys.palmtops,sci.electronics.design,rec.radio.amateur.homebrew

Too_Many_Tools wrote:
> I am looking for an inexpensive digital strip chart recorder.
>
> Does something like this exist?
>
> Are there addons for a laptop, pda or pocket pc that allows one to
> record, store and display analog data similar to the good old chart
> recorder?

Check out

http://www.picotech.com/

Farnell stocked some of their gear when I last looked.

--
Bill Sloman, Nijmegen

413. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 10:07:56 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1136974076.111548.189150@g14g2000cwa.googlegroups.com>
Source record: 14513

...impossible to tell! nobody ever characterized them for high
frequency use. the usual effects of the varactor are pernicious! they
are crucial for low phase noise of the VCO using them. the only truly
effective way to check is build one and measure the performance with a
spectrum analyzer or a phase noise meter, both expensive items. my
recommendation is to build one and try to listen to its signal on a
receiver (stable one!), if the note is clean and not ragged it's OK. if
not the VCO is too noisy for use. don't be afraid to check more than
one diode in the same circuit. experience has shown that some units
perform better than others.
Saandy 4Z5KS

JE wrote:
> The common 1N4007 seem to work for HF but what is the max. frequency they
> can be used as varactors?
>
> And how about zener diodes?
>
> JE

414. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 11:04:46 UTC
From: Ian <Ian_Buckner_not_@agilent.com>
Message-ID: <1136976587.211250@newsreg.cos.agilent.com>
Source record: 14515
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"Spehro Pefhany" <speffSNIP@interlogDOTyou.knowwhat> wrote in message
news:5do7s1tf2t4q8i622q5v6hs3ta04ftani1@4ax.com...
>
> Try pasting this into the search bar:
>
> 33 30 11.57N 111 55 46.22W
>
>
>
> Best regards,
> Spehro Pefhany

Thanks, Spehro, I'll try that tonight (Google Earth doesn't like my ancient
graphics card at work).

Regards
Ian

415. Re: glass-mount omnidirectional antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 11:06:31 UTC
From: budgie <me@privacy.net>
Message-ID: <i9p9s15uch3f2u9nbl3p1sa27p2ghol0qq@4ax.com>
Source record: 14516

On 10 Jan 2006 23:57:15 -0800, "kevincw01" <kevincw01@gmail.com> wrote:

>sorry to have to ask but what is SWR? My guess is sound to [somthing]
>ratio?

Standing wave ratio. It is a measure of how well (in this case) the antenna system accepts the energy sent to it up the transmission line and radiates it, compared to reflecting it back to the source transmitter. The transmission line should be 50 ohm coax in your case. If the tranmission line/system has serious impedance variation or discontinuity, power is reflected back to the source rather than passing along the line.

As the through-glass coupling system employs frequency-sensitive tuned circuit elements, a substantial change in frequency as you suggest will certainly create a serious impedance discontinuity. Overall transmission efficiency pooter<-> antenna would be very poor as a result. You may well find that a decent 2.4G antenna on the pooter inside the vehicle is more efficient.

416. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 11:27:55 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dq2q3r0fg6@drn.newsguy.com>
Source record: 14517
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Spehro Pefhany wrote...
>
> Try pasting this into the search bar:
> 33 30 11.57N 111 55 46.22W

Try this one in Hybrid mode, Google has you driving off
an unfinished bridge, 42.370831,-71.066555 :-)

--
Thanks,
- Win

417. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 12:05:22 UTC
From: tekamn <and7@bigfoot.com>
Message-ID: <1136981122.856564.296860@o13g2000cwo.googlegroups.com>
Source record: 14518
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

For history, check www.tektronix.com, and do a search for "7000".
Worked well last time I tried, and gives a little bit of history and
price info. Better: The site at rutgers.edu , link is mentioned below
by another poster.

hth,
Andreas

418. Re: Inexpensive Digital Strip Chart Recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 12:18:00 UTC
From: carneyke <carneyke@localnet.com>
Message-ID: <1136981880.915087.20540@o13g2000cwo.googlegroups.com>
Source record: 14519
Cross-posted to:
sci.electronics.equipment,comp.arch.embedded,comp.sys.palmtops,sci.electronics.design,rec.radio.amateur.homebrew

Has anyone checked Omega ?

419. Re: Zener Noise (was: 1N4007 varactors)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 13:57:01 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dq32rd01788@drn.newsguy.com>
Source record: 14520
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Winfield Hill wrote...
>
> JeffM wrote...
>>
>> Winfield Hill wrote...
>>>
>>>...the famous zener oscillation thread a few years back
>>>...my ASCII waveform plots of actual bench measurements
>>> showing exactly what's going on.
>>
>>http://groups.google.com/group/sci.electronics.design/browse_frm/thread/399b6a0bf6cfa4f5
/16aa533d72a79d11?q=microplasma+zener+Oscillation&fwc=1
>
> That's one thread, perhaps the first in a series. That thread
> doesn't have the waveforms I was referring to (although there
> are some waveforms in posts 51 and 66). Tony, Bill, Roy and I,
> and some others here wasted masses of time on this subject over
> a period of a few months, eight and a half years ago. We took
> bench measurements, did calculations, found the scientific
> literature (it was a subject that occupied physicists in the
> late 50s, see posts 72-76), and we did plenty of speculation.

All of which led Roy McCammon to remark (post 90), "I'd have to
say that it is the best thread this year." He said that Aug 5th,
after 3 weeks of posts, and yet the followup threads in Aug and
Sept on the same topic were just as long, and perhaps even more
interesting. Ah, those were that days!

--
Thanks,
- Win

420. Spanish at Home

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 14:14:48 UTC
From: PLENI SELENE <pleniselene45@yahoo.com>
Message-ID: <1137010558_159@sp6iad.superfeed.net>
Source record: 14535

HOW FAR TECHNOLOGY MOVES FROM TALK TO ROBOTS,

Would you Like To Know How The Electronic Devices Understand When You Talk to Them, And How It Works To Speak Spanish?

Because spelling words and names are common in English, Software have been developed to code names based on how they sound. Searching and matching is done by converting a word or name to some phonetic code. Phonetic encoding technology is also used for the command voice in electronic devices like cell phones(to make calls), answering machines(to select menu options), toys, cars(for security), house(to control the lights) and a lot of more applications, It is why when somebody order to the cell phone " office" the cell phone make a call to the office, or the lights turn on when you say "lights", etc.
Some of the best video games come in Spanish
Learn Spanish reading in English
I have exciting news for anybody who wants to learn to communicate in Spanish. You can get a flying start and begin communicating in Spanish in 15 days or less it depends of you. In fact, with just 125 Spanish words (75 key words and 50 most common and used Spanish words) anyone can communicate in Spanish.
Just 26 letters make all English literature and 75 Spanish key words are all you need to begin communicating effectively in Spanish, these are:
- Alphabet(26 letters)(a, b, c, d, e ..... x, y, z)
- Three articles(el, la, los)
- Pronouns(7)(I, you, he, she, It, we, they)
- Prepositions(18)(a, an, from, of, with, ... in, on)
- Verb to Be(3)(am, are, is)
- Numbers(0-9)(zero, one, two ..... nine, ten)
- Interrogatives(8)(what, who, ..., how, whom)

Combine these 75 key words as a communication multipliers to make your learning time productive and create real usable Spanish output.
Now anyone can speak Spanish with "Spanish By Myself" guide. This fascinating guide makes speaking Spanish as easy as speak English, just need to know read in English, yes, read in English and learn the correct Spanish pronunciation of the most used key words that give you the most strong communication skills

AMAZINGLY, with just 75 Spanish Key words and 50 most used common Spanish words, you can actually make over 85,000 Spanish sentences and say just about anything you will want to say in Spanish.

Let me give you more examples:

REMEMBER: Read the "pronunciation" sentence in English It will sound in Spanish.

ENGLISH SENTENCE : Good morning How are you?
SPANISH SENTENCE : Buenos dias como esta?
PRONUNCIATION : Boo_n_oz d_us Koh_moh ess_tah?

ENGLISH SENTENCE: My name is Ann, What is your name?
SPANISH SENTENCE: Mi nombre es Ann cual es su nombre?
PRONUNCIATION : Mee nohm_breh ess Ann,
Kuh_al ess sue nohm_breh?

ENGLISH SENTENCE: I would like to be your friend
SPANISH SENTENCE : Me gustaria ser tu amigo(a)
PRONUNCIATION : Meh goose_tah_rih_ah sehr two ah_mee_goh

ENGLISH SENTENCE : your son likes to play ball
SPANISH SENTENCE : a tu hijo le gusta jugar pelota
PRONUNCIATION : ah two ee_ho leh Goose_tah
Hoo_gahr peh_loh_tah.

ENGLISH SENTENCE : The party is in my house
SPANISH SENTENCE : La fiesta es en mi casa
PRONUNCIATION : Lah Fee_ess_tah ess n mee kah_sah

ENGLISH SENTENCE : I want a glass of water
SPANISH SENTENCE : Yo quiero un vaso con agua
PRONUNCIATION : yoh kee_eh_roh oon vah_soh kohn ah_guh_ah

It isn't fun, you will find a lot of more examples inside the guide but the best of the best is that you will learn how make your own sentences, isn't great!, I will teach you the 75 Spanish key words and the 50 common and most used words plus hundreds of words for specific conversations with the pronunciation of all of them, and how you can combine them.

Also you will learn good manners in Spanish, the months of the year, the days of the week, colors, words to use at the restaurant, at home, at school, at work and much more.

Don't think to much about it, there are so many people who want to learn speak Spanish and I'm sure you don't want to stay behind, there are a lot of opportunities for the people who speak English and Spanish, not only for jobs, but to do new friends, to do business or just to know speak Spanish and be more competitive in this world. Take your future in your hands, nobody is going to do it for you, you have to make decision by your self, and this is a good one.

Get your Guide now for a half price and you will receive the bonuses

What is stopping you?
Look, I do know that you are reading this message, it is because you want to learn speak Spanish and of course, you do realize that you need to study to achieve your goal. So there's no reason not to get my Guide, you just have to read in English and then the Spanish flow in your mouth naturally without effort.

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http://www.spanishbymyself.com This Guide is even better!

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421. FA: Globe 46+ air variables+stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 14:33:42 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <aH8xf.246590$qk4.2953@bgtnsc05-news.ops.worldnet.att.net>
Source record: 14521
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Original GLOBE type 46 that tested very strong + many other air variables
at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

tnx heytubeguy

422. Re: Inexpensive Digital Strip Chart Recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 15:00:07 UTC
From: Al <no.spam@wanted.com>
Message-ID: <no.spam-DA7B25.10000411012006@news.verizon.net>
Source record: 14522
Cross-posted to:
sci.electronics.equipment,comp.arch.embedded,comp.sys.palmtops,sci.electronics.design,rec.radio.amateur.homebrew

In article <1136941627.419160.149340@o13g2000cwo.googlegroups.com>,
"Too_Many_Tools" <too_many_tools@yahoo.com> wrote:

> I am looking for an inexpensive digital strip chart recorder.
>
> Does something like this exist?
>
> Are there addons for a laptop, pda or pocket pc that allows one to
> record, store and display analog data similar to the good old chart
> recorder?
>
> Thanks for any leads.
>
> TMT
>

http://www.lascarelectronics.com/promo.cfm?CFID=18736453&CFTOKEN=20840100

Independent datalogger that is connected to your computer via USB.
Program it and download data from it. About 99 bucks.

Al

423. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 15:01:32 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_43c50f45@fidonet.org>
Source record: 14523

"John Popelish" bravely wrote to "All" (10 Jan 06 22:14:12)
--- on the heady topic of "Re: 1N4007 varactors"

JP> From: John Popelish <jpopelish@rica.net>
JP> Xref: core-easynews rec.radio.amateur.homebrew:90859

JP> Steve Nosko wrote:
JP> (snip)
> Don't (some) zeners generate noise???...or is that only near the breakdown
> reigion?

JP> I think that whether noisy or not, the noise generation mechanism
JP> kicks in, only when the zeners are reverse conducting via the zener
JP> breakdown process, so if you keep the voltage well below the zener
JP> knee, say, half of that, they are not particularly noisy compared to
JP> other diodes. So, yes, only near the breakdown region, especially
JP> just below the rated voltage (low reverse current).

I never tested a zener when used as varactor but I think these have a
much greater reverse saturation current (even far below breakdown
threshold) and it is this that might cause comparatively more noise
than a conventional diode with a tiny leakage current. Well, at least
that is what the junction noise equations would seem to indicate.

A*s*i*m*o*v

424. Re: Inexpensive Digital Strip Chart Recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 15:07:40 UTC
From: Steve <steve@no.email>
Message-ID: <qm7as1tgo19l7bk04ij41f35haj2rp53q0@4ax.com>
Source record: 14524
Cross-posted to:
sci.electronics.equipment,comp.arch.embedded,comp.sys.palmtops,sci.electronics.design,rec.radio.amateur.homebrew

Omega OM-EL-USB

USB data logger, stand-alone, temperature, temp/RH, voltage, or
current, about $60

http://www.omega.com/ppt/pptsc.asp?ref=OM-EL-USB-1

OM-PL series, $115 with more options

425. Re: LMX2322?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 15:42:31 UTC
From: JE <JE@nowhere.com>
Message-ID: <daa4d$43c52767$d135c4af$27224@MDI.CA>
Source record: 14525

Another great idea thanks.Lots to choice from NEC. Why don't US companies make prescalers?
Where do I get this free C/C++ compiler and which Atmel chips do you recommend to start?

JE

426. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 16:30:17 UTC
From: Mike Young <boat042-spam@yahoo.com>
Message-ID: <toaxf.5212$fb4.3977@newssvr14.news.prodigy.com>
Source record: 14526
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"Rich Grise, but drunk" <yahright@example.net> wrote in message
news:pan.2006.01.09.22.31.32.308051@example.net...
> Get a piece of baling wire, and tie two garbage cans together, one on
> either side of the alleyway, with the wire about 18" (1/2M) off the
> ground.
>
> That should slow the little bastards down! >:->

Yeah, it would. You should see what pranks like that do to motorcyclists.

427. Re: Inexpensive Digital Strip Chart Recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 16:37:27 UTC
From: Hans-Bernhard Broeker <broeker@physik.rwth-aachen.de>
Message-ID: <42kqi7F1hi7q1U1@news.dfncis.de>
Source record: 14527
Cross-posted to:
sci.electronics.equipment,comp.arch.embedded,comp.sys.palmtops,sci.electronics.design,rec.radio.amateur.homebrew

[Note: F'up2 cut down --- should have been done by OP!]

In comp.arch.embedded Too_Many_Tools <too_many_tools@yahoo.com> wrote:
> I would agree...I am surprised that in today's world of electronics
> that an inexpensive turnkey appliance is not available.

While a paper strip recorder might have seemed a good idea back in its day, actually using one in this day and age would be a rather obvious waste of paper. The kind of device you're looking for is called a storage oscilloscope or data logger, these days, mostly depending on its typical sampling rate and number of channels.

Any computer or PDA with decent sound hardware should suffice for a working, no-cost, software-only approach. Just connect your analog input to line-in (adapt level and impedance as needed), and record your signal as an audio stream, which you can later transform into whatever kind of plot or display you like. It won't be spectacularly accurate, granted, but it'll still outperform a paper strip plotter on all practical counts.

--
Hans-Bernhard Broeker (broeker@physik.rwth-aachen.de)
Even if all the snow were burnt, ashes would remain.

428. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 17:47:40 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <EqOdncARxsgp1FjeRVnytg@pipex.net>
Source record: 14530

> I never tested a zener when used as varactor but I think these have a
> much greater reverse saturation current (even far below breakdown
> threshold) and it is this that might cause comparatively more noise
> than a conventional diode with a tiny leakage current. Well, at least
> that is what the junction noise equations would seem to indicate.
==========
Zener diodes are often used as wide band 'noise generators'for use in an impedance bridge used in conjunction with a receiver.

Frank KN6WH / GM0CSZ

429. RF Connectors, Adapters & Cable Assemblies

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 17:48:40 UTC
From: AAA RF Products <sales@aaarfproducts.com>
Message-ID: <kxbxf.11215$sA3.1997@fed1read02>
Source record: 14528
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

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or see www.aaarfproducts.com

or call 949 481 3154 (San Clemente, CA, USA)

No minimum order.

No handling charges

430. Re: Zener Noise (was: 1N4007 varactors)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 18:08:19 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <b7586$43c54992$42512978$13526@DIALUPUSA.NET>
Source record: 14529
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

OK, then. A zener makes a poor noise source according to what I'm reading. Noise.com used to sell off-spec diodes by the onesies for we poor peons to play with, but for whatever reason that doesn't seem to be the case any more.

Given that a zener (at whatever current) is a poor noise source, what is a good source of electronic broadband noise from low HF through high UHF -- say, 5 to 500 MHz.? (No smart remarks about spark gaps.)

Jim

"Winfield Hill" <Winfield_member@newsguy.com> wrote in message news:dq2k900109@drn.newsguy.com...

We took
> bench measurements, did calculations, found the scientific
> literature (it was a subject that occupied physicists in the
> late 50s, see posts 72-76), and we did plenty of speculation.

431. Re: Zener Noise (was: 1N4007 varactors)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 18:39:29 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <otjas1po49cb2t8jo1jm06ja6jepfd9vsg@4ax.com>
Source record: 14531
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Wed, 11 Jan 2006 10:08:19 -0800, "RST Engineering"
<jim@rstengineering.com> wrote:

>OK, then. A zener makes a poor noise source according to what I'm reading.
>Noise.com used to sell off-spec diodes by the onesies for we poor peons to
>play with, but for whatever reason that doesn't seem to be the case any
>more.
>
>Given that a zener (at whatever current) is a poor noise source, what is a
>good source of electronic broadband noise from low HF through high UHF --
>say, 5 to 500 MHz.? (No smart remarks about spark gaps.)
>
>Jim
>

A hot resistor.

How about a thermistor or a lamp filament that was 50 ohms at some
high temperature. You could heat it with DC, sense its
resistance/temp, and let it make noise, all in a single part.

Old vintage noise figure meters used gas tubes. And I think there was
a pencil tube that mounted in a waveguide and made shot noise.

And, of course, the old photomultiplier trick.

John

432. Re: Zener Noise (was: 1N4007 varactors)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 18:41:14 UTC
From: Mark <makolber@yahoo.com>
Message-ID: <1137004874.426229.102480@g14g2000cwa.googlegroups.com>
Source record: 14532
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

I have seen a small "gain of wheat" type light bulb used as a noise source...

Feed it with DC through a choke and AC couple the noise out ....

and you can vary it too!!

Mark

433. Re: Zener Noise (was: 1N4007 varactors)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 18:47:03 UTC
From: "RST Engineering (jw)" <jim@rstengineering.com>
Message-ID: <a13f8$43c552a6$42512978$13883@DIALUPUSA.NET>
Source record: 14533
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Immediately you say "choke" you have modified and peaked the bandwidth.
I'll buy that you can feed it with a resistor for broadband, but in my
humble opinion the construction of a grain of wheat bulb won't get up into
the UHF region with noise. Do you have any idea of the output level of this
circuit?

Jim

"Mark" <makolber@yahoo.com> wrote in message
news:1137004874.426229.102480@g14g2000cwa.googlegroups.com...
>I have seen a small "gain of wheat" type light bulb used as a noise
> source...
>
> Feed it with DC through a choke and AC couple the noise out ....
>
> and you can vary it too!!
>
> Mark
>

434. Re: Zener Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 19:10:32 UTC
From: Phil Hobbs <pcdh@SpamMeSenseless.pergamos.net>
Message-ID: <43C55828.4010005@SpamMeSenseless.pergamos.net>
Source record: 14534
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John Larkin wrote:
> On Wed, 11 Jan 2006 10:08:19 -0800, "RST Engineering"
> <jim@rstengineering.com> wrote:

> A hot resistor.
>
> How about a thermistor or a lamp filament that was 50 ohms at some
> high temperature. You could heat it with DC, sense its
> resistance/temp, and let it make noise, all in a single part.
>
> Old vintage noise figure meters used gas tubes. And I think there was
> a pencil tube that mounted in a waveguide and made shot noise.
>
> And, of course, the old photomultiplier trick.

I still like the flashlight/photodiode trick. You can get a really good calibration just from the dc, and can calibrate the frequency response with a spark plug.

Cheers,

Phil Hobbs

435. Re: Zener Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 20:05:24 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <dq3oe5018rb@enews3.newsguy.com>
Source record: 14536
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

ORIGINAL MESSAGE:

"Phil Hobbs" <pcdh@SpamMeSenseless.pergamos.net wrote

<snip>
>and can calibrate the frequency response with a spark plug.

~~~~~~

I generally use a pipe wrench, but I'll try anything once.

Bill, W6WRT
~~~~~~

436. Re: Zener Noise (was: 1N4007 varactors)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 20:53:07 UTC
From: Tim Williams <tmoranwms@charter.net>
Message-ID: <kfexf.25$672.23@fe05.lga>
Source record: 14537
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"John Larkin" <jjlarkin@highNOTlandTHIStechnologyPART.com> wrote in message news:otjas1po49cb2t8jo1jm06ja6jepfd9vsg@4ax.com...
> Old vintage noise figure meters used gas tubes. And I think there was
> a pencil tube that mounted in a waveguide and made shot noise.

I've got a gaussian noise generator, some SS in the power supply, tubes everywhere else, found it on the curb and apparently works. Uses a pair of 6D4 thyratrons in magnetic fields for the noise.

Tim

--
Deep Fryer: a very philosophical monk.
Website: http://webpages.charter.net/dawill/tmoranwms

437. Re: glass-mount omnidirectional antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 21:09:47 UTC
From: kevincw01 <kevincw01@gmail.com>
Message-ID: <1137013787.260500.166430@o13g2000cwo.googlegroups.com>
Source record: 14538

looks like i will have to go that route then since I have (so far) not come across anything for the 2.4G frequency. Either that or drill a whole in the vehicle.

438. Re: Zener Noise (was: 1N4007 varactors)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 21:20:53 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <dltas15ph0vs59kn482bpvmipn7ece7okd@4ax.com>
Source record: 14539
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Wed, 11 Jan 2006 14:53:07 -0600, "Tim Williams"
<tmoranwms@charter.net> wrote:

>"John Larkin" <jjlarkin@highNOTlandTHIStechnologyPART.com> wrote in message
>news:otjas1po49cb2t8jo1jm06ja6jepfd9vsg@4ax.com...
>> Old vintage noise figure meters used gas tubes. And I think there was
>> a pencil tube that mounted in a waveguide and made shot noise.
>
>I've got a gaussian noise generator, some SS in the power supply, tubes
>everywhere else, found it on the curb and apparently works. Uses a pair of
>6D4 thyratrons in magnetic fields for the noise.
>
>Tim

GR?

John

439. Re: Zener Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 21:34:10 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <dntas15pqh2qblvdjsv8cpc0bl01qnku4s@4ax.com>
Source record: 14540
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Wed, 11 Jan 2006 14:10:32 -0500, Phil Hobbs
<pcdh@SpamMeSenseless.pergamos.net> wrote:

>John Larkin wrote:
>> On Wed, 11 Jan 2006 10:08:19 -0800, "RST Engineering"
>> <jim@rstengineering.com> wrote:
>
>> A hot resistor.
>>
>> How about a thermistor or a lamp filament that was 50 ohms at some
>> high temperature. You could heat it with DC, sense its
>> resistance/temp, and let it make noise, all in a single part.
>>
>> Old vintage noise figure meters used gas tubes. And I think there was
>> a pencil tube that mounted in a waveguide and made shot noise.
>>
>> And, of course, the old photomultiplier trick.
>
>I still like the flashlight/photodiode trick. You can get a really good
>calibration just from the dc, and can calibrate the frequency response
>with a spark plug.
>
>Cheers,
>
>Phil Hobbs

What's the light-flash waveform look like from a spark plug? What do
you drive it with?

Don't you have gobs of femtosecond lasers around your place?

John

440. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 22:02:07 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2006.01.11.22.02.24.894998@example.net>
Source record: 14541
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Wed, 11 Jan 2006 16:30:17 +0000, Mike Young wrote:

> "Rich Grise, but drunk" <yahright@example.net> wrote in message
> news:pan.2006.01.09.22.31.32.308051@example.net...
>> Get a piece of baling wire, and tie two garbage cans together, one on
>> either side of the alleyway, with the wire about 18" (1/2M) off the
>> ground.
>>
>> That should slow the little bastards down! >:->
>
> Yeah, it would. You should see what pranks like that do to motorcyclists.

But, on your motorcycle, you wouldn't go racing down an alley like that.
At least I know _I_ wouldn't! I drive kinda like this guy:
http://www.abiengr.com/~sysop/images/Safe-Car.gif ;-)

Cheers!
Rich

441. Re: LMX2322?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 22:15:28 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e2f233c60c34735989724@news-central.giganews.com>
Source record: 14542

In article <daa4d$43c52767$d135c4af$27224@MDI.CA>, JE@nowhere.com
says...
> Another great idea thanks.Lots to choice from NEC. Why don't US companies
> make prescalers?

I think On Semiconductor (formerly Motorola) might be your only choice
there; not sure they're still in the business. There's also California
Eastern Labs (www.cel.com), but they may just be reselling NEC parts.
Not super-familiar with the prescaler world these days.

> Where do I get this free C/C++ compiler and which Atmel chips do you
> recommend to start?

Atmel partisans tend to favor the "WinAVR" distribution of avr-gcc (
http://www.avrfreaks.net/AVRGCC/ , or just Google for avr-gcc or winavr
). There are also commercial compilers for the chip, but I don't know
anything about them.

I usually use the ATmega128 for everything, out of laziness. In the
past, I've also compiled my hybrid synth driver (LMX/ADF-series PLL
control, plus DDS control, plus 2-line LCD and numeric-keypad UI) on the
ATmega32. This is the most capable Atmel chip that's still available in
a 40-pin DIP. Flash memory space was a bit cramped, but there's a lot
you can do to optimize the generated code when things get tight. (I
have a bad habit of using 64-bit ints for timers and such, and that
costs a LOT of code space on an 8-bit controller.)

If all you want to do is program the prescaler section of a PLL chip,
I'm sure the cheapest/smallest TinyAVR chip supported by GCC would do
just fine.

The C/C++ learning curve isn't too bad, because the platform limitations
will rule out many of the fancier C++ language constructs. Straight
ANSI C advocates will be very happy campers. The obvious advantage to
writing C on your microcontroller is that the time spent on the learning
curve won't be wasted if/when you move to a new microcontroller family.
Contrary to conventional wisdom, you will NOT end up having to learn AVR
assembly anyway to debug your design. The compiler works great.

There's nothing worse than people who go around bellowing "My CPU is
better than your CPU!," but I hate to see people spending valuable time
learning a dead-end language like PIC assembly for one-off projects.

-- jm

---
http://www.qsl.net/ke5fx

Note: My E-mail address has been altered to avoid spam
---

442. Re: Zener Noise (was: 1N4007 varactors)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 22:22:17 UTC
From: Clark <CP@comcast.net>
Message-ID: <TqOdnY6i8PKGGFjeRVn-gw@comcast.com>
Source record: 14543
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Try this
http://www.noisecom.com/

"RST Engineering (jw)" <jim@rstengineering.com> wrote in message
news:a13f8$43c552a6$42512978$13883@DIALUPUSA.NET...
> Immediately you say "choke" you have modified and peaked the bandwidth.
> I'll buy that you can feed it with a resistor for broadband, but in my
> humble opinion the construction of a grain of wheat bulb won't get up into
> the UHF region with noise. Do you have any idea of the output level of
> this circuit?
>
> Jim
>
>
>
> "Mark" <makolber@yahoo.com> wrote in message
> news:1137004874.426229.102480@g14g2000cwa.googlegroups.com...
>>I have seen a small "gain of wheat" type light bulb used as a noise
>> source...
>>
>> Feed it with DC through a choke and AC couple the noise out ....
>>
>> and you can vary it too!!
>>
>> Mark
>>
>
>

443. Ceramic filters for FM....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 22:51:10 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <dq424udeb1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 14544

Daft question time again.

I've got some ceramic filters in some radios that are too wide.

First:
I've got a repeater with a 455khz IF filter that's the 3 pin type, marked "55F" and "CM". It's in a FX5000 reciever.

Second:
I've got some mobiles with the larger filters, marked LT455FW.

I want to put these all onto a nice and tight filter. The problem is that I'm trying to use 145.625, but there's two repeaters on 145.6125 and 145.6375 locally, so a frequency shift won't do anything. Deviation is 2.5khz peak

1: What sort of bandwidth do people recommend? I have been told that 9khz would work a treat, but I don't know if I should go narrower or wider?

2: I've found this site: http://www.euroquartz.co.uk/ceramic-filt.htm

What are all the filter types, what do they mean (like the LTW33, LTS, etc, etc), and which models would be suitable substitutes?

Look forward to people's responses, because this is confusing me now!

Sam
M1FJB

444. Re: Zener Noise (was: 1N4007 varactors)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 23:00:09 UTC
From: Tim Williams <tmoranwms@charter.net>
Message-ID: <u6gxf.46$vj4.13@fe03.lga>
Source record: 14545
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"John Larkin" <jjlarkin@highNOTlandTHIStechnologyPART.com> wrote in message news:dltas15ph0vs59kn482bpvmipn7ece7okd@4ax.com...
> >I've got a gaussian noise generator, ...
>
> GR?

Come again?

Tim

--
Deep Fryer: a very philosophical monk.
Website: http://webpages.charter.net/dawill/tmoranwms

445. Re: Zener Noise (was: 1N4007 varactors)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 23:19:18 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1137021558.821649.116820@g44g2000cwa.googlegroups.com>
Source record: 14546
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Jim wrote: "...what is a good source of electronic broadband noise
from low HF through high UHF -- say, 5 to 500 MHz.?"

A linear feedback shift register. Small, repeatable. 500MHz should be
no particular problem these days. (There's an idea for some IC
manufacturer...32 bits clocked at 1G/sec repeats every 4 seconds, which
would be OK, but I'd prefer 40 or more bits. Should fit nicely into a
5 pin SOT-23: power, gnd, reset, out, ...)

446. Re: Zener Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 23:47:37 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <dq45eppdn3@puck.litech.org>
Source record: 14547
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In rec.radio.amateur.homebrew Tim Williams <tmoranwms@charter.net> wrote:
> "John Larkin" <jjlarkin@highNOTlandTHIStechnologyPART.com> wrote in message
> news:dltas15ph0vs59kn482bpvmipn7ece7okd@4ax.com...
>> >I've got a gaussian noise generator, ...
>>
>> GR?

> Come again?

When I see "GR", I think "General Radio", and salivate gently. They
made some really, really nice test gear.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

447. Re: Zener Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-11 23:58:56 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dq4640kjo1@engnntp2.cig.mot.com>
Source record: 14451
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Nice touch, Bill.
73, Steve, K9DCI

"Bill Turner" <noway@nohow.com> wrote in message
news:dq3oe5018rb@enews3.newsguy.com...
> ORIGINAL MESSAGE:
>
>
> "Phil Hobbs" <pcdh@SpamMeSenseless.pergamos.net wrote
>
> <snip>
> >and can calibrate the frequency response with a spark plug.
>
> ~~~~~~
>
> I generally use a pipe wrench, but I'll try anything once.
>
> Bill, W6WRT
>
>

448. Re: Zener Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 00:11:52 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <1e7bs1h4v8actq0lsb7u67mr0ksnjf09jg@4ax.com>
Source record: 14448
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Wed, 11 Jan 2006 23:47:37 +0000 (UTC), "Mike Andrews"
<mikea@mikea.ath.cx> wrote:

>In rec.radio.amateur.homebrew Tim Williams <tmoranwms@charter.net> wrote:
>> "John Larkin" <jjlarkin@highNOTlandTHIStechnologyPART.com> wrote in message
>> news:dltas15ph0vs59kn482bpvmipn7ece7okd@4ax.com...
>>> >I've got a gaussian noise generator, ...
>>>
>>> GR?
>
>> Come again?
>
>When I see "GR", I think "General Radio", and salivate gently. They
>made some really, really nice test gear.

And then let themselves get sucked, by marketing, into large
mainframe-based testers, and lost their ass.

I watched the money-making portable test division in Phoenix get
trashed by the shit-heads in Massachusetts... now you know _part_ of
the source of my animosity toward Massa2shits ;-)

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

449. Re: NE602 replacement is NTE7164?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 00:27:44 UTC
From: mzenier@eskimo.com
Message-ID: <dq649q$o1k$1@eskinews.eskimo.com>
Source record: 14482

In article <VFzwf.63$f01.13@fe03.lga>,
xpyttl <xpyttl_NOSPAM@earthling.net> wrote:
>"Mark Zenier" <mzenier@eskimo.com> wrote in message
>news:dpu7h2$ob3$1@eskinews.eskimo.com...
>
>> No, NE and SA are both Philips prefixes, but different temperature
>> ratings. NE is the commercial range of 0 to +70 deg C, SA the
>> mil/industrial range of -40 to +85 deg C.
>
>Since Phillips bought up Signetics, it makes sense they would keep the part
>number. And it occurred to me that I have gotten NE602's long after the SA
>parts appeared.
>
>HOWEVER, Phillips lists no NE parts under their RF parts, nor as parts
>"similar to" the SA602. Although it is certainly not exhaustive, all the
>"NE" parts still in my parts drawer have Signetics logos (no 602's tho -
>604/605/614/615 all my 602/612's are SA).

Er, Philips has owned Signetics since about 1976. (Along with Mullard
and about a half a dozen other regional names which they dropped sometime
in the late 80's). In the 1989 Signetics Linear:Communications databook,
the NE/SA parts are on the same datasheet.

All the demise of the NE602 number says is that Philips has selected
their parts catalog to those items that earn the most money. Since
a low integration part like the '602 would mostly be used in portable
radios or other legacy telcom applications, they probably weren't
selling too many of the narrow temp. range.

Mark Zenier mzenier@eskimo.com
Googleproofaddress(account:mzenier provider:eskimo domain:com)

450. Re: Zener Noise (was: 1N4007 varactors)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 00:29:06 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <c8b47$43c5a2d1$4251d3ee$17341@DIALUPUSA.NET>
Source record: 14449
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

I've used noisecom for some years, but they are hard to buy in
onesie-twosies and are rather expensive in quantity when you only need one.

They USED to sell seconds that didn't meet spec, but I don't see that offer
on their current website.

Jim

"Clark" <CP@comcast.net> wrote in message
news:TqOdnY6i8PKGGFjeRVn-gw@comcast.com...
> Try this
> http://www.noisecom.com/

451. Re: Zener Noise (was: 1N4007 varactors)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 00:30:23 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <608bs1lm6onekfegn9d83q4e6s956je19h@4ax.com>
Source record: 14450
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Wed, 11 Jan 2006 17:00:09 -0600, "Tim Williams"
<tmoranwms@charter.net> wrote:

>"John Larkin" <jjlarkin@highNOTlandTHIStechnologyPART.com> wrote in message
>news:dltas15ph0vs59kn482bpvmipn7ece7okd@4ax.com...
>> >I've got a gaussian noise generator, ...
>>
>> GR?
>
>Come again?
>
>Tim

Is it a General Radio noise generator? I have an old GR noise
generator, and the manual talks about moving the magnet around to
optimize something.

John

452. Re: Zener Noise (was: 1N4007 varactors)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 00:56:44 UTC
From: Gerhard Hoffmann <dk4xp@freenet.de>
Message-ID: <3v8bs1ple47a8khl6157asp006k47of6fa@4ax.com>
Source record: 14452
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Wed, 11 Jan 2006 10:08:19 -0800, "RST Engineering"
<jim@rstengineering.com> wrote:

>OK, then. A zener makes a poor noise source according to what I'm reading.
>Noise.com used to sell off-spec diodes by the onesies for we poor peons to
>play with, but for whatever reason that doesn't seem to be the case any
>more.
>
>Given that a zener (at whatever current) is a poor noise source, what is a
>good source of electronic broadband noise from low HF through high UHF --
>say, 5 to 500 MHz.? (No smart remarks about spark gaps.)

We had this already yesterday in '97 and '98.
The internet does not forget anything, so watch your mouth :-)

<http://groups.google.de/group/rec.radio.amateur.homebrew/browse_frm/thread/e072aa7cef573f
99/9147bca6602ef8d1?lnk=st&q=Gerhard+Hoffmann+noise&rnum=1&hl=de#9147bca6602ef8d1>

But, my final solution was to buy an Agilent 346c.

regards, Gerhard

453. Re: Zener Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 01:52:16 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dq4cog02d7a@drn.newsguy.com>
Source record: 14453
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Jim Thompson wrote...
>
> I watched the money-making portable test division in Phoenix
> get trashed by the shit-heads in Massachusetts... now you know
> _part_ of the source of my animosity toward Massa2shits ;-)

That's an amazing extension. Plenty of healthy Massachusetts companies have been sucked dry by their out-of-state owners. Obviously the ability to mis-manage a company from a distance is not notably a Massachusetts sin, unless you're obsessed with the Harvard Business School's modest influence on the issue.

--
Thanks,
- Win

454. Re: Welcome To Ham Radio! (And Don't Get Misled By CBERS!) - A FAQ.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 03:00:24 UTC
From: keith skelton <keith7373@tesco.net>
Message-ID: <cDjxf.42853$zt1.3591@newsfe5-gui.ntli.net>
Source record: 14454
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

Yasue, Trio, kenwood, Icom, etc

bring back steam, moustoches, nylon Y fronts,
(of course you you have to wash them once a week)
braces, and of course go around hating people
and create a class war, lets try and see the bad
in everything,

455. Re: Zener Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 03:03:29 UTC
From: Tim Williams <tmoranwms@charter.net>
Message-ID: <xGjxf.94$1M3.3@fe06.lga>
Source record: 14455
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"Mike Andrews" <mikea@mikea.ath.cx> wrote in message
news:dq45eppdn3@puck.litech.org...
> >> >I've got a gaussian noise generator, ...
> >>
> >> GR?
>
> When I see "GR", I think "General Radio", and salivate gently. They
> made some really, really nice test gear.

Ah, had a feeling it was something about a manufacturer...

Unfortunately(?) no, it appears to be Elgenco, and I also now remember not finding much info on this device after I picked it up. It's a rack mount unit BTW.

Tim

--
Deep Fryer: a very philosophical monk.
Website: http://webpages.charter.net/dawill/tmoranwms

456. Re: Identifying a mystery diode

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 03:05:27 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11sbhropp35fb24@corp.supernews.com>
Source record: 14456

I doubt that it's two series zeners, since it's no trick to make a single zener with that breakdown voltage.

The only application I know of for series connected diodes with that sort of breakdown voltage is for high dynamic range mixers. But the pairs I've seen in a single package have a third pin at the junction so you can also use them for other applications.

I wonder if it might be a low-C varactor. The very low C ones might possibly consist of two diodes in series -- the manufacturers don't give any clues since they don't publish any data on the forward bias characteristics. The breakdown voltage of low C varactors is in that ballpark, and the packaging is consistent with that possibility.

Roy Lewallen, W7EL

Paul VK3DIP wrote:
> John A,
> Spot on we have reverse breakdown at around 15 to 20 volts dependant on
> current, this is obviously not a high voltage diode!!!
> By the way yes the cross bar is the cathode. All the (known) varactors I
> have measure a vf around the 0.6-0.7 volt and so do the PIN's I have, though
> I don't have a really extensive collection of either, this is why I had
> ruled them out but if you know of other examples then its sounding good.
>
> So so far we know:
> Forward Voltage ~ 1.4 -1.5 V
> Reverse Voltage Breakdown ~ 15-20V
> No Visible or IR light emitted.
> Small Signal RF like packaging with cross bar indicating cathode.
>
> So what is left?, 2 series 10V Zeners?
>
> I may have to break one open and get out a microscope yet.
>
> Paul.

457. Re: Zener Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 03:08:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11sbi2d3rmfe9b2@corp.supernews.com>
Source record: 14457
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Winfield Hill wrote:
>
> That's one thread, perhaps the first in a series. That thread
> doesn't have the waveforms I was referring to (although there
> are some waveforms in posts 51 and 66). Tony, Bill, Roy and I,
> and some others here wasted masses of time on this subject over
> a period of a few months, eight and a half years ago. . .

For the record, that was Roy McCammon, not me.

Roy Lewallen, W7EL

458. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 03:14:13 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11sbic6fctg6t90@corp.supernews.com>
Source record: 14458

Asimov wrote:
>
> I never tested a zener when used as varactor but I think these have a
> much greater reverse saturation current (even far below breakdown
> threshold) and it is this that might cause comparatively more noise
> than a conventional diode with a tiny leakage current. Well, at least
> that is what the junction noise equations would seem to indicate.

They also have a whale of a lot more capacitance than a conventional diode. So I don't think it's a fair comparison.

Roy Lewallen, W7EL

459. Re: Zener Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 03:20:09 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <9qhbs1hec1gvlcbjf895hk1jccgj5rj8lq@4ax.com>
Source record: 14459
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On 11 Jan 2006 17:52:16 -0800, Winfield Hill
<Winfield_member@newsguy.com> wrote:

>Jim Thompson wrote...
>>
>> I watched the money-making portable test division in Phoenix
>> get trashed by the shit-heads in Massachusetts... now you know
>> _part_ of the source of my animosity toward Massa2shits ;-)
>
> That's an amazing extension. Plenty of healthy Massachusetts
> companies have been sucked dry by their out-of-state owners.
> Obviously the ability to mis-manage a company from a distance
> is not notably a Massachusetts sin, unless you're obsessed with
> the Harvard Business School's modest influence on the issue.

It is sadly true that many of the old-line Rt 128 companies are
gone... DEC, Data General, GR, Sensitive Instruments, Clevite,
Transitron, probably others. Have others popped up to take their
place? Analog Devices, for sure.

John

460. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 03:54:09 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <MqmdnTPic6J6TFjenZ2dnUVZ_tqdnZ2d@adelphia.com>
Source record: 14460

Roy Lewallen wrote:
> Asimov wrote:
>
>>
>> I never tested a zener when used as varactor but I think these have a
>> much greater reverse saturation current (even far below breakdown
>> threshold) and it is this that might cause comparatively more noise
>> than a conventional diode with a tiny leakage current. Well, at least
>> that is what the junction noise equations would seem to indicate.
>
>
> They also have a whale of a lot more capacitance than a conventional
> diode. So I don't think it's a fair comparison.

Okay, if we are discussing strange and high capacitance varactors,
what would you think of using a PIN photo diode as a varactor? They
have more chip area per dollar and per package size and capacitance
than many rectifier diodes, and that are made to have low leakage
current and often have low inductance packaging.
For example:
http://rocky.digikey.com/WebLib/Osram/Web%20Data/bpw34fa_fas.pdf
looks like a nice 15 to 70 pF capacitor.

I guess you would have to keep them in the dark, unless you wanted to
tune them (biased by a high resistance to a fixed voltage) with a
variable intensity light beam.

461. Re: Zener Noise (was: 1N4007 varactors)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 04:39:36 UTC
From: Clark <CP@comcast.net>
Message-ID: <OYKdneNS6u0XQFjeRVn-pw@comcast.com>
Source record: 14461
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Just ask for samples, I got five of them a few years ago.

"RST Engineering" <jim@rstengineering.com> wrote in message
news:c8b47$43c5a2d1$4251d3ee$17341@DIALUPUSA.NET...
> I've used noisecom for some years, but they are hard to buy in
> onesie-twosies and are rather expensive in quantity when you only need
> one.
>
> They USED to sell seconds that didn't meet spec, but I don't see that
> offer on their current website.
>
> Jim
>
>
>
> "Clark" <CP@comcast.net> wrote in message
> news:TqOdnY6i8PKGGFjeRVn-gw@comcast.com...
>> Try this
>> http://www.noisecom.com/
>
>

462. Re: Reliable Inexpensive Electronic Weather Instruments

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 04:50:03 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1137041403.687626.83670@f14g2000cwb.googlegroups.com>
Source record: 14462
Cross-posted to: sci.geo.meteorology,sci.electronics.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Has anyone had any experience with this weather station?

http://www.radioshack.com/product/index.jsp?pg=1&parentPage=search&cp=&productId=2168157&kw=weather+station&tab=features

463. Re: 1N4007 varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 05:11:09 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_43c5cf54@fidonet.org>
Source record: 14463

"Highland Ham" bravely wrote to "All" (11 Jan 06 09:47:40)
--- on the heady topic of "Re: 1N4007 varactors"

HH> From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
HH> Xref: core-easynews rec.radio.amateur.homebrew:90890

HH> Zener diodes are often used as wide band 'noise generators'for use in
HH> an impedance bridge used in conjunction with a receiver.

I understand to generate the noise that the zener diodes are operated
within their normal breakdown current range. However, as a varactor it
isn't desirable to have a breakdown current flow. The only tiny
current that flows is a saturation current which is related to
setting up the P-N junction boundaries within the semiconductor.

M*i*k*e

464. Re: Zener Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 05:43:41 UTC
From: Robert Baer <robertbaer@earthlink.net>
Message-ID: <h0mxf.1698$Hd4.622@newsread1.news.pas.earthlink.net>
Source record: 14464
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

RST Engineering wrote:

> OK, then. A zener makes a poor noise source according to what I'm reading.
> Noise.com used to sell off-spec diodes by the onesies for we poor peons to
> play with, but for whatever reason that doesn't seem to be the case any
> more.
>
> Given that a zener (at whatever current) is a poor noise source, what is a
> good source of electronic broadband noise from low HF through high UHF --
> say, 5 to 500 MHz.? (No smart remarks about spark gaps.)
>
> Jim
>
>
>
> "Winfield Hill" <Winfield_member@newsguy.com> wrote in message
> news:dq2k900109@drn.newsguy.com...
>
>
> We took
>
>>bench measurements, did calculations, found the scientific
>>literature (it was a subject that occupied physicists in the
>>late 50s, see posts 72-76), and we did plenty of speculation.
>
>
>
Wouldn't a zener running in (or near) the (easily seen on curve
tracer) negative resistance mode have lots of noise?

465. WTD: Resistor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 06:23:09 UTC
From: GBrown <gkbrown@gwi.net>
Message-ID: <0u2dnZWYtqwpaVjenZ2dnUVZ_tWdnZ2d@gwi.net>
Source record: 14465

Looking for six, 20K 10 watt resistors to finish up my amp project. These are bleeders in the HV supply.

--
Regards,
Gary...WZ1M

466. Re: glass-mount omnidirectional antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 06:29:38 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1e2f97298eefc47f989777@192.168.42.131>
Source record: 14466

In article <1136950193.497960.83860@g47g2000cwa.googlegroups.com>,
kevincw01@gmail.com says...

<snippety>

> I have searched and searched and so far have not found the same thing
> for 2.4 ghz wifi. Does anyone know where I can find one? If not,

If you're serious about decent peformance, stay away from glass
mount antennas for anything other than receive-only. They're worse than
useless for transmitting.

Trust me, I know this. My employer (WA State Patrol) tried some
glass mounts at one time for their undercover cars. Performance was
horrible, and other electronics in the car (notably the entertainment
radio and the key dinger) basically freaked out every time the
transmitter got keyed.

Once we changed back to regular through-hole or trunk-lid
antennas, the problems disappeared completely. It all has to do with
decent grounding.

> could it be as simple as removing the cell antenna from the exterior
> plate(of the radio shack cellular version) and reattaching a 2.4 ghz
> omni?

No. The coupling box of any glass-mount antenna contains a
frequency-sensitive matching circuit. A circuit designed for cellphone
frequencies will not work with WiFi freqs.

If you need a mobile WiFi antenna, and you don't want to drill
holes, use a magnetic mount.

Happy tweaking.

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

467. Re: glass-mount omnidirectional antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 06:33:28 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1e2f98178fe67710989778@192.168.42.131>
Source record: 14467

In article <1136966235.241155.285760@z14g2000cwz.googlegroups.com>,
kevincw01@gmail.com says...

> sorry to have to ask but what is SWR? My guess is sound to [somthing]
> ratio?

Oh dear... Someone didn't pay attention in license class...

SWR = Standing Wave Ratio. Put simply, it has to do with how good
of a load the antenna presents to the transmitter, and how efficiently
it will couple the transmitter's energy to the atmosphere.

It needs to be as close to 1:1 as possible. If you're using a
wattmeter to measure things, you want to see as low as possible a
reading in the 'reflected' mode and as high as possible in the
'forward' mode.

Here are some more details.

http://www.hamquick.com/tutorial_index.php?id=20

Happy tweaking.

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

468. Re: glass-mount omnidirectional antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 06:43:26 UTC
From: kevincw01 <kevincw01@gmail.com>
Message-ID: <1137048206.279177.75590@g43g2000cwa.googlegroups.com>
Source record: 14468

i have an excused, i dont have a license :)

469. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 07:23:22 UTC
From: Mike Young <boat042-spam@yahoo.com>
Message-ID: <Ktnxf.160$or4.60@newssvr12.news.prodigy.com>
Source record: 14469
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"Rich Grise" <richgrise@example.net> wrote in message
news:pan.2006.01.11.22.02.24.894998@example.net...
> On Wed, 11 Jan 2006 16:30:17 +0000, Mike Young wrote:
>
>> "Rich Grise, but drunk" <yahright@example.net> wrote in message
>> news:pan.2006.01.09.22.31.32.308051@example.net...
>>> Get a piece of baling wire, and tie two garbage cans together, one on
>>> either side of the alleyway, with the wire about 18" (1/2M) off the
>>> ground.
>>>
>>> That should slow the little bastards down! >:->
>>
>> Yeah, it would. You should see what pranks like that do to motorcyclists.
>
> But, on your motorcycle, you wouldn't go racing down an alley like that.
> At least I know _I_ wouldn't! I drive kinda like this guy:
> http://www.abiengr.com/~sysop/images/Safe-Car.gif ;-)

Even if I did, the prescribed penalties amount to a few dollars, not skin grafts, limbs, and brain tissue. Fun is fun, and talk is talk. But let's not forget that life isn't a cartoon peopled with faceless stunt doubles.

470. Re: glass-mount omnidirectional antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 07:41:12 UTC
From: budgie <me@privacy.net>
Message-ID: <2t1cs1p0jivuq8m2tist3sfhpsfokcl7nk@4ax.com>
Source record: 14470

On Wed, 11 Jan 2006 22:33:28 -0800, Dr. Anton T. Squeegee
<SpammersAreVermin@dev.null> wrote:

>In article <1136966235.241155.285760@z14g2000cwz.googlegroups.com>,
>kevincw01@gmail.com says...
>
>> sorry to have to ask but what is SWR? My guess is sound to [somthing]
>> ratio?
>
> Oh dear... Someone didn't pay attention in license class...
>
> SWR = Standing Wave Ratio. Put simply, it has to do with how good
>of a load the antenna presents to the transmitter, and how efficiently
>it will couple the transmitter's energy to the atmosphere.

Nothing to do with coupling the Tx energy to the "atmosphere". Terminating the
line in a resistor of the line's charactertistic impedance will present a nice
SWR and radiate very little.

471. Re: Dual jfet

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 08:32:35 UTC
From: Martyn <martyn.preston@pharm.ox.ac.uk>
Message-ID: <dq5476$1gh$1@news.ox.ac.uk>
Source record: 14471

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:11s84kphlachbc4@corp.supernews.com...
> If you match both Idss and Vp, they'll have the same Gm at all currents --
> in theory.
>
> Roy Lewallen, W7EL
>
> Steve Nosko wrote:
>> Depends on the particular application, but this sounds reasonable.
>> However,
>> rather than IDss, I'd shoot for what ever bias current they are operated
>> at,
>> though IDss may work,
>> 73, K,9.D;C'I
>>
>>
>> "Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
>> news:S0Bwf.21079$__4.19198@bignews1.bellsouth.net...
>>
>>>I'm building a circuit that calls for a dual monolithic
>>>jfet. Can I use two discrete jfets that I have matched
>>>for IDSS in the circuit? They are in TO92 plastic
>>>cases, I can glue the two in contact with each other
>>>so they end up at the same temperature.
>>
>> i have u401 and e402 dual fets, new but unused.
any use to you?

martyn G0THY

472. Re: Dual jfet

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 08:33:18 UTC
From: Martyn <martyn.preston@pharm.ox.ac.uk>
Message-ID: <dq548g$1gj$1@news.ox.ac.uk>
Source record: 14472

```
"Martyn" <martyn.preston@pharm.ox.ac.uk> wrote in message
news:dq5476$1gh$1@news.ox.ac.uk...
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:11s84kphlachbc4@corp.supernews.com...
>> If you match both Idss and Vp, they'll have the same Gm at all
>> currents -- in theory.
>>
>> Roy Lewallen, W7EL
>>
>> Steve Nosko wrote:
>>> Depends on the particular application, but this sounds reasonable.
>>> However,
>>> rather than IDss, I'd shoot for what ever bias current they are operated
>>> at,
>>> though IDss may work,
>>> 73, K,9.D;C'I
>>>
>>>
>>> "Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
>>> news:S0Bwf.21079$__4.19198@bignews1.bellsouth.net...
>>>
>>>>I'm building a circuit that calls for a dual monolithic
>>>>jfet. Can I use two discrete jfets that I have matched
>>>>for IDSS in the circuit? They are in TO92 plastic
>>>>cases, I can glue the two in contact with each other
>>>>so they end up at the same temperature.
>>>
>>> i have u401 and e402 dual fets, new but unused.
> any use to you?
>
> martyn G0THY
>
or even Old, but unused. oops
```

473. Re: Identifying a mystery diode

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 08:52:51 UTC
From: Paul VK3DIP <pmcmahon@telstra.com>
Message-ID: <DNoxf.214319$V7.134114@news-server.bigpond.net.au>
Source record: 14473

Ok,
Both Roy and John A, have effectively suggested series HC Diodes or Low C Varicaps.
John A has found some data for an older Motorola HC diode the MBD502 that shows figures for Vf and VBr that are roughly similar in a roughly similar package. Roy also suggests the possibility of a low capacitance varicap, I suppose the way to tell would be to measure the capacitance verses reverse voltage characteristic. If it was something like a MBD502 then the capacitance would be pretty much constant at a low value, if it is a varicap it could also have a low ish value but should be varying a bit. Any ideas on a simple way to do this, I assume my classic multimeter cap range wouldn't like a DC voltage and a diode across it, and the other simple way I can think of of known L and a GDO seems a bit messy to measure possibly sub 1pf values?

By the way just in case anyone else is interested the place I got these from still says on their web site that they have some 82000 more which they are selling for $AUS0.0055 each for 1000 minimum which comes to AUS$5.50 for the 1000 see item 31118 at www.rockby.com.au .

Paul VK3DIP

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:11sbhropp35fb24@corp.supernews.com...
>I doubt that it's two series zeners, since it's no trick to make a single
>zener with that breakdown voltage.
>
> The only application I know of for series connected diodes with that sort
> of breakdown voltage is for high dynamic range mixers. But the pairs I've
> seen in a single package have a third pin at the junction so you can also
> use them for other applications.
>
> I wonder if it might be a low-C varactor. The very low C ones might
> possibly consist of two diodes in series -- the manufacturers don't give
> any clues since they don't publish any data on the forward bias
> characteristics. The breakdown voltage of low C varactors is in that
> ballpark, and the packaging is consistent with that possibility.
>
> Roy Lewallen, W7EL
>

474. Increase lelectivity by a Q multiplier

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 09:46:04 UTC
From: SOMMERGIBILE <mym@iltonobody.it.invalid>
Message-ID: <43c62622$0$334$5fc30a8@news.tiscali.it>
Source record: 14474
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

http://web.tiscali.it/am2zy/

475. Re: glass-mount omnidirectional antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 12:28:13 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <bYrxf.123$1M3.9@fe06.lga>
Source record: 14475

"Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null> wrote in message news:MPG.1e2f97298eefc47f989777@192.168.42.131...

> If you're serious about decent peformance, stay away from glass
> mount antennas for anything other than receive-only. They're worse than
> useless for transmitting.

I think you better stick to the paintings. Anecdotal evidence is worse than no evidence. Just because one manufacturer's antenna was junk doesn't mean they all are. There does seem to be considerable variability in glass mount antennas, though. Some people report good results, others horrible, and little in the middle. Still, at 2.4G I'd personally be a bit suspicious of glass mount.

However, OP has another problem. Nobody has mentioned feedline loss. The wire carrying the signal to the antenna, even with a good SWR, can be a real source of loss, especially at 2.4G. Cable which has a low loss at that frequency is available, but it is expensive and hard to get. As someone else has suggested, it may be better just to keep the antenna in the vehicle.

I would also caution OP, presuming he is in the U.S., there are pretty significant limitations to what he can do legally with WiFi. Besides power limitations, there are a number of other limitations designed to protect other users of that spectrum (including amateurs). WiFi is a tertiary user of that spectrum, and you are REQUIRED not to interfere with the other users. You are also required to accept interference from the primary and secondary users.

Now the odds that you will be called on interference either way are pretty small, but recognize that in general modifications, even something as simple as an external antenna, are disallowed by the regulations.

..

476. Re: Zener Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 14:49:20 UTC
From: kensmith@green.rahul.net
Message-ID: <dq5q9g$2ar$2@blue.rahul.net>
Source record: 14476
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <h0mxf.1698$Hd4.622@newsread1.news.pas.earthlink.net>,
Robert Baer <robertbaer@earthlink.net> wrote:
[...]
> Wouldn't a zener running in (or near) the (easily seen on curve
>tracer) negative resistance mode have lots of noise?

There's noise and then there's noise. Any signal we don't want we call
noise. A noise source for instumentation needs to have a flat spectrum.
The noise on a zener is a good example of the former and poor example of
the latter.

--
--
kensmith@rahul.net forging knowledge

477. Re: Zener Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 15:04:50 UTC
From: Phil Hobbs <pcdh@SpamMeSenseless.pergamos.net>
Message-ID: <43C67012.7040508@SpamMeSenseless.pergamos.net>
Source record: 14477
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John Larkin wrote:
> On Wed, 11 Jan 2006 14:10:32 -0500, Phil Hobbs
> <pcdh@SpamMeSenseless.pergamos.net> wrote:
>
>
>>John Larkin wrote:
>>
>>>On Wed, 11 Jan 2006 10:08:19 -0800, "RST Engineering"
>>><jim@rstengineering.com> wrote:
>>
>>>A hot resistor.
>>>
>>>How about a thermistor or a lamp filament that was 50 ohms at some
>>>high temperature. You could heat it with DC, sense its
>>>resistance/temp, and let it make noise, all in a single part.
>>>
>>>Old vintage noise figure meters used gas tubes. And I think there was
>>>a pencil tube that mounted in a waveguide and made shot noise.
>>>
>>>And, of course, the old photomultiplier trick.
>>
>>I still like the flashlight/photodiode trick. You can get a really good
>>calibration just from the dc, and can calibrate the frequency response
>>with a spark plug.
>>
>>Cheers,
>>
>>Phil Hobbs
>
>
>
> What's the light-flash waveform look like from a spark plug? What do
> you drive it with?
>
> Don't you have gobs of femtosecond lasers around your place?
>
> John
>

You use one of the circular-gap plugs, run it to a HV supply via a 10M
resistor, and just discharge the capacitance of the plug--you get a nice
irregular relaxation oscillation. It isn't the absolute most beautiful
pulse, but (a) it's easy to shield so you get rid of the pickup, (b)

it's surprisingly bright, and (c) the rising edge is way under 1 ns, which should be fine for the VHF to low UHF range. I might stick one on my sampling scope sometime and find out more about its actual performance, but this is a pretty common trick.

There are femtosecond lasers around here--my fastest one is about 20 ps, but it's continuously tunable from 420 nm to 10 microns, when it's working.

Cheers,

Phil Hobbs

478. Re: Zener Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 15:44:35 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dq5th30kvr@drn.newsguy.com>
Source record: 14479
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John Larkin wrote...
>
> Winfield Hill wrote:
>
>> Jim Thompson wrote...
>>>
>>> I watched the money-making portable test division in Phoenix
>>> get trashed by the shit-heads in Massachusetts... now you know
>>> _part_ of the source of my animosity toward Massa2shits ;-)
>>
>> That's an amazing extension. Plenty of healthy Massachusetts
>> companies have been sucked dry by their out-of-state owners.
>> Obviously the ability to mis-manage a company from a distance
>> is not notably a Massachusetts sin, unless you're obsessed with
>> the Harvard Business School's modest influence on the issue.
>
> It is sadly true that many of the old-line Rt 128 companies are
> gone... DEC, Data General, GR, Sensitive Instruments, Clevite,
> Transitron, probably others. Have others popped up to take their
> place? Analog Devices, for sure.

We have scads of large wealthy "newer" high-tech companies
headquartered here, that you may not often hear of, like
Thermo Electron, Bruker, Summit Technology, EMC, etc., and
others you do know, with a substantial presence, like Agilent.

Many software and Internet companies are headquartered in MA,
like Peoplesoft, Novell, etc., and many others have a large
presence, like Sun, Red Hat, IBM, Microsoft, etc.

We all know scores of top-tier biotech companies with their
headquarters in MA, who have massive high-tech employment here.

--
Thanks,
- Win

479. Re: Zener Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 16:04:15 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrndscvfv.1hp1.bit-bucket@shell.config.com>
Source record: 14478
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

```
On Wed, 11 Jan 2006 19:20:09 -0800, John Larkin wrote:
>
> It is sadly true that many of the old-line Rt 128 companies are
> gone... DEC, Data General, GR, Sensitive Instruments, Clevite,
> Transitron, probably others.

> Have others popped up to take their place?

Why sure. Can you red Chinese tech manuals?
```

480. JFET for dip meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 16:22:36 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <dq5voe02m5j@enews4.newsguy.com>
Source record: 14480

Ok, so I'm lazy.

Does anyone know of an appropriate JFET for a VHF/UHF dip meter? I could spend some time prowling through data sheets, but if anyone knows of a readily available one I'd be appreciative. The usual MPF102 clones don't have high enough frequency capability.

Thanks in advance,

73, Bill W6WRT

481. Re: JFET for dip meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 17:11:03 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1137085863.257868.189750@g49g2000cwa.googlegroups.com>
Source record: 14481

Vishay/Telefunken makes several UHF MOSFETs:

http://www.vishay.com/transistors-rf-af/dual-gate-si-mosfet/

73, Leon

482. Re: Inexpensive Digital Strip Chart Recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 17:45:51 UTC
From: robertharvey@my-deja.com
Message-ID: <1137087951.300162.137060@g14g2000cwa.googlegroups.com>
Source record: 14483
Cross-posted to:
sci.electronics.equipment,comp.arch.embedded,comp.sys.palmtops,sci.electronics.design,rec.radio.amateur.homebrew

Too_Many_Tools wrote:
> I am looking for an inexpensive digital strip chart recorder.

I've used http://xoscope.sourceforge.net/ with a PCI audio card and got good results, but never quite come across a chart recorder.

483. Re: JFET for dip meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 17:55:09 UTC
From: johan aeq <pe1aeq@amsat.og>
Message-ID: <9d504$43c69a3f$52ad139c$14023@news.versatel.nl>
Source record: 14484

try a J310.

"Leon" <leon_heller@hotmail.com> schreef in bericht
news:1137085863.257868.189750@g49g2000cwa.googlegroups.com...
> Vishay/Telefunken makes several UHF MOSFETs:
>
> http://www.vishay.com/transistors-rf-af/dual-gate-si-mosfet/
>
> 73, Leon
>

484. Re: LMX2322?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 18:19:23 UTC
From: JE <JE@nowhere.com>
Message-ID: <86ce3$43c69dab$d135c4af$14549@MDI.CA>
Source record: 14485

What is the cheapest AVR that will work for me?
And is there a programmer you can build or just modify the pic ones?

I already know C so should be easy learning.

JE

485. Re: Zener Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 18:46:48 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrndsd90o.200d.bit-bucket@shell.config.com>
Source record: 14486
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On 12 Jan 2006 16:04:15 GMT, Allodoxaphobia wrote:
> On Wed, 11 Jan 2006 19:20:09 -0800, John Larkin wrote:
>>
>> It is sadly true that many of the old-line Rt 128 companies are
>> gone... DEC, Data General, GR, Sensitive Instruments, Clevite,
>> Transitron, probably others.
>
>> Have others popped up to take their place?
>
> Why sure. Can you red Chinese tech manuals?

Funny how my Made-In-China keyboard with its @#%^$}# sticky "a" key
laid that out. :-\

486. Re: Zener Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 19:05:18 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <vp9ds1t3ma41mv93g3qjkumfuqfr2llvss@4ax.com>
Source record: 14487
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On 12 Jan 2006 07:44:35 -0800, Winfield Hill
<Winfield_member@newsguy.com> wrote:

> We have scads of large wealthy "newer" high-tech companies
> headquartered here, that you may not often hear of, like
> Thermo Electron, Bruker, Summit Technology, EMC, etc., and
> others you do know, with a substantial presence, like Agilent.
>

Ah, Bruker, my arch-enemy. I make the gradient drivers and temperature
controllers for Varian. I've also had bad experiences with Bruker AXS
in Madison. They both seem to be very NIH and very PhD oriented, so
they're hard to deal with and especially sell to.

John

487. Re: LMX2322?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 20:59:03 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e3062e0f489a16f989725@news-central.giganews.com>
Source record: 14488

In article <86ce3$43c69dab$d135c4af$14549@MDI.CA>, JE@nowhere.com
says...
> What is the cheapest AVR that will work for me?
> And is there a programmer you can build or just modify the pic ones?
>
> I already know C so should be easy learning.
>
> JE
>
>

I'd probably look at the specs of the lower-end chips that support AVR-GCC. Some of them (ATtiny11L) don't even have any on-chip RAM, which makes me wonder how the stack works.

The difference in cost between the low and high end of the ATtiny range is only about $2.00, so I wouldn't waste time trying to make the cheaper parts work unless I were going to build 1000+ of whatever I was working on. The ATtiny45V sounds good, and DigiKey has 'em in stock (ATTINY45V-10PI-ND).

I know a lot of people use the AVRDude programmer (http://www.bsdhome.com/avrdude/), which apparently now works under both *nix and Win32. I use an STK-500 programmer myself, but those are fairly pricy even on eBay. Lots of options out there.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam
---

488. Re: Ceramic filters for FM....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-12 22:29:51 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dq6l8v$g46$1@engnntp2.cig.mot.com>
Source record: 14489

Sam,

This is what Engineers must struggle through. Looking at the data sheets I only see size differences in the different types. The electrical specs appear to be the same.

When filtering FM you must consider the bandwidth of the transmitted signal which includes the sidebands. Both of your received signals AND the adjacent channel transmitter SIDEBANDS. There needs to be space between the carriers to prevent interference and sidebands from one Tx shouldn't be within the next receiver's bandwidth. Not having my text with me I hope I analyze your numbers correctly. Just remember that FM is wider than just the modulation frequency (according to the Bessel functions).

Narrow band FM (B <1) is narrow, but it does have some bandwidth and it is twice the modulation frequency for sure and some at three time.

If I do the math correctly, your modulation index is about 2.5 / 3 or .833 (assuming 300-3,000 audio). I always have to think carefully how this ratio goes.

Using:

http://www.rfcafe.com/references/electrical/bessel.htm

This puts us to the left of the B=1 (on the horizontal axis on the bottom) and I see that the first and second sidebands (J1-black & J2-green dotted) are significant, but the third (J3-red dotted) is pretty small, so it may be attenuated in your filter with little resulting distortion. HOWEVER, this sideband IS PRESENT in yours and the other transmitters. This says that the second transmitter sidebands go out to +/- 6Kc AND with the third at +/- 9Kc being pretty small.

Now, The sidebands from the other stations do the same (assuming they are modulating correctly). This means that the one above you has sideband energy at its Fc-6kc (second sideband) and some at Fc-9kc (third sideband). Since its carrier is 12.5 kc. above you this puts them at 6.5kc. and 3.5kc. ABOVE your carrier frequency!

So, with the filter, you're trying to get rid of a component that is 6.5 Kc. above your carrier, that is the larger one, and one is 3.5kc. above your carrier, that is smaller one. (The others are there, but much, much smaller according to the Bessel curves).

The problem here is that you need to RECEIVE sidebands that are 3, 6, and to some extent 9 Kc. above your carrier from the desired stations. There is a conflict here and it is due to carrier spacing that is too close for FM.

You have to look at the filter curves to see which one will provide some attenuation at +/-6.5kc. The trouble is that it must pass +/- 6 Kc! You'll also never get rid of the component at 3.5Kc and still receive your desired second sideband at 6Kc.

The other unknown here is the location s of these systems and the stations that will be using them. If someone is far from and using your system, but close to one of the other systems you mention, those sidebands can be much stronger and cause more "splatter" in the eyes of the receiver.

Receivers, at least the ones I have been connected with the design of, take this into account and use filters that have all these considerations included in their design and try to keep the bandwidth wide enough to receive what it needs to receive and narrow enough • and with steep enough skirts -- to attenuate adjacent and alternate channel sidebands as much as feasible given economic constraints. There is, however a limit to how close you can put carriers and not get interference *REGARDLESS* of the shape of the filter at ANY expense.. I think you are past that limit.

I hope you understand "Kc." I 'm from a time long ago (:-)

I find that Hams don't understand the spacing of 2 meter systems and expect to put them on adjacent channels. You can (should) only do this when the systems are far enough apart so this sideband energy is low enough to keep this kind of interference below audible levels.

73, Steve, K,9.D;C'I

"Samuel Hunt" <shunt010@hotmail.com> wrote in message news:dq424udeb1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com...

> Daft question time again.
>
> I've got some ceramic filters in some radios that are too wide.
>
> First:
> I've got a repeater with a 455khz IF filter that's the 3 pin type, marked
> "55F" and "CM". It's in a FX5000 reciever.
>
> Second:
> I've got some mobiles with the larger filters, marked LT455FW.
>
>
> I want to put these all onto a nice and tight filter. The problem is that
> I'm trying to use 145.625, but there's two repeaters on 145.6125 and
> 145.6375 locally, so a frequency shift won't do anything. Deviation is
> 2.5khz peak
>
> 1: What sort of bandwidth do people recommend? I have been told that 9khz
> would work a treat, but I don't know if I should go narrower or wider?
>
> 2: I've found this site: http://www.euroquartz.co.uk/ceramic-filt.htm
>

> What are all the filter types, what do they mean (like the LTW33, LTS,
etc,
> etc), and which models would be suitable substitutes?
> Look forward to people's responses, because this is confusing me now!
> Sam, M1FJB

489. SMT 40m + 20m qrp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 01:06:02 UTC
From: Mike Young <boat042-spam@yahoo.com>
Message-ID: <_1Dxf.925$PL5.401@newssvr11.news.prodigy.com>
Source record: 14490

I'm sure this has been beaten to death already, but I missed it. Is there a very small SMT QRP kit or design somewhere, maybe on equal to the NorCal 40 or better? I'm aware of the SMK-1. Am looking for the smallest possible rig with 5W and good RX. Would it be reasonable to repackage, say, the NorCal 40 with all surface mount parts? Certainly someone must have already tried this. What results did you find?

By way of introduction, I am N9XI. My main rig is a K2, an early first run kit from '99. I think I understand the apparent trepidation surrounding SMT, although I believe it's unfounded and not entirely rational. After all this time, the dearth of very small rigs based on the smaller parts is surprising. (Yell if a quick primer on SMT construction will be useful. I reflow boards in a skillet on the kitchen range.)

490. Re: glass-mount omnidirectional antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 02:59:36 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1e30b777dc6a97f198977d@192.168.42.131>
Source record: 14491

In article <1137048206.279177.75590@g43g2000cwa.googlegroups.com>,
kevincw01@gmail.com says...

> i have an excused, i dont have a license :)

Well, hurry up and get one then, silly person!

Quick, now! Run and pick up a copy of the ARRL's "Now You're
Talking!" or I shall have to taunt you again!

Seriously, hamateur radio's a fun hobby, and it gives you an
excuse to learn all kinds of neat things about electronics in general,
and how it applies to radio in particular.

Keep the peace(es).

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

491. Re: glass-mount omnidirectional antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 03:08:07 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1e30b976b2df47d798977e@192.168.42.131>
Source record: 14492

In article <2t1cs1p0jivuq8m2tist3sfhpsfokcl7nk@4ax.com>, me@privacy.net says...

> Nothing to do with coupling the Tx energy to the "atmosphere". Terminating the
> line in a resistor of the line's charactertistic impedance will present a nice
> SWR and radiate very little.

I beg to differ, and I would invite you to think further on this topic.

An antenna is a coupling device. Its purpose is to efficiently "couple" or radiate your signal into another transmission medium (open space, including our atmosphere).

The antenna (effectively an inductor) needs to be resonant at your operating frequency of choice. It seems to me that the density and composition of the transmission medium you're coupling to has an effect on any antenna's resonant frequency.

This, to my understanding, means that an antenna designed for use in open air will not work underwater, nor will, say, a VLF antenna designed for submarine usage work in open air.

If you believe I'm misunderstanding, then please point me to some documentation on the subject, and I will cheerfully STFU.

Keep the peace(es).

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped with surreal ports?"

492. Re: glass-mount omnidirectional antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 03:13:22 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1e30baa8b82325a598977f@192.168.42.131>
Source record: 14493

In article <bYrxf.123$1M3.9@fe06.lga>, xpyttl_NOSPAM@earthling.net
says...

> "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null> wrote in message
> news:MPG.1e2f97298eefc47f989777@192.168.42.131...
>
> > If you're serious about decent peformance, stay away from glass
> > mount antennas for anything other than receive-only. They're worse than
> > useless for transmitting.
>
> I think you better stick to the paintings. Anecdotal evidence is worse than
> no evidence. Just because one manufacturer's antenna was junk doesn't mean

I'm sorry you feel that way.

You know nothing about me, nor my work environment, nor how MANY
undercover cars have had issues with glass mounts.

This didn't just happen on one vehicle. It was on several. And my
own personal experience with glass mounts (yes, I tried using them at
one time myself) was terrible.

The big problem with glass mounts is their lack of a decent ground
plane. They spew RF all over the interior of the vehicle they're being
used on, hence the interference that I and others have experienced.

Perhaps you're the one who had best stick to "painting."

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

493. Re: Dual jfet

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 03:22:42 UTC
From: "wa2mze(spamless)" <"wa2mze(spamless)"@bellsouth.net>
Message-ID: <v%Exf.59577$Lb1.37343@bignews3.bellsouth.net>
Source record: 14494

Martyn wrote:
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:11s84kphlachbc4@corp.supernews.com...
>
>>If you match both Idss and Vp, they'll have the same Gm at all currents --
>>in theory.
>>
>>Roy Lewallen, W7EL
>>
>>Steve Nosko wrote:
>>
>>>Depends on the particular application, but this sounds reasonable.
>>>However,
>>>rather than IDss, I'd shoot for what ever bias current they are operated
>>>at,
>>>though IDss may work,
>>>73, K,9.D;C'I
>>>
>>>
>>>"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
>>>news:S0Bwf.21079$__4.19198@bignews1.bellsouth.net...
>>>
>>>
>>>>I'm building a circuit that calls for a dual monolithic
>>>>jfet. Can I use two discrete jfets that I have matched
>>>>for IDSS in the circuit? They are in TO92 plastic
>>>>cases, I can glue the two in contact with each other
>>>>so they end up at the same temperature.
>>>
>>>i have u401 and e402 dual fets, new but unused.
>
> any use to you?
>
> martyn G0THY
>
>
Thnaks for the offer.
The specs on the U401 would work out fine for my application.
What would you want for a pair of them?

Ken, WA2MZE

494. Re: glass-mount omnidirectional antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 03:56:49 UTC
From: nothermark <trash@gnomex.cotse.net>
Message-ID: <1r8es1h939ifn43i1ehvlnppoaefs5ghkl@4ax.com>
Source record: 14495

On Thu, 12 Jan 2006 19:13:22 -0800, Dr. Anton T. Squeegee
<SpammersAreVermin@dev.null> wrote:

>In article <bYrxf.123$1M3.9@fe06.lga>, xpyttl_NOSPAM@earthling.net
>says...
>
>> "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null> wrote in message
>> news:MPG.1e2f97298eefc47f989777@192.168.42.131...
>>
>> > If you're serious about decent peformance, stay away from glass
>> > mount antennas for anything other than receive-only. They're worse than
>> > useless for transmitting.
>>
>> I think you better stick to the paintings. Anecdotal evidence is worse than
>> no evidence. Just because one manufacturer's antenna was junk doesn't mean
>
> I'm sorry you feel that way.
>
> You know nothing about me, nor my work environment, nor how MANY
>undercover cars have had issues with glass mounts.
>
> This didn't just happen on one vehicle. It was on several. And my
>own personal experience with glass mounts (yes, I tried using them at
>one time myself) was terrible.
>
> The big problem with glass mounts is their lack of a decent ground
>plane. They spew RF all over the interior of the vehicle they're being
>used on, hence the interference that I and others have experienced.
>
> Perhaps you're the one who had best stick to "painting."

Just curious. Do you recall how much the windows were tinted? I
suspect one of the many reasons for problems is the tinting medium
in/on the glass.

495. Re: glass-mount omnidirectional antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 05:43:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11sefgdtl2gcpc1@corp.supernews.com>
Source record: 14496

Dr. Anton T. Squeegee wrote:
> . . .
> An antenna is a coupling device. Its purpose is to efficiently
> "couple" or radiate your signal into another transmission medium (open
> space, including our atmosphere).

Not really. The power going into the antenna isn't a "signal", but the power leaving it is. An antenna is a transducer -- it changes power in the form of electrical voltages and currents into electromagnetic E and H fields.

> The antenna (effectively an inductor) needs to be resonant at your
> operating frequency of choice.

That's completely untrue. There's nothing magical about resonance, and a resonant antenna radiates no better or worse than a non-resonant one.

As for being an inductor, the impedance at the feedpoint of a small loop antenna is inductive, but an antenna in general certainly aren't "effectively an inductor".

It seems to me that the density and
> composition of the transmission medium you're coupling to has an effect
> on any antenna's resonant frequency.

The conductivity, permittivity, and permeability of the medium in the immediate field of the antenna have a profound effect on the antenna's resonant frequency. Density in and of itself doesn't.

> This, to my understanding, means that an antenna designed for use
> in open air will not work underwater, nor will, say, a VLF antenna
> designed for submarine usage work in open air.

It certainly won't work the same as it does in the very different medium.

> If you believe I'm misunderstanding, then please point me to some
> documentation on the subject, and I will cheerfully STFU.

Any basic antenna text will do. Kraus's _Antennas_ is a good starting point.

Roy Lewallen, W7EL

496. Re: glass-mount omnidirectional antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 08:17:05 UTC
From: budgie <me@privacy.net>
Message-ID: <c6oes1l0esuej640cmr2gojvtqh4cr0pd7@4ax.com>
Source record: 14497

On Thu, 12 Jan 2006 19:08:07 -0800, Dr. Anton T. Squeegee
<SpammersAreVermin@dev.null> wrote:

>In article <2t1cs1p0jivuq8m2tist3sfhpsfokcl7nk@4ax.com>, me@privacy.net
>says...
>
>> Nothing to do with coupling the Tx energy to the "atmosphere". Terminating the
>> line in a resistor of the line's charactertistic impedance will present a nice
>> SWR and radiate very little.
>
> I beg to differ, and I would invite you to think further on this
>topic.
>
> An antenna is a coupling device. Its purpose is to efficiently
>"couple" or radiate your signal into another transmission medium (open
>space, including our atmosphere).
>
> The antenna (effectively an inductor) needs to be resonant at your
>operating frequency of choice. It seems to me that the density and
>composition of the transmission medium you're coupling to has an effect
>on any antenna's resonant frequency.
>
> This, to my understanding, means that an antenna designed for use
>in open air will not work underwater, nor will, say, a VLF antenna
>designed for submarine usage work in open air.
>
> If you believe I'm misunderstanding, then please point me to some
>documentation on the subject, and I will cheerfully STFU.

Pity you snipped your original statement:

"SWR = Standing Wave Ratio. Put simply, it has to do with how good
of a load the antenna presents to the transmitter, and how efficiently
it will couple the transmitter's energy to the atmosphere."

Roy has kindly addressed the antenna aspects. But because you snipped, the
essence of my comment was cut adrift. A nice 50R resistor will not "couple the
transmitter's energy to the atmosphere" at all efficiently, but should certainly
provide a rather good match to your 50 ohm line. You should not attempt to
equate radiation efficiency with line matching.

I suggest you need to think further, or stick to plumbing.

497. Re: Dual jfet

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 08:31:29 UTC
From: Martyn <martyn.preston@pharm.ox.ac.uk>
Message-ID: <dq7oh8$rn8$1@news.ox.ac.uk>
Source record: 14398

```
"wa2mze(spamless)" <"wa2mze(spamless)"@bellsouth.net> wrote in message
news:v%Exf.59577$Lb1.37343@bignews3.bellsouth.net...
> Martyn wrote:
>> "Roy Lewallen" <w7el@eznec.com> wrote in message
>> news:11s84kphlachbc4@corp.supernews.com...
>>
>>>If you match both Idss and Vp, they'll have the same Gm at all
>>>currents --
>>>in theory.
>>>
>>>Roy Lewallen, W7EL
>>>
>>>Steve Nosko wrote:
>>>
>>>>Depends on the particular application, but this sounds reasonable.
>>>>However,
>>>>rather than IDss, I'd shoot for what ever bias current they are operated
>>>>at,
>>>>though IDss may work,
>>>>73, K,9.D;C'I
>>>>
>>>>
>>>>"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
>>>>news:S0Bwf.21079$__4.19198@bignews1.bellsouth.net...
>>>>
>>>>
>>>>>I'm building a circuit that calls for a dual monolithic
>>>>>jfet. Can I use two discrete jfets that I have matched
>>>>>for IDSS in the circuit? They are in TO92 plastic
>>>>>cases, I can glue the two in contact with each other
>>>>>so they end up at the same temperature.
>>>>
>>>>i have u401 and e402 dual fets, new but unused.
>>
>> any use to you?
>>
>> martyn G0THY
>>
>>
> Thnaks for the offer.
> The specs on the U401 would work out fine for my application.
> What would you want for a pair of them?
>
> Ken, WA2MZE
```

been to QRZ, they are on the way to you.

martyn G0THY

498. Re: Ceramic filters for FM....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 10:42:47 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <HuLxf.21037$ya4.8585@trnddc03>
Source record: 14399

Carson's Rule:
The required filter bandwidth for accurate recovery of an FM signal is (2*deltaF) + (2*Fmod).

Assuming from the requestor's previous that deltaF = 2.5 khz, and assuming that the highest audio frequency is 2.5 hHz, then the required filter bandwidth is 7.5 kHz. Whether this filter will reject the adjacent channel is another matter.

Joe
W3JDR

"Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message news:dq6l8v$g46$1@engnntp2.cig.mot.com...
> Sam,
>
>
>
> This is what Engineers must struggle through. Looking at the data
> sheets I only see size differences in the different types. The electrical
> specs appear to be the same.
>
>
>
> When filtering FM you must consider the bandwidth of the transmitted
> signal
> which includes the sidebands. Both of your received signals AND the
> adjacent channel transmitter SIDEBANDS. There needs to be space between
> the
> carriers to prevent interference and sidebands from one Tx shouldn't be
> within the next receiver's bandwidth. Not having my text with me I hope
> I
> analyze your numbers correctly. Just remember that FM is wider than just
> the modulation frequency (according to the Bessel functions).
>
> Narrow band FM (B <1) is narrow, but it does have some bandwidth and it is
> twice the modulation frequency for sure and some at three time.
>
>
>
> If I do the math correctly, your modulation index is about 2.5 / 3 or .833
> (assuming 300-3,000 audio). I always have to think carefully how this
> ratio
> goes.

>
> Using:
>
> http://www.rfcafe.com/references/electrical/bessel.htm
>
>
>
> This puts us to the left of the B=1 (on the horizontal axis on the bottom)
> and I see that the first and second sidebands (J1-black & J2-green dotted)
> are significant, but the third (J3-red dotted) is pretty small, so it may
> be
> attenuated in your filter with little resulting distortion. HOWEVER, this
> sideband IS PRESENT in yours and the other transmitters. This says that
> the
> second transmitter sidebands go out to +/- 6Kc AND with the third at +/-
> 9Kc
> being pretty small.
>
>
>
> Now, The sidebands from the other stations do the same (assuming they are
> modulating correctly). This means that the one above you has sideband
> energy at its Fc-6kc (second sideband) and some at Fc-9kc (third
> sideband).
> Since its carrier is 12.5 kc. above you this puts them at 6.5kc. and
> 3.5kc.
> ABOVE your carrier frequency!
>
>
>
> So, with the filter, you're trying to get rid of a component that is 6.5
> Kc.
> above your carrier, that is the larger one, and one is 3.5kc. above your
> carrier, that is smaller one. (The others are there, but much, much
> smaller
> according to the Bessel curves).
>
> The problem here is that you need to RECEIVE sidebands that are 3, 6, and
> to
> some extent 9 Kc. above your carrier from the desired stations. There
> is
> a conflict here and it is due to carrier spacing that is too close for FM.
>
> You have to look at the filter curves to see which one will provide some
> attenuation at +/-6.5kc. The trouble is that it must pass +/- 6 Kc!
> You'll also never get rid of the component at 3.5Kc and still receive your
> desired second sideband at 6Kc.
>
>

>
> The other unknown here is the location s of these systems and the stations
> that will be using them. If someone is far from and using your system,
> but
> close to one of the other systems you mention, those sidebands can be much
> stronger and cause more "splatter" in the eyes of the receiver.
>
>
>
> Receivers, at least the ones I have been connected with the design of,
> take
> this into account and use filters that have all these considerations
> included in their design and try to keep the bandwidth wide enough to
> receive what it needs to receive and narrow enough and with steep enough
> skirts -- to attenuate adjacent and alternate channel sidebands as much
> as
> feasible given economic constraints. There is, however a limit to how
> close
> you can put carriers and not get interference *REGARDLESS* of the shape of
> the filter at ANY expense.. I think you are past that limit.
>
>
>
> I hope you understand "Kc." I 'm from a time long ago (:-)
>
>
>
> I find that Hams don't understand the spacing of 2 meter systems and
> expect
> to put them on adjacent channels. You can (should) only do this when the
> systems are far enough apart so this sideband energy is low enough to keep
> this kind of interference below audible levels.
>
>
>
> 73, Steve, K,9.D;C'I
>
>
>
>
>
>
>
>
> "Samuel Hunt" <shunt010@hotmail.com> wrote in message
> news:dq424udeb1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com...
>
>> Daft question time again.
>>
>> I've got some ceramic filters in some radios that are too wide.

>>
>> First:
>> I've got a repeater with a 455khz IF filter that's the 3 pin type, marked
>> "55F" and "CM". It's in a FX5000 reciever.
>>
>> Second:
>> I've got some mobiles with the larger filters, marked LT455FW.
>>
>>
>> I want to put these all onto a nice and tight filter. The problem is that
>> I'm trying to use 145.625, but there's two repeaters on 145.6125 and
>> 145.6375 locally, so a frequency shift won't do anything. Deviation is
>> 2.5khz peak
>>
>> 1: What sort of bandwidth do people recommend? I have been told that 9khz
>> would work a treat, but I don't know if I should go narrower or wider?
>>
>> 2: I've found this site: http://www.euroquartz.co.uk/ceramic-filt.htm
>>
>> What are all the filter types, what do they mean (like the LTW33, LTS,
> etc,
>> etc), and which models would be suitable substitutes?
>> Look forward to people's responses, because this is confusing me now!
>> Sam, M1FJB
>
>
>

499. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 11:49:26 UTC
From: Kev <kevcat@optunet.com.au>
Message-ID: <43c793c4$0$2255$afc38c87@news.optusnet.com.au>
Source record: 14400
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

Gary Smith wrote:
> Glenn that would be great if you could possibly scan the docs and email
> them, really appreciate that, Thanks.
>
> Gary
>
>
>
>>I've got one - defective - I think I popped the switching diodes by
>>accidentally transmitting thru it. I know I've got the dox 'somewhere'
>>- just gotta dig 'em out.
>>
>>From memory, the four pin cable from the main unit sends a rotating DC
>>bias to each of the switching diodes in the box. There's a diode at the
>>antenna base too, by design. I haven't opened the box yet, but the
>>diode at the antenna base is ITT BA 282 Cathode (bar) to coax
>>shield.
>>
>>If/when I find the dox, I'll get back to you. Let me know how you
>>progress.
>>
>>Glenn ZL2TLD
>
>
>
I am also looking for the same info as I have the same unit that is
almost complete but no manual or anything else about completing it

Kev

500. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 15:05:47 UTC
From: news <yes@optusnet.com.au>
Message-ID: <43c7c19f$0$25697$afc38c87@news.optusnet.com.au>
Source record: 14401
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

http://members.aol.com/homingin/DSEfix.html
improving the dick smith radio direction finder

501. Re: SMT 40m + 20m qrp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 16:16:18 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1137168978.833797.160460@f14g2000cwb.googlegroups.com>
Source record: 14402

Mike:

There have been a few very interesting SMT transceiver kits with limited production runs, including KD1JV's ATS series. Nothing much about them on his website now.

http://kd1jv.qrpradio.com/

There's quite a bit of info on the ATS-3 at http://www.ae5x.com/ats3.html .

Another recent one is the NorCal 2030 (supposed to have a pretty good RX), see

http://www.norcalqrp.org/nc2030.htm

These limited edition kits area usually announced on the QRP-L email reflector.

The MFJ "QRP-Cub" transceivers are partially SMT and have 2 W output. But the kit version has all the SMT parts already mounted so you miss out on the kitchen fun !

73,
Steve VE3SMA

502. Re: SMT 40m + 20m qrp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 17:31:44 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <8oydnaFOoJlsflreRVn-iA@web-ster.com>
Source record: 14403

Mike Young wrote:

> I'm sure this has been beaten to death already, but I missed it. Is
> there a very small SMT QRP kit or design somewhere, maybe on equal to
> the NorCal 40 or better? I'm aware of the SMK-1. Am looking for the
> smallest possible rig with 5W and good RX. Would it be reasonable to
> repackage, say, the NorCal 40 with all surface mount parts? Certainly
> someone must have already tried this. What results did you find?
>
> By way of introduction, I am N9XI. My main rig is a K2, an early first
> run kit from '99. I think I understand the apparent trepidation
> surrounding SMT, although I believe it's unfounded and not entirely
> rational. After all this time, the dearth of very small rigs based on
> the smaller parts is surprising. (Yell if a quick primer on SMT
> construction will be useful. I reflow boards in a skillet on the kitchen
> range.)
>
I am aware of toaster oven reflow, but I haven't seen skillet reflow.
If you have the time and inclination to prepare a little web site --
particularly if you could do pictures -- that would be cool.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

503. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 17:32:52 UTC
From: JoeSP <olegp@telus.net>
Message-ID: <8vRxf.94010$6K2.32354@edtnps90>
Source record: 14404
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

"BobG" <bobgardner@aol.com> wrote in message
news:1136343764.677404.25190@g47g2000cwa.googlegroups.com...
> We had a dozen citrus trees in the back yard till recently (citrus
> canker eradication program... the state cut em all down). I wondered
> about building 'citric acid' electrolye batteries as I picked up
> garbage cans full of oranges and grapfruit.
>

Much cheaper sources of better electrolytes exist. Using free scraps and
substances will produce a theoretical battery much sooner than a practical
one.
I sense that this discussion is being propelled by the desire to get
something for nothing or very cheap. If you do your homework, you may be
able to match the materials available to the desired output, and get
something safe and practical, but I doubt it. I'd be as interested as
anyone to see the results if you're successful.

504. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 17:37:29 UTC
From: JoeSP <olegp@telus.net>
Message-ID: <tzRxf.94012$6K2.45112@edtnps90>
Source record: 14405
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1136516117.111999.263150@o13g2000cwo.googlegroups.com...
> Good question....in the original posting I mention communications
> equipment.
>
> It is assuming that Robinson Crusoe wants to be rescued.
>
> The discussion has demonstrated to me how we tend to underestimate how
> hard it is to provide basic needs to support our technology based life.
>
> Maybe we should enlarge the scope of the problem and allow active power
> generation.
>
> Any ideas as to how to generate power?
>
> TMT
>

Why do you think it was mostly dry cells and dynamos a century ago? Don't
you think they experimented with every metal and electrolyte available
before coming up with the lead-acid battery and the dry cell? If you're
keen to repeat history, have fun.

505. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 17:40:31 UTC
From: JoeSP <olegp@telus.net>
Message-ID: <jCRxf.94013$6K2.41481@edtnps90>
Source record: 14406
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1136570313.368015.312020@g44g2000cwa.googlegroups.com...
> "Robinson 'could'--with nothing more than the battery and some
> wire--transmit radio signals in Morse....
> No accounting for range, of course.
> jak "
>
> True...but this just shows how important the battery really is...and
> that is why I chose to make it the main focus of Crusoe's efforts to
> get attention.
>

If the professor couldn't build a crude radio transmitter with all the other
advanced technology he managed to build, he wasn't a very good professor.

506. For the newly interested - The Weekly FAQ, "What Is Ham Radio?"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 17:45:01 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1137174301.633511.266870@g47g2000cwa.googlegroups.com>
Source record: 14407
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

What is Ham Radio?

(Preface)
It is becoming increasingly difficult to fly the flag for
decency and for civilised behaviour in Radio Hammery. Even
the Usenet newsgroups dedicated to the cause have degenerated
into a hotbed of abusive onslaughts by those who ought to know better.
However, there still exists the fundamental basis on which Ham
Radio is based, and that will never die. This FAQ ("What Is
Ham Radio?") will be regularly published and will not be
shouted or bullied down. It is important that those of a
technical bent, who are the natural seed-corn of Radio Hammery
and who gravitate towards us to be the real novitiate, can
still find us, (and know that we are still here), their fellows.

-----ooooo-----

Please remember that this FAQ is a _POSITIVE EXHORTATION_
to you to exert yourselves to join our fraternity! (If you find
otherwise, then perhaps you are already classing yourself in the
mediocre groups of those who are criticised in the FAQ and from
whom we _MUST_ dissociate? If so - it's never too late for
a re-taxonomisation on your part - there's nothing elitist about
us, and we welcome all those who are prepared to put themselves
out in order to join our ranks!)

-----ooooo-----
(Article)
So,.....What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One such CB type is the so-called "Not-Ham". Otherwise
known as the CBer-Masquerading-As-A-Radio-Ham, this type
had their background in the hobby that is CB Radio and not
in the technical pursuits that lead up to a coveted Ham licence.
Easily recognised by their boasts of the criminal activity of
11 metre SSB operation, one wonders why they don't go back to
the CB Bands if such bands are dearer in their hearts than are the Ham
Bands? No _REAL Radio Hams associate with those who made an
illegal installation of transmitting equipment before being
in possession of an appropriate licence.

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B
licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

507. Re: Building a "Robinson Crusoe" Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 17:46:57 UTC
From: JoeSP <olegp@telus.net>
Message-ID: <IIRxf.94014$6K2.40489@edtnps90>
Source record: 14408
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:Rhdwf.20965$0y2.12905@bignews2.bellsouth.net...
> Too_Many_Tools wrote:
>> Reading the thread on the Voltaic pile in sci.chem.electrochem.battery,
>> I started considering what would one have to do to build a "Robinson
>> Crusoe" battery to power equipment in an emergency.
>>
>> Assuming a battery of 12v and respectable current to power
>> communications equipment, how would you do it?
>>
>> What materials would you use?
>>
>> How would you charge it?
>>
>> I look forward to your contributions.
>>
>> TMT
>>
> Well the history channel just showed a 2000 year old battery
> found in Bhagdad. It had an iron rod negative pole and a copper
> cylinder positive pole, and probably used vinegar as the electrolyte.
> A clay jar housed the unit. What would a battery be used for 2000
> years ago? BION, electroplating gold!

It was probably used by Hammurabi to play jokes on his friends by
electrifying the chairs.

508. please stop the shit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 17:54:49 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1137174889.447147.92530@g44g2000cwa.googlegroups.com>
Source record: 14409
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Orator For Decency wrote:
> What is Ham Radio?
stop cross posting this shit to the mnayly us gruop your english
license system wether flawed or not is not subject the FCC so whing
about it to us is sueless

509. Re: please stop the shit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 18:05:37 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1137175537.489127.19720@g47g2000cwa.googlegroups.com>
Source record: 14410
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Parlais-vous Anglais?

an_old_friend wrote:
> stop cross posting this shit to the mnayly us gruop your english
> license system wether flawed or not is not subject the FCC so whing
> about it to us is sueless

510. Re: please stop the shit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 18:13:49 UTC
From: "Act like a human being and support the hobby....." <scotland_glasgow@yahoo.co.uk>
Message-ID: <1137176029.733372.163490@g44g2000cwa.googlegroups.com>
Source record: 14411
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

This guy cannot help himself ! The constant BULLSHI* he posts is just a pile of nonsense. It must have been that course he attended in the evening at the local school !

511. FA: More air variables added

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 18:32:24 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <YmSxf.253839$qk4.123744@bgtnsc05-news.ops.worldnet.att.net>
Source record: 14412
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Will continue to added a few each or everyother day till I go through all of them. Check back often at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx heytubeguy

512. Re: please stop the shit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 19:19:46 UTC
From: W2AGN <w2agn@nospamw2agn.net>
Message-ID: <43C7FD52.7090202@nospamw2agn.net>
Source record: 14413
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

an_old_friend wrote:
> Orator For Decency wrote:
>
>>What is Ham Radio?
>
> stop cross posting this shit to the mnayly us gruop your english
> license system wether flawed or not is not subject the FCC so whing
> about it to us is sueless
>
Have you considered a spell checker? You are an embarrassment to the
"mnayly us gruop."

513. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 20:26:29 UTC
From: Glenn McAllister <"(callsign)"@orcon.net.nz>
Message-ID: <43C80CF5.2B5C@orcon.net.nz>
Source record: 14414
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

Kev wrote:
>
> Gary Smith wrote:
> > Glenn that would be great if you could possibly scan the docs and email
> > them, really appreciate that, Thanks.
> >
> > Gary
> >
> >
> >
> >>I've got one - defective - I think I popped the switching diodes by
> >>accidentally transmitting thru it. I know I've got the dox 'somewhere'
> >>- just gotta dig 'em out.
> >>
> >>From memory, the four pin cable from the main unit sends a rotating DC
> >>bias to each of the switching diodes in the box. There's a diode at the
> >>antenna base too, by design. I haven't opened the box yet, but the
> >>diode at the antenna base is ITT BA 282 Cathode (bar) to coax
> >>shield.
> >>
> >>If/when I find the dox, I'll get back to you. Let me know how you
> >>progress.
> >>
> >>Glenn ZL2TLD
> >
> >
> >
> I am also looking for the same info as I have the same unit that is
> almost complete but no manual or anything else about completing it
>
> Kev

All those who would like a copy of the dox when I find them, email me
and I'll keep a list.

Glenn ZL2TLD

514. Re: SMT 40m + 20m qrp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 20:27:45 UTC
From: clifto <clifto@clifto.com>
Message-ID: <13fl93-lbq.ln1@remote.clifto.com>
Source record: 14415

Tim Wescott wrote:
> Mike Young wrote:
>> (Yell if a quick primer on SMT
>> construction will be useful. I reflow boards in a skillet on the kitchen
>> range.)
>
> I am aware of toaster oven reflow, but I haven't seen skillet reflow.
> If you have the time and inclination to prepare a little web site --
> particularly if you could do pictures -- that would be cool.

What's to figure out? A little olive oil, fresh-ground pepper...

Tune in Thursday when Emeril demonstrates reflow in a boil-in bag, with pesto.

--
If John McCain gets the 2008 Republican Presidential nomination,
my vote for President will be a write-in for Jiang Zemin.

515. Re: Zener Noise (was: 1N4007 varactors)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 21:06:58 UTC
From: Mark <makolber@yahoo.com>
Message-ID: <1137186418.355843.251390@f14g2000cwb.googlegroups.com>
Source record: 14416
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

depends upon the resistance and temperature of the filament

a small grain of wheat bulb will work to 500 MHz..

Mark

516. Re: For the newly interested - The Weekly FAQ, "What Is Ham Radio?"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 23:07:43 UTC
From: class-a-licensee-pkearn-zaapk@didnt-run-away-from-a-morse-test.es.eircom.com.net
Message-ID: <43c832a7.2105137@news.iol.ie>
Source record: 14417
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Orator For Decency" <radio.ham@lycos.co.uk> wrote:

>
> What is Ham Radio?
>

excellent posting.

well done.

517. Re: please stop the shit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 23:09:59 UTC
From: class-a-licensee-pkearn-zaapk@didnt-run-away-from-a-morse-test.es.eircom.com.net
Message-ID: <43c832ff.2193218@news.iol.ie>
Source record: 14418
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

W2AGN <w2agn@nospamw2agn.net> wrote:

> Have you considered a spell checker? You are an embarrassment to the
> "mnayly us gruop."

confucius he say,

he who pull-up someone for spelling mistakes
will soon fall over their own spelling mistakes.

518. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 23:44:56 UTC
From: Paul Burridge <pb@shove.your.spam.up.your.arse.atlanticstar.co.uk>
Message-ID: <1regs1pqj4g2oe8hn5bvthuqh9m29jcu06@4ax.com>
Source record: 14422
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Wed, 11 Jan 2006 03:35:46 GMT, "Clif Holland" <clif@avvid.com>
wrote:

>Sure it does Ray. Just like the two hams on 40 today. One had installed RG8
>in place of 58 and wanted to know how much better his signal sounded. I
>almost fell off my stool....

What? With the improvement in signal strength? ;-)

--

"What is now proved was once only imagin'd" - William Blake

519. Re: JFET for dip meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 23:45:58 UTC
From: Paul Burridge <pb@shove.your.spam.up.your.arse.atlanticstar.co.uk>
Message-ID: <fsegs1tdl9esmn638e1549dqflmpgnkoed@4ax.com>
Source record: 14423

On Thu, 12 Jan 2006 08:22:36 -0800, "Bill Turner" <noway@nohow.com>
wrote:

>Ok, so I'm lazy.
>
>Does anyone know of an appropriate JFET for a VHF/UHF dip meter? I could
>spend some time prowling through data sheets, but if anyone knows of a
>readily available one I'd be appreciative. The usual MPF102 clones don't
>have high enough frequency capability.

3SK88 dual-gate mosfet takes some beating.
--

"What is now proved was once only imagin'd" - William Blake

520. Re: SMT 40m + 20m qrp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 23:47:15 UTC
From: Mike Young <boat042-spam@yahoo.com>
Message-ID: <7_Wxf.1711$PL5.252@newssvr11.news.prodigy.com>
Source record: 14419

"clifto" <clifto@clifto.com> wrote in message
news:13fl93-lbq.ln1@remote.clifto.com...
> Tim Wescott wrote:
>> Mike Young wrote:
>>> (Yell if a quick primer on SMT
>>> construction will be useful. I reflow boards in a skillet on the kitchen
>>> range.)
>>
>> I am aware of toaster oven reflow, but I haven't seen skillet reflow.
>> If you have the time and inclination to prepare a little web site --
>> particularly if you could do pictures -- that would be cool.
>
> What's to figure out? A little olive oil, fresh-ground pepper...
>
> Tune in Thursday when Emeril demonstrates reflow in a boil-in bag, with
> pesto.

That's not too far off. :) We're all somewhat mislead by the assumed complexity. After all that we've read and thought, it's not easy to accept on faith that reflowing doesn't have to require carefully controlled equipment and expensive stencils. For now, consider only that hand soldering is much more stressful to the parts than almost any other (mis)treatment. Uneven heating; uncertain temperature rise; solder bridging and subsequent rework and more heat stress; ... on and on. On that basis alone, stir-frying is already a huge improvement. At its best, it isn't very far from a more stringently controlled process.

A few pictures of it working will help make the point. I had every intention at the onset of taking a few, and plotting temperatures taken with an IR thermometer. After doing the first board, though, the whole process seemed as obvious as noting that a rock will indeed drive nails. Or something like that. Bear with me.

The temperature profile is likely the major concern in your mind. Here's an example of a profile: http://www.stencilsunlimited.com/solder_products.php. Click on the link for "SynTECH Technical Data Sheet". The profile is on page 2. (Incidentally, their prices are among the lowest I found for small quantities. Less than $25 for a 35g syringe shipped. I use their 63/37 paste.)

There are two important control points: flux activation at 140^C, and reflow at 220^C. Flux activation is easily recognizable by the gray crud that forms on the paste. Reflow is also obvious from visual cues: the paste turns silvery and looks like molten solder. All that's needed now is to control the time.

Medium flame on my kitchen range is just about right for my thick bottomed aluminum skillet. Flux activation "happens" in a little less than 2 minutes. Reflow starts about 2 minutes later. When the last bit of paste turns silvery, cover the skillet, count to ten slowly, and then turn off the flame. Let it cool undisturbed.

The rest of it is putting on the paste and populating the board. You don't need a stencil to do that. Just draw a neat bead along the pads. The parts center themselves when it reflows. Compare that to the contortions of holding an SOT23 in place to solder by hand.

There is a difference in how you plan your work. Since you can reflow only once without special pastes and finer control, everything has to go on in the 6 hours the paste remains workable. The NorCal 2030 probably shouldn't be your first project.

Anyway, stir frying works well and easily with very few critical details. Try it on a scrap board first to "calibrate" the stove. Within reason, a little too hot is better than not hot enough, and a little too much paste is better than not enough.

521. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-13 23:55:15 UTC
From: news <yes@optusnet.com.au>
Message-ID: <43c83db7$0$17190$afc38c87@news.optusnet.com.au>
Source record: 14420
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

yes thanks glenn. I would like a copy of the circuit.

email james_about@hotmail.com with the info please.

Any thing you need also. I keep a fairly extensive collection of radio software and circuits.

And gidday to Kev ....tanker wanker. private joke.

522. Re: SMT 40m + 20m qrp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-14 00:24:38 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <ftWdnR-steVb2VXenZ2dnUVZ_sCdnZ2d@web-ster.com>
Source record: 14421

Mike Young wrote:
> "clifto" <clifto@clifto.com> wrote in message
> news:13fl93-lbq.ln1@remote.clifto.com...
>
>> Tim Wescott wrote:
>>
>>> Mike Young wrote:
>>>
>>>> (Yell if a quick primer on SMT
>>>> construction will be useful. I reflow boards in a skillet on the
>>>> kitchen
>>>> range.)
>>>
>>>
>>> I am aware of toaster oven reflow, but I haven't seen skillet reflow.
>>> If you have the time and inclination to prepare a little web site --
>>> particularly if you could do pictures -- that would be cool.
>>
>>
>> What's to figure out? A little olive oil, fresh-ground pepper...
>>
>> Tune in Thursday when Emeril demonstrates reflow in a boil-in bag,
>> with pesto.
>
>
> That's not too far off. :) We're all somewhat mislead by the assumed
> complexity. After all that we've read and thought, it's not easy to
> accept on faith that reflowing doesn't have to require carefully
> controlled equipment and expensive stencils. For now, consider only that
> hand soldering is much more stressful to the parts than almost any other
> (mis)treatment. Uneven heating; uncertain temperature rise; solder
> bridging and subsequent rework and more heat stress; ... on and on. On
> that basis alone, stir-frying is already a huge improvement. At its
> best, it isn't very far from a more stringently controlled process.
>
> A few pictures of it working will help make the point. I had every
> intention at the onset of taking a few, and plotting temperatures taken
> with an IR thermometer. After doing the first board, though, the whole
> process seemed as obvious as noting that a rock will indeed drive nails.
> Or something like that. Bear with me.
>
> The temperature profile is likely the major concern in your mind. Here's
> an example of a profile:
> http://www.stencilsunlimited.com/solder_products.php. Click on the link

> for "SynTECH Technical Data Sheet". The profile is on page 2.
> (Incidentally, their prices are among the lowest I found for small
> quantities. Less than $25 for a 35g syringe shipped. I use their 63/37
> paste.)
>
> There are two important control points: flux activation at 140^C, and
> reflow at 220^C. Flux activation is easily recognizable by the gray crud
> that forms on the paste. Reflow is also obvious from visual cues: the
> paste turns silvery and looks like molten solder. All that's needed now
> is to control the time.
>
> Medium flame on my kitchen range is just about right for my thick
> bottomed aluminum skillet. Flux activation "happens" in a little less
> than 2 minutes. Reflow starts about 2 minutes later. When the last bit
> of paste turns silvery, cover the skillet, count to ten slowly, and then
> turn off the flame. Let it cool undisturbed.
>
> The rest of it is putting on the paste and populating the board. You
> don't need a stencil to do that. Just draw a neat bead along the pads.
> The parts center themselves when it reflows. Compare that to the
> contortions of holding an SOT23 in place to solder by hand.
>
> There is a difference in how you plan your work. Since you can reflow
> only once without special pastes and finer control, everything has to go
> on in the 6 hours the paste remains workable. The NorCal 2030 probably
> shouldn't be your first project.
>
> Anyway, stir frying works well and easily with very few critical
> details. Try it on a scrap board first to "calibrate" the stove. Within
> reason, a little too hot is better than not hot enough, and a little too
> much paste is better than not enough.
>
Do you just sit the board on the bottom of the pan, or do you space it
up? Can you do double-sided boards? What else didn't I ask?

I've seen the web sites showing how to do toaster-oven reflow -- have
you tried that?

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

523. Re: glass-mount omnidirectional antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-14 03:07:45 UTC
From: Spajky <Spajky@##volja.net>
Message-ID: <fepgs11po4hnq03gbkuqoqt0lm9bde0hjp@4ax.com>
Source record: 14424

On Thu, 12 Jan 2006 07:28:13 -0500, "xpyttl"
<xpyttl_NOSPAM@earthling.net> wrote:

>However, OP has another problem. Nobody has mentioned feedline loss. The
>wire carrying the signal to the antenna, even with a good SWR, can be a real
>source of loss, especially at 2.4G. Cable which has a low loss at that
>frequency is available, but it is expensive and hard to get.

an alternative would be using TVSat 75ohm cable & connectors properly
lenght cut to mirror Z from source 50ohm to antenna (taking care of
cable velocity factor & unpair 1/4 multiple wave lenght proper cut);
this way is cheap ...
--
Seasons Greetings & Regards , SPAJKY ®
mail addr. @ my site @ http://www.spajky.vze.com
more than 3y - "Tualatin OC-ed / BX-Slot1 / inaudible setup!"

524. Re: glass-mount omnidirectional antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-14 06:21:12 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1e3238362f5409d9989784@192.168.42.131>
Source record: 14425

In article <1r8es1h939ifn43i1ehvlnppoaefs5ghkl@4ax.com>,
trash@gnomex.cotse.net says...

<snippety>

> Just curious. Do you recall how much the windows were tinted? I
> suspect one of the many reasons for problems is the tinting medium
> in/on the glass.

Actually, yes, they were. And you're right -- Tinting which has
metallic content is one of the worst offenders.

I can't be certain whether the tint on these specific cars was
metal-bearing. I just know that I've always had problems with glass-
mount antlers, no matter if the window is tinted.

Keep the peace(es).

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

525. Re: glass-mount omnidirectional antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-14 06:24:33 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1e3238fc437f326b989785@192.168.42.131>
Source record: 14426

In article <c6oes1l0esuej640cmr2gojvtqh4cr0pd7@4ax.com>, me@privacy.net says...

<snippety>

> Roy has kindly addressed the antenna aspects. But because you snipped, the
> essence of my comment was cut adrift. A nice 50R resistor will not "couple the
> transmitter's energy to the atmosphere" at all efficiently, but should certainly
> provide a rather good match to your 50 ohm line. You should not attempt to
> equate radiation efficiency with line matching.
>
> I suggest you need to think further, or stick to plumbing.

I thank you for your opinion. I would also remind you that there's no need to be insulting. A simple "I disagree, here's what you might want to look at" will do.

Consistently telling someone to "stick to" one thing or another is more likely to get you dropped into a filter file, and subsequently ignored, than it is to get you listened to.

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped with surreal ports?"

526. Re: SMT 40m + 20m qrp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-14 07:36:16 UTC
From: Mike Young <boat042-spam@yahoo.com>
Message-ID: <QR1yf.673$Jd.614@newssvr25.news.prodigy.net>
Source record: 14427

"Tim Wescott" <tim@seemywebsite.com> wrote in message
news:ftWdnR-steVb2VXenZ2dnUVZ_sCdnZ2d@web-ster.com...
> Do you just sit the board on the bottom of the pan, or do you space it up?
> Can you do double-sided boards?

There's just the slightest curve on the bottom of the skillet so it sits on its corners. I don't believe this is critical. Direct contact on the face will probably work just as well.

Components on the top-side only. You'll need to use a different paste if you need to reflow top and bottom, and definitely need tighter control on the temperature for the second side. An uncontrolled skillet won't do for that. Use a tin/silver paste for the first side. Its higher reflow temperature will allow you to reflow tin/lead on the second side. You'll want to use stand-offs in a properly controlled oven for that.

> What else didn't I ask?

Hot air is an alternative. I use a Weller Portasol with hot air nozzle for small rework. I hear of others replacing the rubber bulb on a Radio Shack desoldering iron with an aquarium pump. It takes longer to build a board, but might suit the pace of a homebrewer better.

> I've seen the web sites showing how to do toaster-oven reflow -- have you
> tried that?

I haven't tried using a toaster oven. The concepts remain the same, however. There might be a difference between heating with IR elements and heating the board more or less directly.

527. Re: glass-mount omnidirectional antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-14 09:47:37 UTC
From: Roger <Delete-Invallid.stuff.groups@tm.net>
Message-ID: <ephhs1dvu68er43vkslb1s1ftdemb2oto6@4ax.com>
Source record: 14428

On Fri, 13 Jan 2006 22:21:12 -0800, Dr. Anton T. Squeegee
<SpammersAreVermin@dev.null> wrote:

>In article <1r8es1h939ifn43i1ehvlnppoaefs5ghkl@4ax.com>,
>trash@gnomex.cotse.net says...
>
> <snippety>
>
>> Just curious. Do you recall how much the windows were tinted? I
>> suspect one of the many reasons for problems is the tinting medium
>> in/on the glass.
>
> Actually, yes, they were. And you're right -- Tinting which has
>metallic content is one of the worst offenders.

I used an on the glass mount on the rear window of my TA . Part of the
tinting has a metallic content, but was in the form of little circles
or dots. The rest of the window had a dark tint. The antenna worked
fine.

Prior to that I used one on a Thunderbird with no problems although it
did get out better on the TA.
>
> I can't be certain whether the tint on these specific cars was
>metal-bearing. I just know that I've always had problems with glass-
>mount antlers, no matter if the window is tinted.

They have always worked well for me and generally you can tell by
looking at a tint whether it is metallic or not. They "look metallic"
with a silver tint. I've not seen any of the tan, green, or brown
tints that were metallic.

I ran a TM-D700 and a TM-V7A running 50 watts on 144 to these with no
problems. They didn't seem to mind the higher SWR on 440 and did well
there too.

I currently use a diamond mag mount with a colinear on top of a SUV
and that is a real performer.

73

Roger (K8RI)
>
> Keep the peace(es).
Roger

528. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-14 12:12:23 UTC
From: Kev <kevcat@optunet.com.au>
Message-ID: <43c8eaa8$0$13318$afc38c87@news.optusnet.com.au>
Source record: 14429
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

news wrote:

> yes thanks glenn. I would like a copy of the circuit.
>
> email james_about@hotmail.com with the info please.
>
> Any thing you need also. I keep a fairly extensive collection of radio
> software and circuits.
>
> And gidday to Kev ....tanker wanker. private joke.
>
>

:)

Kev

529. Crystal ladder coupling constants.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-14 14:23:09 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2006.01.14.14.23.09.79553@oceanfree.net>
Source record: 14430

I am writing a simple program to design crystal ladder filters
using the formulas from W7ZOI's excellent QST article A Unified
Approach to the Design of Crystal Ladder Filters. QST May 1982.

I have got the tables of normalised coupling constants for
Butterworth and 0.1dB Chebyshev filters from the QST article.

I would like to find a source of similar tables for
filters with more than 5 poles and for passband ripple
other than 0.1dB.

Many Thanks.

73, Ed. EI9GQ.

--
Linux 2.6.15
Remove 'X' to reply by e-mail.
Yes, my username really is: nospam

530. Yet Another Apology To Our British Bretheren

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-14 16:01:40 UTC
From: K4YZ <stevenrobeson@aol.com>
Message-ID: <1137254500.736091.161950@g44g2000cwa.googlegroups.com>
Source record: 14431
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

an_old_friend wrote:
> Orator For Decency wrote:
> > What is Ham Radio?
> stop cross posting this #### to the mnayly us gruop your english
> license system wether flawed or not is not subject the FCC so whing
> about it to us is sueless

Dear Chaps in the UK:

The hate and discontent just spewed upon you per the nickname of "an_old_friend" is none other than Mark C. Morgan, KB9RQZ.

Mark is quick to call others "bigot", among other things, however as it turns out he is the most aggrevious example of what a bigot really is. In this case, suggesting that those of you posting from the UK about license issues (a policy matter if ever I heard one) was somehow inapproprate on RRAP.

There is no prohibition in the RRAP "charter" about such messages being ONLY related to FCC (ie: "United States") jurisdiciton. I for one am interested in seeing how y'all perceive such issues and handle them.

Furthermore, he certainly does NOT hold any "moderator" status that would permit him to direct ANY discussion in this forum.

As for Mark...well...Mark is an enigma even here in the States. "Mark" is what happens when you spend more on one B-2 than you do on your entire nationwide in-patient mental healthcare system...A system that he'd be in if it were better funded.

Mark's tales started with his insistance that he was a drafted colonel in the US Army "chemical corps" (we was 8 years old when the draft ended in the States). He's recently been responsible for spamming RRAP with over 1000 messages and using the names of deceased family members of this respondant's family in order to "get a point across".

I am sure you know what "point" got across! ;)

So, please accept one Yank's apologies for the discourtesy and incivility exercised against you by one of my (less well cultured) countrymen.

73

Steve, K4YZ

531. 50s Band Converter ID

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-14 16:49:02 UTC
From: Al <no.spam@wanted.com>
Message-ID: <no.spam-D9A81E.11490414012006@news.verizon.net>
Source record: 14432

In the '50s, as a teenager, I built a RF conversion receiver. You connect it to an antenna and an AM radio tuned to 1500KHz. Then you can explore the various bands above the AM band.

I have posted images of this item on alt.binaries.schematics.electronic

From the picuture, you can see a bandspread tuner in the center, a tuner at the left and an antenna coupler tuner to the right. It uses two 6J6 tubes and one whose markings I can't make out.

I built it from a schematic in either an ARRL Handbook or Radio-TV Electronics.

I wonder if anyone can identify this converter and provide me with a schematic. It's just for nostalgia's sake.

Al

532. steve lying to brits now

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-14 19:21:31 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1137266491.152079.324090@g49g2000cwa.googlegroups.com>
Source record: 14433
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

K4YZ wrote:
> an_old_friend wrote:
> > Orator For Decency wrote:
> > > What is Ham Radio?
> > stop cross posting this #### to the mnayly us gruop your english
> > license system wether flawed or not is not subject the FCC so whing
> > about it to us is sueless
>
> Dear Chaps in the UK:
>
> The hate and discontent just spewed upon you per the nickname of
> "an_old_friend" is none other than Mark C. Morgan, KB9RQZ.
no hate spewed stve just caling shit shit

533. Re: Yet Another Apology To Our British Bretheren

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-14 19:21:44 UTC
From: W2AGN <w2agn@nospamw2agn.net>
Message-ID: <43C94F48.9050005@nospamw2agn.net>
Source record: 14434
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

K4YZ wrote:
> an_old_friend wrote:
>
>>Orator For Decency wrote:
>>
>>>What is Ham Radio?
>>
>>stop cross posting this #### to the mnayly us gruop your english
>>license system wether flawed or not is not subject the FCC so whing
>>about it to us is sueless
>
>
> Dear Chaps in the UK:
>
> The hate and discontent just spewed upon you per the nickname of
> "an_old_friend" is none other than Mark C. Morgan, KB9RQZ.
>
>

Incidentally a "Technician" class which is similar to your reviled "M3."
(ie, basically a CB license).

534. FS: Heathkit Manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-14 19:50:22 UTC
From: Richard Reese <reeser@gemair.com>
Message-ID: <dflis15v76g79abnfk0dbq54kpl0f9il6l@4ax.com>
Source record: 14435

If you need any Heathkit Manuals please visit my website at www.gemair.com/~reeser

73
Dick
WA4PLL

535. Re: Yet Another Apology To Our British Bretheren

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-14 21:26:58 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1137274018.814501.127430@g49g2000cwa.googlegroups.com>
Source record: 14436
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

K4YZ wrote:
> an_old_friend wrote:
> > Orator For Decency wrote:
> > > What is Ham Radio?
> > stop cross posting this #### to the mnayly us gruop your english
> > license system wether flawed or not is not subject the FCC so whing
> > about it to us is sueless
>
> Dear Chaps in the UK:
>
> The hate and discontent just spewed upon you per the nickname of
> "an_old_friend" is none other than Mark C. Morgan, KB9RQZ.

Steve, don't you mean "raped an old friend" as you've forged in past
posts?

536. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-14 23:49:10 UTC
From: Glenn McAllister <"(my_callsign)"@orcon.net.nz>
Message-ID: <43C98DF6.2958@orcon.net.nz>
Source record: 14437
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

Glenn McAllister wrote:
> (snip)
>
> If/when I find the dox, I'll get back to you. Let me know how you
> progress.
>
> Glenn ZL2TLD

Dox found, photographed (no scanner) and emailed to James, Al and Gary.

If anyone else would like it, email me with a VALID email address and
I'll send. (that's pointed at you, al! :-))
It's about 2.5MB zipped. Anyone got some space to host it?

I'll scan it properly when I find someone locally with a flatbed
scanner.

My email address is my callsign at orcon dot net dot enn zed

de Glenn ZL2TLD

537. Re: steve lying to brits now

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 00:12:34 UTC
From: Dave Heil <k8mn@earthlink.net>
Message-ID: <Srgyf.5048$WY5.902@newsread2.news.pas.earthlink.net>
Source record: 14438
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

an_old_friend wrote:
> K4YZ wrote:

>> Dear Chaps in the UK:
>>
>> The hate and discontent just spewed upon you per the nickname of
>> "an_old_friend" is none other than Mark C. Morgan, KB9RQZ.

> no hate spewed stve just caling shit shit

If you're referring to your original post, you are quite correct. It
was and is.

Dave K8MN

538. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 01:08:48 UTC
From: Ken Taylor <ken@home.nz>
Message-ID: <Wfhyf.14925$vH5.795605@news.xtra.co.nz>
Source record: 14439
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

"Glenn McAllister" <"(my_callsign)"@orcon.net.nz> wrote in message
news:43C98DF6.2958@orcon.net.nz...
> Glenn McAllister wrote:
> > (snip)
> >
> > If/when I find the dox, I'll get back to you. Let me know how you
> > progress.
> >
> > Glenn ZL2TLD
>
> Dox found, photographed (no scanner) and emailed to James, Al and Gary.
>
> If anyone else would like it, email me with a VALID email address and
> I'll send. (that's pointed at you, al! :-))
> It's about 2.5MB zipped. Anyone got some space to host it?
>
> I'll scan it properly when I find someone locally with a flatbed
> scanner.
>
> My email address is my callsign at orcon dot net dot enn zed
>
>
> de Glenn ZL2TLD

Whereabouts are you Glenn? I'm in Auckland - have scanner.

Ken

539. Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 01:17:31 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1137287851.160900.117570@z14g2000cwz.googlegroups.com>
Source record: 14440
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

I like many of you had my first experience with electronics through the electronic kits that Radio Shack has had over the years. The versions that spanned the 50, 100, 200 electronic experiments all come to mind.

My question is...how many versions and types of these kits have they had over the years?

I would be interested in hearing which ones you recall.

Thanks

TMT

540. Re: steve lying to brits now

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 01:17:45 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1137287865.079245.260570@f14g2000cwb.googlegroups.com>
Source record: 14441
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Dave Heil wrote:
> an_old_friend wrote:
> > K4YZ wrote:
>
> >> Dear Chaps in the UK:
> >>
> >> The hate and discontent just spewed upon you per the nickname of
> >> "an_old_friend" is none other than Mark C. Morgan, KB9RQZ.
>
> > no hate spewed stve just caling shit shit
>
> If you're referring to your original post, you are quite correct. It
> was and is.

indeed and that means Steve lied in calling it something else

thank you
>
> Dave K8MN

541. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 01:46:45 UTC
From: Michael Ware <mware@insight.rr.com>
Message-ID: <9Qhyf.19251$Q11.12220@tornado.ohiordc.rr.com>
Source record: 14442
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

I think they had a 250, it had a neat plastic case with a hinged lid, and
controls, displays, meter and speaker on the front of it.
I still have a 150 that I have had for 25 years.
The good ol' days of Radio Shack, when they were actually a good source for
hobbyists. Now they are not much more than Best Buy wannabees.

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1137287851.160900.117570@z14g2000cwz.googlegroups.com...
> I like many of you had my first experience with electronics through the
> electronic kits that Radio Shack has had over the years. The versions
> that spanned the 50, 100, 200 electronic experiments all come to mind.
>
> My question is...how many versions and types of these kits have they
> had over the years?
>
> I would be interested in hearing which ones you recall.
>
> Thanks
>
> TMT
>

542. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 02:21:48 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <0liyf.6851$or4.4507@newssvr12.news.prodigy.com>
Source record: 14443
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Hello Michael,

> The good ol' days of Radio Shack, when they were actually a good source for
> hobbyists. Now they are not much more than Best Buy wannabees.
>

But why is that? Many kids aren't creative these days. They hang out in
front of the TV or some video game but don't actually build stuff.
Places like Radio Shack as we knew it from the old days can only survive
when people built stuff.

The Radio Shack here in town has closed. It become a cell phone store. Sigh.

Regards, Joerg

http://www.analogconsultants.com

543. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 02:23:53 UTC
From: Ken Weitzel <kweitzel@shaw.ca>
Message-ID: <Zmiyf.344040$ki.218198@pd7tw2no>
Source record: 14444
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Too_Many_Tools wrote:
> I like many of you had my first experience with electronics through the
> electronic kits that Radio Shack has had over the years. The versions
> that spanned the 50, 100, 200 electronic experiments all come to mind.
>
> My question is...how many versions and types of these kits have they
> had over the years?
>
> I would be interested in hearing which ones you recall.
>
> Thanks
>
> TMT

Hi...

Wow, memories again! :)

Bought one for my daughter about 25 years ago. Though she's been
grown and gone for a good while, it's still intact and sitting on
the top shelf of her closet (her closet here). Just looked at
it - it's a 150 in 1. Radio shack part number is 28-248.

Anyone's interested I'd be happy to scan some or all of the experiment
pages and make them available.

And about 5 years ago bought one (used) off ebay for the young
fellow a couple of doors over birthday. I think he's still
enjoying it. One of his favorites was a rain detector project.
Figured out that if he wanted to know if it was raining, all he had to
do was put it together, carry it outside, hold it up for a while,
and bingo! Knew whether it was raining or not :)

Just for curiousity looked on ebay, searched electronic kit,
and the first thing that came up was one :)

Take care.

Ken

544. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 02:40:50 UTC
From: CLFE <Junkmail@clfurent.com>
Message-ID: <43c9b62c$0$8299$ecde5a14@news.coretel.net>
Source record: 14445
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"Ken Weitzel" <kweitzel@shaw.ca> wrote in message
news:Zmiyf.344040$ki.218198@pd7tw2no...
>
>
> Too_Many_Tools wrote:
>> I like many of you had my first experience with electronics through the
>> electronic kits that Radio Shack has had over the years. The versions
>> that spanned the 50, 100, 200 electronic experiments all come to mind.
>>
>> My question is...how many versions and types of these kits have they
>> had over the years?
>>
>> I would be interested in hearing which ones you recall.
>>
>> Thanks
>>
>> TMT
>
> Hi...
>
> Wow, memories again! :)
>
> Bought one for my daughter about 25 years ago. Though she's been
> grown and gone for a good while, it's still intact and sitting on
> the top shelf of her closet (her closet here). Just looked at
> it - it's a 150 in 1. Radio shack part number is 28-248.
>
> Anyone's interested I'd be happy to scan some or all of the experiment
> pages and make them available.
>
> And about 5 years ago bought one (used) off ebay for the young
> fellow a couple of doors over birthday. I think he's still
> enjoying it. One of his favorites was a rain detector project.
> Figured out that if he wanted to know if it was raining, all he had to
> do was put it together, carry it outside, hold it up for a while,
> and bingo! Knew whether it was raining or not :)
>
> Just for curiousity looked on ebay, searched electronic kit,
> and the first thing that came up was one :)
>
> Take care.
>

> Ken
>

I'm not going to try to address any or all of the issues as to market needs, pay scales, bla bla blah - but I will say - I suppose these kids today - think those video games and so on - appear out of no where. Yes, maybe they can program something on a computer to do that - but they should try tackling the "component" level stuff. Actually learn what it takes to do all that. There are probably a host of reasons we could bring up as to "why" they don't - but it doesn't necessarily have to be that way. Even miniaturization goes so far..... if the demand for the larger parts such as we're used to working with would increase - maybe the action would pick back up.

As to the kits and Radio Shack, I learned from their books. My father bought me like a 50 in 1 kit from Lafayette Radio - I think! Back then, Radio Shack hadn't gotten in our area yet. BUT then when they did, I bought every book they had. I've had technical training since then and went beyond that. I build items from junk parts just to have something to do when not repairing. It is a very enjoyable hobby. I went to a Hamfest this past summer and someone gave me a 150 in 1 kit with a book. I have other items here which have power strips and so on - but you have to supply the parts yourself. But still - makes for a lot of designing fun.

CLF

545. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 03:44:06 UTC
From: Bob Liesenfeld <wb0poq@visi.com>
Message-ID: <43C9C505.13CCF62@visi.com>
Source record: 14447

Michael Ware wrote:

> I think they had a 250, it had a neat plastic case with a hinged lid, and
> controls, displays, meter and speaker on the front of it.
> I still have a 150 that I have had for 25 years.

I wish I still had my Norelco Electronics Lab kit I had as a kid. It was the greatest Christmas gift I ever got.

Bob WB0POQ

546. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 03:45:17 UTC
From: Michael Ware <mware@insight.rr.com>
Message-ID: <hzjyf.19417$Q11.15713@tornado.ohiordc.rr.com>
Source record: 14446
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

That's true, I guess the electronics hobby just isn't as big as it was in the late 70's-early 80's. You would think kids would at least have some curiosity about how the game controllers work, or how to build a power supply to run their GameBoy to save the batteries. Of course, you can buy a power supply for a fraction of what it costs to build one from scratch.

"Joerg" <notthisjoergsch@removethispacbell.net> wrote in message news:0liyf.6851$or4.4507@newssvr12.news.prodigy.com...
> But why is that? Many kids aren't creative these days. They hang out in
> front of the TV or some video game but don't actually build stuff.
> Regards, Joerg
>
> http://www.analogconsultants.com

547. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 04:05:38 UTC
From: JR North <jasonrnorth@bigfoot.com>
Message-ID: <E-idnSdRVfaJV1TenZ2dnUVZ_tSdnZ2d@seanet.com>
Source record: 14302
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

The really sad thing about the RS kits is they failed to explain to the
novice user how the components acted together to make the circuit
function. Instructions to insert the + lead of C4 into hole 4-12 did
nothing to educate the user about electronics. Once the novelty and
interest in the buzzer and LEDs flashing waned, the user departed, non
the wiser and no more knowledgeable about electronics than when they
started.
JR

Too_Many_Tools wrote:

> I like many of you had my first experience with electronics through the
> electronic kits that Radio Shack has had over the years. The versions
> that spanned the 50, 100, 200 electronic experiments all come to mind.
>
> My question is...how many versions and types of these kits have they
> had over the years?
>
> I would be interested in hearing which ones you recall.
>
> Thanks
>
> TMT
>

--

Home Page: http://www.seanet.com/~jasonrnorth

548. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 04:09:48 UTC
From: Glenn McAllister <"(callsign)"@orcon.net.nz>
Message-ID: <43C9CB0C.48AA@orcon.net.nz>
Source record: 14303
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

Ken Taylor wrote:
> (snip)
> Whereabouts are you Glenn? I'm in Auckland - have scanner.
>
> Ken
Masterton. Email me with your postal address
(And a valid email address :-))
and I'll post it to you if I can't find a scanner locally.

de Glenn ZL2TLD
(callsign) at orcon dot net dot enn zed

549. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 04:27:15 UTC
From: CLFE <Junkmail@clfurent.com>
Message-ID: <43c9cf1d$0$8275$ecde5a14@news.coretel.net>
Source record: 14304
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"JR North" <jasonrnorth@bigfoot.com> wrote in message
news:E-idnSdRVfaJV1TenZ2dnUVZ_tSdnZ2d@seanet.com...
> The really sad thing about the RS kits is they failed to explain to the
> novice user how the components acted together to make the circuit
> function. Instructions to insert the + lead of C4 into hole 4-12 did
> nothing to educate the user about electronics. Once the novelty and
> interest in the buzzer and LEDs flashing waned, the user departed, non the
> wiser and no more knowledgeable about electronics than when they started.
> JR
>

Good point! Maybe they thought that the kit builder would "become"
interested in why - and reach further..... Who knows.....?

CLF

550. Re: steve lying to brits now

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 04:54:01 UTC
From: Dave Heil <k8mn@earthlink.net>
Message-ID: <Jzkyf.2834$ee6.1360@newsread3.news.pas.earthlink.net>
Source record: 14305
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

an_old_friend wrote:
> Dave Heil wrote:
>> an_old_friend wrote:
>>> K4YZ wrote:
>>>> Dear Chaps in the UK:
>>>>
>>>> The hate and discontent just spewed upon you per the nickname of
>>>> "an_old_friend" is none other than Mark C. Morgan, KB9RQZ.
>>> no hate spewed stve just caling shit shit
>> If you're referring to your original post, you are quite correct. It
>> was and is.
>
> indeed and that means Steve lied in calling it something else

No, I don't think he did. You just summed up your post very succinctly.
Steve was much too kind.

> thank you

You're welcome, Colonel Morgan.

Dave K8MN

551. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 05:10:36 UTC
From: - exray - <exray@coqui.net>
Message-ID: <11sjmaepk8en1c3@corp.supernews.com>
Source record: 14352
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

CLFE wrote:

>
> Good point! Maybe they thought that the kit builder would "become"
> interested in why - and reach further..... Who knows.....?
>
> CLF
>
>
Hi Lou, long time no see.
I don't think they "thought" anything. Just filling a niche marketing wise. Lots of kids have an interest in something new - not necessarily something specific - and the only way for a parent to capitalise on what might be a budding ambition would be exposure to something like this kit rather than just disassembling the family's clock radio.
Anybody who has raised a kid who wanted to be a "musician" in the school band at about 7th-8th Grade knows what I'm talking about :)
Hehe...I remember my "chemistry set". It actually had instructions about how to make a stink bomb. That didn't turn me towards being a chemist but the exposure to all that stuff at least gave me some cognizance of what it was all about at an age when I knew absolutely zip about chemicals. Not that that has changed any in the past 40 years !

-Bill

552. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 07:12:31 UTC
From: CLFE <Junkmail@clfurent.com>
Message-ID: <43c9f5d9$0$8272$ecde5a14@news.coretel.net>
Source record: 14353
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"- exray -" <exray@coqui.net> wrote in message
news:11sjmaepk8en1c3@corp.supernews.com...
> CLFE wrote:
>
>
>>
>> Good point! Maybe they thought that the kit builder would "become"
>> interested in why - and reach further..... Who knows.....?
>>
>> CLF
> Hi Lou, long time no see.
> I don't think they "thought" anything. Just filling a niche marketing
> wise. Lots of kids have an interest in something new - not necessarily
> something specific - and the only way for a parent to capitalise on what
> might be a budding ambition would be exposure to something like this kit
> rather than just disassembling the family's clock radio.
> Anybody who has raised a kid who wanted to be a "musician" in the school
> band at about 7th-8th Grade knows what I'm talking about :)
> Hehe...I remember my "chemistry set". It actually had instructions about
> how to make a stink bomb. That didn't turn me towards being a chemist but
> the exposure to all that stuff at least gave me some cognizance of what it
> was all about at an age when I knew absolutely zip about chemicals. Not
> that that has changed any in the past 40 years !
>
> -Bill

Yeah Bill, long time no see - "trying" to stay out of trouble! :) Anyway, you are probably correct. I was "trying" to give them the benefit of doubt. Chemistry sets - eh? Man, my bedroom was a mini lab. If I had now - what I had then - they'd arrest me on suspicion of a Meth Lab or something. Man, I had a telescope, microscope, geology set, chemistry set, jars of formaldehyde (sp?) with specimens in it, and so on. Not to mention the electronics crap I had a ton of. I barely had room for my clothes, bed and other eh - more important stuff. Ya know - looking back - I miss all that..... That was FUN..... Half the so called Chemistry sets and so on now - don't have half the goodies the sets did back then. These new sets are garbage compared to what we used to get. Same with the new project kits. JUNK..... Knowing what we had, maybe there is a reason these kids would be bored. Somewhere, I think I have a couple pictures of my Lab - er - I mean Bedroom.

CLF

553. Soundcard Application development.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 07:35:30 UTC
From: Rubon <rubon_ismail@yahoo.com>
Message-ID: <1137310530.032019.238650@f14g2000cwb.googlegroups.com>
Source record: 14354
Cross-posted to: microsoft.public.win32.programmer.mmedia,comp.speech.users,rec.radio.amateur.homebrew,comp.os.ms-windows.programmer.multimedia,comp.lang.basic.visual.misc

Hi,

I would like to develop an application under WINDOWS-os using my PC
soundcard that will deliver a DC output (+2 to -2 Volt in step)
through the speaker-port and collect an AC (~ 15 kHz) corresponding to
the DC step through the MIC port.
I am now wondering where should I start from. Could you please help me
start the project and suggest me any internet resource?

Rubon Ismail

554. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 07:53:10 UTC
From: - exray - <exray@coqui.net>
Message-ID: <11sjvr8o7k97d5@corp.supernews.com>
Source record: 14355
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

CLFE wrote:

> now - don't have half the goodies the sets did back then. These new sets are
> garbage compared to what we used to get. Same with the new project kits.
> JUNK..... Knowing what we had, maybe there is a reason these kids would
> be bored. Somewhere, I think I have a couple pictures of my Lab - er - I
> mean Bedroom.
>
> CLF

yabbut...remember how cool it was to imagine a little thing that
actually worked that you could stick in your pocket and if you punched
in about 10 switches you could talk to ANYBODY IN THE WORLD?...and have
them deliver a pizza?

Hey, how do you keep 'em on the farm once they've see the city?

I imagine back in the 50s-60s the old farts were grumbling like we are
now about having those spoon-fed kits for those (us) unimaginative kids.
It all works out in the long run. There's 14-year-old kids with rooms
stacked full of old curbside PCs and video cams that would scoff
(technologically speaking) at us old guys who were limited to stink
bombs and dead salamanders in jars.

They'll be ok...at least some of them will...and thats the way it has
always been.

-ex

>
>

555. Crystal Filter Matching

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 09:10:56 UTC
From: David <webreply@orbitcoms.com>
Message-ID: <Akoyf.217626$V7.210436@news-server.bigpond.net.au>
Source record: 14356

I am wanting to place a 45MHz, 2-pole crystal filter between the first mixer output and 2nd IF input. (Mixer output is a SA602 and IF input is SA605).

The mixer output is around 1500 Ohms and the IF input is around 4500 Ohms with 2.5pF capacitance parallel.

The required source and termination for the filter is 800 Ohms par with 3pF. The insertion loss of the filter is 2dB max.

Would the impedances be close enough to use resitive pad between mixer and filter (680R in series with 1k2) and a small cap to ground across the filter input.
Then a 980R resistor to ground at filter output and no capacitance (use SA605 2.5pF and stray to make up the 3pF).

This would give total loss around 4.7dB.

Or would I be better to use say a tapped capacitor or L match from Mixer to filter with
added C on filter input.

Apparently the SA605 has a "swet spot" for noise at around 800R so maybe the Res to ground on the input would be ideal ???

Thanks for any help, I have not used crystal filters before and unsure of implications of the approach.

Regards

David Huisman

556. Re: glass-mount omnidirectional antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 09:29:45 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1137317385.195835.173050@g43g2000cwa.googlegroups.com>
Source record: 14357

Hi Kevin:
the main reason you didn't find one is the glass losses!
at 2.4GHz, the loss of most kinds of glass winshields are made of, is so hi as to defeat operation!
using a different base, such a cellular one will work, since it has a high pass filtering characteristic, but like I said, the glass itself can prove to be an insurmountable hurdle.
Saandy 4Z5KS

557. Re: Crystal Filter Matching

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 12:29:03 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <jeryf.730565$xm3.146199@attbi_s21>
Source record: 14358

Xtal filters are designed to operate correctly between specific values of generator and load resistances. Trying to "match" the input and output impedances almost always degrades the filter frequency response. Xtal filters are rather strange in that respect because of the complicated things that go on inside.

Transforming the generator and load resistances to 800 ohms using L networks is an excellent idea. Add the 3 pF that the vendor suggests.

Bill W0IYH

"David" <webreply@orbitcoms.com> wrote in message
news:Akoyf.217626$V7.210436@news-server.bigpond.net.au...
>I am wanting to place a 45MHz, 2-pole crystal filter between the first
>mixer output and 2nd IF input. (Mixer output is a SA602 and IF input is
>SA605).
>
> The mixer output is around 1500 Ohms and the IF input is around 4500 Ohms
> with 2.5pF capacitance parallel.
>
> The required source and termination for the filter is 800 Ohms par with
> 3pF. The insertion loss of the filter is 2dB max.
>
> Would the impedances be close enough to use resitive pad between mixer and
> filter (680R in series with 1k2) and a small cap to ground across the
> filter input.
> Then a 980R resistor to ground at filter output and no capacitance (use
> SA605 2.5pF and stray to make up the 3pF).
>
> This would give total loss around 4.7dB.
>
> Or would I be better to use say a tapped capacitor or L match from Mixer
> to filter with
> added C on filter input.
>
> Apparently the SA605 has a "swet spot" for noise at around 800R so maybe
> the Res to ground on the input would be ideal ???
>
> Thanks for any help, I have not used crystal filters before and unsure of
> implications of the approach.
>
> Regards
>
> David Huisman

558. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 12:44:56 UTC
From: Andrew Holme <andrew@nospam.com>
Message-ID: <dqdh1p$146$1$830fa17d@news.demon.co.uk>
Source record: 14359
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Too_Many_Tools wrote:
> I like many of you had my first experience with electronics through
> the electronic kits that Radio Shack has had over the years. The
> versions that spanned the 50, 100, 200 electronic experiments all
> come to mind.
>
> My question is...how many versions and types of these kits have they
> had over the years?
>
> I would be interested in hearing which ones you recall.

My hobby began in 1973 when I got a Thomas Salter Electrical Lab 4 for
Christmas.

I got one of these 150-in-1 IC experimenters kits for Christmas in 1974:
http://www.transistor.org/collection/lafayette/lafayette4.html

The UK version wasn't badged "Lafayette". Regrettably, I trashed it for the
parts many years ago, although I still have the wooden case.

559. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 14:32:13 UTC
From: Mark Fergerson <nunya@biz.ness>
Message-ID: <j1tyf.9207$jR.212@fed1read01>
Source record: 14360
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

- exray - wrote:
> CLFE wrote:

>> now - don't have half the goodies the sets did back then. These new
>> sets are garbage compared to what we used to get. Same with the new
>> project kits. JUNK..... Knowing what we had, maybe there is a
>> reason these kids would be bored. Somewhere, I think I have a couple
>> pictures of my Lab - er - I mean Bedroom.

Pardon me for barging in- another Old Fart who had a lab/bedroom like
that.

> yabbut...remember how cool it was to imagine a little thing that
> actually worked that you could stick in your pocket and if you punched
> in about 10 switches you could talk to ANYBODY IN THE WORLD?...and have
> them deliver a pizza?
>
> Hey, how do you keep 'em on the farm once they've see the city?

The "imagination barrier" blurs when TV shows like the old Star Trek
"predict" Motorola flip-phones.

> I imagine back in the 50s-60s the old farts were grumbling like we are
> now about having those spoon-fed kits for those (us) unimaginative kids.

I had it both ways- I was given everything from Erector sets through
chem to electronic sets, AND had an Elmer down the street who showed me
how to make working stuff out of "junk".

OTOH my mother just couldn't understand why I thought it necessary to
disassemble my "perfectly good" microscope...

> It all works out in the long run. There's 14-year-old kids with rooms
> stacked full of old curbside PCs and video cams that would scoff
> (technologically speaking) at us old guys who were limited to stink
> bombs and dead salamanders in jars.
>
> They'll be ok...at least some of them will...and thats the way it has
> always been.

Yep. The true hope for the future is the kid who can't help taking
things apart to find out how they work...

Mark L. Fergerson

560. Re: Soundcard Application development.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 14:52:48 UTC
From: NoSpam@daqarta.com
Message-ID: <43ca603a.4281401@news.itd.umich.edu>
Source record: 14361
Cross-posted to: microsoft.public.win32.programmer.mmedia,comp.speech.users,rec.radio.amateur.homebrew,comp.os.ms-windows.programmer.multimedia,comp.lang.basic.visual.misc

On 14 Jan 2006 23:35:30 -0800, "Rubon" <rubon_ismail@yahoo.com> wrote:

>Hi,
>
>I would like to develop an application under WINDOWS-os using my PC
>soundcard that will deliver a DC output (+2 to -2 Volt in step)
>through the speaker-port and collect an AC (~ 15 kHz) corresponding to
>the DC step through the MIC port.
>I am now wondering where should I start from. Could you please help me
>start the project and suggest me any internet resource?
>
>Rubon Ismail
>

Sorry, all sound cards that I know of are AC-coupled, with a roll-off
in the few Hertz range (or above). So you won't get anything like
a DC step unless you are talking about very short durations. (Few
msec or so.) Longer durations will have more and more noticeable
tilt as the input coupling capacitors charge up. If you are only
using this as an auditory stimulus click, say, for evoked potentials,
it probaby won't make any difference because you couldn't really
hear the DC anyway, just the transitions. But if you are trying to
(say) drive a solenoid to whack a resonant structure, you will need
some external interface.

Tell us more about what you are trying to do.

Best regards,

Bob Masta
dqatechATdaqartaDOTcom

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www.daqarta.com
Home of DaqGen, the FREEWARE signal generator

561. More Markie Mularkie

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 15:07:47 UTC
From: K4YZ <k4yz@aol.com>
Message-ID: <1137337667.488172.54810@g43g2000cwa.googlegroups.com>
Source record: 14362
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

an_old_friend wrote:
> K4YZ wrote:
> > an_old_friend wrote:
> > > Orator For Decency wrote:
> > > > What is Ham Radio?
> > > stop cross posting this #### to the mnayly us gruop your english
> > > license system wether flawed or not is not subject the FCC so whing
> > > about it to us is sueless
> >
> > Dear Chaps in the UK:
> >
> > The hate and discontent just spewed upon you per the nickname of
> > "an_old_friend" is none other than Mark C. Morgan, KB9RQZ.
>
> no hate spewed

Sure it was...And bigoted hate at that...You basically told the
Brits (capitalized, Markie...It's a formal reference...) to get lost
just because they were not discussing United States policy matters.

You manifested the very example of the "Ugly American". (and
having seen your morbidly obese, unwashed mug on the net before, I can
attest to it in more ways than one...)

> stve just caling #### ####

Where did I call you ####...?!?!

Steve, K4YZ

562. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 15:12:17 UTC
From: meow2222@care2.com
Message-ID: <1137337937.728906.113160@g47g2000cwa.googlegroups.com>
Source record: 14363
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Too_Many_Tools wrote:
> I like many of you had my first experience with electronics through the
> electronic kits that Radio Shack has had over the years. The versions
> that spanned the 50, 100, 200 electronic experiments all come to mind.
>
> My question is...how many versions and types of these kits have they
> had over the years?
>
> I would be interested in hearing which ones you recall.
>
> Thanks
>
> TMT

What I remember most about them is the wide variety of different types of kit, and the garbage quality of the circuits in the books. ISTR the components strung between springs type were popular and cheap, I also saw one with square plastic cubes that each contained a part, and they all slotted in next to each other to make circuits. And the Philips ones that were a PCB with components mounted on bolts which screwed to the pcb.

Best thing to do with the spring ones was to rip out the parts, then you got twice as many connection points to use, just string parts between the springs instead of wires. Add some more springs, which is easy enough, and you could start building more serious projects with them, eg radios that worked properly, burger alarms, etc.

NT

563. More Markie Mularkie

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 15:17:18 UTC
From: K4YZ <k4yz@aol.com>
Message-ID: <1137338238.319507.188650@f14g2000cwb.googlegroups.com>
Source record: 14364
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Dave Heil wrote:
> an_old_friend wrote:
> > Dave Heil wrote:
> >> an_old_friend wrote:
> >>> K4YZ wrote:
> >>>> Dear Chaps in the UK:
> >>>>
> >>>> The hate and discontent just spewed upon you per the nickname of
> >>>> "an_old_friend" is none other than Mark C. Morgan, KB9RQZ.
> >>>
> >>> no hate spewed stve just caling #### ####
> >>
> >> If you're referring to your original post, you are quite correct. It
> >> was and is.
> >
> > indeed and that means Steve lied in calling it something else
>
> No, I don't think he did. You just summed up your post very succinctly.
> Steve was much too kind.

He'll never understand what he did to himself there, Dave...

Just sit back and enjoy the show!

I am!

73

Steve, K4YZ

564. Re: Soundcard Application development.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 15:46:55 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <Ecuyf.419$yK6.404@fe06.lga>
Source record: 14365

"Bob Masta" <NoSpam@daqarta.com> wrote in message
news:43ca603a.4281401@news.itd.umich.edu...

> On 14 Jan 2006 23:35:30 -0800, "Rubon" <rubon_ismail@yahoo.com> wrote:
>
>>I would like to develop an application under WINDOWS-os using my PC

From your question, I wonder if you have any idea what a PITA Windows
development is -- especially when it relates to dealing with hardware at a
low level.

> Sorry, all sound cards that I know of are AC-coupled, with a roll-off

I've never studied them, but I would expect this to be the case. And even
if it were not, I can't imagine why the DAC would be designed to support DC

..

{handful of crosspostings clipped]

565. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 15:54:22 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <horks19grr31h9polc42s1rqdb8ra50apn@4ax.com>
Source record: 14366
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On 15 Jan 2006 07:12:17 -0800, meow2222@care2.com wrote:

...

>Add some more springs, which is
>easy enough, and you could start building more serious projects with
>them, eg radios that worked properly, burger alarms, etc.

Yes, I remember building one and driving by Burger King with it in
my car. It went off about 100 yards away from BK...

--
John Fields
Professional Circuit Designer

566. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 16:09:50 UTC
From: Fred Bloggs <nospam@nospam.com>
Message-ID: <43CA73CB.3080707@nospam.com>
Source record: 14367
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

> I like many of you had my first experience with electronics through the
> electronic kits that Radio Shack has had over the years. The versions
> that spanned the 50, 100, 200 electronic experiments all come to mind.
>
> My question is...how many versions and types of these kits have they
> had over the years?
>
> I would be interested in hearing which ones you recall.
>

Those kits were for sissies. Real children start out immediately playing
with the mains wiring and electric train sets, lighting, motors
etc...the school of hard knocks and shocks.

567. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 16:16:55 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <e7tks1l5fnf6goidjit73jp5k598si8org@4ax.com>
Source record: 14368
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On Sun, 15 Jan 2006 16:09:50 GMT, Fred Bloggs <nospam@nospam.com>
wrote:

>> I like many of you had my first experience with electronics through the
>> electronic kits that Radio Shack has had over the years. The versions
>> that spanned the 50, 100, 200 electronic experiments all come to mind.
>>
>> My question is...how many versions and types of these kits have they
>> had over the years?
>>
>> I would be interested in hearing which ones you recall.
>>
>
>
>Those kits were for sissies. Real children start out immediately playing
>with the mains wiring and electric train sets, lighting, motors
>etc...the school of hard knocks and shocks.

Absolutely! Learning does not occur unless there's a failure that you
must analyse and understand. Flame makes it sink in even more ;-)

I estimate that I have torn up at least 20X as many sheets of paper as
I have kept.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

Anyone can be rude, but it takes a Democrat to be a real dirtbag.

568. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 16:21:23 UTC
From: Mark Fergerson <nunya@biz.ness>
Message-ID: <ADuyf.9216$jR.1321@fed1read01>
Source record: 14369
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Fred Bloggs wrote:
>> I like many of you had my first experience with electronics through the
>> electronic kits that Radio Shack has had over the years. The versions
>> that spanned the 50, 100, 200 electronic experiments all come to mind.
>>
>> My question is...how many versions and types of these kits have they
>> had over the years?
>>
>> I would be interested in hearing which ones you recall.

> Those kits were for sissies. Real children start out immediately playing
> with the mains wiring and electric train sets, lighting, motors
> etc...the school of hard knocks and shocks.

They were good for getting down to the fiddly bits (for those of us
who survived the mains wiring etc with breath and fingers intact).

Besides, I believe I recounted some of my "teleportation experiences"
with mains voltage in my youth. That sort of thing can be misconstrued
as a religious experience, but I was lucky, I guess...

Mark L. Fergerson

569. Re: Soundcard Application development.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 16:28:15 UTC
From: Dave <noone@nowhere.com>
Message-ID: <Z8KdnWLOCftu6lfenZ2dnUVZ_tmdnZ2d@crocker.com>
Source record: 14370
Cross-posted to: microsoft.public.win32.programmer.mmedia,comp.speech.users,rec.radio.amateur.homebrew,comp.os.ms-windows.programmer.multimedia,comp.lang.basic.visual.misc

start from using the lpt port not a sound card. you can also use com port control signals like dtr, rts, cts for i/o. you will probably have to provide a signal level converter in any case. there are also control cards, mostly for industrial or scientific applications, that provide digital and analog input and output... or there are usb devices that do the same thing for remote control or data collection. and if you are trying to control household stuff check out the x10 computer control interfaces that are pretty reasonable.

"Bob Masta" <NoSpam@daqarta.com> wrote in message
news:43ca603a.4281401@news.itd.umich.edu...
> On 14 Jan 2006 23:35:30 -0800, "Rubon" <rubon_ismail@yahoo.com> wrote:
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>>Hi,
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>>I would like to develop an application under WINDOWS-os using my PC
>>soundcard that will deliver a DC output (+2 to -2 Volt in step)
>>through the speaker-port and collect an AC (~ 15 kHz) corresponding to
>>the DC step through the MIC port.
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>>Rubon Ismail
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> Sorry, all sound cards that I know of are AC-coupled, with a roll-off
> in the few Hertz range (or above). So you won't get anything like
> a DC step unless you are talking about very short durations. (Few
> msec or so.) Longer durations will have more and more noticeable
> tilt as the input coupling capacitors charge up. If you are only
> using this as an auditory stimulus click, say, for evoked potentials,
> it probaby won't make any difference because you couldn't really
> hear the DC anyway, just the transitions. But if you are trying to
> (say) drive a solenoid to whack a resonant structure, you will need
> some external interface.
>
> Tell us more about what you are trying to do.
>
> Best regards,
>
>
>
>

>
> Bob Masta
> dqatechATdaqartaDOTcom
>
> D A Q A R T A
> Data AcQuisition And Real-Time Analysis
> www.daqarta.com
> Home of DaqGen, the FREEWARE signal generator

570. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 16:31:26 UTC
From: Fred Bloggs <nospam@nospam.com>
Message-ID: <43CA78DB.9030308@nospam.com>
Source record: 14371
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Mark Fergerson wrote:
> Fred Bloggs wrote:
>
>>> I like many of you had my first experience with electronics through the
>>> electronic kits that Radio Shack has had over the years. The versions
>>> that spanned the 50, 100, 200 electronic experiments all come to mind.
>>>
>>> My question is...how many versions and types of these kits have they
>>> had over the years?
>>>
>>> I would be interested in hearing which ones you recall.
>>
>
>> Those kits were for sissies. Real children start out immediately
>> playing with the mains wiring and electric train sets, lighting,
>> motors etc...the school of hard knocks and shocks.
>
>
> They were good for getting down to the fiddly bits (for those of us
> who survived the mains wiring etc with breath and fingers intact).
>
> Besides, I believe I recounted some of my "teleportation experiences"
> with mains voltage in my youth. That sort of thing can be misconstrued
> as a religious experience, but I was lucky, I guess...
>
>
> Mark L. Fergerson
>

If a child walks into school with a 2nd - 3rd degree electrical burn
these days, it is probable the police will soon be around to arrest the
parents:-)

571. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 16:53:02 UTC
From: Richard Henry <rphenry@home.com>
Message-ID: <42vcviF1Id77sU1@individual.net>
Source record: 14372
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"Fred Bloggs" <nospam@nospam.com> wrote in message
news:43CA73CB.3080707@nospam.com...
> > I like many of you had my first experience with electronics through the
> > electronic kits that Radio Shack has had over the years. The versions
> > that spanned the 50, 100, 200 electronic experiments all come to mind.
> >
> > My question is...how many versions and types of these kits have they
> > had over the years?
> >
> > I would be interested in hearing which ones you recall.
> >
>
>
> Those kits were for sissies. Real children start out immediately playing
> with the mains wiring and electric train sets, lighting, motors
> etc...the school of hard knocks and shocks.

When I got my electric train set, I quickly found that the spring from a
ball-point pen would glow red hot when placed across the track wire
terminals of the control box.

572. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 16:54:26 UTC
From: Richard Henry <rphenry@home.com>
Message-ID: <42vd26F1kc20jU1@individual.net>
Source record: 14373
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"Fred Bloggs" <nospam@nospam.com> wrote in message
news:43CA78DB.9030308@nospam.com...
>
>
> Mark Fergerson wrote:
> > Fred Bloggs wrote:
> >
> >>> I like many of you had my first experience with electronics through
the
> >>> electronic kits that Radio Shack has had over the years. The versions
> >>> that spanned the 50, 100, 200 electronic experiments all come to mind.
> >>>
> >>> My question is...how many versions and types of these kits have they
> >>> had over the years?
> >>>
> >>> I would be interested in hearing which ones you recall.
> >>
> >
> >> Those kits were for sissies. Real children start out immediately
> >> playing with the mains wiring and electric train sets, lighting,
> >> motors etc...the school of hard knocks and shocks.
> >
> >
> > They were good for getting down to the fiddly bits (for those of us
> > who survived the mains wiring etc with breath and fingers intact).
> >
> > Besides, I believe I recounted some of my "teleportation experiences"
> > with mains voltage in my youth. That sort of thing can be misconstrued
> > as a religious experience, but I was lucky, I guess...
> >
> >
> > Mark L. Fergerson
> >
>
> If a child walks into school with a 2nd - 3rd degree electrical burn
> these days, it is probable the police will soon be around to arrest the
> parents:-)

Ifa child has a 3rd degree elctrical burn, he should be walking into a
hospital.

573. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 16:58:13 UTC
From: Fred Bloggs <nospam@nospam.com>
Message-ID: <43CA7F23.6010408@nospam.com>
Source record: 14374
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Richard Henry wrote:
> "Fred Bloggs" <nospam@nospam.com> wrote in message
> news:43CA73CB.3080707@nospam.com...
>
>>>I like many of you had my first experience with electronics through the
>>>electronic kits that Radio Shack has had over the years. The versions
>>>that spanned the 50, 100, 200 electronic experiments all come to mind.
>>>
>>>My question is...how many versions and types of these kits have they
>>>had over the years?
>>>
>>>I would be interested in hearing which ones you recall.
>>>
>>
>>
>>Those kits were for sissies. Real children start out immediately playing
>>with the mains wiring and electric train sets, lighting, motors
>>etc...the school of hard knocks and shocks.
>
>
> When I got my electric train set, I quickly found that the spring from a
> ball-point pen would glow red hot when placed across the track wire
> terminals of the control box.
>
>

Hahah- that's when I learned you do not strip the wires with your teeth
when they're plugged into the transformer...

574. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 17:30:36 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <4l1ls1lc3er03sq2123r1i8sitvsqm10bv@4ax.com>
Source record: 14375
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On Sun, 15 Jan 2006 09:16:55 -0700, Jim Thompson
<To-Email-Use-The-Envelope-Icon@My-Web-Site.com> wrote:

>On Sun, 15 Jan 2006 16:09:50 GMT, Fred Bloggs <nospam@nospam.com>
>wrote:
>
>>> I like many of you had my first experience with electronics through the
>>> electronic kits that Radio Shack has had over the years. The versions
>>> that spanned the 50, 100, 200 electronic experiments all come to mind.
>>>
>>> My question is...how many versions and types of these kits have they
>>> had over the years?
>>>
>>> I would be interested in hearing which ones you recall.
>>>
>>
>>
>>Those kits were for sissies. Real children start out immediately playing
>>with the mains wiring and electric train sets, lighting, motors
>>etc...the school of hard knocks and shocks.
>
>Absolutely! Learning does not occur unless there's a failure that you
>must analyse and understand. Flame makes it sink in even more ;-)
>
>I estimate that I have torn up at least 20X as many sheets of paper as
>I have kept.

Slow learner, huh?

--
John Fields
Professional Circuit Designer

575. steve talking shit again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 19:36:29 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1137353789.349967.122950@f14g2000cwb.googlegroups.com>
Source record: 14376
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

K4YZ wrote:
> Dave Heil wrote:
> > an_old_friend wrote:
> > > Dave Heil wrote:
> > >> an_old_friend wrote:
> > >>> K4YZ wrote:
> > >>>> Dear Chaps in the UK:
> > >>>>
> > >>>> The hate and discontent just spewed upon you per the nickname of
> > >>>> "an_old_friend" is none other than Mark C. Morgan, KB9RQZ.
> > >>>
> > >>> no hate spewed stve just caling ##### #####
> > >>
> > >> If you're referring to your original post, you are quite correct. It
> > >> was and is.
> > >
> > > indeed and that means Steve lied in calling it something else
> >
> > No, I don't think he did. You just summed up your post very succinctly.
> > Steve was much too kind.

yes he lied in calling ti hate

it was shit
>
> He'll never understand what he did to himself there, Dave...

I sur e did

I took that ponderous bog shit that the idoit reopsts so often buried
one of the read in a mire of shit

>
> Just sit back and enjoy the show!
>
> I am!
>
> 73
>
> Steve, K4YZ

576. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 19:44:59 UTC
From: Ben Bradley <ben_nospam_bradley@frontiernet.net>
Message-ID: <vb8ls11h6pr0iav30n5klre5alpr73es6r@4ax.com>
Source record: 14377
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

In a crosspost to a large but apparently related set of newsgroups,
specifically:
sci.electronics.design,
rec.radio.amateur.homebrew,
sci.electronics.equipment,
sci.electronics.repair and
comp.robotics.misc;
On 14 Jan 2006 17:17:31 -0800, "Too_Many_Tools"
<too_many_tools@yahoo.com> wrote:

>I like many of you had my first experience with electronics through the
>electronic kits that Radio Shack has had over the years. The versions
>that spanned the 50, 100, 200 electronic experiments all come to mind.
>
>My question is...how many versions and types of these kits have they
>had over the years?
>
>I would be interested in hearing which ones you recall.

I only recall that Radio Shack had them, probably over many
decades. I never owned one.

But I don't feel particularly deprived - when I was about five to
six years old I got a Heathkit version of these "N-in-1" kits. I have
no clue of the model number, but I think it had:
one transistor,
one diode,
one variable coil (magnetic material on the end of a small threaded
rod that went into the coil, you turn the end of the rod to 'tune' it
- common then, I don't see them nowadays)
several capacitors and resistors
small crystal earphone
I recall that it used small compression springs to accept the
wires, and Fahnestock clips to connect to things off-board: earphone,
antenna and ground. Or perhaps it used only springs, but Fahnestock
clips were common connectors for these projects.
There were two radio projects, one with the diode, and one with the
transistor. The one with the transistor was of course much more
sensitive and played louder through the earphone.

I later recall having another brand, a 'more advanced' model on an
actual printed circuit board (there were traces between each
component's leads and the clips or springs on the board), perhaps it
was a Knight-Kit. It had a relay, a silicon photocell, probably two

transistors, and the usual passive components.

>
>Thanks
>
>TMT

577. GOOGLE SECRETS ..earn easy money

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 19:51:29 UTC
From: J Dee <saso@hotmail.com>
Message-ID: <1137354689_4477@sp6iad.superfeed.net>
Source record: 14378

I was browsing these newsgroups, just like you are now, and came across

an article similar to this that said you could make thousands of CASH
within weeks with only an initial investment of $6.00 plus stamps! So I

thought, "Yeah, right, this must be a scam!" But like most of us I was
curious and kept reading. It said that if you send $1.00 to each of the

6 names and addresses listed in the article, you could make thousands
in a very short period of time. You then place your own name and
address at the bottom of the list at #6, and post the article to at
least 300 newsgroups. No catch, that was it.
So I invested six $1.00 bills and six 32 cent postage stamps ... and
boy am I glad I did!!! Within 7 days, I started getting CASH in the
mail! I was shocked! I figured it would end soon and didn't give it
another thought. But the CASH continued coming in. In my first week I
made between $20 to $30. By the end of the second week I had a made a
total of $1,000.00. In the third week I had over $10,000.00 and it was
still growing. This is now my fourth week and I have made a total of
just over $42,000 and it's still coming in ..... It's certainly worth
$6.00 and 6 stamps !!! Also, make sure you print a copy of this article

NOW, so you can get the information off of it as you need it. I promise

you that if you follow the directions exactly, that you will start
making more CASH than you thought possible by doing something so easy!
Suggestion: Read this entire message carefully! (print it out or
download it.) Follow the simple directions and watch the CASH come in!
It's easy. It's legal. And, your investment is only $6.00 (Plus
postage) IMPORTANT: This is not a rip-off; it is not indecent; it is
not illegal; and it is virtually no risk - it really works!!!! If all
of the following instructions are adhered to, you will
receive extraordinary dividends. PLEASE NOTE: Please follow these
directions EXACTLY, and $50,000 or more can be yours in 20 to 60 days.
This program remains successful because of the honesty and integrity of

the participants. Please continue its success by carefully adhering to
the instructions. You will now become part of the Mail Order business.
In this business your product is not solid and tangible, it's a
service. You are in the business of developing Mailing Lists. Many
large corporations are happy to pay big bucks for quality lists.
However, the CASH made from the mailing lists is secondary to the
income which is made from people like you and me asking to be included
in that list. Here are the 4 easy steps to success:
STEP 1: Get 6 separate pieces of paper and write the following on each
piece of paper "PLEASE PUT ME ON YOUR MAILING LIST." Now get 6 US $1.00

bills and place ONE inside EACH
of the 6 pieces of paper so the bill will not be seen through the
envelope (to prevent
thievery). Place one paper in each of the 6 envelopes and seal them.
You should now have 6 sealed envelopes, each with a piece of paper
stating the above phrase, your name and address, and a $1.00 bill. What

you are doing is creating a service. THIS IS ABSOLUTELY LEGAL! You are
requesting a legitimate service and you are paying for it! Mail the 6
envelopes to the following addresses:
#1) Barry Hewison
1222 Louisa ST.
Watertown WI 53098
#2) David Hall
19855 Deercreek DR.
Zachary LA. 70791
#3) P Sewak
6 John Warren Avenue
Glenwood NSW 2768 Australia
#4) S James
#34 - 7611 Moffatt Rd
Richmond BC V6Y 1X9 Canada
#5) J Johnson
201 Dames Road
London E7 OEA
England
#6) S Wize
43A Portnall Road
London W9 3BA
United Kingdom

STEP 2: Now take the #1 name off the list that you see above, move the
other names up (6 becomes 5, 5 becomes 4, etc...) and add YOUR Name as
number 6 on the list.
STEP 3: Change anything you need to, but try to keep this article as
close to original as possible. Now, post your amended article to at
least 300 newsgroups. (I think there are close to 32,000 groups) All
you need is 300, but remember, the more you post, the more CASH you
make! Keep a copy of these steps for yourself and, whenever you need
CASH, you can use it again, and again. PLEASE REMEMBER that this
program remains successful because of the honesty and integrity of the
participants and by their carefully adhering to the directions. Look at

it this way. If you are a person of integrity, the program will
continue and the CASH that so many others have received will come your
way.
NOTE: You may want to retain every name and address sent to you, either

on a computer or hard copy and keep the notes people send you. This
VERIFIES that you are truly providing a
service. (Also, it might be a good idea to wrap the $1 bill in dark
paper to reduce the risk of mail theft.) So, as each post is downloaded

and the directions carefully followed, six members will be reimbursed for their participation as a List Developer with one dollar each. Your name will move up the list geometrically so that when your name reaches

the #1 position you will be receiving thousands of CASH in CASH!!! What

an opportunity for only $6.00 ($1.00 for each of the first six people listed above) Send it now, add your own name to the list and you're in business!
DIRECTIONS FOR HOW TO POST TO NEWSGROUPS
Step 1) You do not need to re-type this entire letter to do your own posting. Simply put your cursor at the beginning of this letter and drag your cursor to the bottom of this letter, and select 'copy' from the edit menu. This will copy the entire letter into the computer's memory.
Step 2) Open a blank 'notepad' file and place your cursor at the top of

the blank page. From the 'edit' menu select 'paste'. This will paste a copy of the letter into notepad so that you can add your name to the list.
Step 3) Save your new notepad file as a .txt file. If you want to do your postings in different settings, you'll always have this file to go

back to.
Step 4) Use Netscape or Internet explorer and try searching for various

newsgroups (on-line forums, message boards, chat sites, discussions.)
Step 5) Visit these message boards and post this article as a new message by highlighting the text of this letter and selecting paste from the edit menu. Fill in the Subject, this will be the header that everyone sees as they scroll through the list of postings in a particular group, click the post message button. You're done with your first one! Congratulations...THAT'S IT! All you have to do is jump to different newsgroups and post away, after you get the hang of it, it will take about 30 seconds for each newsgroup!
REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE CASH YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 300
That's it! You will begin receiving CASH from around the world within days! You may eventually want to rent a P.O.Box due to the large amount

of mail you will receive. If you wish
to stay anonymous, you can invent a name to use, as long as the postman

will deliver it.
JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT
Now the WHY part:
Out of 300 postings, say I receive only 7 replies (a very low example).

So then I made $7.00 with my name at #6 on the letter. Now, each of the

7 persons who just sent me $1.00 make the
MINIMUM 300 postings, each with my name at #5 and only 7 persons respond to each of the 7
original 7, that is another $49.00 for me, now those 49 each make 300

MINIMUM posts with my name at #4 and only 7 replies each, I will bring in an additional $343.00! Now, those 343 persons turn around and post the MINIMUM 300 with my name at #3 and only receive 7 replies each, I will make an additional $2401.00! OK, now here is the fun part, each of

those 2401 persons post a MINIMUM 300 letters with my name at #2 and they each only receive 7 replies, that just made me $16,807.00!!! Those 16807 persons will all deliver this message to 300 newsgroups with my name at #1 and if still 7 persons per 300 Newsgroups

react I will receive $117,649.00! With an original investment of only $6.00! And some stamps. AMAZING! When your name is no longer on the list, you just take the latest posting in the newsgroups, and send out another $6.00 to names on the list, putting your name at number 6 again. And start posting again. The thing to remember is: do you realize that thousands of people all over the world are joining the internet and reading these articles everyday? JUST LIKE YOU are now!! So, can you afford $6.00 and see if it really works?? I think so... People have said, "what if the plan is played out

and no one sends you the CASH? So what! What are the chances of that happening when there are tons of new honest users and new honest people who are joining the internet and newsgroups everyday and are willing to give it a try? Estimates are at 20,000 to 50,000 new users, every day, with thousands of those joining the actual internet. Remember, play FAIRLY and HONESTLY and this will really work. ** By the way, if you try to deceive people by posting the messages with your name in the list and not sending the CASH to the rest of the people already on the list, you

will NOT get as much. This is the fairest and most honest way I have ever seen to share

the wealth of the world without costing anything but our time!!! You also may want to buy mailing and e-mail lists for future CASH. Make sure you print this article out RIGHT NOW! Also, try to keep a list of everyone that sends you CASH and always keep an eye on the newsgroups to make sure everyone is playing fairly. Remember, HONESTY IS THE BEST POLICY. You don't need to cheat the basic idea to make the CASH!! GOOD LUCK to all and please play fairly and reap the huge rewards from this,

which is tons of extra CASH. Please remember to declare your extra income. Thanks once again... "People have asked me if this is really legal. Well, it is! You are using the Internet to advertise your business. What is that business? You are creating a mailing list of people who are interested in home based computer and online business and methods of generating income at home. Remember, people send you a small fee to be added to your mailing list. It is legal. What will you do with your list of thousands of names? That's up to you." So, build your mailing list, keep good accounts, declare the income and pay your taxes. By doing this you prove your business intentions. Keep an eye on

the newsgroups and when the cash has stopped coming (that means your name is no longer on the list), you just take the latest posting at the

newsgroups, send another $6.00 to the names stated on the list, make your corrections (put your name at #6) and start posting again.
NOTES:
*1. In some countries, the export of the country's exchange is illegal.

But you can get the license to do this from the post office, explaining

the above statements (that you have an online business, etc. You may have to pay an extra tax, but that's OK, the amount of the incoming CASH is HUGE! And as I said, a few countries have that restriction.
*2. You may want to buy mailing and e-mail lists for future CASH. (Or Database or Spreadsheet software.)
*3. If you're really not sure or still think this can't be for real, please print a copy of this article and give it to someone who really needs the CASH, and see what happens.
*4. You will start getting responses within 1-2 weeks, it depends.

ALSO REMEMBER
SEND YOUR $1 OUT TO EVERYONE ON THE LIST,
EVEN IF THEY ARE NOT FROM THE U.S.
WHAT ARE YOU WAITING FOR???

Posted Via Usenet.com Premium Usenet Newsgroup Services

** SPEED ** RETENTION ** COMPLETION ** ANONYMITY **
----
http://www.usenet.com

578. Any CDR's known to work with old CD drives???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 20:14:23 UTC
From: hexter@blazenet.net
Message-ID: <11slb8vm3apjnfb@corp.supernews.com>
Source record: 14379

Hi folks,

Problem is this, My old Panasonic CF-41 laptop works great with my GPS/APRS goodies, but the internal cd drive doesn't seem to want to read CDR's. This was a common problem with older 4x and slower drives. I suspect the internal drive is a 4 speed and working to original specs perfectly.

Have you found any CDR's that consistantly seem to work with old drives?

At home I hook my BackPack cd drive up to the laptop and all is well, but on the road that is not an option.

Thanks for any leads!

579. Re: Any CDR's known to work with old CD drives???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 20:28:22 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1137356902.102476.182270@z14g2000cwz.googlegroups.com>
Source record: 14380

Gudmundur wrote:
> Hi folks,
>
> Problem is this, My old Panasonic CF-41 laptop works great with
> my GPS/APRS goodies, but the internal cd drive doesn't seem to
> want to read CDR's. This was a common problem with older 4x and
> slower drives. I suspect the internal drive is a 4 speed and working
> to original specs perfectly.
>
> Have you found any CDR's that consistantly seem to work with old
> drives?

having dealt a bit with similar problem I think your problem may be
more with the controling software than the writing drive

XP esp is not a good choice

look for one the older cd burning programs and try bruning the at 1x
speed
>
> At home I hook my BackPack cd drive up to the laptop and all is well,
> but on the road that is not an option.
>
> Thanks for any leads!

580. Re: Any CDR's known to work with old CD drives???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 20:51:04 UTC
From: gsm@mendelson.com
Message-ID: <slrndsldaq.bd4.gsm@cable.mendelson.com>
Source record: 14381

Gudmundur wrote:
> Hi folks,
>
> Problem is this, My old Panasonic CF-41 laptop works great with
> my GPS/APRS goodies, but the internal cd drive doesn't seem to
> want to read CDR's. This was a common problem with older 4x and
> slower drives. I suspect the internal drive is a 4 speed and working
> to original specs perfectly.
>
> Have you found any CDR's that consistantly seem to work with old
> drives?

I can't say 100%, but I've had good luck with the following techniques:

1. Use disks with a recording surface that looks yellow (aka "gold").
There are different dyes used and that seems to work the best.

2. Record at no faster than the read speed of the drive.

3. For some unexplained reason, the best luck I have had is with a DVD
burner (I've done it with 3 different ones, LG, Toshiba and NEC)
at single (CD 4x) speed.

4. Turn off any buffer overrun protection. It works by streching out the gap
between sectors and the new gap may be too big for older drives.

5. Always make sure you finalize the disk, close the sessions, fixate
(same thing different software).

6. A CD lens cleaning disk has saved many a drive for me. But I live in
the desert.

I've had great luck with TEAC blanks, they are marked 12x to 52x but they
do work at lower speeds.

Software issues:

I often burn my CDs and DVD roms using a combination of UDF and ISO
file systems. Older operating systems seem to have trouble with them,
limit them to ISO file systems. If you really get stuck, try turning off
rock-ridge and joliet extensions.

Good luck,

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

IL Voice: (07)-7424-1667 IL Fax: 972-2-648-1443 U.S. Voice: 1-215-821-1838
The trouble with being a futurist is that when people get around to believing you, it's too late. We lost. Google 2,000,000:Hams 0.

581. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 21:04:28 UTC
From: catman <pawelski_robots@comcast.net>
Message-ID: <1137359068.337873.240310@o13g2000cwo.googlegroups.com>
Source record: 14382
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Mine was a RS Solar Power Kit. Not as many items as the *in1 kits, but
using the solar cells was cool.

While the instructions did not go into to too much detail on the why,
they did cover it at least a little. With the easy spring connections,
I would often switch things around to see what would happen. The
results were the most obvious with the sound experiments.

The important thing with the kits was that you at least learned what
different parts were called. Twenty five years later when my wife
wanted to build a Sinclar ZX81 we bought surplus, I got her a 150 in 1
kit first just so she could learn what the pieces were before she
started on building the computer since she knew nothing about
electronics when she started. The kits gave you confidence that you
could do this, even if you didn't completely understand what it was
that you were doing.

Paul Pawelski

- exray - wrote:
> CLFE wrote:
>
>
> >
> > Good point! Maybe they thought that the kit builder would "become"
> > interested in why - and reach further..... Who knows.....?
> >
> > CLF
> >
> >
> Hi Lou, long time no see.
> I don't think they "thought" anything. Just filling a niche marketing
> wise. Lots of kids have an interest in something new - not necessarily
> something specific - and the only way for a parent to capitalise on what
> might be a budding ambition would be exposure to something like this kit
> rather than just disassembling the family's clock radio.
> Anybody who has raised a kid who wanted to be a "musician" in the school
> band at about 7th-8th Grade knows what I'm talking about :)
> Hehe...I remember my "chemistry set". It actually had instructions
> about how to make a stink bomb. That didn't turn me towards being a
> chemist but the exposure to all that stuff at least gave me some
> cognizance of what it was all about at an age when I knew absolutely zip
> about chemicals. Not that that has changed any in the past 40 years !
>

> -Bill

582. More Markie Mularkie

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 21:15:48 UTC
From: K4YZ <k4yz@aol.com>
Message-ID: <1137359748.363420.148090@f14g2000cwb.googlegroups.com>
Source record: 14383
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

an_old_friend wrote:
> K4YZ wrote:
> > Dave Heil wrote:
> > > an_old_friend wrote:
> > > > Dave Heil wrote:
> > > >> an_old_friend wrote:
> > > >>> K4YZ wrote:
> > > >>>> Dear Chaps in the UK:
> > > >>>>
> > > >>>> The hate and discontent just spewed upon you per the nickname of
> > > >>>> "an_old_friend" is none other than Mark C. Morgan, KB9RQZ.
> > > >>>
> > > >>> no hate spewed stve just caling #### ####
> > > >>
> > > >> If you're referring to your original post, you are quite correct. It
> > > >> was and is.
> > > >
> > > > indeed and that means Steve lied in calling it something else
> > >
> > > No, I don't think he did. You just summed up your post very succinctly.
> > > Steve was much too kind.
>
> yes he lied in calling ti hate
>
> it was ####

It was from you, so I suppose it was both.

> > He'll never understand what he did to himself there, Dave...
>
> I sur e did

From the following....

> I took that ponderous bog #### that the idoit reopsts so often buried
> one of the read in a mire of ####

...I'd have to say, no, you didn't.

Steve, K4YZ

583. more shit from steve

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 21:31:50 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1137360710.513175.135150@g43g2000cwa.googlegroups.com>
Source record: 14384
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

K4YZ wrote:
> an_old_friend wrote:

> > it was shit
consortship fixed

584. RadioPirates Forum Check It out

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 21:34:30 UTC
From: DJboutit <Recordking@Hotmail.com>
Message-ID: <Gdzyf.16075$SD1.8987@tornado.texas.rr.com>
Source record: 14385

A community for Pirate Radio enthusiasts to discuse this great hobby and too meet other people interested in Pirate Radio
http://radiopirates.ny-cp.net/index.php

585. Re: Building a 'Robinson Crusoe' Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 21:40:16 UTC
From: John Savage <rookswood@suburbian.com.au>
Message-ID: <060116000083548.16Jan06$rookswood@suburbian.com>
Source record: 14386
Cross-posted to:
sci.chem.electrochem.battery,alt.energy.homepower,sci.electronics.repair,rec.radio.amateur.homebrew,alt.energy.renewable

On 02 Jan 2006, JR North <jasonrnorth@bigfoot.com> wrote:
>in an emergency, For materials, I would use a brick to smash Radio
>Shack's window and get all the batteries I need.

All the batteries? Then you'd better do that before Friday!

>> What materials would you use?

To fabricate a cell with dissimilar metals + salt water electrolyte you simply search in the sand for different bags of dubloons--and hope they came from batches of alloy sufficiently dissimilar to generate a worth-while potential difference. If not, then jump the next pirate who comes ashore and steal his sword: it's iron or steel. Use that as one of the electrode metals for your battery. But you can't escape the island in the pirate's rowboat, that would be against the spirit of adventure ....
--
John Savage (my news address is not valid for email)

586. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 21:41:55 UTC
From: clifto <clifto@clifto.com>
Message-ID: <36sq93-hus.ln1@remote.clifto.com>
Source record: 14387
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

John Fields wrote:
> On 15 Jan 2006 07:12:17 -0800, meow2222@care2.com wrote:
>>Add some more springs, which is
>>easy enough, and you could start building more serious projects with
>>them, eg radios that worked properly, burger alarms, etc.
>
> Yes, I remember building one and driving by Burger King with it in
> my car. It went off about 100 yards away from BK...

You should have adjusted the circuit to detect only burgers above 80
degrees F.

--
If John McCain gets the 2008 Republican Presidential nomination,
my vote for President will be a write-in for Jiang Zemin.

587. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 22:02:45 UTC
From: CLFE <Junkmail@clfurent.com>
Message-ID: <43cac683$0$8292$ecde5a14@news.coretel.net>
Source record: 14388
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

```
"Richard Henry" <rphenry@home.com> wrote in message
news:42vd26F1kc20jU1@individual.net...
>
> "Fred Bloggs" <nospam@nospam.com> wrote in message
> news:43CA78DB.9030308@nospam.com...
>>
>>
>> Mark Fergerson wrote:
>> > Fred Bloggs wrote:
>> >
>> >>> I like many of you had my first experience with electronics through
> the
>> >>> electronic kits that Radio Shack has had over the years. The versions
>> >>> that spanned the 50, 100, 200 electronic experiments all come to
>> >>> mind.
>> >>>
>> >>> My question is...how many versions and types of these kits have they
>> >>> had over the years?
>> >>>
>> >>> I would be interested in hearing which ones you recall.
>> >>
>> >
>> >> Those kits were for sissies. Real children start out immediately
>> >> playing with the mains wiring and electric train sets, lighting,
>> >> motors etc...the school of hard knocks and shocks.
>> >
>> >
>> > They were good for getting down to the fiddly bits (for those of us
>> > who survived the mains wiring etc with breath and fingers intact).
>> >
>> > Besides, I believe I recounted some of my "teleportation experiences"
>> > with mains voltage in my youth. That sort of thing can be misconstrued
>> > as a religious experience, but I was lucky, I guess...
>> >
>> >
>> > Mark L. Fergerson
>> >
>>
>> If a child walks into school with a 2nd - 3rd degree electrical burn
>> these days, it is probable the police will soon be around to arrest the
>> parents:-)
>
```

> Ifa child has a 3rd degree elctrical burn, he should be walking into a
> hospital.
>
>
>

Yes they should be, but you seem to have missed the point! With the laws today - the parents would be arrested immediately - in most cases for Child Abuse - and questions asked later. The answer of trying to teach them electronics probably wouldn't be a good answer now days. Many of those who made and uphold the laws either didn't grow up like we did - or - lead a very sheltered life and took very few chances.

It certainly wasn't my parents fault, I was a very inquisitive child. Hell, I stuck my fingers in empty light sockets and hit the switch and did many other stupd stunts - more than I can keep count of. But, I LEARNED. Back in those good ole days - Child Abuse may have been around, but parents weren't busted just for looking at their child - in a cross manner. THAT was living. Today - you have to watch anything and everything. I'm glad my kids are grown, now I don't have that worry.

588. More Markie Mularkie

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 22:07:00 UTC
From: K4YZ <k4yz@aol.com>
Message-ID: <1137362820.872964.283000@g44g2000cwa.googlegroups.com>
Source record: 14389
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

an_old_friend wrote:
> K4YZ wrote:
> > an_old_friend wrote:
>
> > > it was ####
> consortship fixed

Who were you consorting with?

Steve, K4YZ

589. stve lifouls up some more

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 22:14:14 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1137363254.821503.175500@o13g2000cwo.googlegroups.com>
Source record: 14390
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

```
K4YZ wrote:
> an_old_friend wrote:
> > K4YZ wrote:
> > > an_old_friend wrote:
> > >
> > > > it wasshit
> > consortship fixed
>
> Who were you consorting with?

you as point of fact

>
> Steve, K4YZ
```

590. More Markie Mularkie

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 22:16:31 UTC
From: K4YZ <stevenrobeson@yahoo.com>
Message-ID: <1137363391.840783.35680@f14g2000cwb.googlegroups.com>
Source record: 14391
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

```
an_old_friend wrote:
> K4YZ wrote:
> > an_old_friend wrote:
> > > K4YZ wrote:
> > > > an_old_friend wrote:
> > > >
> > > > > it was####
> > > consortship fixed
> > >
> > Who were you consorting with?
> >
> you as point of fact

Uhhhhhhhh....Nope.

Steve, K4YZ
```

591. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 22:23:52 UTC
From: Michael Ware <mware@insight.rr.com>
Message-ID: <YXzyf.7310$tK4.254@tornado.ohiordc.rr.com>
Source record: 14392
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Man, I wanted one of those kits SOOO bad!

"catman" <pawelski_robots@comcast.net> wrote in message
news:1137359068.337873.240310@o13g2000cwo.googlegroups.com...
>////
> Twenty five years later when my wife
> wanted to build a Sinclar ZX81 we bought surplus, >
> Paul Pawelski

592. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 22:25:33 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <rnils1lhntb8ogedfkofrhcpe2scdfu425@4ax.com>
Source record: 14393
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Wed, 28 Dec 2005 16:29:14 -0600, clifto <clifto@clifto.com>
wrote:

>Rich Grise, but drunk wrote:
>> "... Accurate imitation of the Hammond sound with simple electronic
>> circuitry was difficult, because the subtly-changing phase relationships
>> between tonewheels could not be easily replicated...."
>>
>> OK, fair enough. :-)
>>
>> I guess a piano is even harder - they don't even reproduce well from a
>> live recording! :-)
>
>I heard a decently accurate electronic piano sound long before I heard
>anything remotely resembling the timber of a B3.

Oak, was it, or maple?

--
John Fields
Professional Circuit Designer

593. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 22:30:09 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <uvils1dg75c394976hoi422n0svjrj5ofd@4ax.com>
Source record: 14394
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Sun, 08 Jan 2006 17:02:05 -0600, clifto <clifto@clifto.com>
wrote:

>Paul Burridge wrote:
>> xray <notreally@hotmail.invalid> wrote:
>>>No, Spectum Analysers are useless for anyone outside the government or
>>>RF extremists.
>>
>> ???
>> Er, they're extremely useful pieces of test gear for anyone involved
>> in RF., even hobbyists.
>
>No, they're garbage.
>
>I have a really nice garbage can in case anyone wants.

What's your point?

Are you saying that you have spectrum analyzers (which you say are
garbage) that you want to get rid of, or are you saying that you'd
like someone to dump a spectrum analyzer into your garbage can?

--
John Fields
Professional Circuit Designer

594. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 22:35:55 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <o8jls1he8fd8n154gh2un0ivqk8419n92a@4ax.com>
Source record: 14395
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Mon, 09 Jan 2006 00:01:54 -0600, clifto <clifto@clifto.com>
wrote:

>maxfoo wrote:
>> On Sun, 08 Jan 2006 17:02:05 -0600, clifto <clifto@clifto.com> wrote:
>>>Paul Burridge wrote:
>>>> xray <notreally@hotmail.invalid> wrote:
>>>>>No, Spectum Analysers are useless for anyone outside the government or
>>>>>RF extremists.
>>>>
>>>> ???
>>>> Er, they're extremely useful pieces of test gear for anyone involved
>>>> in RF., even hobbyists.
>>>
>>>No, they're garbage.
>>>
>>>I have a really nice garbage can in case anyone wants.
>>
>> Will it do phase noise measurements for me?
>
>Only if someone sends me the right kind of garbage.

With all due respect, and being as polite as I can, I must say that
after reading your four posts to sci.electronics.design, I get the
feeling that you don't know what you're talking about.

Prove me wrong?

--
John Fields
Professional Circuit Designer

595. Re: SMT 40m + 20m qrp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 22:41:02 UTC
From: Mike Young <boat042-spam@yahoo.com>
Message-ID: <2cAyf.4932$_S7.3623@newssvr14.news.prodigy.com>
Source record: 14396

<skavanagh72nospam@yahoo.ca> wrote in message
news:1137168978.833797.160460@f14g2000cwb.googlegroups.com...
> Mike:
>
> There have been a few very interesting SMT transceiver kits with
> limited production runs, including KD1JV's ATS series. Nothing much
> about them on his website now.
>
> http://kd1jv.qrpradio.com/
>
> There's quite a bit of info on the ATS-3 at
> http://www.ae5x.com/ats3.html .
>
> Another recent one is the NorCal 2030 (supposed to have a pretty good
> RX), see
>
> http://www.norcalqrp.org/nc2030.htm

Thanks for the links. The ATS3 looks promising, as do the DDS and SDR
directions. I'm pleased to find the fresh ideas making their way along.
Seeing the gulf between the old and the new, though, it makes you wonder
(yet again) where HF operating will be in another ten or twenty years. I
have half a mind to hibernate another year or so, and see where the "kids"
take us. :o

596. more shit form the asshole of rrap

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 22:42:48 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1137364967.982538.82750@g44g2000cwa.googlegroups.com>
Source record: 14397
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

K4YZ wrote:
> an_old_friend wrote:
> > K4YZ wrote:
> > > an_old_friend wrote:
> > > > K4YZ wrote:
> > > > > an_old_friend wrote:
> > > >
> > > > > > it wasshit
> > > > consortship fixed
> > >
> > > Who were you consorting with?
> >
> > you as point of fact
>
> Uhhhhhhhh....Nope.

yep

and you seem to enjoy consorting with me here online indeed you do sem
to live for it
>
> Steve, K4YZ

597. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 22:44:21 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e347020da876b8a989727@news-central.giganews.com>
Source record: 14248
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

In article <e7tks1l5fnf6goidjit73jp5k598si8org@4ax.com>, To-Email-Use-
The-Envelope-Icon@My-Web-Site.com says...

> Learning does not occur unless there's a failure that you
> must analyse and understand.

Nice. Original?

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam
---

598. Re: Soundcard Application development.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 22:50:01 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e347178b6f33fca989728@news-central.giganews.com>
Source record: 14249

In article <Ecuyf.419$yK6.404@fe06.lga>, xpyttl_NOSPAM@earthling.net
says...
> From your question, I wonder if you have any idea what a PITA Windows
> development is -- especially when it relates to dealing with hardware at a
> low level.

1994 was a long time ago.

> > Sorry, all sound cards that I know of are AC-coupled, with a roll-off
>
> I've never studied them, but I would expect this to be the case. And even
> if it were not, I can't imagine why the DAC would be designed to support DC

Hmm. I'm not sure how to design one that doesn't.

Usually, all that's necessary is to locate the output coupling
capacitors on the sound card and bridge them. This may be easier with
older Sound Blaster 16-era sound cards, before they all went to SMT.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam
---

599. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 23:21:02 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <LYidneUyprt-RVfeRVn-vA@rcn.net>
Source record: 14250
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

John Fields wrote:
> On Mon, 09 Jan 2006 00:01:54 -0600, clifto <clifto@clifto.com>
> wrote:
>
>> maxfoo wrote:
>>> On Sun, 08 Jan 2006 17:02:05 -0600, clifto <clifto@clifto.com> wrote:
>>>> Paul Burridge wrote:
>>>>> xray <notreally@hotmail.invalid> wrote:
>>>>>> No, Spectum Analysers are useless for anyone outside the government or
>>>>>> RF extremists.
>>>>> ???
>>>>> Er, they're extremely useful pieces of test gear for anyone involved
>>>>> in RF., even hobbyists.
>>>> No, they're garbage.
>>>>
>>>> I have a really nice garbage can in case anyone wants.
>>> Will it do phase noise measurements for me?
>> Only if someone sends me the right kind of garbage.
>
> ---
> With all due respect, and being as polite as I can, I must say that
> after reading your four posts to sci.electronics.design, I get the
> feeling that you don't know what you're talking about.
>
> Prove me wrong?

Some postings on this newsgroup aren't meant for the humor impaired.

Do you really want this "joke" explained?

-Chuck

600. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-15 23:34:11 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <c1lls1tv3m0rc3jisvssir22nma0k23uam@4ax.com>
Source record: 14251
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On Sun, 15 Jan 2006 14:44:21 -0800, John Miles
<jmiles@pop.removethistomailme.net> wrote:

>In article <e7tks1l5fnf6goidjit73jp5k598si8org@4ax.com>, To-Email-Use-
>The-Envelope-Icon@My-Web-Site.com says...
>
>> Learning does not occur unless there's a failure that you
>> must analyse and understand.
>
>Nice.

With all due respect and being as polite as I can be, I disagree.

As far as I can see, Jim Thompson's outlook on life seems to me to
be that of a (according to him) polio victim who somehow managed to
mollify that disability (to which all of us who refused to succumb
to that illness should kow-tow) and then went on to achieve
semi-greatness by learning how to transfer circuits onto silicon.

Not a big deal.

Got a circuit which needs to be reproduced a zillion times?
Also not a big deal, no matter what you've been told.

Learning occurs on many levels, not the least of which is the
information which we're given when we're ignorant and _can't_
analyze the data given us.

I learned the names for red and green when I was very young, and I
still see them the same way and call them the names I learned back
then.

--
John Fields
Professional Circuit Designer

601. Re: Crystal Filter Matching

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 00:02:40 UTC
From: tim gorman <tgorman2@cox.net>
Message-ID: <0rneqd.nmv.ln@tg6124.ab0wr.net>
Source record: 14253

Are you the William Sabin of Single-Sideband Systems & Circuits?

tim ab0wr

William E. Sabin wrote:

>
>
> Xtal filters are designed to operate correctly between specific values of
> generator and load resistances. Trying to "match" the input and output
> impedances almost always degrades the filter frequency response. Xtal
> filters are rather strange in that respect because of the complicated
> things that go on inside.
>
> Transforming the generator and load resistances to 800 ohms using L
> networks is an excellent idea. Add the 3 pF that the vendor suggests.
>
> Bill W0IYH
>
> "David" <webreply@orbitcoms.com> wrote in message
> news:Akoyf.217626$V7.210436@news-server.bigpond.net.au...
>>I am wanting to place a 45MHz, 2-pole crystal filter between the first
>>mixer output and 2nd IF input. (Mixer output is a SA602 and IF input is
>>SA605).
>>
>> The mixer output is around 1500 Ohms and the IF input is around 4500 Ohms
>> with 2.5pF capacitance parallel.
>>
>> The required source and termination for the filter is 800 Ohms par with
>> 3pF. The insertion loss of the filter is 2dB max.
>>
>> Would the impedances be close enough to use resitive pad between mixer
>> and filter (680R in series with 1k2) and a small cap to ground across the
>> filter input.
>> Then a 980R resistor to ground at filter output and no capacitance (use
>> SA605 2.5pF and stray to make up the 3pF).
>>
>> This would give total loss around 4.7dB.
>>
>> Or would I be better to use say a tapped capacitor or L match from Mixer
>> to filter with
>> added C on filter input.
>>
>> Apparently the SA605 has a "swet spot" for noise at around 800R so maybe
>> the Res to ground on the input would be ideal ???

>>
>> Thanks for any help, I have not used crystal filters before and unsure of
>> implications of the approach.
>>
>> Regards
>>
>> David Huisman

602. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 00:53:15 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <h1nls1d282vte3e8s48333iukavop6d8vu@4ax.com>
Source record: 14252
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

```
On Sun, 15 Jan 2006 18:21:02 -0500, Chuck Harris
<cf-NO-SPAM-harris@erols.com> wrote:

>
>John Fields wrote:
>> On Mon, 09 Jan 2006 00:01:54 -0600, clifto <clifto@clifto.com>
>> wrote:
>>
>>> maxfoo wrote:
>>>> On Sun, 08 Jan 2006 17:02:05 -0600, clifto <clifto@clifto.com> wrote:
>>>>> Paul Burridge wrote:
>>>>>> xray <notreally@hotmail.invalid> wrote:
>>>>>>> No, Spectum Analysers are useless for anyone outside the government or
>>>>>>> RF extremists.
>>>>>> ???
>>>>>> Er, they're extremely useful pieces of test gear for anyone involved
>>>>>> in RF., even hobbyists.
>>>>> No, they're garbage.
>>>>>
>>>>> I have a really nice garbage can in case anyone wants.
>>>> Will it do phase noise measurements for me?
>>> Only if someone sends me the right kind of garbage.
>>
>> ---
>> With all due respect, and being as polite as I can, I must say that
>> after reading your four posts to sci.electronics.design, I get the
>> feeling that you don't know what you're talking about.
>>
>> Prove me wrong?
>
>Some postings on this newsgroup aren't meant for the humor impaired.
>
>Do you really want this "joke" explained?

---
Sure.

Go for it.

--
John Fields
Professional Circuit Designer
```

603. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 01:20:31 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <zxCyf.15181$or4.5807@newssvr12.news.prodigy.com>
Source record: 14254
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Hello Michael,

> That's true, I guess the electronics hobby just isn't as big as it was in
> the late 70's-early 80's. You would think kids would at least have some
> curiosity about how the game controllers work, or how to build a power
> supply to run their GameBoy to save the batteries. Of course, you can buy a
> power supply for a fraction of what it costs to build one from scratch.
>

I believe most come with a wall wart type supply. After all, they pay
$300 or more for those gizmos. But that's just the problem, kids have
way too much money. We had to make do with whatever parts a discarded
radio or TV set yielded. And that was plenty. I remember jumping up and
down in joy as a kid when I found a 13.56MHz crystal in a TV. That
discovery propelled me into the ISM business.

Regards, Joerg

http://www.analogconsultants.com

604. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 02:18:11 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <fNGdnXde37f5n1beRVn-oQ@rcn.net>
Source record: 14255
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

John Fields wrote:

#0 >>>>>>> Er, they're extremely useful pieces of test gear for anyone involved
>>>>>>> in RF., even hobbyists.
#1 >>>>>> No, they're garbage.
>>>>>>
#2 >>>>>> I have a really nice garbage can in case anyone wants.
#3 >>>>> Will it do phase noise measurements for me?
#2 >>>> Only if someone sends me the right kind of garbage.

...
>> Some postings on this newsgroup aren't meant for the humor impaired.
>>
>> Do you really want this "joke" explained?
>
> ---
> Sure.
>
> Go for it.

The OP posted that he was thinking of getting rid of his
spectrum analyzer, and was wondering if there was some inherent
use that, as a hobbyist, he might of missed.

#0 was a reasonable response to this request for information.

#1 says they are garbage in faint hopes of convincing the OP that
he should get rid of his spectrum analyzer.

#2 echoes #1, and offers up a garbage can for the OP to put his
spectrum analyzer in.

#3 plays the straight man, and wonders if the "really nice garbage can"
can do phase noise measurements.

#2 plays the comic, and implies that if someone puts a
spectrum analyzer (the right kind of garbage) in his garbage can,
then his garbage can will be able to make phase noise measurements.

Bah duh BUMP! (the sound of the ever present drum in the club band)

I didn't think that you would be so humor impaired that you would
miss the meaning of this simple thread. This is just plain old
ham banter the likes of which is heard daily on the informal nets
on the ham bands, or at hamfests everywhere.

-Chuck

605. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 02:21:18 UTC
From: Jonathan Kirwan <jkirwan@easystreet.com>
Message-ID: <em0ms1houfkdioijt3iq9iiva994qd59sm@4ax.com>
Source record: 14256
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On Sun, 15 Jan 2006 22:23:52 GMT, "Michael Ware"
<mware@insight.rr.com> wrote:

>Man, I wanted one of those kits SOOO bad!
>
>"catman" <pawelski_robots@comcast.net> wrote in message
>news:1137359068.337873.240310@o13g2000cwo.googlegroups.com...
>>////
>> Twenty five years later when my wife
>> wanted to build a Sinclar ZX81 we bought surplus, >
>> Paul Pawelski

I built one and still have it in a box, somewhere. Interesting unit,
at the time.

Jon

606. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 02:30:18 UTC
From: Joseph2k <joseph2k@lanset.com>
Message-ID: <_yDyf.17521$or4.7664@newssvr12.news.prodigy.com>
Source record: 14257
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Bill Janssen wrote:

> RST Engineering wrote:
>
>>Back in the '60s and early '70s I did some work with Impatt and Gunn
>>diodes,
>>building a little self-detecting doppler for speed sensing. However, 35
>>years have passed and my notebooks for that stuff are somewhere in a dusty
>>archive along with my venerable sliderule.
>>
>>Is there a cheap source for onesies-twosies of a radar front-end that will
>>give me doppler audio as a function of a large metal object's speed at a
>>range of 20 meters or so? I don't need to go into production on this
>>thing,
>>just build one. A surplus source would be ideal.
>>
>>It seems that the little kids on our rural country lane have all become
>>teenagers at once and are trying to outdo the others in how fast they can
>>drive daddy's car up and down the lane. We've lost one dog this week and
>>unless I can put up some sort of a siren that goes off when they exceed
>>some agreed upon limit, the carnage will continue.
>>
>>
>>Regards,
>>
>>
>>Jim
>>
>>
>>
>>
>>
> Yep they are available. I have about a dozen or so of Gunn units that
> came from
> 10 GHz door opening bits They have the Gunn diode and a detector diode.
> The rest of the
> electronics I threw away.
>
> Two of them can be sent for the cost of postage.
>
> Bill K7NOM
I suggest modifying a readily available sports radar, it is very sensitive,
outputs speed digitally and is inexpensive.

--
JosephKK

607. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 02:54:18 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1137380057.979912.299960@g44g2000cwa.googlegroups.com>
Source record: 14258
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"In a crosspost to a large but apparently related set of newsgroups,
specifically:
sci.electronics.design,
rec.radio.amateur.homebrew,
sci.electronics.equipment,
sci.electronics.repair and
comp.robotics.misc; "

Is there a problem with posting a suitable topic to a number of groups
that would find it interesting?

It definitely was not meant to be spam.

TMT

608. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 03:00:55 UTC
From: Joseph2k <joseph2k@lanset.com>
Message-ID: <H%Dyf.18478$or4.7161@newssvr12.news.prodigy.com>
Source record: 14259
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Rich Grise, but drunk wrote:
<snip>
>> 28-628. Rights of real property owners
>>
>> This chapter does not prevent the owner of real property that is used
>> by the public for purposes of vehicular travel by permission of the
>> owner and not as a matter of right from:
>>
>> 1. Prohibiting that use.
>>
>> 2. Requiring other, different or additional conditions than those
>> specified in this chapter.
>>
>> 3. Otherwise regulating the use as deemed best by the owner.
>>
>> In other words, I get to regulate the speed (I've posted it as 10
>> MPH). I have no power to fine UPS, but I can still cost them money.
>
> Put up a gate and charge them $1.00 in and $100.00 out. ;-)
>
> Good Luck!
> Rich
>
>
>
Then the next step is to post legal notice in the form a large sign.
"Private road. Right to pass under control of owner." And make sure that
you know just what ownership rights you have. If other owners attached to
the private road have equivalent ownership you could create problems for
your self. However, patterns of Bott's dots on the road also have
significant speed reducing effect and cases against them have usually lost
clearly. Also, rumble strips made by any method have been effective also.
--
JosephKK

609. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 03:11:21 UTC
From: Joseph2k <joseph2k@lanset.com>
Message-ID: <t9Eyf.18794$or4.481@newssvr12.news.prodigy.com>
Source record: 14260
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

RST Engineering wrote:

> A) We aren't in a "town", rather we are pretty far out into the country.
>
> B) It is a private dead-end road owned in mutual easement between the
> four families that live at the end of it about half a mile off the county
> road
> that serves it. The county mounties have nothing to say about what goes
> on on the road.
>
> C) I realize that this is newsnet and anything goes, but why can't you
> just ATFQ?
>
> Jim
>
>
>> Go to your local police department and have them monitor the speeders
>> with a
>> automated speed display unit. What! they don't have one in your town?
>> bring it
>> up at the next town meeting... ;)
>
>
Actually you can rent them for about $500/mo and set them any where you wish
on your private road. Look for roadway construction suppliers to find
them. You could probably buy one for under $10,000 and modify it with
cameras etc., to your hearts content.
--
JosephKK

610. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 03:20:51 UTC
From: Rob B <RobB@where.on.net>
Message-ID: <niEyf.78$vU2.36@newsread3.news.atl.earthlink.net>
Source record: 14261
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment,sci.electronics.repair

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1137287851.160900.117570@z14g2000cwz.googlegroups.com...
> I like many of you had my first experience with electronics through the
> electronic kits that Radio Shack has had over the years. The versions
> that spanned the 50, 100, 200 electronic experiments all come to mind.
>
> My question is...how many versions and types of these kits have they
> had over the years?
>
> I would be interested in hearing which ones you recall.

I recall my first electronics kit consisted of a single hair pin (U shaped
hair pin)
i promptly applied it to the nearest power source i could find (which
happened to be a 120v outlet) nothing happened at first so i proceeded with
my experimentation of wiggling the hair pin so as to make contact, i
remember the lights flickering and then i recall a loud scream imminated
from my general locale and the rest blurs

my second electronic kit was radio shack am radio with ear plug phone it
scratched out some noise and occasional radio signal

my third project was a shock box (pop-mech kit ?) where i dug up some old
transformer from my dads shop that resembled the one in the design (same
shape & number of wires) and i applied either 6v lantern battery or couple
of D cells to the indicated wires then self-tested the output... i have no
idea what i put together but my arm ached and felt like jello for a short
while after the test.

4th came the 100 or 125 kit from RS where you had to build some of the
elments/switches/ variable capacitor ? (eg. bunch of thin brass(copper)
sheets and some thin plastic wafered together with an adjustment knob?) i
remeber lights, buzzers (elec keyboard), meter ?,

I enjoyed it then but electronics interest faded quickly once the TRS-80,
TI-99-4a, timex sinclair, ataris and commodores etc became available for
play plus the video games of 70-80

611. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 03:20:51 UTC
From: Rob B <RobB@where.on.net>
Message-ID: <niEyf.79$vU2.74@newsread3.news.atl.earthlink.net>
Source record: 14262
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1137380057.979912.299960@g44g2000cwa.googlegroups.com...
> "In a crosspost to a large but apparently related set of newsgroups,
> specifically:
> sci.electronics.design,
> rec.radio.amateur.homebrew,
> sci.electronics.equipment,
> sci.electronics.repair and
> comp.robotics.misc; "
>
> Is there a problem with posting a suitable topic to a number of groups
> that would find it interesting?
>
> It definitely was not meant to be spam.
>

did someone complain ?

cross posting is for relevant groups, those appear to be relevant excepting
(repair) and i might have added (sci.electronics.basics) or (misc) but i am
just a humble hobbier :)

612. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 03:22:08 UTC
From: Joseph2k <joseph2k@lanset.com>
Message-ID: <AjEyf.19080$or4.4903@newssvr12.news.prodigy.com>
Source record: 14263
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Joerg wrote:

> Hello Jim,
>
>> Good idea, Joerg. Where do I get onesie-twosie IR sensors that will
>> trigger at 3 meters or better?
>>
>
> No idea but one source might be remote controls and the corresponding
> receiver diode in the set or from a stereo. I bet that Radio Shack will
> have something if there still is one in your area (our became a cell
> phone store). You'd need a crude reflector on the other side, piece of
> metal or white board.
>
> Another source might be if someone replaces their garage door opener.
> They usually come complete with the child protect barrier and most
> people will throw out the old one.
>
> Thing is, you need at least two sets. The LEDs could be running all the
> time and you just have to sense the receive elements.
>
> There is yet one more method: Two coils next to the road, each with
> oscillator. On fence posts, wherever. A car will de-tune it or, if set
> on the edge of the stable feedback range, would stop the oscillator
> momentarily. In contrast to the IR method and the Doppler method this
> can be made pretty weather proof from cheap wire.
>
> Regards, Joerg
>
> http://www.analogconsultants.com

Actually inductive loop detectors (buried or not) require fairly good wire to last more than a year. Plus you have to provide a roadside cabinet and detection electronics, and power therefore. of course you can space them carefully and detect speed that way also.

--
JosephKK

613. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 03:32:40 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <xn0eh9rf68plsq000@cnews.newsguy.com>
Source record: 14265
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Chuck Harris wrote:

> I didn't think that you would be so humor impaired that you would
> miss the meaning of this simple thread. This is just plain old
> ham banter the likes of which is heard daily on the informal nets
> on the ham bands, or at hamfests everywhere.
~~~~~~

Don't be too hard on the guy. This kind of humor depends heavily on
voice inflection, something not easily done on Usenet.

Bill, W6WRT
~~~~~~

614. Re: Any CDR's known to work with old CD drives???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 03:49:09 UTC
From: hexter@blazenet.net
Message-ID: <11sm5tlg3rsv27b@corp.supernews.com>
Source record: 14264

In article <slrndsldaq.bd4.gsm@cable.mendelson.com>, gsm@mendelson.com says...
>
>Gudmundur wrote:
>> Hi folks,
>>
>> Problem is this, My old Panasonic CF-41 laptop works great with
>> my GPS/APRS goodies, but the internal cd drive doesn't seem to
>> want to read CDR's. This was a common problem with older 4x and
>> slower drives. I suspect the internal drive is a 4 speed and working
>> to original specs perfectly.
>>
>> Have you found any CDR's that consistantly seem to work with old
>> drives?
>
>I can't say 100%, but I've had good luck with the following techniques:
>

Sorry I did not explain better my meaning. This unit does not 'burn'
cd's at all, and I wasn't looking to do that. I have burned the CDR's
on my big computer and want to read them on the laptop, and the laptop
refuses to see most CDR's. It seems to read some of my older sony cdr's
however. They are shiney silver color, and it would make sense that
those are readable. Burning at 1X on my big computer seems to help.
The CDR's made on the big computer are 'good' if you want to say that
as everyone else with 8X or faster drives can read them fine.

Just looking for a more easily 'readable' CDR that my old laptop
may find easier to deal with. The laptop reads store bought 'master'
CD's just fine, music or data, it's the less reflective CDR surface
that trip this thing up.

615. Re: Any CDR's known to work with old CD drives???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 04:08:09 UTC
From: dplatt@radagast.org
Message-ID: <11sm719ist7am90@corp.supernews.com>
Source record: 14266

In article <11sm5tlg3rsv27b@corp.supernews.com>,
Gudmundur <retxeh@blazenet.net> wrote:

> Just looking for a more easily 'readable' CDR that my old laptop
>may find easier to deal with. The laptop reads store bought 'master'
>CD's just fine, music or data, it's the less reflective CDR surface
>that trip this thing up.

You might want to try to find a supply of older-chemistry blanks which
are designed to be burned at speeds no greater than 4x or so, or even
the specialized "audio CD recorder" blanks (some of these are
optimized for burning at 1x). I've heard reports that these may have
a stronger recovered-signal level than newer high-speed blanks do
(thicker dye layer in the old variety??).

I've generally had good luck with Taiyo Yuden blanks. Used to like
TDK a lot - their "metal-stabilized cyanine" media seemed to be quite
good - but they seem to have stopped making their own blanks and are
OEM'ing from companies like Ritek.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

616. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 06:22:09 UTC
From: clifto <clifto@clifto.com>
Message-ID: <hlqr93-n8t.ln1@remote.clifto.com>
Source record: 14267
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John Fields wrote:
> On Wed, 28 Dec 2005 16:29:14 -0600, clifto <clifto@clifto.com>
> wrote:
>>Rich Grise, but drunk wrote:
>>> "... Accurate imitation of the Hammond sound with simple electronic
>>> circuitry was difficult, because the subtly-changing phase relationships
>>> between tonewheels could not be easily replicated...."
>>>
>>> OK, fair enough. :-)
>>>
>>> I guess a piano is even harder - they don't even reproduce well from a
>>> live recording! :-)
>>
>>I heard a decently accurate electronic piano sound long before I heard
>>anything remotely resembling the timber of a B3.
>
> ---
> Oak, was it, or maple?

Not that I would be one to pass up a good straight line, but just in case...

Main Entry: timï¿½bre
Variant: also timï¿½ber /'tam-b&r, 'tim-; 'tam(br&)/
Function: noun
: the quality given to a sound by its overtones: as
a : the resonance by which the ear recognizes and identifies a voiced
speech sound
b : the quality of tone distinctive of a particular singing voice or
musical instrument
?timï¿½bral /'tam-br&l, 'tim-/ adjective

Source: Merriam-Webster's Medical Dictionary, ï¿½ 2002 Merriam-Webster, Inc.

--
If John McCain gets the 2008 Republican Presidential nomination,
my vote for President will be a write-in for Jiang Zemin.

617. Re: Soundcard Application development.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 08:40:00 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <n7hms1ttq5pata8bhikr66utalusg6na38@4ax.com>
Source record: 14268

On Sun, 15 Jan 2006 14:50:01 -0800, John Miles
<jmiles@pop.removethistomailme.net> wrote:

>In article <Ecuyf.419$yK6.404@fe06.lga>, xpyttl_NOSPAM@earthling.net
>says...

>> > Sorry, all sound cards that I know of are AC-coupled, with a roll-off
>>
>> I've never studied them, but I would expect this to be the case. And even
>> if it were not, I can't imagine why the DAC would be designed to support DC
>
>Hmm. I'm not sure how to design one that doesn't.
>
>Usually, all that's necessary is to locate the output coupling
>capacitors on the sound card and bridge them. This may be easier with
>older Sound Blaster 16-era sound cards, before they all went to SMT.

IIRC, at least some of the Crystal/Cirrus data sheets for ADCs (and
codecs) indicated that there was a 3 Hz lower frequency limit,
apparently due to some DC offset drift compensation circuitry on the
chip itself.

Even if the sound card is AC coupled with a capacitor, various diode
clamping tricks can be used (as in clamping the sync tip to a known DC
level in video equipment).

Paul OH3LWR

618. Re: Crystal Filter Matching

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 09:39:31 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <nRJyf.701703$x96.483379@attbi_s72>
Source record: 14269

Yes I am, Tim. Very pleased to make your acquaintance.

Bill W0IYH

"tim gorman" <tgorman2@cox.net> wrote in message
news:0rneqd.nmv.ln@tg6124.ab0wr.net...
> Are you the William Sabin of Single-Sideband Systems & Circuits?
>
> tim ab0wr
>
> William E. Sabin wrote:
>
>>
>>
>> Xtal filters are designed to operate correctly between specific values of
>> generator and load resistances. Trying to "match" the input and output
>> impedances almost always degrades the filter frequency response. Xtal
>> filters are rather strange in that respect because of the complicated
>> things that go on inside.
>>
>> Transforming the generator and load resistances to 800 ohms using L
>> networks is an excellent idea. Add the 3 pF that the vendor suggests.
>>
>> Bill W0IYH
>>
>> "David" <webreply@orbitcoms.com> wrote in message
>> news:Akoyf.217626$V7.210436@news-server.bigpond.net.au...
>>>I am wanting to place a 45MHz, 2-pole crystal filter between the first
>>>mixer output and 2nd IF input. (Mixer output is a SA602 and IF input is
>>>SA605).
>>>
>>> The mixer output is around 1500 Ohms and the IF input is around 4500
>>> Ohms
>>> with 2.5pF capacitance parallel.
>>>
>>> The required source and termination for the filter is 800 Ohms par with
>>> 3pF. The insertion loss of the filter is 2dB max.
>>>
>>> Would the impedances be close enough to use resitive pad between mixer
>>> and filter (680R in series with 1k2) and a small cap to ground across
>>> the
>>> filter input.
>>> Then a 980R resistor to ground at filter output and no capacitance (use
>>> SA605 2.5pF and stray to make up the 3pF).
>>>

>>> This would give total loss around 4.7dB.
>>>
>>> Or would I be better to use say a tapped capacitor or L match from Mixer
>>> to filter with
>>> added C on filter input.
>>>
>>> Apparently the SA605 has a "swet spot" for noise at around 800R so maybe
>>> the Res to ground on the input would be ideal ???
>>>
>>> Thanks for any help, I have not used crystal filters before and unsure
>>> of
>>> implications of the approach.
>>>
>>> Regards
>>>
>>> David Huisman
>

619. More Markie Mularkie

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 12:12:50 UTC
From: K4YZ <k4yz@aol.com>
Message-ID: <1137413570.901556.205410@g49g2000cwa.googlegroups.com>
Source record: 14270
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

an old friend wrote:
> K4YZ wrote:
> > an_old_friend wrote:
> > > K4YZ wrote:
> > > > an_old_friend wrote:
> > > > > K4YZ wrote:
> > > > > > an_old_friend wrote:
> > > > > >
> > > > > > > it wasshit
> > > > > > consortship fixed
> > > > >
> > > > Who were you consorting with?
> > > >
> > > you as point of fact
> > >
> > Uhhhhhhhh....Nope.
> >
> yep

Nope.

> and you seem to enjoy consorting with me here online indeed you do sem
> to live for it

And now we have solid evidence that you ARE fantasizing.

Steve, K4YZ

620. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 15:44:59 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43CBBF60.5F321D48@earthlink.net>
Source record: 14271
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Fred Bloggs wrote:
>
> Hahah- that's when I learned you do not strip the wires with your teeth
> when they're plugged into the transformer...

This explains a lot about you, Fred! ;-)

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

621. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 16:09:28 UTC
From: CLFE <Junkmail@clfurent.com>
Message-ID: <43cbc537$0$8283$ecde5a14@news.coretel.net>
Source record: 14272
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

I'm sure we've all had our turn at learning things the "hard" way back then. Some funny, some not so funny - at least not then - but boy is it nice to sit back and laugh at ourselves now..... But hey - we made it - and learned a lot along the way. IF we all admitted to all the things we did then, many would wonder how we either survived or weren't put in a looney bin.

CLF

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message news:43CBBF60.5F321D48@earthlink.net...
> Fred Bloggs wrote:
>>
>> Hahah- that's when I learned you do not strip the wires with your teeth
>> when they're plugged into the transformer...
>
>
> This explains a lot about you, Fred! ;-)
>
> --
> Service to my country? Been there, Done that, and I've got my DD214 to
> prove it.
> Member of DAV #85.
>
> Michael A. Terrell
> Central Florida

622. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 17:38:42 UTC
From: "Rich Grise, but drunk" <yahright@example.net>
Message-ID: <pan.2006.01.16.17.39.04.77173@example.net>
Source record: 14273

On Mon, 16 Jan 2006 03:00:55 +0000, Joseph2k wrote:

> Rich Grise, but drunk wrote:
> <snip>
>>> 28-628. Rights of real property owners
>>>
>>> This chapter does not prevent the owner of real property that is used
>>> by the public for purposes of vehicular travel by permission of the
>>> owner and not as a matter of right from:
>>>
>>> 1. Prohibiting that use.
>>>
>>> 2. Requiring other, different or additional conditions than those
>>> specified in this chapter.
>>>
>>> 3. Otherwise regulating the use as deemed best by the owner.
>>>
>>> In other words, I get to regulate the speed (I've posted it as 10
>>> MPH). I have no power to fine UPS, but I can still cost them money.
>>
>> Put up a gate and charge them $1.00 in and $100.00 out. ;-)
>>
>> Good Luck!
>> Rich
>>
>>
>>
> Then the next step is to post legal notice in the form a large sign.
> "Private road. Right to pass under control of owner." And make sure that
> you know just what ownership rights you have. If other owners attached to
> the private road have equivalent ownership you could create problems for
> your self. However, patterns of Bott's dots on the road also have
> significant speed reducing effect and cases against them have usually lost
> clearly. Also, rumble strips made by any method have been effective also.

In Hopkins, Minnesota, the main street is kinda S-shaped - it's impossible to speed, because you would be going over curbs. It's like, for a half a block, the sidewalk on one side is 6 feet wide, and on the other side it's 18 feet wide, and then the roadway curves, because in the second half of the block (except the transition), the 6' sidewalk on one side grows to 18', and the 18' side shrinks to 6', so if you're in your car, you have to turn, or hit the curb; it's terribly difficult do do this any faster than about 20 MPH.

But, admittedly, road-building is mind-bogglingly expensive.

Good Luck!
Rich

623. Re: Doppler Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 17:39:24 UTC
From: "Rich Grise, but drunk" <yahright@example.net>
Message-ID: <pan.2006.01.16.17.39.45.20923@example.net>
Source record: 14274

On Mon, 16 Jan 2006 03:11:21 +0000, Joseph2k wrote:

> RST Engineering wrote:
>
>> A) We aren't in a "town", rather we are pretty far out into the country.
>>
>> B) It is a private dead-end road owned in mutual easement between the
>> four families that live at the end of it about half a mile off the county
>> road
>> that serves it. The county mounties have nothing to say about what goes
>> on on the road.
>>
>> C) I realize that this is newsnet and anything goes, but why can't you
>> just ATFQ?
>>
>> Jim
>>
>>
>>> Go to your local police department and have them monitor the speeders
>>> with a
>>> automated speed display unit. What! they don't have one in your town?
>>> bring it
>>> up at the next town meeting... ;)
>>
>>
> Actually you can rent them for about $500/mo and set them any where you wish
> on your private road. Look for roadway construction suppliers to find
> them. You could probably buy one for under $10,000 and modify it with
> cameras etc., to your hearts content.

There's one in Whittier you could steal. ;-P

Cheers!
Rich

624. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 17:42:30 UTC
From: "Rich Grise, but drunk" <yahright@example.net>
Message-ID: <pan.2006.01.16.17.42.49.347908@example.net>
Source record: 14275
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Sun, 15 Jan 2006 18:53:15 -0600, John Fields wrote:

> On Sun, 15 Jan 2006 18:21:02 -0500, Chuck Harris
> <cf-NO-SPAM-harris@erols.com> wrote:
>
>>
>>John Fields wrote:
>>> On Mon, 09 Jan 2006 00:01:54 -0600, clifto <clifto@clifto.com>
>>> wrote:
>>>
>>>> maxfoo wrote:
>>>>> On Sun, 08 Jan 2006 17:02:05 -0600, clifto <clifto@clifto.com> wrote:
>>>>>> Paul Burridge wrote:
>>>>>>> xray <notreally@hotmail.invalid> wrote:
>>>>>>>> No, Spectum Analysers are useless for anyone outside the government or
>>>>>>>> RF extremists.
>>>>>>> ???
>>>>>>> Er, they're extremely useful pieces of test gear for anyone involved
>>>>>>> in RF., even hobbyists.
>>>>>> No, they're garbage.
>>>>>>
>>>>>> I have a really nice garbage can in case anyone wants.
>>>>> Will it do phase noise measurements for me?
>>>> Only if someone sends me the right kind of garbage.
>>>
>>> ---
>>> With all due respect, and being as polite as I can, I must say that
>>> after reading your four posts to sci.electronics.design, I get the
>>> feeling that you don't know what you're talking about.
>>>
>>> Prove me wrong?
>>
>>Some postings on this newsgroup aren't meant for the humor impaired.
>>
>>Do you really want this "joke" explained?
>
> ---
> Sure.
>
> Go for it.

Geez, John, even _I_ got it! Guy A says, "My scope is garbage." Guy
B says, "I have a nice garbage can", which implies (at least it did

to me), "Go ahead and throw it this way!"

Admittedly, not the world's greatest humour, but I don't think it was meant to be taken so seriously as to spoil anybody's day. ;-)

Cheers!
Rich

625. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 17:55:00 UTC
From: "Rich Grise, but drunk" <yahright@example.net>
Message-ID: <pan.2006.01.16.17.55.21.156312@example.net>
Source record: 14276
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

```
On Sun, 15 Jan 2006 16:30:09 -0600, John Fields wrote:
> On Sun, 08 Jan 2006 17:02:05 -0600, clifto <clifto@clifto.com>
>>Paul Burridge wrote:
>>> xray <notreally@hotmail.invalid> wrote:
>>>>No, Spectum Analysers are useless for anyone outside the government or
>>>>RF extremists.
>>>
>>> ???
>>> Er, they're extremely useful pieces of test gear for anyone involved
>>> in RF., even hobbyists.
>>
>>No, they're garbage.
>>
>>I have a really nice garbage can in case anyone wants.
>
> What's your point?
>
> Are you saying that you have spectrum analyzers (which you say are
> garbage) that you want to get rid of, or are you saying that you'd
> like someone to dump a spectrum analyzer into your garbage can?

It looks like xray said, "Spectrum analyzers are OK", then Paul Burridge
said, "No, they're garbage", then clifto said, "I have a nice garbage
can" as in "toss it this way! <leer, snort>" ;-)

At least, thanks for maintaining attribution here so I could 'splain
it to you. :-P

Cheers!
Rich
```

626. Re: Crystal ladder coupling constants.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 19:56:43 UTC
From: Zack <zlau@arrl.org>
Message-ID: <1137441403.294622.312310@g14g2000cwa.googlegroups.com>
Source record: 14277

Eamon Skelton wrote:

> I have got the tables of normalised coupling constants for
> Butterworth and 0.1dB Chebyshev filters from the QST article.
>
> I would like to find a source of similar tables for
> filters with more than 5 poles and for passband ripple
> other than 0.1dB.
>
> Many Thanks.
>
> 73, Ed. EI9GQ.

Handbook of Filter Synthesis by Anatol I. Zverev
(now available in paperback)
is the best book I've ever
seen on this topic. It even has tables for lossy filter elements.

Zack Lau W1VT

627. Re: Soundcard Application development.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 20:43:23 UTC
From: mcalhoun@ksu.edu
Message-ID: <dqh0hb$m7c@unix1.cc.ksu.edu>
Source record: 14278

>> ...[Re: how to use sound cards]...

>Usually, all that's necessary is to locate the output coupling
>capacitors on the sound card and bridge them....

IIRC, part of the original question was something like:

"Where/How can one learn to program soundcards?"

I, too, would be interested in the answer to that question.

--Myron.
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

628. Re: Crystal ladder coupling constants.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-16 22:30:42 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <m8Vyf.710614$_o.333921@attbi_s71>
Source record: 14279

> Handbook of Filter Synthesis by Anatol I. Zverev
> (now available in paperback)
> is the best book I've ever
> seen on this topic. It even has tables for lossy filter elements.
>
> Zack Lau W1VT
>

From where Zack? My hard copy has the pages falling out of it.

W4ZCB

629. Re: Crystal ladder coupling constants.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 00:35:30 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1137458130.869335.3480@o13g2000cwo.googlegroups.com>
Source record: 14280

Harold E. Johnson wrote:
> > Handbook of Filter Synthesis by Anatol I. Zverev
> > (now available in paperback)
> > is the best book I've ever
> > seen on this topic. It even has tables for lossy filter elements.
> >
> > Zack Lau W1VT
> >
>
> From where Zack? My hard copy has the pages falling out of it.
>
> W4ZCB

Amazon has it, £44.50 (UK).

Leon

630. Standard Micronic Ruby radios

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 01:06:31 UTC
From: Hatfield <utility_infielder@earthlink.net>
Message-ID: <1137459990.995782.264440@g43g2000cwa.googlegroups.com>
Source record: 14281

0 These tiny collectable 1960s transistor sets seem to be available on ebay all the time.

1 First and foremost kudus to Wumpus who has posted an online pictorial on how to use modern zinc air hearing aid batteries in an SR-H436 ruby.

http://www.oldradioworld.de/srh436.htm

2. Based on this site, I tried using some hardware I had on hand and found that a perfect spacer was easy to make with #6 brass hardware: a 6-32 machine screw, eight thin flat washers, one hex nut. #6 sized brass is easy to machine: i.e. cutting down the screw length using dikes , and a steel 6-32 hexnut can be used as a die to clean up the threads on the brass screw after trimming it to length.

3. After a few successive trimmings of the screw, my spacer ended up (the assembled screw, washers, nut) to an overall length of .457".

4. My spacer does have the screwtip sticking out past the nut like it does in the Wumpus pictures. Instead the screw is recessed down inside the hexnut, so that the nut (instead of the screwtip) contacts the radio. Using more or fewer washers allows having the nut extend just slightly past the tip of the screw.

5 Using 675 (i.e. blue) hearing aid batteries I do not need the paper tubes which Wumpus shows. I just cut a strip about 5" long of gray duck tape .200" wide and wrapped it around the stack of washers on the spacer until that the diameter of spacer roughly equaled that of the batteries, this leaves the screwhead and hexnut extending out of the tape so they are not covered by the tape like the washers are.

6. I use no covering around the batteries (Wumpus used a paper tube) because the stack of two batteries and the spacer holds tight in the radio, and does not ever lose electrical contact as the radio is jostled. The longest part of battery replacement is unscrewing the radio cover with a disme, after that it takes 10 seconds to swap batteries.

7. The discontinued Eveready 640 size alkaline cells have a mAh rating of 325 and costed $5 each at Radio Shack.

8. #675 zinc airs are $36 including shipping for a case of sixty Toshibas at www.microbattery.com/. And these are rated at 651 mAh !

9. A couple hours ago my tiny SR-H436 picked up 20 listenable stations during the daytime, a dozen loud and clear, with good selectivity, very nice performer.

631. Re: Standard Micronic Ruby radios

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 01:10:05 UTC
From: Hatfield <utility_infielder@earthlink.net>
Message-ID: <1137460205.574172.202970@g44g2000cwa.googlegroups.com>
Source record: 14282

oops, sorry guys. I accidently posted in the wrong group, my mistake....

632. Re: Dick Smith Radio Direction Finder - Documentation available for download

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 02:17:27 UTC
From: Glenn McAllister <"(callsign)"@orcon.net.nz>
Message-ID: <43CC53B7.7143@orcon.net.nz>
Source record: 14283
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

Glenn McAllister wrote:
>
> Dox found, photographed (no scanner)
>
> (snip)
>
> My email address is my callsign at orcon dot net dot enn zed

Zipped file of photos of documentation for this device available for
download
http://www.webdingers.com/DseRdf.zip

Will update when scanned and PDF'd

de Glenn ZL2TLD

633. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 02:19:10 UTC
From: Josh Wyatt <trisale@wirefall.org>
Message-ID: <1sYyf.2177$Ea3.1601@bignews2.bellsouth.net>
Source record: 14284
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

CLFE wrote:
> I'm sure we've all had our turn at learning things the "hard" way back then.
> Some funny, some not so funny - at least not then - but boy is it nice to
> sit back and laugh at ourselves now..... But hey - we made it - and learned
> a lot along the way. IF we all admitted to all the things we did then, many
> would wonder how we either survived or weren't put in a looney bin.
>
> CLF

True story:

At the ripe age of 11, I received my first Digi-Key catalog (Dad was into electronics...). At the time I was big into neon lights (sad I know), and had collected lots of the little bulbs from Radio Shack, salvaged equipment, etc.

Digi-Key had bare bulbs for 11 cents each! And strangely, they were listed as requiring 120v (without a resistor specification, and not pre-attached resistors, assembly, etc). I had to have a couple, as surely these were exotic and unusual bulbs.

So I taped two dimes and two pennies to an index card, filled out the order form, and mailed the whole thing to Digi-Key, along with a personal note about how much I loved neon lights (yes, still sad).

Couple weeks later I got back a stern typewritten note about minimum orders, effort of fulfilling tiny requests, shipping charges, yadda, yadda... and enclosed in the envelope with this letter were two neon lights wrapped in bubble wrap!

I could not wait to test my new neon lights that didn't require a current limiting resistor. Still, something seemed ominous about that, so I enclosed the first one in a glass jar, "just in case". Applied 120V and POW, tiny neon bomb!

I sent the broken glass and freed electrodes, carefully padded and wrapped, back to Digi-Key with a nastygram of my own, stating what had happened and how these were NOT 120V neon bulbs despite the catalog specification. Couple of weeks later I received a reply in the mail, with an apology, a statement of catalog revision, and... a replacement neon bulb ;) .

Ah, Digi-Key, thou dost know customer service.

Thanks,
Josh

P.S. Hope this wasn't too off-topic.

634. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 02:51:03 UTC
From: Rob B <RobB@where.on.net>
Message-ID: <rYYyf.473$rH5.336@newsread2.news.atl.earthlink.net>
Source record: 14285
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"Josh Wyatt" <trisale@wirefall.org> wrote in message
news:1sYyf.2177$Ea3.1601@bignews2.bellsouth.net...
> CLFE wrote:
> > I'm sure we've all had our turn at learning things the "hard" way back
then.
> > Some funny, some not so funny - at least not then - but boy is it nice
to
> > sit back and laugh at ourselves now..... But hey - we made it - and
learned
> > a lot along the way. IF we all admitted to all the things we did then,
many
> > would wonder how we either survived or weren't put in a looney bin.
> >
> > CLF
>
> True story:
>
> At the ripe age of 11, I received my first Digi-Key catalog (Dad was into
electronics...). At the time I was big into neon lights (sad I know), and
had collected lots of the little bulbs from Radio Shack, salvaged equipment,
etc.
>
> Digi-Key had bare bulbs for 11 cents each! And strangely, they were
listed as requiring 120v (without a resistor specification, and not
pre-attached resistors, assembly, etc). I had to have a couple, as surely
these were exotic and unusual bulbs.
>
> So I taped two dimes and two pennies to an index card, filled out the
order form, and mailed the whole thing to Digi-Key, along with a personal
note about how much I loved neon lights (yes, still sad).
>
> Couple weeks later I got back a stern typewritten note about minimum
orders, effort of fulfilling tiny requests, shipping charges, yadda,
yadda... and enclosed in the envelope with this letter were two neon lights
wrapped in bubble wrap!
>
> I could not wait to test my new neon lights that didn't require a current
limiting resistor. Still, something seemed ominous about that, so I
enclosed the first one in a glass jar, "just in case". Applied 120V and
POW, tiny neon bomb!
>
> I sent the broken glass and freed electrodes, carefully padded and

wrapped, back to Digi-Key with a nastygram of my own, stating what had happened and how these were NOT 120V neon bulbs despite the catalog specification. Couple of weeks later I received a reply in the mail, with an apology, a statement of catalog revision, and... a replacement neon bulb ;) .
>
> Ah, Digi-Key, thou dost know customer service.
>
> Thanks,
> Josh
>
> P.S. Hope this wasn't too off-topic.
>

it is stories like these that always make me wonder how lots of kids like that survived child hood

had a similar experiment story (similar age) mixing Acetylene and Oxygen from the torch into a small 16oz glass bottle then putting a match near opening to see what kind of flame would be produced :)

for some unknown reason (alludes me to this day) i decided to put it inside of a 5 gallon paint bucket and that was the better part of the idea

robb

635. Re: Soundcard Application development.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 02:57:49 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e35fcd9d19b1d989729@news-central.giganews.com>
Source record: 14286

In article <dqh0hb$m7c@unix1.cc.ksu.edu>, mcalhoun@ksu.edu says...
> >> ...[Re: how to use sound cards]...
>
> >Usually, all that's necessary is to locate the output coupling
> >capacitors on the sound card and bridge them....
>
> IIRC, part of the original question was something like:
>
> "Where/How can one learn to program soundcards?"
>
> I, too, would be interested in the answer to that question.
>
> --Myron.
>

It's kind of an open-ended question... one that depends entirely on what sort of application you want to build and what development environment you prefer to build it with. A quick and dirty console app to record a raw PCM audio file using the waveIn API will be on the order of 100 lines of C code. A more-sophisticated app that has to parse various sound file formats, handle streaming audio, or otherwise do a lot of network and/or UI interaction will of course be longer and hairier.

Either way, it's not necessary (or appropriate) to deal with low-level hardware coding, and in neither case are the basic programming concepts obscure or difficult. The Win32 APIs for audio input and output -- namely waveIn, waveOut, and DirectSound -- have been around forever, work very reliably, and are very well-documented.

A good first step is plugging phrases like "sound programming" into your favorite search engine, tweaking the search terms based on the language and intended application. Once your questions become more specific, there are a lot of ways to get help with them.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam
---

636. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 04:05:42 UTC
From: mc <look@www.ai.uga.edu.for.address>
Message-ID: <U%Zyf.140718$k76.59393@bignews6.bellsouth.net>
Source record: 14287
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

> Ah, Digi-Key, thou dost know customer service.

They knew you might grow up to be an engineer and design something that uses millions of dollars' worth of their parts.

RCA and Kodak were very generous to me with documentation and answers to questions when I was young. Sadly, RCA died before I could do anything to repay them. Kodak is still there and has benefited, I think, from some writing I did in the 1980s.

637. FA: Dow Relay, variable caps, meters, VLF Converter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 04:19:15 UTC
From: "Jim, KK1W" <kk1w@charter.net>
Message-ID: <_f_yf.93$oL7.6@fe06.lga>
Source record: 14288

FA on eBay an assortment of air variables, air, compression and piston
trimmers, meters, Dow relay and Palomar VLF converter.

Please see:
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5855059717&ssPageName=MERC_VIC_ReBay_Pr4_PcY_BID_IT
and others.

Thanks for looking,

Jim, KK1W

638. steve in lust it seems

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 06:06:04 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1137477964.578358.260470@o13g2000cwo.googlegroups.com>
Source record: 14290
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

```
K4YZ wrote:
> an old friend wrote:
> > K4YZ wrote:
> > > an_old_friend wrote:
> > > > K4YZ wrote:
> > > > > an_old_friend wrote:
> > > > > > K4YZ wrote:
> > > > > > > an_old_friend wrote:
> > > > > > > >
> > > > > > > > it wasshit
> > > > > > > consortship fixed
> > > > > > >
> > > > > > Who were you consorting with?
> > > > > >
> > > > > you as point of fact
> > > > >
> > > > Uhhhhhhhh....Nope.
> > >
> > yep
> >
> Nope.
yep
>
> > and you seem to enjoy consorting with me here online indeed you do sem
> > to live for it
>
> And now we have solid evidence that you ARE fantasizing.

nope just a reasoned analys of your action you are obsessly sexaul
obsessed with me wish I could it was flatering
>
> Steve, K4YZ
```

639. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 06:07:19 UTC
From: Cliff Sojourner <cls-NOSPAM@employees.org>
Message-ID: <43CC8997.20201@employees.org>
Source record: 14289
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Joerg wrote:
> Hello Michael,
>
>
>> The good ol' days of Radio Shack, when they were actually a good
>> source for
>> hobbyists. Now they are not much more than Best Buy wannabees.
>>
>
> But why is that? Many kids aren't creative these days. They hang out in
> front of the TV or some video game but don't actually build stuff.
> Places like Radio Shack as we knew it from the old days can only survive
> when people built stuff.

same could be said of most hams!! I bought an HT recently and I was
astounded to learn HRO did NOT stock SMA connectors (needed for the HT),
or RG174.

Hams pay $30 to $60 for coax with BNCs at each end. Hams pay $30 for
12VDC 200mA wall warts! Hams pay $15 to $30 for serial cables.

do hams actually BUILD anything these days?

> The Radio Shack here in town has closed. It become a cell phone store.
> Sigh.

yeah.

640. More Markie Mularkie

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 06:10:21 UTC
From: K4YZ <k4yz@aol.com>
Message-ID: <1137478221.391485.307620@f14g2000cwb.googlegroups.com>
Source record: 14291
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

an_old_friend wrote:
> K4YZ wrote:
> > an old friend wrote:
> > > K4YZ wrote:
> > > > an_old_friend wrote:
> > > > > K4YZ wrote:
> > > > > > an_old_friend wrote:
> > > > > > > K4YZ wrote:
> > > > > > > > an_old_friend wrote:
> > > > > > > > >
> > > > > > > > > it wasshit
> > > > > > > > consortship fixed
> > > > > > > >
> > > > > > > > Who were you consorting with?
> > > > > > > >
> > > > > > > you as point of fact
> > > > > > >
> > > > > > Uhhhhhhhh....Nope.
> > > > > >
> > > > > yep
> > > > >
> > > > Nope.
> > > >
> > > yep

Nope.

> > > and you seem to enjoy consorting with me here online indeed you do sem
> > > to live for it
> > >
> > And now we have solid evidence that you ARE fantasizing.
> >
> nope just a reasoned analys of your action you are obsessly sexaul
> obsessed with me wish I could it was flatering

Mark, you are INCAPABLE of even the most basic of reasoning, let
alone analysis.

As for being "sexaul" obsessed with you, that's your OWN fantasy.
Enjoy.

Steve, K4YZ

641. more of steve the sexadict

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 06:16:07 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1137478567.280467.65640@g43g2000cwa.googlegroups.com>
Source record: 14292
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

K4YZ wrote:
> an_old_friend wrote:
> > K4YZ wrote:
> > > an old friend wrote:
> > > > K4YZ wrote:
> > > > > an_old_friend wrote:
> > > > > > K4YZ wrote:
> > > > > > > an_old_friend wrote:
> > > > > > > > K4YZ wrote:
> > > > > > > > > an_old_friend wrote:
> > > > > > > > >
> > > > > > > > > > it wasshit
> > > > > > > > consortship fixed
> > > > > > > >
> > > > > > > Who were you consorting with?
> > > > > > >
> > > > > > you as point of fact
> > > > >
> > > > > Uhhhhhhhh....Nope.
> > > >
> > > > yep
> > >
> > > Nope.
> >
> > yep
>
> Nope.

yep
>
> > > > and you seem to enjoy consorting with me here online indeed you do sem
> > > > to live for it
> > >
> > > And now we have solid evidence that you ARE fantasizing.
> >
> > nope just a reasoned analys of your action you are obsessly sexaul
> > obsessed with me wish I could it was flatering
>
> Mark, you are INCAPABLE of even the most basic of reasoning, let
> alone analysis.
another lie you can't tell the truth this morning

BTW when you going to post your lie about my being drunk tonight you
always do after we have these sessions where we both happen to be

online

642. More Markie Mularkie

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 06:21:47 UTC
From: K4YZ <stevenrobeson@yahoo.com>
Message-ID: <1137478907.857604.119870@g47g2000cwa.googlegroups.com>
Source record: 14293
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

an_old_friend wrote:
> K4YZ wrote:

> > > nope just a reasoned analys of your action you are obsessly sexaul
> > > obsessed with me wish I could it was flatering
> >
> > Mark, you are INCAPABLE of even the most basic of reasoning, let
> > alone analysis.
>
> another lie you can't tell the truth this morning

Sure I can. And I did in that very sentence above.

> BTW when you going to post your lie about my being drunk tonight you
> always do after we have these sessions where we both happen to be
> online

No, I do not "always" claim you're drunk...That's only when you
ARE drunk. it's apparent in your postings.

Steve, K4YZ

643. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 06:28:31 UTC
From: CLFE <Junkmail@clfurent.com>
Message-ID: <43cc8e8d$0$8282$ecde5a14@news.coretel.net>
Source record: 14294
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"Cliff Sojourner" <cls-NOSPAM@employees.org> wrote in message
news:43CC8997.20201@employees.org...
> Joerg wrote:
>> Hello Michael,
>>
>>
>>> The good ol' days of Radio Shack, when they were actually a good source
>>> for
>>> hobbyists. Now they are not much more than Best Buy wannabees.
>>>
>>
>> But why is that? Many kids aren't creative these days. They hang out in
>> front of the TV or some video game but don't actually build stuff. Places
>> like Radio Shack as we knew it from the old days can only survive when
>> people built stuff.
>
> same could be said of most hams!! I bought an HT recently and I was
> astounded to learn HRO did NOT stock SMA connectors (needed for the HT),
> or RG174.
>
> Hams pay $30 to $60 for coax with BNCs at each end. Hams pay $30 for
> 12VDC 200mA wall warts! Hams pay $15 to $30 for serial cables.
>
> do hams actually BUILD anything these days?
>
>> The Radio Shack here in town has closed. It become a cell phone store.
>> Sigh.
>
> yeah.

I do, if I find something worth the effort. It is fun..... I don't mind
building, including making my own PCs, but it has to be something which I
can use - not just throw in a drawer once done - never to see daylight -
again. I've built some pieces of test equipment which saved me a lot of
aggrivation and time - once completed. Heck, I wish I could do a project a
week - just to do it.

CLF

644. more lies

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 06:29:22 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1137479362.536997.275680@g14g2000cwa.googlegroups.com>
Source record: 14295
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

K4YZ wrote:
> an_old_friend wrote:
> > K4YZ wrote:
>
> > > > nope just a reasoned analys of your action you are obsessly sexaul
> > > > obsessed with me wish I could it was flatering
> > >
> > > Mark, you are INCAPABLE of even the most basic of reasoning, let
> > > alone analysis.
> >
> > another lie you can't tell the truth this morning
>
> Sure I can. And I did in that very sentence above.

nope you did you did not write the very sentense above I wrote it you
lied again
>
> > BTW when you going to post your lie about my being drunk tonight you
> > always do after we have these sessions where we both happen to be
> > online
>
> No, I do not "always" claim you're drunk..
yes you alwasys claim I am drunk when we go back and forth like this
>.That's only when you
> ARE drunk.
nope since i never have drunk while posting you are lying some more
>it's apparent in your postings.
yet another lie
>
> Steve, K4YZ

645. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 07:16:37 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <11sp6ekpsdr405a@corp.supernews.com>
Source record: 14296
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Cliff,

"Cliff Sojourner" <cls-NOSPAM@employees.org> wrote in message
news:43CC8997.20201@employees.org...
> Hams pay $30 to $60 for coax with BNCs at each end. Hams pay $30 for
> 12VDC 200mA wall warts! Hams pay $15 to $30 for serial cables.

So what? Although I understand your point here -- you'd like people to build their own equipment and learn a few skills -- I would sure hope that anyone who's been messing around with electronics since a kid has terminated hundreds or thousands of cables, built plenty of cheesy wall-wart-like power supplies, and wired plenty of their own cables. If they're smart, they've advanced their skills well beyond the point and now have good paying jobs and buying those pre-manufactured items is arguably a much better use of their time than making them.

It just doesn't make sense to build your own power supplies when you can buy something like a 5V, 1A switcher with 100-240V input for <$10... time is the ultimate commodity than you can never create more of!

> do hams actually BUILD anything these days?

Sure... look at something like GNU Radio, the Elecraft kits, the TAPR VNA kit, etc.

Being able to build something from a schematic prepares you for a job that pays little better than flipping burgers.

This is very much like mowing your lawn -- if you can afford to pay soomeone else to do it, there's little point in doing it yourself unless you truly enjoy and experience and understand the "opportunity cost" (the time you won't be able to spend doing other things you might enjoy more) involved.

646. Re: Crystal ladder coupling constants.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 09:38:03 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2006.01.17.09.38.03.689892@oceanfree.net>
Source record: 14297

On Mon, 16 Jan 2006 11:56:43 -0800, Zack wrote:

> Handbook of Filter Synthesis by Anatol I. Zverev
> (now available in paperback)
> is the best book I've ever
> seen on this topic. It even has tables for lossy filter elements.
>
> Zack Lau W1VT

Thanks Zack,

73, Ed. EI9GQ.
--
Linux 2.6.15
Remove 'X' to reply by e-mail.
Yes, my username really is: nospam

647. More Markie Mularkie

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 11:05:55 UTC
From: K4YZ <stevenrobeson@yahoo.com>
Message-ID: <1137495955.586485.59610@o13g2000cwo.googlegroups.com>
Source record: 14298
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

an_old_friend wrote:
> K4YZ wrote:
> > an_old_friend wrote:
> > > K4YZ wrote:
> > >
> > > > > > > nope just a reasoned analys of your action you are obsessly sexaul
> > > > > > > obsessed with me wish I could it was flatering
> > > > > >
> > > > > > Mark, you are INCAPABLE of even the most basic of reasoning, let
> > > > > > alone analysis.
> > > > >
> > > > another lie you can't tell the truth this morning
> > >
> > Sure I can. And I did in that very sentence above.
>
> nope you did you did not write the very sentense above I wrote it you
> lied again

What's a "sentense"...?!?!

> > > BTW when you going to post your lie about my being drunk tonight you
> > > always do after we have these sessions where we both happen to be
> > > online
> >
> > No, I do not "always" claim you're drunk..
>
> yes you alwasys claim I am drunk when we go back and forth like this

No, I do not.

I "claim" you are drunk when you are drunk.

It's not hard to tell when THAT is ! ! ! ! !

> >.That's only when you ARE drunk.
>
> nope since i never have drunk while posting you are lying some more

Nope...Not lying then, not lying "more"...

> >it's apparent in your postings.
>
> yet another lie

Nope.

Google archives reveal.

Steve, K4YZ

648. more lies about intoxcation

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 16:08:17 UTC
From: an old friend <kb9rqz@amsat.org>
Message-ID: <1137514097.850581.50420@g14g2000cwa.googlegroups.com>
Source record: 14299
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

K4YZ wrote:
> an_old_friend wrote:
> > K4YZ wrote:
> > > an_old_friend wrote:
cut

> > > No, I do not "always" claim you're drunk..
> >
> > yes you alwasys claim I am drunk when we go back and forth like this
>
> No, I do not.
>
> I "claim" you are drunk when you are drunk.

you have never claimed I was drunk referring to a time I was drunk

so you are lying
>
> It's not hard to tell when THAT is ! ! ! ! !

it would be impposible to tell from where you are siting

another lies
>
> > >.That's only when you ARE drunk.
> >
> > nope since i never have drunk while posting you are lying some more
>
> Nope...Not lying then, not lying "more"...

always were lying (indeed in practical term everything you say say a
lie) so still lying
>
> > >it's apparent in your postings.
> >
> > yet another lie
>
> Nope.
>
> Google archives reveal.

google archive reavel you lying

google archives does not do a breathazer test
>
> Steve, K4YZ

649. Re: Harry E. Landsberg, Jr., CIA Maltese Falcon: Kennedy assassination, IRAN/CONTRA, UFO's

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 17:57:30 UTC
From: Laura <lhann10243@earthlink.net>
Message-ID: <1137520650.747211.146490@z14g2000cwz.googlegroups.com>
Source record: 14300

Harry has a small voice/mouse voice. If you're a survivor you may have heard it. It may be technology, projected (from a satellite.) One survivor said she thought she might have an inner alter patterned after Harry. You may have a crown as a receiver (I have a crown of unknown origin, upper left quadrant, near the front.) I heard a Barbra Streisand song in my left ear once. I have a "dimple" behind my ear. Mesh might be part of the conductive system receiving signals from satellites.

Please see:

"To My Friend -- more iii"
http://home.earthlink.net/~twainable2lhann/id7.html

"To My Friend -- more iv"
http://home.earthlink.net/~raiyndoelhann/id7.html

Please click link "Air Force" above for more information about mesh, links at bottom of page.

Laura

650. Re: Harry E. Landsberg, Jr., CIA Maltese Falcon: Kennedy assassination, IRAN/CONTRA, UFO's

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 18:00:24 UTC
From: Laura <lhann10243@earthlink.net>
Message-ID: <1137520824.377385.67460@o13g2000cwo.googlegroups.com>
Source record: 14301

"Air Force"
http://home.earthlink.net/~sammark4/id243.html

651. Re: Soundcard Application development.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 18:49:46 UTC
From: laura halliday <marsgal42@hotmail.com>
Message-ID: <1137523786.144129.218200@g43g2000cwa.googlegroups.com>
Source record: 14306

mcalh...@ksu.edu wrote:

> IIRC, part of the original question was something like:
>
> "Where/How can one learn to program soundcards?"
>
> I, too, would be interested in the answer to that question.

Windows is not your friend in this area. Linux, on the other
hand makes this easy. The sound card is a device like
any other. Read from /dev/dsp and you get samples. Write to
/dev/dsp and you make noise.

There is a little bit more setup to buffer things properly,
and you use ioctl() to configure the sample rate, sample
size, and so on, but it's nothing compared to the contortions
Windows programmers go through.

What to do with the samples once you've got them, or
how to generate interesting samples for output is another
matter. Any decent textbook on DSP will help you. I
like Ifeachor & Jervis as a good nuts and bolts introduction.

Laura Halliday VE7LDH "Que les nuages soient notre
Grid: CN89mg pied a terre..."
ICBM: 49 16.05 N 122 56.92 W - Hospital/Shafte

652. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 19:56:27 UTC
From: ehsjr <ehsjr@bellatlantic.net>
Message-ID: <LZbzf.1372$pq5.1323@trndny02>
Source record: 14307
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Joel Kolstad wrote:
> Cliff,
>
> "Cliff Sojourner" <cls-NOSPAM@employees.org> wrote in message
> news:43CC8997.20201@employees.org...
>
>>Hams pay $30 to $60 for coax with BNCs at each end. Hams pay $30 for
>>12VDC 200mA wall warts! Hams pay $15 to $30 for serial cables.
>
>
> So what? Although I understand your point here -- you'd like people to
> build their own equipment and learn a few skills -- I would sure hope that
> anyone who's been messing around with electronics since a kid has terminated
> hundreds or thousands of cables, built plenty of cheesy wall-wart-like power
> supplies, and wired plenty of their own cables. If they're smart, they've
> advanced their skills well beyond the point and now have good paying jobs
> and buying those pre-manufactured items is arguably a much better use of
> their time than making them.
>
> It just doesn't make sense to build your own power supplies when you can buy
> something like a 5V, 1A switcher with 100-240V input for <$10... time is the
> ultimate commodity than you can never create more of!
>
>
>>do hams actually BUILD anything these days?
>
>
> Sure... look at something like GNU Radio, the Elecraft kits, the TAPR VNA
> kit, etc.
>
> Being able to build something from a schematic prepares you for a job that
> pays little better than flipping burgers.
>
> This is very much like mowing your lawn -- if you can afford to pay soomeone
> else to do it, there's little point in doing it yourself unless you truly
> enjoy and experience and understand the "opportunity cost" (the time you
> won't be able to spend doing other things you might enjoy more) involved.
>
>

Yabut - another ham and I were discussing the design of a
phase discriminator. Mention Foster-Seely to any of the
other hams listening and they thought it was a mattress.

One of them didn't know how to solder a resistor to a
PC board ... afaik the others didn't even try. Let me
put it this way - some hams' time would be better spent
opening a book or melting solder than buying a wall wart.

Ed

653. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 20:15:19 UTC
From: CLFE <Junkmail@clfurent.com>
Message-ID: <43cd5054$0$8296$ecde5a14@news.coretel.net>
Source record: 14308
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"ehsjr" <ehsjr@bellatlantic.net> wrote in message
news:LZbzf.1372$pq5.1323@trndny02...
> Joel Kolstad wrote:
>> Cliff,
>>
>> "Cliff Sojourner" <cls-NOSPAM@employees.org> wrote in message
>> news:43CC8997.20201@employees.org...
>>
>>>Hams pay $30 to $60 for coax with BNCs at each end. Hams pay $30 for
>>>12VDC 200mA wall warts! Hams pay $15 to $30 for serial cables.
>>
>>
>> So what? Although I understand your point here -- you'd like people to
>> build their own equipment and learn a few skills -- I would sure hope
>> that anyone who's been messing around with electronics since a kid has
>> terminated hundreds or thousands of cables, built plenty of cheesy
>> wall-wart-like power supplies, and wired plenty of their own cables. If
>> they're smart, they've advanced their skills well beyond the point and
>> now have good paying jobs and buying those pre-manufactured items is
>> arguably a much better use of their time than making them.
>>
>> It just doesn't make sense to build your own power supplies when you can
>> buy something like a 5V, 1A switcher with 100-240V input for <$10... time
>> is the ultimate commodity than you can never create more of!
>>
>>
>>>do hams actually BUILD anything these days?
>>
>>
>> Sure... look at something like GNU Radio, the Elecraft kits, the TAPR VNA
>> kit, etc.
>>
>> Being able to build something from a schematic prepares you for a job
>> that pays little better than flipping burgers.
>>
>> This is very much like mowing your lawn -- if you can afford to pay
>> soomeone else to do it, there's little point in doing it yourself unless
>> you truly enjoy and experience and understand the "opportunity cost" (the
>> time you won't be able to spend doing other things you might enjoy more)
>> involved.
>>
>>

>
>
> Yabut - another ham and I were discussing the design of a
> phase discriminator. Mention Foster-Seely to any of the
> other hams listening and they thought it was a mattress.
> One of them didn't know how to solder a resistor to a
> PC board ... afaik the others didn't even try. Let me
> put it this way - some hams' time would be better spent
> opening a book or melting solder than buying a wall wart.
>
> Ed

Maybe the economy and so on - isn't what it once was - BUT - those who knock "knowing" electronics would be up a creek - were it not for those of us who DO. Those gadgets don't make themselves.

You're right about the Foster Seeley..... Hell, I've seen "hams" - using the term lightly as we're not all on the same platform - not even know what a "fuse" was!
OR a ground! Eh..... seems to me they should have failed. But - that is my beef with the newer tests. You get all the answers given to you in a book. Years ago, you really didn't know what to expect when you went in front of the FCC. If you didn't know electronics, you were just wasting your time. My - how times have changed.

CLF

654. Re: Soundcard Application development.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 20:33:53 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e36f3b3897eeaa398972a@news-central.giganews.com>
Source record: 14309

In article <1137523786.144129.218200@g43g2000cwa.googlegroups.com>,
marsgal42@hotmail.com says...
> mcalh...@ksu.edu wrote:
>
> Windows is not your friend in this area.
> There is a little bit more setup to buffer things properly,
> and you use ioctl() to configure the sample rate, sample
> size, and so on, but it's nothing compared to the contortions
> Windows programmers go through.

I hope you're not under the impression that you're doing the Linux
community a service by spreading FUD about how difficult it is to code
for waveOut or DirectSound, or (for that matter) by extolling the
virtues of ioctl(). :-)

There's got to be ten thousand pages of example audio recording and
playback code for both operating systems out there by this point.
Choose your poison and Google for a willing supplier.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam
---

655. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 20:45:26 UTC
From: CLFE <Junkmail@clfurent.com>
Message-ID: <43cd5763$0$8272$ecde5a14@news.coretel.net>
Source record: 14310
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"Ignoramus22991" <ignoramus22991@NOSPAM.22991.invalid> wrote in message
news:uoczf.17873$V9.5348@fe07.usenetserver.com...
>I have to wonder what is the point of being a ham in the day and age
> of the internet.
>
> i
>

I'm not so sure being a "ham" was the point. However, that is how many of the current technicians/engineers (myself included) cut their teeth. IF it weren't for people getting involved in electronics, those who can't seem to understand the desire - would have no computers, no TV, no Stereo, no anything. SOMEONE had to "design" these items and test them for them to be able to be marketed. You just don't do that without "knowledge". Parts can be soldered on by machine if need be - BUT - they had to be designed and tested to get there. These kids wouldn't have their Gameboys, cell phones and so on - if "someone" didn't take the initiative to design and create. Maybe the phones are made in China, so be it - who do you think installs the cell sites? Not chinese. SOMEONE has to know what to do. THERE IS - need for people to become interested in electronics. Give that up and the rest - and yes we will truly become slaves to those who would love to destroy us. It is too easy to sit back and do nothing.

CLF

656. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 21:58:03 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <BFF2A86B.22F8F%dbowey@comcast.net>
Source record: 14311
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On 1/17/06 12:24 PM, in article uoczf.17873$V9.5348@fe07.usenetserver.com,
"Ignoramus22991" <ignoramus22991@NOSPAM.22991.invalid> wrote:

> I have to wonder what is the point of being a ham in the day and age
> of the internet.
>
> i
>

Talking to someone via ham radio means you are talking with someone with
developed skills with which you have something in common. There is a
kinship that is comfortable. Also, it's great fun to use low power and make
contact all over the planet.

There is nothing similar to ham radio, in the internet.

Don

657. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 22:23:51 UTC
From: onehappymadman@yahoo.com
Message-ID: <1137536631.625417.240690@g44g2000cwa.googlegroups.com>
Source record: 14312
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Cliff Sojourner wrote:
> Joerg wrote:
> > Hello Michael,
> >
> >
> >> The good ol' days of Radio Shack, when they were actually a good
> >> source for
> >> hobbyists. Now they are not much more than Best Buy wannabees.
> >>
> >
> > But why is that? Many kids aren't creative these days. They hang out in
> > front of the TV or some video game but don't actually build stuff.
> > Places like Radio Shack as we knew it from the old days can only survive
> > when people built stuff.
>
> same could be said of most hams!! I bought an HT recently and I was
> astounded to learn HRO did NOT stock SMA connectors (needed for the HT),
> or RG174.
>
> Hams pay $30 to $60 for coax with BNCs at each end. Hams pay $30 for
> 12VDC 200mA wall warts! Hams pay $15 to $30 for serial cables.
>

Just so you know, Goodwill (and other thrift shops) sell those wall
warts for $1 apiece.

658. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 22:33:42 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <ahezf.13200$Jd.5257@newssvr25.news.prodigy.net>
Source record: 14313
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Hello Joel,

> Sure... look at something like GNU Radio, the Elecraft kits, the TAPR VNA
> kit, etc.
>
> Being able to build something from a schematic prepares you for a job that
> pays little better than flipping burgers.
>

Not quite. As a kid I learned a whole lot from making other folk's
Heathkit projects work. Sending them in to Heathkit would have been the
ultimate embarrassment for them so they'd rather have someone local do
it. Schematic sez it should work but it ain't, so ... lessee.

That taught me a good dose of diagnostics and showed me lots of ways how
they designed stuff. You learn from examples and then go on to doing it
from scratch.

> This is very much like mowing your lawn -- if you can afford to pay soomeone
> else to do it, there's little point in doing it yourself unless you truly
> enjoy and experience and understand the "opportunity cost" (the time you
> won't be able to spend doing other things you might enjoy more) involved.
>
>
Lawn, yeah. Other stuff? Not quite. I am just doing a plumbing/framing
project because a broken fixture in a bath turned out to reveal huge
shortcomings in what the "professionals" did. I am not going to let that
happen again. BTW, they'd esily charge a couple thousand plus material.
Probably doing it myself will in the end equate to a fat three digit
hour rate.

Regards, Joerg

http://www.analogconsultants.com

659. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 22:46:38 UTC
From: mc <look@www.ai.uga.edu.for.address>
Message-ID: <Gqezf.26$d5.12@bignews1.bellsouth.net>
Source record: 14314
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

> Talking to someone via ham radio means you are talking with someone with
> developed skills with which you have something in common. There is a
> kinship that is comfortable. Also, it's great fun to use low power and
> make
> contact all over the planet.
>
> There is nothing similar to ham radio, in the internet.

In particular, with ham radio, you don't need an ISP or a telephone line.
You can talk to the other side of the world with no equipment except what is
owned (and could even have been built) by the people on the two ends.

For emergency communication, ham radio is indispensable. Also, I think
shortwave technology should be kept alive in the interest of freedom. A
tyrant can take his country off the Internet but can't block all incoming
radio signals.

VY 73
N4TMI

660. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 23:12:39 UTC
From: Sjouke Burry <burrynulnulfour@ppllaanneett.nnlll>
Message-ID: <43cd79e7$0$12849$ba620dc5@text.nova.planet.nl>
Source record: 14315
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Don Bowey wrote:
> On 1/17/06 12:24 PM, in article uoczf.17873$V9.5348@fe07.usenetserver.com,
> "Ignoramus22991" <ignoramus22991@NOSPAM.22991.invalid> wrote:
>
>
>>I have to wonder what is the point of being a ham in the day and age
>>of the internet.
>>
>>i
>>
>
>
> Talking to someone via ham radio means you are talking with someone with
> developed skills with which you have something in common. There is a
> kinship that is comfortable. Also, it's great fun to use low power and make
> contact all over the planet.
>
> There is nothing similar to ham radio, in the internet.
>
> Don
>
Have you listened to the ham bands lately?
There is a deadly silence there most of the time.
I wonder how fast the ham population is
disappearing.....

661. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 23:20:14 UTC
From: onehappymadman@yahoo.com
Message-ID: <1137540014.438888.212340@g49g2000cwa.googlegroups.com>
Source record: 14316
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

mc wrote:
> > Talking to someone via ham radio means you are talking with someone with
> > developed skills with which you have something in common. There is a
> > kinship that is comfortable. Also, it's great fun to use low power and
> > make
> > contact all over the planet.
> >
> > There is nothing similar to ham radio, in the internet.
>
> In particular, with ham radio, you don't need an ISP or a telephone line.
> You can talk to the other side of the world with no equipment except what is
> owned (and could even have been built) by the people on the two ends.
>
> For emergency communication, ham radio is indispensable. Also, I think
> shortwave technology should be kept alive in the interest of freedom. A
> tyrant can take his country off the Internet but can't block all incoming
> radio signals.
>
> VY 73
> N4TMI

Say, doesn't Linux have some provision for using the ham radio bands
for telecommunication? Anyone have any experience with this?

662. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-17 23:38:51 UTC
From: mc <look@www.ai.uga.edu.for.address>
Message-ID: <Dbfzf.278$z8.146@bignews3.bellsouth.net>
Source record: 14317
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

> Say, doesn't Linux have some provision for using the ham radio bands
> for telecommunication? Anyone have any experience with this?

All operating systems do. There's not much to it. What you need is essentially a packet radio modem, and from there, TCP/IP over the air is not hard to do.

You can't mix ham radio with the Internet because of the strict laws against commercial traffic on ham radio. But apart from that, it's a good thing, and very useful in emergencies.

I don't do packet radio myself because it's too much like my day job, but it's certainly a popular part of ham radio.

663. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 00:00:23 UTC
From: Roberto Waltman <usenet@rwaltman.net>
Message-ID: <7u0rs11n3qr3vb03n99ijgpbgn4ft7t2ta@4ax.com>
Source record: 14318
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

<otc_friend@gmx.net> wrote:
>Do you know of other interesting devices or circuits good for misuse?

Old thread, but still worth answering.

* Small signal germanium transistors in glass
packaging, (OC45 comes to memory, TO1 package,)
make good photodetectors after scrapping the
paint.

* Zener diodes are good noise generators
(This is widely known and used.)

* Some small (toy) dc motors wired in series
with a speaker make good siren sounds.

Roberto Waltman

[Please reply to the group,]
[return address is invalid.]

664. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 00:48:21 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <pfgzf.11524$F_3.10960@newssvr29.news.prodigy.net>
Source record: 14319
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

>>Talking to someone via ham radio means you are talking with someone with
>>developed skills with which you have something in common. There is a
>>kinship that is comfortable. Also, it's great fun to use low power and make
>>contact all over the planet.
>
> you could do the same thing over a computer. Connect to people sharing
> your interests, using low power, worldwide.
>
>
And then, poof, there is a widespread power outage and all your 'modern'
communication is toast. Web, cell phones, everything but radio. Even the
POTS network will become spotty if the outage goes on for too long.
Generators are fine but they won't help when the snow pack is so huge
that a 4WD won't get you there to refuel. AFAIK the record for our area
stand at around 10 days. That makes people realize the true value of
some basic technologies. Now where was that bag of charcoal? Where can
we get some firewood that isn't wet? And where are those batteries?

Regards, Joerg

http://www.analogconsultants.com

665. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 01:12:57 UTC
From: John Perry <jp@no.spam>
Message-ID: <mCgzf.75010$4l5.49828@dukeread05>
Source record: 14320
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"Ignoramus22991" <ignoramus22991@NOSPAM.22991.invalid> wrote:

>> I have to wonder what is the point of being a ham in the day and age
>> of the internet.
>>
>> i
>>

Joerg, etc. wrote:
>>> Talking to someone via ham radio means you are talking with someone with
>>> developed skills with which you have something in common. There is a
>>> kinship that is comfortable. Also, it's great fun to use low power
>>> and make
>>> contact all over the planet.
>>
>>
>> you could do the same thing over a computer. Connect to people sharing
>> your interests, using low power, worldwide.
>>
> And then, poof, there is a widespread power outage and all your 'modern'
> communication is toast. Web, cell phones, everything but radio. Even the
> POTS network will become spotty if the outage goes on for too long.

As Katrina just showed. OUr local newspaper just had a nice spread
about hams being the only means of communication into and out of La. and
Mississippi for a while after the landfall.

John Perry

666. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 01:32:54 UTC
From: mc <look@www.ai.uga.edu.for.address>
Message-ID: <ySgzf.2$0f3.0@bignews2.bellsouth.net>
Source record: 14321
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

>> And then, poof, there is a widespread power outage and all your 'modern'
>> communication is toast. Web, cell phones, everything but radio. Even the
>> POTS network will become spotty if the outage goes on for too long.
>
> As Katrina just showed. OUr local newspaper just had a nice spread about
> hams being the only means of communication into and out of La. and
> Mississippi for a while after the landfall.

Exactly. Almost all ham gear these days runs on 12 volts DC, so anywhere
you have a running car, you can power it. Much of it is low-power and will
run for a very long time on a car battery.

667. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 04:11:20 UTC
From: James Sweet <jamessweet@hotmail.com>
Message-ID: <Idjzf.28656$MG1.26247@trnddc05>
Source record: 14322
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

>
> it is stories like these that always make me wonder how lots of kids like
> that survived child hood
>
> had a similar experiment story (similar age) mixing Acetylene and Oxygen
> from the torch into a small 16oz glass bottle then putting a match near
> opening to see what kind of flame would be produced :)
>
> for some unknown reason (alludes me to this day) i decided to put it inside
> of a 5 gallon paint bucket and that was the better part of the idea
>
> robb
>
>

It's nice to know I'm not the only one who connected a neon glow lamp
straight to 120V.

Thankfully I didn't have access to oxy-acetylene until highschool
welding class. I did find however that if you fill a welding glove with
it and then hit it with the torch striker it makes quite an impressive
boom and the glove launches.

668. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 06:45:05 UTC
From: Rob B <RobB@where.on.net>
Message-ID: <Rtlzf.2023$vU2.1554@newsread3.news.atl.earthlink.net>
Source record: 14323
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"James Sweet" <jamessweet@hotmail.com> wrote in message
news:Idjzf.28656$MG1.26247@trnddc05...
>
> >
> > it is stories like these that always make me wonder how lots of kids
like
> > that survived child hood
> >
<snip>
>
> Thankfully I didn't have access to oxy-acetylene until highschool
> welding class. I did find however that if you fill a welding glove with
> it and then hit it with the torch striker it makes quite an impressive
> boom and the glove launches.
>

ah then you already know, i wasn't smart enough to try container like a
glove, that would have been entertaining

i am glad for alot of descisions at those times but not trying to fill one
of the larger containers ranks high on the list

669. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 08:42:37 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <11srvrtq25k4p59@corp.supernews.com>
Source record: 14324
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"Ignoramus22991" <ignoramus22991@NOSPAM.22991.invalid> wrote in message
news:uoczf.17873$V9.5348@fe07.usenetserver.com...
>I have to wonder what is the point of being a ham in the day and age
> of the internet.

You get to (legally!) transmit on the HF bands where just a handful of watts can carry a message around the planet... that's still pretty darned cool.

It's also a lot easier to find a free chunk-o-spectrum with a ham license if you just want to build a few transmitters or receivers than trying to do something on the ISM bands... and you get to use a lot more power.

The average ham today probably does have far less "electronics" knowledge than one 50 years ago, although one has to keep in mind that 50 years ago it was a lot easier to have a lot of "deep" knowledge in many fields than it is today. Building something like a modern cell phone requires so much knowledge that you can't really begrudge the guy who implemented, e.g., the Viterbi decoder in some digital logic in some corner of an ASIC the fact that he doesn't know how to solder.

670. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 08:55:55 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <11ss0ks61ct7ne4@corp.supernews.com>
Source record: 14325
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"John Perry" <jp@no.spam> wrote in message
news:mCgzf.75010$4l5.49828@dukeread05...
> As Katrina just showed. OUr local newspaper just had a nice spread about
> hams being the only means of communication into and out of La. and
> Mississippi for a while after the landfall.

<< Cough! >> Hams certainly did plenty of good work, but there were people with satellite phones in New Orleans throughout the ordeal. Additionally the military had plenty of their own infrastructure, which included satellite links.

For the average person, I think the best thing hams can do in disaster areas these days is to set up a bunch of PCs that ship out short e-mail messages over HF using Winlink or similiar. If the hams can manage to get a reasonably high speed link to a functional hilltop repeater or similar going, setting up a WiFi gateway would be the way to go.

I have a lot of mixed feelings about hams and emergency communications these days. The kind of things that emergency operations personnel expect in the way of communications these days tend to require a fair amount of fancy equipment and a lot of training. Investing that sort of funding into a "volunteer" group is not something that tends to go over very well anymore, unless it's a group such as, e.g., a volunteer fire department where there are strict duties and responsibilities spelled out and not just some "ad hoc" gathering of a bunch of guys at a pizza parlor every month.

---Joel

671. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 08:58:28 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <11ss0pksp46042a@corp.supernews.com>
Source record: 14326
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"mc" <look@www.ai.uga.edu.for.address> wrote in message
news:Dbfzf.278$z8.146@bignews3.bellsouth.net...
> You can't mix ham radio with the Internet because of the strict laws
> against commercial traffic on ham radio.

I'm convinced that 99% of what the average person does on the Internet would be completely legal if the data packets were going over ham frequencies as well. Reading your personal e-mail? AOK (just don't read your work e-mail!). Ordering a book on Amazon.Com? AOK (just as ordering a pizza through a phone patch is). Etc...

672. LF Dip Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 09:29:25 UTC
From: Andreu <afreixas*NO*SPAM*@terra.es>
Message-ID: <VTnzf.61099$kp.569251@telenews.teleline.es>
Source record: 14327

I have several small measuring instruments in my shack, but I have always been unable to find plans to build a DIP METER for use in LF Freqs. I already have a LEADER DM that begins at 1.5 Mhz but I would like to be able to measure resonant circuits at say 40 Khz or 470 Khz. Is there a thecnical difficulty I should be aware of ? Any help or reference appreciated.

Andrew.

673. Re: LF Dip Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 10:25:21 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <t65ss1dqq8hmtj7eqv19fq40d9phs2nt22@4ax.com>
Source record: 14328

Hi,

> I have several small measuring instruments in my shack, but I have
> always been unable to find plans to build a DIP METER for use in
> LF Freqs. I already have a LEADER DM that begins at 1.5 Mhz but I
> would like to be able to measure resonant circuits at say 40 Khz
> or 470 Khz. Is there a thecnical difficulty I should be aware of ?
> Any help or reference appreciated.

Millen used to make a set of LF coils that plugged into one of
their GDOs without any modifications to the unit. It seems then
that you simply need to make an appropriate coil (old wave-wound
IF transformer coils perhaps) and to draw a calibration graph for
it. I was thinking of doing just that but on the other hand,
should anyone have a set of LF coils for sale for the 90652 or any
information on them, I would be most interested.

Cheers - Joe (G3LLV)

674. Re: Crystal ladder coupling constants.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 12:12:44 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2006.01.18.12.12.44.469069@oceanfree.net>
Source record: 14329

On Sat, 14 Jan 2006 14:23:09 +0000, Eamon Skelton wrote:

> I would like to find a source of similar tables for
> filters with more than 5 poles and for passband ripple
> other than 0.1dB.

I got the Tables from Zverev's book.

Many thanks,

73, Ed. EI9GQ.

--
Linux 2.6.15
Remove 'X' to reply by e-mail.
Yes, my username really is: nospam

675. Re: Soundcard Application development.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 12:38:32 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <pFqzf.3$7i3.0@fe06.lga>
Source record: 14330

"laura halliday" <marsgal42@hotmail.com> wrote in message
news:1137523786.144129.218200@g43g2000cwa.googlegroups.com...

> Windows is not your friend in this area.

Actually, depending on where you are coming from and what you are doing,
Windows can be your friend. Once you have gotten over the initial jolt of
Windows development (admittedly, no small feat), then doing "normal" things
with sound is pretty easy -- probably quite a bit easier than Linux.
However, OP wanted to do some unusal things, and in that sort of case, the
help that Windows gives you definitely gets in the way.

One thing that Windows and Linux development have in common -- everything is
documented and it is virtually impossible to find what you want in the docs.

..

676. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 15:14:15 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <dqlm07$f9d$1@puck.litech.org>
Source record: 14331
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

In rec.radio.amateur.homebrew James Sweet <jamessweet@hotmail.com> wrote:

> It's nice to know I'm not the only one who connected a neon glow lamp
> straight to 120V.

> Thankfully I didn't have access to oxy-acetylene until highschool
> welding class. I did find however that if you fill a welding glove with
> it and then hit it with the torch striker it makes quite an impressive
> boom and the glove launches.

If you put the tip in a dish of soap solution, you can get bubbles full of
stoichiometric oxyacetylene mix, which make a pretty good _BANG_ when you
light them.

This is better done outdoors than indoors.

--
Mike Andrews W5EGO 10WPM
mikea@mikea.ath.cx Extra
Tired old sysadmin working on his code speed

677. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 18:11:08 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <BFF3C4BC.23156%dbowey@comcast.net>
Source record: 14332
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On 1/18/06 12:58 AM, in article 11ss0pksp46042a@corp.supernews.com, "Joel Kolstad" <JKolstad71HatesSpam@Yahoo.Com> wrote:

> "mc" <look@www.ai.uga.edu.for.address> wrote in message
> news:Dbfzf.278$z8.146@bignews3.bellsouth.net...
>> You can't mix ham radio with the Internet because of the strict laws
>> against commercial traffic on ham radio.
>
> I'm convinced that 99% of what the average person does on the Internet would
> be completely legal if the data packets were going over ham frequencies as
> well. Reading your personal e-mail? AOK (just don't read your work
> e-mail!). Ordering a book on Amazon.Com? AOK (just as ordering a pizza
> through a phone patch is). Etc...
>
>

How can you be convinced of something that would be illegal? The ham frequencies are for use by people who hold an appropriate license.

Don

678. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 18:35:14 UTC
From: Ken Weitzel <kweitzel@shaw.ca>
Message-ID: <CTvzf.381619$ki.2254@pd7tw2no>
Source record: 14333
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Don Bowey wrote:
> On 1/18/06 12:58 AM, in article 11ss0pksp46042a@corp.supernews.com, "Joel
> Kolstad" <JKolstad71HatesSpam@Yahoo.Com> wrote:
>
>
>>"mc" <look@www.ai.uga.edu.for.address> wrote in message
>>news:Dbfzf.278$z8.146@bignews3.bellsouth.net...
>>
>>>You can't mix ham radio with the Internet because of the strict laws
>>>against commercial traffic on ham radio.
>>
>>I'm convinced that 99% of what the average person does on the Internet would
>>be completely legal if the data packets were going over ham frequencies as
>>well. Reading your personal e-mail? AOK (just don't read your work
>>e-mail!). Ordering a book on Amazon.Com? AOK (just as ordering a pizza
>>through a phone patch is). Etc...
>>
>>
>
>
> How can you be convinced of something that would be illegal? The ham
> frequencies are for use by people who hold an appropriate license.
>
> Don

Hi..

The operation of the hardware is restricted to those who hold
an appropriate license. Who may or may not elect to share the
usefulness of that equipment with whoever he chooses.

To suggest otherwise would be akin to laying claim that only
those holding drivers licenses could be passengers in a car.

Or that only a properly licensed electrician could make use of
or enjoy electrical equipment. In turn most likely meaning that
you couldn't operate your shack being that you're most likely
not a licensed electrician.

Ken

679. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 19:15:14 UTC
From: jakdedert <jakdedert@bellsouth.net>
Message-ID: <qrwzf.150676$k76.76157@bignews6.bellsouth.net>
Source record: 14334
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Joerg wrote:
> Hello Michael,
>
>
>> The good ol' days of Radio Shack, when they were actually a good
>> source for
>> hobbyists. Now they are not much more than Best Buy wannabees.
>>
>
> But why is that? Many kids aren't creative these days. They hang out in
> front of the TV or some video game but don't actually build stuff.
> Places like Radio Shack as we knew it from the old days can only survive
> when people built stuff.

My favorite Christmas present this last year was a basic electronics kit
like the old RS (or Heath) ones I had as a kid. It was presented to me
by my nine year old daughter...in the hopes that I would build the
projects with her, of course.

We spent an hour putting the kit together, built the first project; and
then I turned her loose...thinking she would build the next most
complicated one, and work her way up.

The next day when I came home, she presented me with a working example
of the most complicated device in the project book. We had a ball
subbing in different components, and then explaining to her why they
made the circuit operate differently.

jak

>
> The Radio Shack here in town has closed. It become a cell phone store.
> Sigh.
>
> Regards, Joerg
>
> http://www.analogconsultants.com
>

680. anybody has barebones superhet schematics (QST june 82)?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 20:18:30 UTC
From: aadu.adok@gmail.com
Message-ID: <1137615509.990666.323460@g49g2000cwa.googlegroups.com>
Source record: 14335

hi,
does anybody have schematics of this receiver in electronic format?

thanks

681. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 21:43:07 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <LDyzf.6050$_S7.465@newssvr14.news.prodigy.com>
Source record: 14336
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Hello,

> While you surely have a point, about a very remote possibility for any
> given locale, I actually have enough diesel fuel to last for a month of
> conservative use in winter, more for summer. I have a 26 year old Onan
> diesel generator that I restored.
>

Lucky you. That possibility isn't remote at all. Happened here about 15
years ago. And this is not a settlement behind the Klondike but we are
35mi from where Arnold holds his office.

Regards, Joerg

http://www.analogconsultants.com

682. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 21:47:08 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <wHyzf.6054$_S7.2405@newssvr14.news.prodigy.com>
Source record: 14337
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Hello Joel,

> I have a lot of mixed feelings about hams and emergency communications these
> days. The kind of things that emergency operations personnel expect in the
> way of communications these days tend to require a fair amount of fancy
> equipment and a lot of training. ...

And then that fancy equipment won't talk to the fancy equipment of the
other agency. Happened, a lot. Keep it simple, that's what hams excel
at. And it works.

> ... Investing that sort of funding into a
> "volunteer" group is not something that tends to go over very well anymore,
> unless it's a group such as, e.g., a volunteer fire department where there
> are strict duties and responsibilities spelled out and not just some "ad
> hoc" gathering of a bunch of guys at a pizza parlor every month.
>

They are quite a bit more organized than that.

Regards, Joerg

http://www.analogconsultants.com

683. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 21:51:41 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <NLyzf.6055$_S7.4045@newssvr14.news.prodigy.com>
Source record: 14338
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Hello Jak

>
> The next day when I came home, she presented me with a working example
> of the most complicated device in the project book. We had a ball
> subbing in different components, and then explaining to her why they
> made the circuit operate differently.
>

That's the only way to get kids interested in electronics. Come to think
of it, I must have been around her age. Maybe a year younger but that
doesn't make much difference. It was a Philips kit that did it.

Later in case her interest persists just be honest with her about the
career prospects inside the US. It ain't that stellar anymore for EEs
unless they are very willing to relocate, even out of the country.

Regards, Joerg

http://www.analogconsultants.com

684. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 22:00:58 UTC
From: jakdedert <jakdedert@bellsouth.net>
Message-ID: <NSyzf.50$ij3.34@bignews2.bellsouth.net>
Source record: 14339
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Joerg wrote:
> Hello Jak
>
>>
>> The next day when I came home, she presented me with a working example
>> of the most complicated device in the project book. We had a ball
>> subbing in different components, and then explaining to her why they
>> made the circuit operate differently.
>>
>
> That's the only way to get kids interested in electronics. Come to think
> of it, I must have been around her age. Maybe a year younger but that
> doesn't make much difference. It was a Philips kit that did it.
>
> Later in case her interest persists just be honest with her about the
> career prospects inside the US. It ain't that stellar anymore for EEs
> unless they are very willing to relocate, even out of the country.
>
Yeah, it's okay though. I was just pumped that she bought 'me' a toy
which was actually for 'us' to play with. The fact that she took it and
ran with it was a bonus. It shows the aptitude.

At nine, she's got all the choices in the world.

jak

> Regards, Joerg
>
> http://www.analogconsultants.com
>

685. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 22:26:10 UTC
From: Ken Weitzel <kweitzel@shaw.ca>
Message-ID: <6gzzf.158819$tl.69677@pd7tw3no>
Source record: 14340
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

jakdedert wrote:
> Joerg wrote:
>
>> Hello Jak
>>
>>>
>>> The next day when I came home, she presented me with a working
>>> example of the most complicated device in the project book. We had a
>>> ball subbing in different components, and then explaining to her why
>>> they made the circuit operate differently.
>>>
>>
>> That's the only way to get kids interested in electronics. Come to
>> think of it, I must have been around her age. Maybe a year younger but
>> that doesn't make much difference. It was a Philips kit that did it.
>>
>> Later in case her interest persists just be honest with her about the
>> career prospects inside the US. It ain't that stellar anymore for EEs
>> unless they are very willing to relocate, even out of the country.
>>
> Yeah, it's okay though. I was just pumped that she bought 'me' a toy
> which was actually for 'us' to play with. The fact that she took it and
> ran with it was a bonus. It shows the aptitude.
>
> At nine, she's got all the choices in the world.

Hi...

Guess I'm easily a generation or few ahead of you, so have a
suggestion, if I may?

Get pictures - lots of 'em - of her working on it, some of you and
her working together, and some of her demonstrating them to her Mom.

Make wonderful, wonderful memories for all of you, and maybe
introduce her to photography at the same time.

Take care.

Ken

686. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 23:53:01 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2006.01.18.23.53.22.772998@example.net>
Source record: 14341
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On Wed, 18 Jan 2006 13:15:14 -0600, jakdedert wrote:

> Joerg wrote:
>> Hello Michael,
>>
>>
>>> The good ol' days of Radio Shack, when they were actually a good
>>> source for
>>> hobbyists. Now they are not much more than Best Buy wannabees.
>>>
>>
>> But why is that? Many kids aren't creative these days. They hang out in
>> front of the TV or some video game but don't actually build stuff.
>> Places like Radio Shack as we knew it from the old days can only survive
>> when people built stuff.
>
> My favorite Christmas present this last year was a basic electronics kit
> like the old RS (or Heath) ones I had as a kid. It was presented to me
> by my nine year old daughter...in the hopes that I would build the
> projects with her, of course.
>
> We spent an hour putting the kit together, built the first project; and
> then I turned her loose...thinking she would build the next most
> complicated one, and work her way up.
>
> The next day when I came home, she presented me with a working example
> of the most complicated device in the project book. We had a ball
> subbing in different components, and then explaining to her why they
> made the circuit operate differently.
>

OK, I'm an old softie - this made me emote. :-)

Next, do you plan to loan her your kit and a copy of AoE? ;-) Maybe access
to your junque box? ;-P

Thanks!
Rich

> jak
>
>>
>> The Radio Shack here in town has closed. It become a cell phone store.
>> Sigh.

>>
>> Regards, Joerg
>>
>> http://www.analogconsultants.com
>>

687. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-18 23:57:25 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2006.01.18.23.57.44.285187@example.net>
Source record: 14342
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On Wed, 18 Jan 2006 18:35:14 +0000, Ken Weitzel wrote:
> Don Bowey wrote:
>> On 1/18/06 12:58 AM, in article 11ss0pksp46042a@corp.supernews.com, "Joel
>> Kolstad" <JKolstad71HatesSpam@Yahoo.Com> wrote:
>>>"mc" <look@www.ai.uga.edu.for.address> wrote in message
>>>
>>>>You can't mix ham radio with the Internet because of the strict laws
>>>>against commercial traffic on ham radio.
>>>
>>>I'm convinced that 99% of what the average person does on the Internet would
>>>be completely legal if the data packets were going over ham frequencies as
>>>well. Reading your personal e-mail? AOK (just don't read your work
>>>e-mail!). Ordering a book on Amazon.Com? AOK (just as ordering a pizza
>>>through a phone patch is). Etc...
>>
>> How can you be convinced of something that would be illegal? The ham
>> frequencies are for use by people who hold an appropriate license.
>
> The operation of the hardware is restricted to those who hold
> an appropriate license. Who may or may not elect to share the
> usefulness of that equipment with whoever he chooses.
>
> To suggest otherwise would be akin to laying claim that only
> those holding drivers licenses could be passengers in a car.
>
> Or that only a properly licensed electrician could make use of
> or enjoy electrical equipment. In turn most likely meaning that
> you couldn't operate your shack being that you're most likely
> not a licensed electrician.

So, who are these "passengers" who are using my rig for their
traffic?

Thanks,
Rich

688. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 00:43:03 UTC
From: Ken Weitzel <kweitzel@shaw.ca>
Message-ID: <rgBzf.265578$2k.159589@pd7tw1no>
Source record: 14343
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Rich Grise wrote:

> On Wed, 18 Jan 2006 18:35:14 +0000, Ken Weitzel wrote:
>
>>Don Bowey wrote:
>>
>>>On 1/18/06 12:58 AM, in article 11ss0pksp46042a@corp.supernews.com, "Joel
>>>Kolstad" <JKolstad71HatesSpam@Yahoo.Com> wrote:
>>>
>>>>"mc" <look@www.ai.uga.edu.for.address> wrote in message
>>>>
>>>>
>>>>>You can't mix ham radio with the Internet because of the strict laws
>>>>>against commercial traffic on ham radio.
>>>>
>>>>I'm convinced that 99% of what the average person does on the Internet would
>>>>be completely legal if the data packets were going over ham frequencies as
>>>>well. Reading your personal e-mail? AOK (just don't read your work
>>>>e-mail!). Ordering a book on Amazon.Com? AOK (just as ordering a pizza
>>>>through a phone patch is). Etc...
>>>
>>>How can you be convinced of something that would be illegal? The ham
>>>frequencies are for use by people who hold an appropriate license.
>>
>>The operation of the hardware is restricted to those who hold
>>an appropriate license. Who may or may not elect to share the
>>usefulness of that equipment with whoever he chooses.
>>
>>To suggest otherwise would be akin to laying claim that only
>>those holding drivers licenses could be passengers in a car.
>>
>>Or that only a properly licensed electrician could make use of
>>or enjoy electrical equipment. In turn most likely meaning that
>>you couldn't operate your shack being that you're most likely
>>not a licensed electrician.
>
>
> So, who are these "passengers" who are using my rig for their
> traffic?

Hi...

Anyone who you choose to.

Long distance telephone is now virtually free, and the internet
is free. But I'm in Canada, and my youngest is off to Australia
the end of the month. I may ask you to send a message off in
her general direction, and you may agree to do it. :)

No license necessary :)

Take care.

Ken

689. FA: Dow Relay, air variables, VLF converter, meters, etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 01:35:08 UTC
From: "Jim, KK1W" <kk1w@charter.net>
Message-ID: <02Czf.93$7i3.24@fe06.lga>
Source record: 14344

FA on eBay an assortment of air variables, air, compression and piston trimmers, meters, RF ammeters, Dow relay and Palomar VLF converter.

Please take a look at: http://search.ebay.com/_W0QQsassZkk1w2000

RF ammeters have been tested and are OK, everything else is in good to very good condition.
.
Thanks for your interest,

Jim, KK1W

690. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 01:40:07 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <11strfo7squ1h58@corp.supernews.com>
Source record: 14345
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Hi Joerg,

"Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
news:NLyzf.6055$_S7.4045@newssvr14.news.prodigy.com...
> Later in case her interest persists just be honest with her about the
> career prospects inside the US. It ain't that stellar anymore for EEs
> unless they are very willing to relocate, even out of the country.

Fair point, but I guess the question would be... "the prospects for EEs aren't that stellar compared to... what?" Compared to most people in technical fields I still think we do OK. (I do agree one typically does have to relocate, but at least straight out of college I would hope that most people would _want_ to do that.)

For people who really want to make money, an engineering degree along with a business degree still seems like a really solid combination (in terms of sheer results -- we can save the horror stories of these people for later!).

---Joel

691. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 01:47:20 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <11strt8o9g62d07@corp.supernews.com>
Source record: 14346
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Hi Joerg,

> And then that fancy equipment won't talk to the fancy equipment of the
> other agency. Happened, a lot.

Yes, and the government continues to pour millions of dollars into radio interoperability to try to make it work. I see no technical reason why getting all the fancy equipment to talk to other agencies should be a problem (look at the Internet -- Usenet news and e-mail seems to make it to all corners of the globe just fine, despite using lots of different brands and types of equipment) -- I guess it really is much more a political problem.

> Keep it simple, that's what hams excel at. And it works.

I agree it helps, but wouldn't you suspect that if you survived all the Hurricane Katrina victims who received help from any formal organization, by quantity those helped by more formalized organizations such as the Red Cross would easily outnumber those who received helps from hams? The problem the hams have is that their help often does go un- or under-acknowledged, whereas everyone knows about the Red Cross.

> They are quite a bit more organized than that.

I guess it depends on the area? Those pictures on hamsexy.com aren't all forged. :-)

---Joel

692. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 01:50:25 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <11sts322us8f75b@corp.supernews.com>
Source record: 14347
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"Don Bowey" <dbowey@comcast.net> wrote in message
news:BFF3C4BC.23156%dbowey@comcast.net...
> On 1/18/06 12:58 AM, in article 11ss0pksp46042a@corp.supernews.com, "Joel
> Kolstad" <JKolstad71HatesSpam@Yahoo.Com> wrote:
>> I'm convinced that 99% of what the average person does on the Internet
>> would
>> be completely legal if the data packets were going over ham frequencies
>> as
>> well.
> How can you be convinced of something that would be illegal?

I meant that if the people in question had ham radio licenses, of course.
My point was that a lot of people get VERY defensive if you suggest you're
going to provide a straight gateway between the airwaves and the Internet
for licensed hams to use, citing how the fact that there's no realistic
means of precluding that gateway's use for illegal activities (just as there
isn't when one uses an autopatch) should somehow be reason enough to
disallow it in the first place.

693. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 01:51:28 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <AgCzf.6699$_S7.4546@newssvr14.news.prodigy.com>
Source record: 14348
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Hello Ken,

> Long distance telephone is now virtually free, and the internet
> is free. ...

Ahem, not quite. I have to shell out $50 every month for DSL. Long distance over regular phone lines is 3c/minute within US/Canada but only with an MCI phone card. Overseas is anywhere north of 10c/minute if you want the 'luxury' of a decent echo cancellation.

Regards, Joerg

http://www.analogconsultants.com

694. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 02:56:58 UTC
From: mc <look@www.ai.uga.edu.for.address>
Message-ID: <nbDzf.151276$k76.138897@bignews6.bellsouth.net>
Source record: 14349
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

> I meant that if the people in question had ham radio licenses, of course.
> My point was that a lot of people get VERY defensive if you suggest you're
> going to provide a straight gateway between the airwaves and the Internet
> for licensed hams to use, citing how the fact that there's no realistic
> means of precluding that gateway's use for illegal activities (just as
> there isn't when one uses an autopatch) should somehow be reason enough to
> disallow it in the first place.

But that's not the point. The point is that ham radio is required to be
noncommercial. The Internet is mostly business.

695. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 03:15:00 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <11su11kf0gjq8d1@corp.supernews.com>
Source record: 14350
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"mc" <look@www.ai.uga.edu.for.address> wrote in message
news:nbDzf.151276$k76.138897@bignews6.bellsouth.net...
> But that's not the point. The point is that ham radio is required to be
> noncommercial. The Internet is mostly business.

That was my (original) point -- a very large chunk of what most people use their "personal" or "home" Internet connection for is NOT business... just reading e-mail from friends, ordering the occasional book on Amazon, reading newsgroup, surfing random web sites, whatever -- all things that are allowed over ham frequencies. (Which -- as you're probably aware -- are regulated such that you can't engage in activities in which you have a "pecuniary interest," but it's been made clear that things like ordering a pizzaare OK.)

696. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 03:15:16 UTC
From: Keith <krw@att.bizzzz>
Message-ID: <pan.2006.01.19.03.15.09.922154@att.bizzzz>
Source record: 14203
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On Thu, 19 Jan 2006 03:25:52 +0000, James Sweet wrote:

>
>> Fair point, but I guess the question would be... "the prospects for EEs
>> aren't that stellar compared to... what?" Compared to most people in
>> technical fields I still think we do OK. (I do agree one typically does
>> have to relocate, but at least straight out of college I would hope that
>> most people would _want_ to do that.)
>>
>
>
> I dunno, I certainly wouldn't want to relocate. I love the area I grew
> up in, nearly my entire family lives within a few hundred miles, it'd be
> a big hassle to fly in for family events a few times a year. To each
> their own I suppose.

I guess! I moved nine hundred miles from the family upon graduation and another couple of hundred more 20 years later. My father moved from the UP of Michigan to Schenectady NY in the 40s for similar reasons. Comparitively, I have it easy since I've only had to move the family twice (kid only once) and travel is so much easier today. If you want the job you gotta go where it is. If you want to stay home with momma, don't whine about it.

--
Keith

697. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 03:19:31 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <BFF44543.232B1%dbowey@comcast.net>
Source record: 14351
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On 1/18/06 5:50 PM, in article 11sts322us8f75b@corp.supernews.com, "Joel
Kolstad" <JKolstad71HatesSpam@Yahoo.Com> wrote:

> "Don Bowey" <dbowey@comcast.net> wrote in message
> news:BFF3C4BC.23156%dbowey@comcast.net...
>> On 1/18/06 12:58 AM, in article 11ss0pksp46042a@corp.supernews.com, "Joel
>> Kolstad" <JKolstad71HatesSpam@Yahoo.Com> wrote:
>>> I'm convinced that 99% of what the average person does on the Internet
>>> would
>>> be completely legal if the data packets were going over ham frequencies
>>> as
>>> well.
>> How can you be convinced of something that would be illegal?
>
> I meant that if the people in question had ham radio licenses, of course.
> My point was that a lot of people get VERY defensive if you suggest you're
> going to provide a straight gateway between the airwaves and the Internet
> for licensed hams to use, citing how the fact that there's no realistic
> means of precluding that gateway's use for illegal activities (just as there
> isn't when one uses an autopatch) should somehow be reason enough to
> disallow it in the first place.
>
>

If messages traverse the internet and jump into ham band packets at one or
both ends, and there is an operator controlling the transmission at the jump
points, I don't perceive any legal problems for non-commercial messages.
For "emergency" traffic it would be a valuable process. Maybe some are
doing this..... It's not a brain-buster.

Don

698. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 03:25:52 UTC
From: James Sweet <jamessweet@hotmail.com>
Message-ID: <4FDzf.19564$6L1.11367@trnddc02>
Source record: 14198
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

> Fair point, but I guess the question would be... "the prospects for EEs
> aren't that stellar compared to... what?" Compared to most people in
> technical fields I still think we do OK. (I do agree one typically does
> have to relocate, but at least straight out of college I would hope that
> most people would _want_ to do that.)
>

I dunno, I certainly wouldn't want to relocate. I love the area I grew
up in, nearly my entire family lives within a few hundred miles, it'd be
a big hassle to fly in for family events a few times a year. To each
their own I suppose.

699. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 03:26:33 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <11su1n9brqhdq37@corp.supernews.com>
Source record: 14199
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"Don Bowey" <dbowey@comcast.net> wrote in message
news:BFF44543.232B1%dbowey@comcast.net...
> If messages traverse the internet and jump into ham band packets at one or
> both ends, and there is an operator controlling the transmission at the
> jump
> points, I don't perceive any legal problems for non-commercial messages.
> For "emergency" traffic it would be a valuable process. Maybe some are
> doing this..... It's not a brain-buster.

Yeah, the whole idea though really turns some people off, unfortunately. My opinion is that reasonably cool heads are prevailing, though, and ham radio regulations are slooooowwwllllly moving in the right direction. It appears that regulation primarily by bandwidth (rather than emission type) will be the law of the land in the next couple of years.

700. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 03:29:40 UTC
From: James Sweet <jamessweet@hotmail.com>
Message-ID: <EIDzf.19607$6L1.10746@trnddc02>
Source record: 14200
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair

Joerg wrote:
> Hello Ken,
>
>> Long distance telephone is now virtually free, and the internet
>> is free. ...
>
>
>
> Ahem, not quite. I have to shell out $50 every month for DSL. Long
> distance over regular phone lines is 3c/minute within US/Canada but only
> with an MCI phone card. Overseas is anywhere north of 10c/minute if you
> want the 'luxury' of a decent echo cancellation.
>

You don't *have* to shell out $50/month. My DSL is $30, but if I wanted
to I could get dialup for $5, or I could go to the local library and use
it for free. The added cost is for the convenience of having a fast
connection at home.

701. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 03:34:18 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <11su25qamu9765e@corp.supernews.com>
Source record: 14201
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"James Sweet" <jamessweet@hotmail.com> wrote in message
news:4FDzf.19564$6L1.11367@trnddc02...
> I dunno, I certainly wouldn't want to relocate. I love the area I grew up
> in, nearly my entire family lives within a few hundred miles, it'd be a
> big hassle to fly in for family events a few times a year. To each their
> own I suppose.

I didn't say people should never come back. :-) I just think one can learn
a lot by moving around a little, trying out different states, countries,
whatever your resources allow you to. My understanding is that in many
western European countries, Oz, NZ, etc. this "experience" is somewhat
formalized, with something like a year right after college reserved for
travelling the globe.

Sheesh, I really need to get back to work and quit getting so sentimental
when stuck in a motel in San Diego for a week...!

702. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 03:36:06 UTC
From: James Sweet <jamessweet@hotmail.com>
Message-ID: <GODzf.19683$6L1.17387@trnddc02>
Source record: 14202
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

>
> Yeah, the whole idea though really turns some people off, unfortunately. My
> opinion is that reasonably cool heads are prevailing, though, and ham radio
> regulations are slooooowwwllllly moving in the right direction. It appears
> that regulation primarily by bandwidth (rather than emission type) will be
> the law of the land in the next couple of years.
>
>

I'm sure it will eventually. Ham will either evolve with the times or it
will fade out of existence. I know a few old timers who are into ham
radio but I've not yet met anyone in my 20-something generation who's
into it, not even one.

703. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 04:31:43 UTC
From: James Sweet <jamessweet@hotmail.com>
Message-ID: <PCEzf.24879$h47.13452@trnddc08>
Source record: 14204
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Joel Kolstad wrote:
> "James Sweet" <jamessweet@hotmail.com> wrote in message
> news:4FDzf.19564$6L1.11367@trnddc02...
>
>>I dunno, I certainly wouldn't want to relocate. I love the area I grew up
>>in, nearly my entire family lives within a few hundred miles, it'd be a
>>big hassle to fly in for family events a few times a year. To each their
>>own I suppose.
>
>
> I didn't say people should never come back. :-) I just think one can learn
> a lot by moving around a little, trying out different states, countries,
> whatever your resources allow you to. My understanding is that in many
> western European countries, Oz, NZ, etc. this "experience" is somewhat
> formalized, with something like a year right after college reserved for
> travelling the globe.
>
> Sheesh, I really need to get back to work and quit getting so sentimental
> when stuck in a motel in San Diego for a week...!
>
>

I love to travel, but by the time I was out on my own I had far too much "junk" to pack up and move every few years and none of the places I've been to seemed all that appealing to live in. I guess it works out well that I live in an area which is quite a hotspot of technical jobs, just glad I bought a house when I did because there's no way I'd be able to now, one would be hard pressed to find a 1 bedroom condo for much under $200K.

704. Re: Dick Smith Radio Direction Finder - Docs now in PDF

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 04:42:24 UTC
From: Glenn McAllister <"(callsign)"@orcon.net.nz>
Message-ID: <43CF18B0.70E8@orcon.net.nz>
Source record: 14205
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

Scanned and kindly converted to PDF by Ken, ZL1WKT.

Hosted by Al at
http://www.webdingers.com/K6345RadioDirectionFinder.pdf
and also by me at
http://www.freewebs.com/cqdx/dserdfk6345.htm

Glenn McAllister wrote:
>
> My email address is my callsign at orcon dot net dot enn zed
>
> de Glenn ZL2TLD

705. Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 04:43:07 UTC
From: Kerry Miller <kmiller01at@ticnet.com>
Message-ID: <CNEzf.140599$WH.64582@dukeread01>
Source record: 14206

I've got a problem with my Astron RS-20 power supply. With no load, it's fine, but anything above 4amps or so makes it drop way down and my rig drops out of lock. I haven't measured it under load but the rig works ok to 10 or 11 volts so it must be dropping below that.

I found a schematic and downloaded it, all the voltages are fairly close to what it says on the schematic with no load, I haven't made any measurements with a load on it. I'll pick up a headlight tomorrow to put a load on it and make more measurements.

Does anybody have any ideas?

Thanks,
Kerry, WD5ABC

706. Re: More Markie Mularkie

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 06:06:17 UTC
From: nospam@atall.com
Message-ID: <43CF2C59.FD96D330@atall.com>
Source record: 14207
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

K4YZ wrote:

> an old friend wrote:
> > K4YZ wrote:
> > > an_old_friend wrote:
> > > > K4YZ wrote:
> > > > > an_old_friend wrote:
> > > > > > K4YZ wrote:
> > > > > > > an_old_friend wrote:
> > > > > > > >
> > > > > > > > > it wasshit
> > > > > > > > consortship fixed
> > > > > > > >
> > > > > > > Who were you consorting with?
> > > > > >
> > > > > you as point of fact
> > > >
> > > Uhhhhhhhh....Nope.
> > >
> > yep
> >
> Nope.
>
> > and you seem to enjoy consorting with me here online indeed you do sem
> > to live for it
>
> And now we have solid evidence that you ARE fantasizing.
>
> Steve, K4YZ

I see ukra is raising it's tone, somewhat.

707. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 06:09:07 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <GKydnRtVh-OVsFLenZ2dnUVZ_sSdnZ2d@comcast.com>
Source record: 14208

"Kerry Miller" <kmiller01at@ticnet.com> wrote in message
news:CNEzf.140599$WH.64582@dukeread01...
> I've got a problem with my Astron RS-20 power supply. With no load, it's
> fine, but anything above 4amps or so makes it drop way down and my rig
> drops out of lock. I haven't measured it under load but the rig works ok
> to 10 or 11 volts so it must be dropping below that.
>
> I found a schematic and downloaded it, all the voltages are fairly close
> to what it says on the schematic with no load, I haven't made any
> measurements with a load on it. I'll pick up a headlight tomorrow to put
> a load on it and make more measurements.
>
> Does anybody have any ideas?
>
> Thanks,
> Kerry, WD5ABC

Kerry -

From you description, you have lost REGULATION .

Read the KBT web site for ALL required diagnosis and repair steps for linear
power supplies and Astron. MENU BAR is GRAY LIST ON LEFT
http://www.kbt-dc-supplies.com/index.php

Replace LM723 regulator chip ...
TEST PASS TRANSISTORS (2N3055 or 2N3771)

How it Works - David Metz's classic article - now 10 years old
http://www.seits.org/features/pwrsup.htm

Index & schematics for Astron power supplies
http://www.repeater-builder.com/astron/astron-index.html

gb

708. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 12:41:17 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <DOLzf.3$_h7.2@fe06.lga>
Source record: 14209

Astron linear supplies use a 3 terminal regulator, usually an LM317. These things do tend to fail from time to time. Can't tell if that's your problem, but it is likely, and the things are cheap enough it's worth popping a new one in to find out.

..

"Kerry Miller" <kmiller01at@ticnet.com> wrote in message news:CNEzf.140599$WH.64582@dukeread01...
> I've got a problem with my Astron RS-20 power supply. With no load, it's
> fine, but anything above 4amps or so makes it drop way down and my rig
> drops out of lock. I haven't measured it under load but the rig works ok
> to 10 or 11 volts so it must be dropping below that.
>
> I found a schematic and downloaded it, all the voltages are fairly close
> to what it says on the schematic with no load, I haven't made any
> measurements with a load on it. I'll pick up a headlight tomorrow to put
> a load on it and make more measurements.
>
> Does anybody have any ideas?
>
> Thanks,
> Kerry, WD5ABC

709. FA:100p+Atwater-Kent Service Manual+ more

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 14:34:09 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <BrNzf.274613$qk4.18092@bgtnsc05-news.ops.worldnet.att.net>
Source record: 14210
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

A 108 page Atwater Kent service model covering several models + other stuff too; see at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking, heytubeguy

710. how can a casette deck receive a radio program

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 14:49:06 UTC
From: Siggi <smusnmrNOSPAM@yahoo.com>
Message-ID: <dqo8t2$f4vo$1@zam602.zam.kfa-juelich.de>
Source record: 14211

Sorry, folks, I am not a radio amateur, but this question puzzles me for years, ever since I heared radio programs in an ordinary audio recorder or now, in the speakers of my PC. Admitted, we live close to a lot of short wave staions, but how can this be? is it diodes in my PC that do the job? An electrical engineer friend told me he knows other friends having the same experience, but suggested I ask a radi newsgroup. Here I am.

Can you help me?

Thanks, Siggi

P.S. As a child I experimented with a high-resistance speakers and a copper penny - heated on one side to function as a detector - but then this was a (crude) detector!

711. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 14:57:11 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <D-CdnZP05uZQNVLeRVn-sw@comcast.com>
Source record: 14212

"xpyttl" <xpyttl_NOSPAM@earthling.net> wrote in message
news:DOLzf.3$_h7.2@fe06.lga...
> Astron linear supplies use a 3 terminal regulator, usually an LM317.
> These things do tend to fail from time to time. Can't tell if that's your
> problem, but it is likely, and the things are cheap enough it's worth
> popping a new one in to find out.
>

Really? What model of Astron linear power supply have you repaired or seen
that uses this design approach? I have never seen one like this -- over
past 20 years.
Confusing this with some other mfg. design?

Astron has been using the 14-pin (30 years old) LM 723 regulator IC with NPN
pass transistors (e.g. 2N3055, 2N3771) ... for as long as I have been
repairing them.

Check here for correct Astron information - repairs, etc.
http://www.kbt-dc-supplies.com/index.php

and Astron schematics (which show the LM723, not the later LM317 design)
http://www.repeater-builder.com/astron/astron-index.html

gb

712. Re: LF Dip Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 16:37:05 UTC
From: "Derek R. Smith" <Derek@multnomah.demon.co.uk>
Message-ID: <J8ghOjCxA8zDFwtQ@multnomah.demon.co.uk>
Source record: 14213

No real technical difficulty. Simply use a suitable (large) inductance
and it will probably work.
However, there is a very real practical difficulty. The tuning capacitor
in a Dip meter designed for 1.5Mhz and up, will provide a very small
coverage at LF and the dip may be hard to identify. You will require a
lot of coils to get continuous coverage. This might be OK if you are
working at narrow range of spot frequencies and the circuits under test
are reasonably close to the spot frequency to begin with.

In message <VTnzf.61099$kp.569251@telenews.teleline.es>, Andreu
<afreixas*NO*SPAM*@terra.es> writes
>
> I have several small measuring instruments in my shack, but I have
> always been unable to find plans to build a DIP METER for use in
> LF Freqs. I already have a LEADER DM that begins at 1.5 Mhz but I
> would like to be able to measure resonant circuits at say 40 Khz
> or 470 Khz. Is there a thecnical difficulty I should be aware of ?
> Any help or reference appreciated.
>
> Andrew.
>
>

--
Derek R. Smith.

713. Re: how can a casette deck receive a radio program

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 18:01:50 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1137693710.399087.191670@f14g2000cwb.googlegroups.com>
Source record: 14214

Yes, diodes. Usually ones that are part of another structure: the base-emitter junction of a common transistor will act like a diode. There are other nonlinearities inside pretty much any electronics that will detect AM signals, and if the signals are large enough, the result will be audible on connected speakers, etc. The trick is to keep the RF (radio) signals small enough inside the circuits so that it's not a problem. As you noted when you played with your crude detector, lots of things you might not expect can be nonlinear enough to detect AM stations and provide some audio output.

Cheers,
Tom

714. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 18:20:15 UTC
From: John Hudak <jhudak@sei.cmu.edu>
Message-ID: <43CFD85F.1050806@sei.cmu.edu>
Source record: 14215
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Hmmm, well I for one would not trust my windoz-based PCs to work
reliably enough in a disaster. Even if stripped down, I don't think it
is robust enough. (I think Linux or a Mac are different stories).
ALso, there is still too much infrastructure needed to get PCs 'out on
the web'...With a ham rig, hoist an antenna and your there...
John

Joel Kolstad wrote:
> "John Perry" <jp@no.spam> wrote in message
> news:mCgzf.75010$4l5.49828@dukeread05...
>
>>As Katrina just showed. OUr local newspaper just had a nice spread about
>>hams being the only means of communication into and out of La. and
>>Mississippi for a while after the landfall.
>
>
> << Cough! >> Hams certainly did plenty of good work, but there were people
> with satellite phones in New Orleans throughout the ordeal. Additionally
> the military had plenty of their own infrastructure, which included
> satellite links.
>
> For the average person, I think the best thing hams can do in disaster areas
> these days is to set up a bunch of PCs that ship out short e-mail messages
> over HF using Winlink or similiar. If the hams can manage to get a
> reasonably high speed link to a functional hilltop repeater or similar
> going, setting up a WiFi gateway would be the way to go.
>
> I have a lot of mixed feelings about hams and emergency communications these
> days. The kind of things that emergency operations personnel expect in the
> way of communications these days tend to require a fair amount of fancy
> equipment and a lot of training. Investing that sort of funding into a
> "volunteer" group is not something that tends to go over very well anymore,
> unless it's a group such as, e.g., a volunteer fire department where there
> are strict duties and responsibilities spelled out and not just some "ad
> hoc" gathering of a bunch of guys at a pizza parlor every month.
>
> ---Joel
>
>
>

715. Re: anybody has barebones superhet schematics (QST june 82)?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 18:35:11 UTC
From: sailtamarack@yahoo.ca
Message-ID: <1137695711.521268.314310@g44g2000cwa.googlegroups.com>
Source record: 14216

The ARRL will send you a reprint of Doug Demaw's article for $5. I have a copy of W1FBs Design Notebook and it looks like it has the schematic and the description you are looking for. Sorry but I don't have a scanner. You can often find this book at libraries.

The design uses 40673 dual gate FETS which are an obsolete part. You can find them at surplus houses at about $10 each.

Any particular reason for wanting to build this particular receiver?

Roger

716. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 18:39:01 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <11svn66cb580ue2@corp.supernews.com>
Source record: 14217
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Hi John,

"John Hudak" <jhudak@sei.cmu.edu> wrote in message
news:43CFD85F.1050806@sei.cmu.edu...
> Hmmm, well I for one would not trust my windoz-based PCs to work reliably
> enough in a disaster. Even if stripped down, I don't think it is robust
> enough. (I think Linux or a Mac are different stories).

Whether or not a Windows system is reliable has much more to do with the person setting it up than the OS itself; thousands of "mission critical" Windows systems prove that every day. Personally, I'd be choosing my hardware basd on the applications I wanted to run... that pretty much rules out Macs, whereas Linux could be a decent contender given that there is plenty of good amateur radio software for it.

> ALso, there is still too much infrastructure needed to get PCs 'out on the
> web'...With a ham rig, hoist an antenna and your there...

My suggestion was that the best thing hams could do for the average person would be to set up a PC to let them send e-mail, but I'd certainly agree that if you don't have a laptop lying around to do that with, there's still some benefit in being able to relay voice messages. (And compared to a decent HF radio, its power supply, and antenna, adding a laptop as well doesn't do much to increase weight, decrease mobility, etc., but it does provide a marked increase in communications flexibility.)

There are now some fancy HF transceiver out there running Linux or Windows CE... Heck, there are even folks who use their PDAs running WinCE or the Palm OS to interface with their radios!

---Joel

717. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 19:00:01 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <RkRzf.12030$F_3.9746@newssvr29.news.prodigy.net>
Source record: 14218
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Hello Joel,

> Yes, and the government continues to pour millions of dollars into radio
> interoperability to try to make it work. I see no technical reason why
> getting all the fancy equipment to talk to other agencies should be a
> problem (look at the Internet -- Usenet news and e-mail seems to make it to
> all corners of the globe just fine, despite using lots of different brands
> and types of equipment) -- I guess it really is much more a political
> problem.
>

That is the difference. Agencies are notoriously slow and inefficient in
fixing organizational problems no matter how simple. Someone on TV
suggested to have the welfare program in Califronia run by Jiffy Lube
because they know how to operate efficiently. My guess is that this guy
was right.

>
>>Keep it simple, that's what hams excel at. And it works.
>
> I agree it helps, but wouldn't you suspect that if you survived all the
> Hurricane Katrina victims who received help from any formal organization, by
> quantity those helped by more formalized organizations such as the Red Cross
> would easily outnumber those who received helps from hams? The problem the
> hams have is that their help often does go un- or under-acknowledged,
> whereas everyone knows about the Red Cross.
>

Many people are fine when their good deeds are un-acknowledged. Much of
the ministry and outreach we do through our church is unrecognized and
neither I nor my wife mind. Recognition isn't why we do it.

Regards, Joerg

http://www.analogconsultants.com

718. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 19:07:43 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <3sRzf.12031$F_3.2647@newssvr29.news.prodigy.net>
Source record: 14219
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Hello,

> I am doubtful that any snowfall would not be sorted out in one week,
> here. I am in N Illinois. I still "like to be prepared", hence my
> ownership of a generator and diesel fuel.
>

Some areas like this aren't geared for a major hard freeze and snow pack. It just doesn't usually happen. Even areas that are prepared can get hit hard. In Europe they had a major issue this winter with ice build-up on HV lines. It happened in unprecedented magnitude and then many of the lines came down.

> Here are some pictures of its restoration.
>
> http://igor.chudov.com/tmp/onan/Diesel/
>

Nice. Make sure that rooster doesn't decide to peck the tank for too long ;-)

Regards, Joerg

http://www.analogconsultants.com

719. Re: LF Dip Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 19:45:46 UTC
From: fmmck@aol.com
Message-ID: <fmmck-1901061445460001@aca705f8.ipt.aol.com>
Source record: 14220

In article <VTnzf.61099$kp.569251@telenews.teleline.es>, "Andreu"
<afreixas*NO*SPAM*@terra.es> wrote:

> I have several small measuring instruments in my shack, but I have
> always been unable to find plans to build a DIP METER for use in
> LF Freqs. I already have a LEADER DM that begins at 1.5 Mhz but I
> would like to be able to measure resonant circuits at say 40 Khz
> or 470 Khz. Is there a thecnical difficulty I should be aware of ?
> Any help or reference appreciated.

Andrew-

Do you have an audio oscillator that goes up to 470 KHz? That could be
hooked up to a resonant circuit through a resistor, and a high impedance
AC voltmeter connected to measure voltage across the circuit. You would
look for dips or peaks depending on whether it was series or parallel.

73, Fred, K4DII

720. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 19:56:58 UTC
From: clifto <clifto@clifto.com>
Message-ID: <ah75a3-jmv.ln1@remote.clifto.com>
Source record: 14221
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Joel Kolstad wrote:
> "mc" <look@www.ai.uga.edu.for.address> wrote in message
> news:nbDzf.151276$k76.138897@bignews6.bellsouth.net...
>> But that's not the point. The point is that ham radio is required to be
>> noncommercial. The Internet is mostly business.
>
> That was my (original) point -- a very large chunk of what most people use
> their "personal" or "home" Internet connection for is NOT business... just
> reading e-mail from friends, ordering the occasional book on Amazon, reading
> newsgroup, surfing random web sites, whatever -- all things that are allowed
> over ham frequencies.

Even before the Internet allowed commercial traffic, ham radio had to be
careful of people whose f*cking language was f*cking against the rules,
if ya know what I mean.

--
If John McCain gets the 2008 Republican Presidential nomination,
my vote for President will be a write-in for Jiang Zemin.

721. Re: I receive voices from hell with my radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 20:11:59 UTC
From: Frank <Frank.21whjw@news.radiobanter.com>
Message-ID: <Frank.21whjw@news.radiobanter.com>
Source record: 14223

Interesting. I make a system that allows contact with spirits/entities and don't get sounds of hell, even though some of the contacts can be somewhat negative sounding, and threatening. I have a site to share information
http://franksumption.tripod.com/

There does seem to be faction out there in the nether world that would try to scare off would be researchers, and can sound demonic, and threatening, but it's been my expereince that it's only a paper tiger. I've been doing this work for six years now, and have always found it intriguing, and fasinating, but never harmful.

Frank

--
Frank

722. Re: Dick Smith Radio Direction Finder - Docs now in PDF

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 20:43:42 UTC
From: Kev <kevcat@optunet.com.au>
Message-ID: <43cff9fe$0$10954$afc38c87@news.optusnet.com.au>
Source record: 14222
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

Glenn McAllister wrote:

> Scanned and kindly converted to PDF by Ken, ZL1WKT.
>
> Hosted by Al at
> http://www.webdingers.com/K6345RadioDirectionFinder.pdf
> and also by me at
> http://www.freewebs.com/cqdx/dserdfk6345.htm
>
> Glenn McAllister wrote:
>
>>My email address is my callsign at orcon dot net dot enn zed
>>
>>de Glenn ZL2TLD

Fantastic
Thanks for doing that

Now at least I can see what's what in this thing

Cheers

Kev

723. Re: LF Dip Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-19 21:20:56 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrndt00lo.gi0.bit-bucket@shell.config.com>
Source record: 14224

On Thu, 19 Jan 2006 16:37:05 +0000, Derek R. Smith wrote:
> No real technical difficulty. Simply use a suitable (large) inductance
> and it will probably work.
> However, there is a very real practical difficulty. The tuning capacitor
> in a Dip meter designed for 1.5Mhz and up, will provide a very small
> coverage at LF and the dip may be hard to identify. You will require a
> lot of coils to get continuous coverage. This might be OK if you are
> working at narrow range of spot frequencies and the circuits under test
> are reasonably close to the spot frequency to begin with.
>
> In message <VTnzf.61099$kp.569251@telenews.teleline.es>, Andreu
><afreixas*NO*SPAM*@terra.es> writes
>>
>> I have several small measuring instruments in my shack, but I have
>> always been unable to find plans to build a DIP METER for use in
>> LF Freqs. I already have a LEADER DM that begins at 1.5 Mhz but I
>> would like to be able to measure resonant circuits at say 40 Khz
>> or 470 Khz. Is there a thecnical difficulty I should be aware of ?
>> Any help or reference appreciated.

I'd think coupling to the DUT would be a problem. Physically small dip
coils would not couple easily to large tuned components, and versy vicey.
Of course, if you build to just _your_ custom requirements....

Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
Pueblo, Colorado | @ | Jonesy | OS/2 __
38.24N 104.55W | config.com | DM78rf | SK

724. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 00:06:59 UTC
From: Richard the Dreaded Libertarian <eatmyshorts@doubleclick.net>
Message-ID: <pan.2006.01.20.00.07.24.506446@doubleclick.net>
Source record: 14225
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On Thu, 19 Jan 2006 13:56:58 -0600, clifto wrote:

> Joel Kolstad wrote:
>> "mc" <look@www.ai.uga.edu.for.address> wrote in message
>> news:nbDzf.151276$k76.138897@bignews6.bellsouth.net...
>>> But that's not the point. The point is that ham radio is required to be
>>> noncommercial. The Internet is mostly business.
>>
>> That was my (original) point -- a very large chunk of what most people use
>> their "personal" or "home" Internet connection for is NOT business... just
>> reading e-mail from friends, ordering the occasional book on Amazon, reading
>> newsgroup, surfing random web sites, whatever -- all things that are allowed
>> over ham frequencies.
>
> Even before the Internet allowed commercial traffic, ham radio had to be
> careful of people whose f*cking language was f*cking against the rules,
> if ya know what I mean.

It used to be illegal to even say "that word" on the f*cking _telephone_!

Thank Goddess for the Bill of Rights!

Cheers!
Rich
--
"We have met the enemy and he is us." - Pogo Possum

725. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 00:34:05 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <1eWzf.10783$H71.4074@newssvr13.news.prodigy.com>
Source record: 14226
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Hello Keith,

>>I dunno, I certainly wouldn't want to relocate. I love the area I grew
>>up in, nearly my entire family lives within a few hundred miles, it'd be
>>a big hassle to fly in for family events a few times a year. To each
>>their own I suppose.
>
> I guess! I moved nine hundred miles from the family upon graduation and
> another couple of hundred more 20 years later. ...

It's about 6000 miles for me now. And I love it. :-)

Home can be almost anywhere as long as one is willing to make friends,
integrate and most of all, learn the customs and the language.

Regards, Joerg

http://www.analogconsultants.com

726. Value of the capacitor Cx in wireless microphone SM0VPO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 01:27:55 UTC
From: markbradley2006@yahoo.com
Message-ID: <1137720475.929167.173560@g43g2000cwa.googlegroups.com>
Source record: 14227

Hi all:

I am trying to arm the wireless microphone sm0vpo
but the value of the capacitor Cx does not appear.

Someone could tell it to me
Thanks in advance for any help.

727. Re: Value of the capacitor Cx in wireless microphone SM0VPO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 01:41:10 UTC
From: dplatt@radagast.org
Message-ID: <11t0ftmnlqpl7e6@corp.supernews.com>
Source record: 14228

>Hi all:
>
>I am trying to arm the wireless microphone sm0vpo
>but the value of the capacitor Cx does not appear.
>
>Someone could tell it to me

If you're referring to his "HIGH POWER FM MIC" project, the page says the following:

There used to be a 1n0 5mm cap for supply decoupling, but after a cange of component supplier (manufacturer?) there developed some form of RF instability when the gain of the PA transistor was a little above normal. Replacing the 1n0 to an electrolytic capacitor of 22uf cured this problem totally. Any "radial" (the leads both come out of the same end) type electrolytic capacitor from 0.47uf upwards cures the problem.

So, any small electrolytic cap of .47 uF or above, 12 WVDC or above, ought to do the trick.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

728. Re: Inexpensive Digital Strip Chart Recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 02:07:45 UTC
From: John <look@sig.net>
Message-ID: <qch0t1h960l091qccj680qvgv6e013dho6@4ax.com>
Source record: 14229
Cross-posted to:
sci.electronics.equipment,comp.arch.embedded,comp.sys.palmtops,sci.electronics.design,rec.radio.amateur.homebrew

On 10 Jan 2006 17:07:07 -0800, "Too_Many_Tools"
<too_many_tools@yahoo.com> wrote:

>I am looking for an inexpensive digital strip chart recorder.
>
>Does something like this exist?
>
>Are there addons for a laptop, pda or pocket pc that allows one to
>record, store and display analog data similar to the good old chart
>recorder?
>
>Thanks for any leads.
>
>TMT

Go to http://www.dataq.com/194.htm

For $50US, you get a 4 channel, 10 bit A/D converter (serial interface
to PC) and PC chart recorder software.

John

729. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 04:15:48 UTC
From: Joseph2k <joseph2k@lanset.com>
Message-ID: <UtZzf.17703$dW3.13924@newssvr21.news.prodigy.com>
Source record: 14230
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

CLFE wrote:

> "Ignoramus22991" <ignoramus22991@NOSPAM.22991.invalid> wrote in message
> news:uoczf.17873$V9.5348@fe07.usenetserver.com...
>>I have to wonder what is the point of being a ham in the day and age
>> of the internet.
>>
>> i
>>
>
> I'm not so sure being a "ham" was the point. However, that is how many of
> the current technicians/engineers (myself included) cut their teeth. IF it
> weren't for people getting involved in electronics, those who can't seem
> to understand the desire - would have no computers, no TV, no Stereo, no
> anything. SOMEONE had to "design" these items and test them for them to be
> able to be marketed. You just don't do that without "knowledge". Parts can
> be soldered on by machine if need be - BUT - they had to be designed and
> tested to get there. These kids wouldn't have their Gameboys, cell phones
> and so on - if "someone" didn't take the initiative to design and create.
> Maybe the phones are made in China, so be it - who do you think installs
> the cell sites? Not chinese. SOMEONE has to know what to do. THERE IS -
> need for people to become interested in electronics. Give that up and the
> rest - and yes we will truly become slaves to those who would love to
> destroy us. It is too easy to sit back and do nothing.
>
> CLF
>
>
Ugh, white eyes start to see truth. It has been made too hard to do kit
electronics that is worth having, everyone expects to be able to build
something fun and useful on the first try; no thinking or much effort. I
have seen too many of them when the decide on engineering when they are
sophomore in college; and have no clue as how to understand or apply the
underlying theory. What bothers me the most is that somehow they graduate.
--
JosephKK

730. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 05:09:30 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <BFF5B08A.233DD%dbowey@comcast.net>
Source record: 14231
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On 1/18/06 7:36 PM, in article GODzf.19683$6L1.17387@trnddc02, "James Sweet"
<jamessweet@hotmail.com> wrote:

>
>>
>> Yeah, the whole idea though really turns some people off, unfortunately. My
>> opinion is that reasonably cool heads are prevailing, though, and ham radio
>> regulations are slooooowwwllllly moving in the right direction. It appears
>> that regulation primarily by bandwidth (rather than emission type) will be
>> the law of the land in the next couple of years.
>>
>>
>
>
>
> I'm sure it will eventually. Ham will either evolve with the times or it
> will fade out of existence. I know a few old timers who are into ham
> radio but I've not yet met anyone in my 20-something generation who's
> into it, not even one.

Maybe because young people don't want to put out the effort to become a ham,
you know, like, they wanna hang at the mall.

Don

731. Re: anybody has barebones superhet schematics (QST june 82)?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 05:28:04 UTC
From: bill.meara@gmail.com
Message-ID: <1137734884.678763.288710@g14g2000cwa.googlegroups.com>
Source record: 14232

I understand the attraction of this circuit. Very simple, very clean.
Easy to understand. I built it and it was a great experience. I have
info on my web site. http://www.qsl.net/n2cqr

I could probably dig up the schematic and scan it if the original
poster still needs it -- please let me know. I recall several LONG
discussions of possible replacements for the dual gate MOSFETS.

73 Bill M0HBR N2CQR CU2JL

732. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 05:44:09 UTC
From: - exray - <exray@coqui.net>
Message-ID: <11t0u5c16b0b820@corp.supernews.com>
Source record: 14233
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Don Bowey wrote:

>>
>>I'm sure it will eventually. Ham will either evolve with the times or it
>>will fade out of existence. I know a few old timers who are into ham
>>radio but I've not yet met anyone in my 20-something generation who's
>>into it, not even one.
>
>
> Maybe because young people don't want to put out the effort to become a ham,
> you know, like, they wanna hang at the mall.
>
> Don
>
>
This lament is often repeated in many of the hobbies which are now
considered the territory of the oldsters. Communicating by radio and
messing with thumb-sized electronic components is passi¿½. So is
collecting rocks or fern samples and scale model railroading.
I'm not so quick to write off a whole generation because they find their
stuff cooler than mine. That kid hanging at the mall can reach into his
pocket and pull out his toy and be in contact with China in a matter of
seconds. That pretty much kills any hope of impressing him with my rig
and hobby for communicating. Whoopee, I can build mine - but it doesn't
"work" as well as his.

There have always been kids who get into all sorts of things. I don't
think that the percentage of kids interested in technology has
decreased...I'd be inclined to think the opposite. Technology has
changed much more than the kids have. How many old radio farts are into
THEIR modern technology?

-Bill

733. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 05:47:24 UTC
From: Kerry Miller <kmiller01at@ticnet.com>
Message-ID: <UP_zf.140961$WH.46302@dukeread01>
Source record: 14234

gb wrote:
> "xpyttl" <xpyttl_NOSPAM@earthling.net> wrote in message
> news:DOLzf.3$_h7.2@fe06.lga...
>
>>Astron linear supplies use a 3 terminal regulator, usually an LM317.
>>These things do tend to fail from time to time. Can't tell if that's your
>>problem, but it is likely, and the things are cheap enough it's worth
>>popping a new one in to find out.
>>
>
>
> Really? What model of Astron linear power supply have you repaired or seen
> that uses this design approach? I have never seen one like this -- over
> past 20 years.
> Confusing this with some other mfg. design?
>
> Astron has been using the 14-pin (30 years old) LM 723 regulator IC with NPN
> pass transistors (e.g. 2N3055, 2N3771) ... for as long as I have been
> repairing them.
>
> Check here for correct Astron information - repairs, etc.
> http://www.kbt-dc-supplies.com/index.php
>
> and Astron schematics (which show the LM723, not the later LM317 design)
> http://www.repeater-builder.com/astron/astron-index.html
>
> gb
>
>
I can confirm that mine has a 723, not a 317. Thanks for the web sites,
looks like some great information. I hooked up that headlight tonight
but it ran fine, pulling a bit over 3 amps for an hour or so. Maybe I
need more load to make it lose regulation.

Guess I'll start digging into that regulator board, the transistors and
all the big things like the transformer seem to be fine.

Thanks,
Kerry - WD5ABC

734. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 06:04:54 UTC
From: mc <look@www.ai.uga.edu.for.address>
Message-ID: <F1%zf.3044$TK2.2497@bignews1.bellsouth.net>
Source record: 14235
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

> Maybe because young people don't want to put out the effort to become a
> ham,
> you know, like, they wanna hang at the mall.

And in 1955 they all wanted to watch or play football, or go cruising.

I think that, thanks to computers, the proportion of technologically
motivated young people is as high as it has ever been.

735. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 10:22:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11t1ef6aepds066@corp.supernews.com>
Source record: 14236
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

mc wrote:
>>Maybe because young people don't want to put out the effort to become a
>>ham,
>>you know, like, they wanna hang at the mall.
>
>
> And in 1955 they all wanted to watch or play football, or go cruising.
>
> I think that, thanks to computers, the proportion of technologically
> motivated young people is as high as it has ever been.

Why aren't they going to engineering school? There's no doubt it takes considerable effort. Take a look at the breakdown at the U.S. engineering schools and you'll find a small and decreasing number of Americans enrolled -- at least those who got their primary and secondary education here. Some major U.S. universities are even building branches overseas in order to scare up enough students. And it's unusual now to see a paper in the IEEE Transactions on Antennas and Propagation written by someone raised in this country. It appears that our educational system and the general culture is preparing people to be Wal-Mart clerks, not engineers. Technologically motivated Wal-Mart clerks, perhaps, but Wal-Mart clerks nonetheless. ("Joe over there is a real whiz on the customer computer terminal. I'll recommend him for a 25 cent raise if he keeps it up.") Engineering will soon join manufacturing in overwhelmingly being done somewhere else, and for good reason.

Roy Lewallen, W7EL

736. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 10:47:48 UTC
From: mc <look@www.ai.uga.edu.for.address>
Message-ID: <Ta3Af.258$f57.45@bignews7.bellsouth.net>
Source record: 14237
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:11t1ef6aepds066@corp.supernews.com...

>> I think that, thanks to computers, the proportion of technologically
>> motivated young people is as high as it has ever been.
>
> Why aren't they going to engineering school? There's no doubt it takes
> considerable effort. Take a look at the breakdown at the U.S. engineering
> schools and you'll find a small and decreasing number of Americans
> enrolled -- at least those who got their primary and secondary education
> here.

There were plenty of Americans at Georgia Tech the last time I looked... all over the place, in fact! And even MIT...

The reason IEEE Transactions papers seem always to be written by foreigners is something to do with incentives, I think. Americans do engineering but don't publish papers about it, at least not in IEEE Transactions. I think this has something to do with the way American vs. Asian employers operate.

> by someone raised in this country. It appears that our educational system
> and the general culture is preparing people to be Wal-Mart clerks, not
> engineers. Technologically motivated Wal-Mart clerks, perhaps, but
> Wal-Mart clerks nonetheless.

And in 1955 it was preparing every male to be a football player and every female to be a homemaker. Yet we survived.

Another thing to keep in mind: Circuit design is yesterday's challenge. One of the biggest technological challenges we face is how to organize and manage huge amounts of information. I know a lot of young people (2 of them in my own house) who are keenly interested in that. It just isn't something that looms large in the "engineering" curriculum yet, just as electronics didn't in 1880.

737. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 10:55:14 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <11t1gclmnit7of6@corp.supernews.com>
Source record: 14238
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"- exray -" <exray@coqui.net> wrote in message
news:11t0u5c16b0b820@corp.supernews.com...
> That kid hanging at the mall can reach into his pocket and pull out his
> toy and be in contact with China in a matter of seconds. That pretty much
> kills any hope of impressing him with my rig and hobby for communicating.

Sooner or later, one would hope that that kid in the mall would like to see beyond the "magic" and have a sit-down chat with the man behind the curtain. The Internet, cell phones, etc. ARE very cool, but if one can start to understand the technology behind them, hopefully they'll also understand why something like HF radio, simple AM/FM receivers, etc. can be cool as well.

There was an article in some IEEE magazine not too long ago where the author was lamenting the fact that not only are things like digital radio and video very complicated to understand in the first place, but in nearly all cases today the details of their formatting/modulation/etc. are purposely obfuscated and the content itself encrypted, so pretty soon it's going to be pretty much impossible for a motivated youngster to build a contemporary radio receiver even if he or she did have access to the appropriate hardware. A good example would be something like IBOC -- something like GNU Radio is inexpensive (i.e., something a youngster could reasonably obtain access to), yet there's no way to demodulate it since the standard behind it is proprietary. :-(This despite the fact that it's being broadcast on the "public" FM frequencies...

738. FS: Expanded Spectrum "Time Machine"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 11:14:23 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <jC3Af.28627$Q11.27266@tornado.ohiordc.rr.com>
Source record: 14239

Record and play back 80KHz of your favorite h-f band.

FS: Expanded Spectrum "Time Machine" ready to go on 40-30-20-15-10M, with 90MHz Flash Crystal, LO1, Daughter Board, 9 xtals, RS-232 programming cable, wallpig.

See:
http://www.expandedspectrumsystems.com/
http://www.expandedspectrumsystems.com/prod4.html
http://www.expandedspectrumsystems.com/prod2.html

$150 or near offer.

73 Dave N3HE

739. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 11:57:39 UTC
From: - exray - <exray@coqui.net>
Message-ID: <11t1k1m1pcn8pc1@corp.supernews.com>
Source record: 14240
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Roy Lewallen wrote:

>
> Why aren't they going to engineering school?

I think we can blame that one on the public education system moreso than any lack of interest. Public schools have exchanged emphasis on technical skills (like spelling) in exchange for 'feel-good' subjects.

In years gone by an average kid who studied hard and got good grades could get into an institution of higher learning. Probably had 2-3 years of advanced math under his belt and could find the college on a map. Nowadays a straight A kid may only have his straight As in non-engineering subjects and has little chance of getting into an engineering school unless he has been privately educated or was exceptional enough in a *good* public system.

-Bill

740. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 12:06:18 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <Pu-dnUDZY-DdT03eRVn-qg@comcast.com>
Source record: 14241

"Kerry Miller" <kmiller01at@ticnet.com> wrote in message
news:UP_zf.140961$WH.46302@dukeread01...
>
> I can confirm that mine has a 723, not a 317. Thanks for the web sites,
> looks like some great information. I hooked up that headlight tonight but
> it ran fine, pulling a bit over 3 amps for an hour or so. Maybe I need
> more load to make it lose regulation.
>
> Guess I'll start digging into that regulator board, the transistors and
> all the big things like the transformer seem to be fine.
>
> Thanks,
> Kerry - WD5ABC

First, test each NPN transistor with a VOM or DVM ... both methods of proper measurement are outlined (added proper method for DVM testing to procedures)

Second, discharge electrolytic capacitors before removing or inserting the LM 723
Most Astron regulator boards have a socket for the LM 723, IF not after removing, install socket - observing proper placement of pin 1.

Check bridge rectifier and diodes in circuit.

The KBT site suggests substitution of a resistor value. There are also suggestions for bypass capacitors.

Stray RF in your radio shack can cause problems in some supplies.

gb

741. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 12:09:43 UTC
From: meow2222@care2.com
Message-ID: <1137758983.646233.153480@f14g2000cwb.googlegroups.com>
Source record: 14242
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Roy Lewallen wrote:
> mc wrote:
> >>Maybe because young people don't want to put out the effort to become a
> >>ham,
> >>you know, like, they wanna hang at the mall.
> >
> >
> > And in 1955 they all wanted to watch or play football, or go cruising.
> >
> > I think that, thanks to computers, the proportion of technologically
> > motivated young people is as high as it has ever been.
>
> Why aren't they going to engineering school?

Computing skills can be learnt without the need for schooling, due to the internet and its wide freely availabe range of self teaching materials. Also this education can happen at times convenient to the learner. It is a real move forward from the traditional schooling model. Now we have large numbers of capable but not traditionally qualified people, who didnt attend engineering school.

> There's no doubt it takes
> considerable effort. Take a look at the breakdown at the U.S.
> engineering schools and you'll find a small and decreasing number of
> Americans enrolled -- at least those who got their primary and secondary
> education here.

Maybe we're seeing the same effcet as happened here (Britain) in the ealy 1900s. In victorian times, building was a great technology, but as new areas of tech came along, less and less people were involved in building, and the standards of quality in that trade declined. Same today with electronics, now that computing has become a serious and powerful force.

> Some major U.S. universities are even building branches
> overseas in order to scare up enough students. And it's unusual now to
> see a paper in the IEEE Transactions on Antennas and Propagation written
> by someone raised in this country. It appears that our educational
> system and the general culture is preparing people to be Wal-Mart
> clerks, not engineers. Technologically motivated Wal-Mart clerks,
> perhaps, but Wal-Mart clerks nonetheless. ("Joe over there is a real
> whiz on the customer computer terminal. I'll recommend him for a 25 cent
> raise if he keeps it up.") Engineering will soon join manufacturing in
> overwhelmingly being done somewhere else, and for good reason.

>
> Roy Lewallen, W7EL

It strikes me as a simple case of consequences of actions. US public education is of low quality, so people arent coming out well educated, motivated, or able to make good of their lives. When a country's education is as good as it can be, instead of as bad as it can be, not surprisingly people come out more capable, more motivated and so on, and go on and do well.

This is a basic error in American politics. Spend as little as possible so I get to keep my share, but its then a greater share of less in total. The only way a country will do better and better over time is if education is as good a quality as one can get.

When you produce so many badly educated people, there becomes no longer the ability for the masses to understand the issues well enough to make the right policy choices, and things decline even further. Through history, those societies that have done relatively well have been ones where education was regarded as real important. It is a simple choice for US to make, but US seems to show no insight into its condition.

Here in Britain we're going the same way, with standards falling all round, sacrificed in many cases to rather naive pc ideals. I just hope, as the evidence mounts up, that PC will be put back into its proper place some day.

NT

742. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 13:36:13 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <BFF6274D.23574%dbowey@comcast.net>
Source record: 14243
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On 1/19/06 10:04 PM, in article F1%zf.3044$TK2.2497@bignews1.bellsouth.net,
"mc" <look@www.ai.uga.edu.for.address> wrote:

>
>> Maybe because young people don't want to put out the effort to become a
>> ham,
>> you know, like, they wanna hang at the mall.
>
> And in 1955 they all wanted to watch or play football, or go cruising.

Yes, in the 50s we did do all that, but there was still time for ham radio
(midnight to 3am when HF was open to the world).

>
> I think that, thanks to computers, the proportion of technologically
> motivated young people is as high as it has ever been.
>
>

My opinion is a little different. In the 50s we were motivated to study
electronics and use the technology to build equipment and then to use the
equipment, modify it, and recover parts from it to try something different.

Most of today's youth doesn't care for all that work. Getting "it" and
using "it" is the entire objective.

Using the products of technology is a spectator sport.

Don

743. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 15:00:15 UTC
From: Bob Shuman <reshuman@removethis.lucent.com>
Message-ID: <dqqtuf$h0f@netnews.net.lucent.com>
Source record: 14245
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:11t1ef6aepds066@corp.supernews.com...
> mc wrote:
> Why aren't they going to engineering school? There's no doubt it takes
> considerable effort. Take a look at the breakdown at the U.S.
> engineering schools and you'll find a small and decreasing number of
> Americans enrolled -- at least those who got their primary and secondary
> education here. ... Engineering will soon join manufacturing in
> overwhelmingly being done somewhere else, and for good reason.
>
> Roy Lewallen, W7EL

Roy,

I believe that the shrinking engineering school attendance is directly related to the shrinking engineering job opportunities in the US. Global communications have enabled large US corporations to move a significant portion of their high paying technical jobs off shore to lower cost regions. With fewer and fewer opportunities, the out of work engineers, find themselves competing for fewer and fewer jobs. HS students selecting a college major see this and many of them decide that it is more important to be able to make a living than to pursue this discipline. Many of my former peers elected to change careers with a significant reduction in salary when they were unable to find engineering work during the last few years.

Bob

744. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 15:11:46 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <m0v1t1ptu30c6p2rs7n1u5dlecn1d9bmg3@4ax.com>
Source record: 14244
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On Fri, 20 Jan 2006 02:22:29 -0800, the renowned Roy Lewallen
<w7el@eznec.com> wrote:

>mc wrote:
>>>Maybe because young people don't want to put out the effort to become a
>>>ham,
>>>you know, like, they wanna hang at the mall.
>>
>>
>> And in 1955 they all wanted to watch or play football, or go cruising.
>>
>> I think that, thanks to computers, the proportion of technologically
>> motivated young people is as high as it has ever been.
>
>Why aren't they going to engineering school? There's no doubt it takes
>considerable effort.

Would you point a kid who was wavering towards a career in
engineering?

>Take a look at the breakdown at the U.S.
>engineering schools and you'll find a small and decreasing number of
>Americans enrolled -- at least those who got their primary and secondary
>education here. Some major U.S. universities are even building branches
>overseas in order to scare up enough students. And it's unusual now to
>see a paper in the IEEE Transactions on Antennas and Propagation written
>by someone raised in this country. It appears that our educational
>system and the general culture is preparing people to be Wal-Mart
>clerks, not engineers. Technologically motivated Wal-Mart clerks,
>perhaps, but Wal-Mart clerks nonetheless. ("Joe over there is a real
>whiz on the customer computer terminal. I'll recommend him for a 25 cent
>raise if he keeps it up.") Engineering will soon join manufacturing in
>overwhelmingly being done somewhere else, and for good reason.

Nah, the idjits are going into idjit jobs, just like they always did.
More of the smarter kids are going into medicine, law, and business.
It takes more effort and money than engineering, perhaps, but the
payoff is you are less likely to be outsourced or become obsolescent
halfway through your working life.

>Roy Lewallen, W7EL

Best regards,
Spehro Pefhany

--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

745. FAQ (Was : Re: Who is childish enough and obsessed enough? Brian Reay? Mike Gathergood? Nathan Hull? Gareth Paley? Eric Williams? D.Lawson?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 16:17:47 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1137773867.794809.71150@z14g2000cwz.googlegroups.com>
Source record: 14246
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Because of the Not-Ham action of maliciously getting
someone's licence cancelled, it is meet to remind us
what is (AND WHAT IS NOT AND NEVER CAN BE)
Ham Radio, and to this end, I append a FAQ.....

Orator For Decency wrote:
> I have just had my renewal cheque returned to me with the comment
> that my licence was cancelled because a forged and malicious email
> was received by RLC at Bristol, purporting to have come from me on
> the 9th January.
>
> I have immediately raised this matter with Ofcom who have
> immediately restored my licence and also undertaken to review
> their security procedures.
>
> Needless to say, because RLC have got full details of the
> email and its header info, the plods are involved.
>
> The childishness and vindictiveness of those who will _NEVER_
> make it into the ranks of _REAL_ Radio Hams knows no bounds.
>
> I continue to be amazed at the malice of those who disagree with my
> stance
> on what is , and what is not, _REAL_ Ham Radio; stupid children, all.

What is Ham Radio?

(Preface)
It is becoming increasingly difficult to fly the flag for
decency and for civilised behaviour in Radio Hammery. Even
the Usenet newsgroups dedicated to the cause have degenerated
into a hotbed of abusive onslaughts by those who ought to know better.
However, there still exists the fundamental basis on which Ham
Radio is based, and that will never die. This FAQ ("What Is
Ham Radio?") will be regularly published and will not be
shouted or bullied down. It is important that those of a
technical bent, who are the natural seed-corn of Radio Hammery
and who gravitate towards us to be the real novitiate, can
still find us, (and know that we are still here), their fellows.

-----ooooo-----

Please remember that this FAQ is a _POSITIVE EXHORTATION_
to you to exert yourselves to join our fraternity! (If you find
otherwise, then perhaps you are already classing yourself in the
mediocre groups of those who are criticised in the FAQ and from
whom we _MUST_ dissociate? If so - it's never too late for
a re-taxonomisation on your part - there's nothing elitist about
us, and we welcome all those who are prepared to put themselves
out in order to join our ranks!)

-----ooooo-----
(Article)
So,.....What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One such CB type is the so-called "Not-Ham". Otherwise
known as the CBer-Masquerading-As-A-Radio-Ham, this type
had their background in the hobby that is CB Radio and not
in the technical pursuits that lead up to a coveted Ham licence.
Easily recognised by their boasts of the criminal activity of
11 metre SSB operation, one wonders why they don't go back to
the CB Bands if such bands are dearer in their hearts than are the Ham
Bands? No _REAL Radio Hams associate with those who made an
illegal installation of transmitting equipment before being
in possession of an appropriate licence.

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between a Ham Radio licence and a CB Radio licence. To him, they are sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then tries to classify himself as the equal of the Radio Ham when, in fact, he is nothing of the kind. A sure sign of a CB Radio hobbyist is if he holds, or has ever held, a licence issued under the gangrenous degeneration that is the M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of Radio Hams but who are in reality nothing more than an apology for the failure of a CBer are those class B licensees who falsely proclaimed that they were against the use of a Morse Test to control access to the HF bands, until, that is, a test was introduced at their intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to enable them to handle even the simplest algebraic manipulation for Ohm's Law and thus, the disgraceful Class Ber's in the aforementioned category are not Radio Hams by any stretch of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds, or has ever held, a licence issued under the gangrenous degeneration that is the M3/CB Fools' Licence scheme!

746. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 16:20:56 UTC
From: Keith Williams <krw@att.bizzzz>
Message-ID: <MPG.1e3ad7f0a96548b398982a@News.Individual.NET>
Source record: 14247
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

In article <1eWzf.10783$H71.4074@newssvr13.news.prodigy.com>,
notthisjoergsch@removethispacbell.net says...
> Hello Keith,
>
>
> >>I dunno, I certainly wouldn't want to relocate. I love the area I grew
> >>up in, nearly my entire family lives within a few hundred miles, it'd be
> >>a big hassle to fly in for family events a few times a year. To each
> >>their own I suppose.
> >
> > I guess! I moved nine hundred miles from the family upon graduation and
> > another couple of hundred more 20 years later. ...
>
>
> It's about 6000 miles for me now. And I love it. :-)

Once you get past a certain point, any further doesn't mean much.

> Home can be almost anywhere as long as one is willing to make friends,
> integrate and most of all, learn the customs and the language.

Sure. Family is still important. I'd like to be closer now that
my mother is getting older (92) and won't be around forever. We
missed being close to my MIL (died a year ago) and the FIL (20
years ago). Seeing family once or twice a year is a negative.
Living next door is on the other extreme, however.

--
Keith

747. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 16:39:11 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <43D1122F.9040201@psu.edu>
Source record: 14098
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Sjouke Burry wrote:
> Don Bowey wrote:
>
>> On 1/17/06 12:24 PM, in article uoczf.17873$V9.5348@fe07.usenetserver.com,
>> "Ignoramus22991" <ignoramus22991@NOSPAM.22991.invalid> wrote:
>>
>>
>>> I have to wonder what is the point of being a ham in the day and age
>>> of the internet.
>>> i
>>>
>>
>>
>> Talking to someone via ham radio means you are talking with someone with
>> developed skills with which you have something in common. There is a
>> kinship that is comfortable. Also, it's great fun to use low power
>> and make
>> contact all over the planet.
>>
>> There is nothing similar to ham radio, in the internet.
>>
>> Don
>>
> Have you listened to the ham bands lately?
> There is a deadly silence there most of the time.
> I wonder how fast the ham population is
> disappearing.....

hmm, better check to see if your setup is working. If you are listening
to the bands where propagation is working it is getting difficult to
find an open space.

- 73 de Mike KB3EIA -

748. takeyou hate shit shit and shove back where it came form

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 16:47:47 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1137775662.276240.121880@o13g2000cwo.googlegroups.com>
Source record: 14099
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Orator For Decency wrote:
> Because of the Not-Ham action of maliciously getting
> someone's licence cancelled, it is meet to remind us
> what is (AND WHAT IS NOT AND NEVER CAN BE)
> Ham Radio, and to this end, I append a FAQ.....

guess you are not evne a ham yourself anymore "orator" at we now know
something about peed in your cheerios

749. Amateur Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 17:10:23 UTC
From: mustafa umut sarac <mustafaumutsarac@gmail.com>
Message-ID: <1137777023.341298.24860@g43g2000cwa.googlegroups.com>
Source record: 14100

I want to take high res mountain and city pictures with homebrew radar.
Some use passive radars and produce synthetic aperture radar images.
Passive radars use gsm , vhf , uhf , sw , fm , satellite transmitters .
But I am not sure about the quality of resulting image.
- Some italian researchers did it but I saw the images and I did not
like.-
If it will not not satisfy my need , I will want to build a transmitter
and receiver.
Do I need to use a gunnplexer ? Or is there any new transmitters at
market ?
What is your idea for building a sar ?

Best ,

Mustafa Umut Sarac

750. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 18:19:42 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <1ca2t11966e97qttm4vtsjijr9ib9eto0e@4ax.com>
Source record: 14101

On Thu, 19 Jan 2006 23:47:24 -0600, Kerry Miller
<kmiller01at@ticnet.com> wrote:

>gb wrote:
>> "xpyttl" <xpyttl_NOSPAM@earthling.net> wrote in message
>> news:DOLzf.3$_h7.2@fe06.lga...
>>
>>>Astron linear supplies use a 3 terminal regulator, usually an LM317.
>>>These things do tend to fail from time to time. Can't tell if that's your
>>>problem, but it is likely, and the things are cheap enough it's worth
>>>popping a new one in to find out.
>>>
>>
>>
>> Really? What model of Astron linear power supply have you repaired or seen
>> that uses this design approach? I have never seen one like this -- over
>> past 20 years.
>> Confusing this with some other mfg. design?
>>
>> Astron has been using the 14-pin (30 years old) LM 723 regulator IC with NPN
>> pass transistors (e.g. 2N3055, 2N3771) ... for as long as I have been
>> repairing them.
>>
>> Check here for correct Astron information - repairs, etc.
>> http://www.kbt-dc-supplies.com/index.php
>>
>> and Astron schematics (which show the LM723, not the later LM317 design)
>> http://www.repeater-builder.com/astron/astron-index.html
>>
>> gb
>>
>>
>I can confirm that mine has a 723, not a 317. Thanks for the web sites,
>looks like some great information. I hooked up that headlight tonight
>but it ran fine, pulling a bit over 3 amps for an hour or so. Maybe I
>need more load to make it lose regulation.
>
>Guess I'll start digging into that regulator board, the transistors and
>all the big things like the transformer seem to be fine.
>
>Thanks,
>Kerry - WD5ABC

I would look at the radio first. Put an ameter in the 12 volt line to
the radio and see how much current it is actually drawing.

73
Gary K4FMX

751. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 18:45:28 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <43D12FC8.30800@psu.edu>
Source record: 14102
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Roy Lewallen wrote:
> mc wrote:
>
>>> Maybe because young people don't want to put out the effort to become
>>> a ham,
>>> you know, like, they wanna hang at the mall.
>>
>>
>>
>> And in 1955 they all wanted to watch or play football, or go cruising.
>>
>> I think that, thanks to computers, the proportion of technologically
>> motivated young people is as high as it has ever been.
>
>
> Why aren't they going to engineering school? There's no doubt it takes
> considerable effort. Take a look at the breakdown at the U.S.
> engineering schools and you'll find a small and decreasing number of
> Americans enrolled -- at least those who got their primary and secondary
> education here.

American youth are being steered in other directions now. And even
those who are not being steered in that direction may take a look at
engineering and wonder "Why the heck would I want to do that"?

The kid is going to have to work long and hard though their college
days. No gut courses for you, my friend! Then they are going to get a
job in which they are expected to get their job done, and if that means
you work 80 hour weeks, then so be it. That nice paycheck isn't so great
when you break it into hourly rates.

There is a lot more money to be made, at less effort, by becoming a
manager, MBA, or the like. So unless a person really really has a
passion for engineering, they select some other way to make a living.
And for good or bad, too many people chase max money at minimum effort

> Some major U.S. universities are even building branches
> overseas in order to scare up enough students. And it's unusual now to
> see a paper in the IEEE Transactions on Antennas and Propagation written
> by someone raised in this country. It appears that our educational
> system and the general culture is preparing people to be Wal-Mart
> clerks, not engineers.

Because in the not so distant future, there will be a much greater need
for Wal-Mart employees! 8^(

> Technologically motivated Wal-Mart clerks,
> perhaps, but Wal-Mart clerks nonetheless. ("Joe over there is a real
> whiz on the customer computer terminal. I'll recommend him for a 25 cent
> raise if he keeps it up.") Engineering will soon join manufacturing in
> overwhelmingly being done somewhere else, and for good reason.

Sad but true, Roy.

- 73 de Mike KB3EIA -

752. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 18:52:44 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <0kaAf.867$2O6.779@newssvr12.news.prodigy.com>
Source record: 14103
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Hello Keith,

>>
>>It's about 6000 miles for me now. And I love it. :-)
>
> Once you get past a certain point, any further doesn't mean much.
>

Well, it still matters whether it takes a multi-leg flight of 20+ hours
to get there or a one-hop of 7 hours. But I won't complain when I think
about folks who emigrated from Europe to Australia. Getting to their old
home country is a major endeavor for them.

When my wife's parent's were still alive it was nice to know that we
could be there in half a day, which we had to do a lot.

Regards, Joerg

http://www.analogconsultants.com

753. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 19:02:20 UTC
From: Keith Williams <krw@att.bizzzz>
Message-ID: <MPG.1e3afdc36eb5035d98982f@News.Individual.NET>
Source record: 14104
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

In article <0kaAf.867$2O6.779@newssvr12.news.prodigy.com>,
notthisjoergsch@removethispacbell.net says...
> Hello Keith,
>
> >>
> >>It's about 6000 miles for me now. And I love it. :-)
> >
> > Once you get past a certain point, any further doesn't mean much.
> >
>
> Well, it still matters whether it takes a multi-leg flight of 20+ hours
> to get there or a one-hop of 7 hours. But I won't complain when I think
> about folks who emigrated from Europe to Australia. Getting to their old
> home country is a major endeavor for them.

And when we go back it's an eighteen hour drive, each way. It's a
PITA flying the last 200mi and I'd need to rent a car anyway.
Driving isn't a lot more expensive and we can take a lot more junk
with us.
>
> When my wife's parent's were still alive it was nice to know that we
> could be there in half a day, which we had to do a lot.

Indeed. Unfortunately, there won't be all that many more trips.

--
Keith

754. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 19:09:00 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <43D1354C.8060708@psu.edu>
Source record: 14105
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

James Sweet wrote:
>
>>
>> Yeah, the whole idea though really turns some people off,
>> unfortunately. My opinion is that reasonably cool heads are
>> prevailing, though, and ham radio regulations are slooooowwwllllly
>> moving in the right direction. It appears that regulation primarily
>> by bandwidth (rather than emission type) will be the law of the land
>> in the next couple of years.
>>
>>
>
>
>
> I'm sure it will eventually. Ham will either evolve with the times or it
> will fade out of existence.

Yeah, I want to get my spam via Ham radio!!!

Considering that some 73 percent of email is spam and/or virus laden garbage, and that there are much better ways for Hams to get their email if they really want to, utilizing HF for email solutions is like an answer to ten year old questions.

Besides - thinking that email is "High-Tech" is to start off with an erroneous assumption.

> I know a few old timers who are into ham
> radio but I've not yet met anyone in my 20-something generation who's
> into it, not even one.

A sample of one? I know several young amateurs in my area, and we turn out dozens every year at the local college. And some other stats are that plenty of new licenses are being issued. I can't vouch for the ages of these newbies, but even if they are not kids, they are new hams.

- 73 de Mike KB3EIA -

755. Re: takeyou hate shit shit and shove back where it came form

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 19:23:58 UTC
From: nospam@nospam.com
Message-ID: <43D138CE.31BAC44B@nospam.com>
Source record: 14106
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

an old friend wrote:

> Orator For Decency wrote:
> > Because of the Not-Ham action of maliciously getting
> > someone's licence cancelled, it is meet to remind us
> > what is (AND WHAT IS NOT AND NEVER CAN BE)
> > Ham Radio, and to this end, I append a FAQ.....
>
> guess you are not evne a ham yourself anymore "orator" at we now know
> something about peed in your cheerios

Eh?

756. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 19:25:09 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <43D13915.4020009@psu.edu>
Source record: 14107
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Joel Kolstad wrote:
> Hi John,
>
> "John Hudak" <jhudak@sei.cmu.edu> wrote in message
> news:43CFD85F.1050806@sei.cmu.edu...
>
>>Hmmm, well I for one would not trust my windoz-based PCs to work reliably
>>enough in a disaster. Even if stripped down, I don't think it is robust
>>enough. (I think Linux or a Mac are different stories).
>
>
> Whether or not a Windows system is reliable has much more to do with the
> person setting it up than the OS itself; thousands of "mission critical"
> Windows systems prove that every day.

Which is of course another way of saying that the person behind the
computer has to know a whole lot more if using a PC (or have a
department of people that keep them running)

Personally, I'd be choosing my
> hardware basd on the applications I wanted to run... that pretty much rules
> out Macs, whereas Linux could be a decent contender given that there is
> plenty of good amateur radio software for it.

Your correct about the Apps. That is why I end up using both PC and Mac
on a continual basis. The Mac has it all over the PC in terms of getting
the work done, Especially if I have to make any software or hardware
changes.

>
>>ALso, there is still too much infrastructure needed to get PCs 'out on the
>>web'...With a ham rig, hoist an antenna and your there...
>
>
> My suggestion was that the best thing hams could do for the average person
> would be to set up a PC to let them send e-mail, but I'd certainly agree
> that if you don't have a laptop lying around to do that with, there's still
> some benefit in being able to relay voice messages. (And compared to a
> decent HF radio, its power supply, and antenna, adding a laptop as well
> doesn't do much to increase weight, decrease mobility, etc., but it does
> provide a marked increase in communications flexibility.)

I dunno, Joel. Are you saying that using a Ham radio to send email is
going to impress someone? It just seems so odd to me that people who can

now text message others with their cell phones, and IM each other on a regular basis are going to be impressed by a big HF setup. I mean email in general is a real yawner (unless we buy those stimulants offered in the 75 percent of email that is spam) 8^)

73 de Mike KB3EIA -

757. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 19:32:36 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43D13AB5.DE7BC32E@earthlink.net>
Source record: 14108
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Keith Williams wrote:
>
> Sure. Family is still important. I'd like to be closer now that
> my mother is getting older (92) and won't be around forever. We
> missed being close to my MIL (died a year ago) and the FIL (20
> years ago). Seeing family once or twice a year is a negative.
> Living next door is on the other extreme, however.

My dad and stepmom live next door. It makes it a lot easier for me
to check on them that way. I don't drive much anymore, so I wouldn't
see them very often if they were across town.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

758. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 19:32:59 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <43D13AEB.9040109@psu.edu>
Source record: 14109
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Keith Williams wrote:
> In article <1eWzf.10783$H71.4074@newssvr13.news.prodigy.com>,
> notthisjoergsch@removethispacbell.net says...
>
>>Hello Keith,
>>
>>
>>
>>>>I dunno, I certainly wouldn't want to relocate. I love the area I grew
>>>>up in, nearly my entire family lives within a few hundred miles, it'd be
>>>>a big hassle to fly in for family events a few times a year. To each
>>>>their own I suppose.
>>>
>>>I guess! I moved nine hundred miles from the family upon graduation and
>>>another couple of hundred more 20 years later. ...
>>
>>
>>It's about 6000 miles for me now. And I love it. :-)
>
>
> Once you get past a certain point, any further doesn't mean much.
>
>
>>Home can be almost anywhere as long as one is willing to make friends,
>>integrate and most of all, learn the customs and the language.
>
>
> Sure. Family is still important. I'd like to be closer now that
> my mother is getting older (92) and won't be around forever. We
> missed being close to my MIL (died a year ago) and the FIL (20
> years ago). Seeing family once or twice a year is a negative.
> Living next door is on the other extreme, however.

Ain't that the Truff! While our respective siblings moved away, My XYL
and myself get the fun job of taking care of all the aging related
catastrophes of the parental units, while the others just do whatever it
is that they do.

- 73 de Mike KB3EIA -

759. Re: FAQ (Was : Re: Who is childish enough and obsessed enough? Brian Reay? Mike Gathergood? Nathan Hull? Gareth Paley? Eric Williams? D.Lawson?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 19:37:56 UTC
From: "G1LVN (for it is he)" <gareth.paley@gmail.com>
Message-ID: <dqre6kbu1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 14110
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Orator For Decency" <radio.ham@lycos.co.uk> wrote in message
news:1137773867.794809.71150@z14g2000cwz.googlegroups.com...
> Because of the Not-Ham action of maliciously getting
> someone's licence cancelled, it is meet to remind us

Bean's been drinking too much Google again.

--
--
73 de G1LVN (M0WWS)
On teh Internet no-one knows you are a dog
http://www.g1lvn.org.uk/no-one_knows.jpg

760. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 19:57:06 UTC
From: Keith Williams <krw@att.bizzzz>
Message-ID: <MPG.1e3b0a9c495c9148989833@News.Individual.NET>
Source record: 14111
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

In article <43D13AEB.9040109@psu.edu>, mjc5remove@psu.edu says...
> Keith Williams wrote:
> > In article <1eWzf.10783$H71.4074@newssvr13.news.prodigy.com>,
> > notthisjoergsch@removethispacbell.net says...
> >
> >>Hello Keith,
> >>
> >>
> >>
> >>>>I dunno, I certainly wouldn't want to relocate. I love the area I grew
> >>>>up in, nearly my entire family lives within a few hundred miles, it'd be
> >>>>a big hassle to fly in for family events a few times a year. To each
> >>>>their own I suppose.
> >>>
> >>>I guess! I moved nine hundred miles from the family upon graduation and
> >>>another couple of hundred more 20 years later. ...
> >>
> >>
> >>It's about 6000 miles for me now. And I love it. :-)
> >
> >
> > Once you get past a certain point, any further doesn't mean much.
> >
> >
> >>Home can be almost anywhere as long as one is willing to make friends,
> >>integrate and most of all, learn the customs and the language.
> >
> >
> > Sure. Family is still important. I'd like to be closer now that
> > my mother is getting older (92) and won't be around forever. We
> > missed being close to my MIL (died a year ago) and the FIL (20
> > years ago). Seeing family once or twice a year is a negative.
> > Living next door is on the other extreme, however.
>
> Ain't that the Truff! While our respective siblings moved away, My XYL
> and myself get the fun job of taking care of all the aging related
> catastrophes of the parental units, while the others just do whatever it
> is that they do.

My brother and SIL got delegated that task, though they live 50mi
away. We spent Christmas week visiting mom and my brother spent it
in Costa Rica with the SIL's family (Brits).

--
Keith

761. Fair market value of salvaged parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 20:07:54 UTC
From: The Eternal Squire <eternalsquire@hotmail.com>
Message-ID: <1137787674.639411.263920@z14g2000cwz.googlegroups.com>
Source record: 14112

Hi,

For tax purposes I need to know how I can determine the fair market
value of a resistor,
capacitor, inductor, or active component in working condition that is
salvaged from
scrapped equipment.

One way, I suppose, would be to ask how much a disinterested party like
yourself(s)
would be willing to pay. Another, I suppose, would be to treat each
part as a piece of
clothing and assign it 1/2 to 1/4 retail value as a used article.

Opinions?

Thanks,

The Eternal Squire

762. Re: Fair market value of salvaged parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 20:28:44 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1137788924.680167.126420@g49g2000cwa.googlegroups.com>
Source record: 14113

> For tax purposes I need to know how I can
> determine the fair market value of a resistor,
> capacitor, inductor, or active component in
> working condition that is salvaged from
> scrapped equipment.

Value of scrapped equipment: $1.

Labor to strip components: $200.

Value of stripped components: Negative $199.

Is this for "income" determination or for "inventory tax" purposes?
Inventory tax has to be the most anti-scrapyard thing ever imagined.

Tim.

763. Re: Amateur Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 20:33:44 UTC
From: Mike Young <boat042-spam@yahoo.com>
Message-ID: <IObAf.11499$_S7.4657@newssvr14.news.prodigy.com>
Source record: 14114

Not to drag it off topic, but I'm confused about what looks like ground shadows in Sandia's SAR images. For example, the tower shadow in http://www.sandia.gov/radar/movies/solar.mov continually points toward the "viewer". Is this reflected radiation from the tower off the ground?? Really weird false lighting effect if that's what it is. Also, ground shadows under trees in other images make them look like false color satellite photos.

I think if you're going to do it, large synthetic apertures would be most interesting. :)

Mike.

"mustafa umut sarac" <mustafaumutsarac@gmail.com> wrote in message news:1137777023.341298.24860@g43g2000cwa.googlegroups.com...
>I want to take high res mountain and city pictures with homebrew radar.
> Some use passive radars and produce synthetic aperture radar images.
> Passive radars use gsm , vhf , uhf , sw , fm , satellite transmitters .
> But I am not sure about the quality of resulting image.
> - Some italian researchers did it but I saw the images and I did not
> like.-
> If it will not not satisfy my need , I will want to build a transmitter
> and receiver.
> Do I need to use a gunnplexer ? Or is there any new transmitters at
> market ?
> What is your idea for building a sar ?

764. Re: FAQ (Was : Re: Who is childish enough and obsessed enough? Brian Reay? Mike Gathergood? Nathan Hull? Gareth Paley? Eric Williams? D.Lawson?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 20:40:01 UTC
From: huLLy <s2f@f2s.com>
Message-ID: <16adnXRx2Ns010zeRVny1g@giganews.com>
Source record: 14115
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

G1LVN (for it is he) wrote:
> "Orator For Decency" <radio.ham@lycos.co.uk> wrote in message
> news:1137773867.794809.71150@z14g2000cwz.googlegroups.com...
>> Because of the Not-Ham action of maliciously getting
>> someone's licence cancelled, it is meet to remind us
>
> Bean's been drinking too much Google again.
>

I thought he had progressed to taking Baaa biturates

--
huLLy
Tel: 07976 123278
ICQ 136-987-925

765. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 21:04:29 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <xfcAf.17873$dW3.10451@newssvr21.news.prodigy.com>
Source record: 14116
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Hello Keith,

>
> And when we go back it's an eighteen hour drive, each way. It's a
> PITA flying the last 200mi and I'd need to rent a car anyway.
> Driving isn't a lot more expensive and we can take a lot more junk
> with us.
>

In Europe that was easier. You could do it in a little over half that time for the 900 miles. The best we did for the 400 miles to the inlaws was 4 hours and 8 minutes. Last time it took longer per mile but that was because my father's car won't go above 110mph.

Regards, Joerg

http://www.analogconsultants.com

766. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 21:08:43 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <vjcAf.17875$dW3.6126@newssvr21.news.prodigy.com>
Source record: 14117
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Hello Mike,

>> Sure. Family is still important. I'd like to be closer now that my
>> mother is getting older (92) and won't be around forever. We missed
>> being close to my MIL (died a year ago) and the FIL (20 years ago).
>> Seeing family once or twice a year is a negative. Living next door is
>> on the other extreme, however.
>
> Ain't that the Truff! While our respective siblings moved away, My XYL
> and myself get the fun job of taking care of all the aging related
> catastrophes of the parental units, while the others just do whatever it
> is that they do.
>

Doesn't necessarily mean they signed off. We live way too far from any
relatives. So, we picked some 'instant relatives' in nursing homes and
so on. There are plenty of people there who are never visited by anyone
else.

Regards, Joerg

http://www.analogconsultants.com

767. Re: FAQ (Was : Re: Who is childish enough and obsessed enough? Brian Reay? Mike Gathergood? Nathan Hull? Gareth Paley? Eric Williams? D.Lawson?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-20 22:39:37 UTC
From: Dave <davenpat@btopenworld.com>
Message-ID: <dqror9$4t4$1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 14118
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

huLLy wrote:
> G1LVN (for it is he) wrote:
>
>>"Orator For Decency" <radio.ham@lycos.co.uk> wrote in message
>>news:1137773867.794809.71150@z14g2000cwz.googlegroups.com...
>>
>>>Because of the Not-Ham action of maliciously getting
>>>someone's licence cancelled, it is meet to remind us
>>
>>Bean's been drinking too much Google again.
>>
>
>
> I thought he had progressed to taking Baaa biturates

I rather like those two comments :-)

Dave

768. Re: FAQ (Was : Re: Who is childish enough and obsessed enough? Brian Reay? Mike Gathergood? Nathan Hull? Gareth Paley? Eric Williams? D.Lawson?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 00:09:43 UTC
From: From the shack of G1LVN <gareth.paley@gmail.invalid.com>
Message-ID: <dqru47ith1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 14119
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Dave" <davenpat@btopenworld.com> wrote in message
news:dqror9$4t4$1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com...
> huLLy wrote:
> > G1LVN (for it is he) wrote:
> >
> >>"Orator For Decency" <radio.ham@lycos.co.uk> wrote in message
> >>news:1137773867.794809.71150@z14g2000cwz.googlegroups.com...
> >>
> >>>Because of the Not-Ham action of maliciously getting
> >>>someone's licence cancelled, it is meet to remind us
> >>
> >>Bean's been drinking too much Google again.
> >>
> >
> >
> > I thought he had progressed to taking Baaa biturates
>
> I rather like those two comments :-)
>
So who's the latest arrest warrent to come out of U.K.R.A for ?

769. Re: Amateur Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 00:50:06 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <43D1862D.4030404@nettally.com>
Source record: 14120

If you think of it, man is illuminating the earth with RF "photons"
continually. It should be possible to image all types of structures in
3D with the proper receivers.

Mike Young wrote:

> Not to drag it off topic, but I'm confused about what looks like
> ground shadows in Sandia's SAR images. For example, the tower shadow
> in http://www.sandia.gov/radar/movies/solar.mov continually points
> toward the "viewer". Is this reflected radiation from the tower off
> the ground?? Really weird false lighting effect if that's what it is.
> Also, ground shadows under trees in other images make them look like
> false color satellite photos.
>
> I think if you're going to do it, large synthetic apertures would be
> most interesting. :)
>
> Mike.
>
> "mustafa umut sarac" <mustafaumutsarac@gmail.com> wrote in message
> news:1137777023.341298.24860@g43g2000cwa.googlegroups.com...
>
>> I want to take high res mountain and city pictures with homebrew radar.
>> Some use passive radars and produce synthetic aperture radar images.
>> Passive radars use gsm , vhf , uhf , sw , fm , satellite transmitters .
>> But I am not sure about the quality of resulting image.
>> - Some italian researchers did it but I saw the images and I did not
>> like.-
>> If it will not not satisfy my need , I will want to build a transmitter
>> and receiver.
>> Do I need to use a gunnplexer ? Or is there any new transmitters at
>> market ?
>> What is your idea for building a sar ?
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

770. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 01:32:12 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1137807132.475953.250130@g49g2000cwa.googlegroups.com>
Source record: 14121
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"I believe that the shrinking engineering school attendance is directly

related to the shrinking engineering job opportunities in the US.
Global
communications have enabled large US corporations to move a significant

portion of their high paying technical jobs off shore to lower cost
regions.
With fewer and fewer opportunities, the out of work engineers, find
themselves competing for fewer and fewer jobs. HS students selecting a

college major see this and many of them decide that it is more
important to
be able to make a living than to pursue this discipline. Many of my
former
peers elected to change careers with a significant reduction in salary
when
they were unable to find engineering work during the last few years. "

Roy is right...kids are not entering tech fields because the writing is
on the wall.

If you haven't noticed, millions of tech jobs have been offshored in
the last few years with the blessing of the government...and in a time
of war no less. Time after time I have heard a parent say that no kid
of his is going to be an engineer, computer programmer or scientist to
have his livelihood taken away when he/she reaches 40. In my own
opinion, until this country gets its priorities straightened out and
reward those who truly contribute to the bottom line we will not see a
change. Kids are smart and they follow the money...and science and
engineering is not where it is at. Also if there was a REAL shortage of
technical people you would see the wages for that speciality
rise...instead we just see more green cards issued. What companies want
is good cheap labor and their complaints are because as offshoring
continues the low cost wage employees are being more scarce overseas
which causes their labor costs to go up.

Read this article to see what society really wants...

http://news.yahoo.com/s/usatoday/20060119/bs_usatoday/newmbasfindingeducationpaysoffbigtim
e&printer=1;_ylt=AgfwM1DRQusR3Kr5kayD0aXrB2YD;_ylu=X3oDMTA3MXN1bHE0BHNlYwN0bWE-

"The $106,000 salary and signing bonus was up 13.5% from 2004,
according to a GMAC survey of 5,829 2005 grads. Salary alone increased
to $88,600, surpassing the previous high of $85,400 set in 2001."

Money talks.

TMT

771. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 02:51:04 UTC
From: Yukio YANO <yano@shaw.ca>
Message-ID: <skhAf.189138$tl.55845@pd7tw3no>
Source record: 14122

Kerry Miller wrote:
> I've got a problem with my Astron RS-20 power supply. With no load,
> it's fine, but anything above 4amps or so makes it drop way down and my
> rig drops out of lock. I haven't measured it under load but the rig
> works ok to 10 or 11 volts so it must be dropping below that.
>
> I found a schematic and downloaded it, all the voltages are fairly close
> to what it says on the schematic with no load, I haven't made any
> measurements with a load on it. I'll pick up a headlight tomorrow to
> put a load on it and make more measurements.
>
> Does anybody have any ideas?
>
> Thanks,
> Kerry, WD5ABC
Sounds like to me the "Fold-back Regulator circuit" just cut-in, during
operation, if a adjusted threshold value is exceeded, instead of popping
a fuse, the circuit just drops to a low value until the circuit is
re-set by powering-Down and re-started !

Yukio YANO

772. Re: Fair market value of salvaged parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 03:11:24 UTC
From: The Eternal Squire <eternalsquire@hotmail.com>
Message-ID: <1137813084.720922.249750@g43g2000cwa.googlegroups.com>
Source record: 14123

This is to determine initial corporate inventory. The fair market value of an item is defined as the price a disinterested party is willing to pay for it in an arm's length transaction. So that value of stripped components actually isn't negative, this is why salvage works: it creates value by selling saleable parts from a valueless scrapped object.

773. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 03:22:06 UTC
From: Kerry Miller <kmiller01at@ticnet.com>
Message-ID: <GNhAf.141967$WH.127022@dukeread01>
Source record: 14124

Gary Schafer wrote:

> I would look at the radio first. Put an ameter in the 12 volt line to
> the radio and see how much current it is actually drawing.
>
> 73
> Gary K4FMX

Actually, I first thought it was an antenna problem, the rig acted just like I had a bad problem with RF in the shack. I spent all of one afternoon reworking the grounds and tuning the antenna. I've got the best-tuned 4BTV in Texas! I tried it on a dummy load and had the same problem. So, I pulled it off the power supply and ran the rig (Yaesu FT-990) from the battery in my truck and it works fine. I also tried the supply on a second rig, a TS-430, with exactly the same problem - when I transmit the lights on the rig dim and it drops out of lock. The 430 is my mobile rig, it works fine in the truck but not on the PS.

I'll follow you guys' suggestions to start testing parts. I'm in a fairly small town, so while I bought a 1000uf capacitor today at Radio Shack, they can't even order an LM723 so I'll have to find someplace else to get one.

Have any of you guys tried the new switching power supplies? I've seen the one at Radio Shack (claims 25a but I doubt it), MFJ and Astron but haven't ever used one. I normally just run 1 HF rig (max 100w) and a small VHF rig (max 25w) for packet. Is a switcher solid and reliable enough for something like that? I've considered getting something like that and rebuilding the Astron when I can get the parts.

I have built regulated supplies but it's been 20 yrs since I tinkered with anything analog, so I'll take all the help I can get! The info at those links looks helpful, along with the ideas you guys have given me here.

73,
Kerry
WD5ABC

774. FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 03:33:44 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e3b4b57327d998998972c@news-central.giganews.com>
Source record: 14126
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

I'm looking to clear out some clean, working equipment at the end of a couple of long-term personal projects. This shortened URL will take you to eBay's "View Seller's Items" page for my account:

http://snipurl.com/ls89

Highlights include the nicest HP 8566B spectrum analyzer out of several that I've owned; an HP 8662A with OEM manuals and brand-new PS filter caps; and an HP 5345A counter with enough spares and accessories to satisfy any ECL computing buff.

Most of these items include manuals, and all of them will be sold with 3-day buyer inspection periods. Local pickup in Seattle OK. Even if you're not in the market, several of the listings include some interesting HP Journal .PDFs and other literature. Check 'em out!

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam
---

775. Re: Fair market value of salvaged parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 03:34:19 UTC
From: - exray - <exray@coqui.net>
Message-ID: <11t3atrsr50s1d4@corp.supernews.com>
Source record: 14125

The Eternal Squire wrote:

> The fair market
> value of an item is defined as the price a disinterested party is
> willing to pay for it in an arm's length transaction.

I don't get it. Seems like a disinterested party and a buyer are two
different things?

But I'm clearly not a lawyer either.

-Bill

776. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 04:27:11 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <xn0ehgtpg2axlt000@cnews.newsguy.com>
Source record: 14127

Kerry Miller wrote:

> Have any of you guys tried the new switching power supplies? I've
> seen the one at Radio Shack (claims 25a but I doubt it), MFJ and
> Astron but haven't ever used one. I normally just run 1 HF rig (max
> 100w) and a small VHF rig (max 25w) for packet. Is a switcher solid
> and reliable enough for something like that? I've considered getting
> something like that and rebuilding the Astron when I can get the
> parts.
~~~~~~

You might be able to find a good deal on an Icom PS-125 switching power supply. Icom had a promotion where they gave one away with each purchase of an IC-746PRO. A lot of guys bought the '746 but didn't need the power supply and I've seen many for sale as a result. I have one and it's a great supply. I'm keeping mine :-) Check rec.radio.swap and eBay.

Bill, W6WRT
~~~~~~

777. Re: Fair market value of salvaged parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 06:39:46 UTC
From: The Eternal Squire <eternalsquire@hotmail.com>
Message-ID: <1137825586.841394.11390@g47g2000cwa.googlegroups.com>
Source record: 14128

>From what I understand a buyer can be anyone, but a disinterested party
is a buyer who does not have a personal relationship with the seller.

778. Re: Fair market value of salvaged parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 10:40:11 UTC
From: rrah@pencoys.org.uk
Message-ID: <43d20ec3.699676893@news.madasafish.com>
Source record: 14129

On 20 Jan 2006 19:11:24 -0800, "The Eternal Squire"
<eternalsquire@hotmail.com> wrote:

>This is to determine initial corporate inventory. The fair market
>value of an item is defined as the price a disinterested party is
>willing to pay for it in an arm's length transaction.

a disinterested party has no interest in the item and therefore the
item has no value.
Don't we love English in a legal document, it can be made to say
anything, everything and nothing in the same sentance.

779. Re: FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 11:28:30 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dqt5su01t19@drn.newsguy.com>
Source record: 14130
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

John Miles wrote...
>
> I'm looking to clear out some clean, working equipment at the end
> of a couple of long-term personal projects. This shortened URL
> will take you to eBay's "View Seller's Items" page for my account:
> http://snipurl.com/ls89
>
> Highlights include the nicest HP 8566B spectrum analyzer out of several
> that I've owned; an HP 8662A with OEM manuals and brand-new PS filter
> caps; and an HP 5345A counter with enough spares and accessories to
> satisfy any ECL computing buff.
>
> Most of these items include manuals, and all of them will be sold with
> 3-day buyer inspection periods. Local pickup in Seattle OK. Even
> if you're not in the market, several of the listings include some
> interesting HP Journal .PDFs and other literature. Check 'em out!
> http://www.qsl.net/ke5fx

Shit, John, you're selling your stuff!??!! What's going on?

--
Thanks,
- Win

780. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 13:33:27 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43D237EC.16CFD4E7@earthlink.net>
Source record: 14131
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Joerg wrote:
>
> Doesn't necessarily mean they signed off. We live way too far from any
> relatives. So, we picked some 'instant relatives' in nursing homes and
> so on. There are plenty of people there who are never visited by anyone
> else.

How true, and I'm glad to hear that others have the same attitude towards the elderly. A request was made yesterday on our WOCA "Veteran's News" program for people to take the time to visit veterans in a couple nursing homes. Most of them have little or no family left, or no family close by. I used to visit some old veterans when I lived in Ohio. They were neighbors who had plenty of relatives who couldn't be bothered to visit, till they died. Then they were there, badgering the widows for all of his possessions. These days I have a lot of trouble getting around, and my time is tied up with the computer project, and a website of Veterans news and information. BTW, there is a new VA website for prescriptions. Anyone reading this who is a US veteran and in the VA medical system can refill their prescriptions at https://www.myhealth.va.gov/ and not hassle with the mail-in forms or wait while on hold on on the telephone. I've used it, and it works.

Part of my "Computers for Veterans" project is to place at least one working computer in any nursing home or long term care facility near Ocala that has any Veterans in residence. I know that not all of them will be able to, or even want to use a computer for E-mail and browsing the web, but I want to make sure the ones that can and do, will be able to.

--
Service to my country? Been there, Done that, and I've got my DD214 to prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

781. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 13:55:34 UTC
From: Joseph2k <joseph2k@lanset.com>
Message-ID: <q3rAf.15574$Yu.8408@newssvr27.news.prodigy.net>
Source record: 14132
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Joel Kolstad wrote:

> "- exray -" <exray@coqui.net> wrote in message
> news:11t0u5c16b0b820@corp.supernews.com...
>> That kid hanging at the mall can reach into his pocket and pull out his
>> toy and be in contact with China in a matter of seconds. That pretty
>> much kills any hope of impressing him with my rig and hobby for
>> communicating.
>
> Sooner or later, one would hope that that kid in the mall would like to
> see beyond the "magic" and have a sit-down chat with the man behind the
> curtain. The Internet, cell phones, etc. ARE very cool, but if one can
> start to understand the technology behind them, hopefully they'll also
> understand why something like HF radio, simple AM/FM receivers, etc. can
> be cool as well.
>
> There was an article in some IEEE magazine not too long ago where the
> author was lamenting the fact that not only are things like digital radio
> and video very complicated to understand in the first place, but in nearly
> all cases today the details of their formatting/modulation/etc. are
> purposely obfuscated and the content itself encrypted, so pretty soon it's
> going to be pretty much impossible for a motivated youngster to build a
> contemporary radio receiver even if he or she did have access to the
> appropriate
> hardware. A good example would be something like IBOC -- something like
> GNU Radio is inexpensive (i.e., something a youngster could reasonably
> obtain access to), yet there's no way to demodulate it since the standard
> behind it
> is proprietary. :-(This despite the fact that it's being broadcast on
> the "public" FM frequencies...
>
>
>
>
You must have built a different GNU radio than i have seen. When i priced
building it, the result was between $1000 and $2000. I have other things
that i want to do with that much money first.
Just the same, i expect that if someone could come up with an affordable
[$100 - $200] software defined radio, with really good tools to experiment
with, that it would change the world.
--
JosephKK

782. Re: Fair market value of salvaged parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 14:17:43 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1137853063.876770.298320@g43g2000cwa.googlegroups.com>
Source record: 14133

The Eternal Squire wrote:
> This is to determine initial corporate inventory.

My advice here is to choose the method that gives you an answer of zero. Otherwise you have to deal with inventory taxes (depending on locality).

> The fair market
> value of an item is defined as the price a disinterested party is
> willing to pay for it in an arm's length transaction. So that value
> of stripped components actually isn't negative, this is why salvage
> works: it creates value by selling saleable parts from a valueless
> scrapped object.

If necessary, do not create taxable value until you can sell it. "Creating value" that you have to pay inventory taxes on is foolish.

The folks that actually do this stuff for a living (usually meager, but they seem to enjoy it) quickly learn that if you aren't turning over your inventory several times a year, that you aren't making any money.

Realistically the IRS may very well classify your attempted business activities as a hobby if all your components sit in boxes for years without getting sold. And classifying it yourself as a hobby may be a good thing too, at least psychologically.

Some localities also tax personal (non-business-inventory) property and I also advise you to not inflate this number either!

Important note: I am not in any way a business or tax advisor. But I do know (through the school of hard knocks) what I have to do to keep my hobbies/obsessions from becoming some stupid time-and-money-sink business model :-). That doesn't mean I don't do them, it just means that I keep them in a separate compartment in my head full of holes.

Tim.

783. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 14:20:49 UTC
From: Joseph2k <joseph2k@lanset.com>
Message-ID: <5rrAf.15576$Yu.11763@newssvr27.news.prodigy.net>
Source record: 14134
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Bob Shuman wrote:

>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:11t1ef6aepds066@corp.supernews.com...
>> mc wrote:
>> Why aren't they going to engineering school? There's no doubt it takes
>> considerable effort. Take a look at the breakdown at the U.S.
>> engineering schools and you'll find a small and decreasing number of
>> Americans enrolled -- at least those who got their primary and secondary
>> education here. ... Engineering will soon join manufacturing in
>> overwhelmingly being done somewhere else, and for good reason.
>>
>> Roy Lewallen, W7EL
>
> Roy,
>
> I believe that the shrinking engineering school attendance is directly
> related to the shrinking engineering job opportunities in the US. Global
> communications have enabled large US corporations to move a significant
> portion of their high paying technical jobs off shore to lower cost
> regions. With fewer and fewer opportunities, the out of work engineers,
> find
> themselves competing for fewer and fewer jobs. HS students selecting a
> college major see this and many of them decide that it is more important
> to
> be able to make a living than to pursue this discipline. Many of my
> former peers elected to change careers with a significant reduction in
> salary when they were unable to find engineering work during the last few
> years.
>
> Bob
>
>
Aye, the first great American engineering layoff was in the early 1970's and
the second in the early 1990's. In both cases over 10% left engineering
permanently. When the kids ask around they hear about this, small wonder
it has become unpopular. Also publishing papers is done by academics,
engineering is done by engineers.
--
JosephKK

784. Re: Fair market value of salvaged parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 14:52:54 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1137855174.063225.137710@g49g2000cwa.googlegroups.com>
Source record: 14135

Personally (for ham radio purposes) I wouldn't normally buy individual used small components that have a current retail value of under about $3. I would rather get new ones which have a greater probability of working (regardless, in my opinion, of the seller's claims regarding testing) and, in some cases, longer leads. By this thinking around 95% of parts found in typical equipment are of no value, which simplifies your calculations.

For more expensive components, something like 10-20% of the new price is about the average of what I would pay.

Normally unavailable replacement parts and "antique" parts are another story, of course.

73,
Steve VE3SMA

785. Re: FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 15:24:44 UTC
From: Harry Dellamano <harryd@tdsystems.org>
Message-ID: <0nsAf.26418$RK3.3776@trnddc06>
Source record: 14136
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

"Winfield Hill" <Winfield_member@newsguy.com> wrote in message
news:dqt5su01t19@drn.newsguy.com...
> John Miles wrote...
>>
>> I'm looking to clear out some clean, working equipment at the end
>> of a couple of long-term personal projects. This shortened URL
>> will take you to eBay's "View Seller's Items" page for my account:
>> http://snipurl.com/ls89
>>
>> Highlights include the nicest HP 8566B spectrum analyzer out of several
>> that I've owned; an HP 8662A with OEM manuals and brand-new PS filter
>> caps; and an HP 5345A counter with enough spares and accessories to
>> satisfy any ECL computing buff.
>>
>> Most of these items include manuals, and all of them will be sold with
>> 3-day buyer inspection periods. Local pickup in Seattle OK. Even
>> if you're not in the market, several of the listings include some
>> interesting HP Journal .PDFs and other literature. Check 'em out!
>> http://www.qsl.net/ke5fx
>
> Shit, John, you're selling your stuff!??!! What's going on?
>
>
> --
> Thanks,
> - Win

There can only be one answer....a new girl friend!
Harry

786. Re: LF Dip Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 15:27:30 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <3nsAf.2327$5O2.1323@bignews4.bellsouth.net>
Source record: 14137

Andreu wrote:
> I have several small measuring instruments in my shack, but I have
> always been unable to find plans to build a DIP METER for use in
> LF Freqs. I already have a LEADER DM that begins at 1.5 Mhz but I
> would like to be able to measure resonant circuits at say 40 Khz
> or 470 Khz. Is there a thecnical difficulty I should be aware of ?
> Any help or reference appreciated.
>
> Andrew.
>
>
I've built a few dip meters, most with the circuit using a dual
gang variable cap. The Millen dip meter is the same circuit.
The variable caps are usually around 100 to 200pf per section
giving a total tuning range of 50 to 100pf across the coil.

This works well up to about 1mhz tops, below that feedback
drops off as the reactance of the variable cap is too low.
IF the tuned circuit is ac coupled to the tube (plate blocking
cap in place) you can ground the center of the coil to provide
additional feedback. The Millen coils DO have a third pin
for this purpose. (My dipmeters used the 'Heath' method of
an RCA plug for the coil connecter so they lacked the means
of providing the ground).

My coils were wound on 3/8" dia plastic tubing (like Heath)
and I could get down to about 2mhz with a single layer coil
wound with #36 wire. To get down to where you want to go
will require a larger diameter coil form, and a "Pi" winding
(like on rf chokes). Litz wire would also be a good idea.
The tuning range even with a 200pf / section variable cap
will be less than a 2/1 frequency range due to distributed
capacitance across the coil. Coupling should not be a problem,
if you can get the dip coil close enough to the inductor in the
circuit under question. This is where a small dip coil has an
advantage....Try getting those Millen coils close enough to
a modern solid state circuit!

Surf my web site (www.qsl.net/wa2mze) to see my mini gdo built
with a 6cw4 tube.

787. Re: Favorite Tektronix Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 17:16:13 UTC
From: clifto <clifto@clifto.com>
Message-ID: <tr6aa3-4lo.ln1@remote.clifto.com>
Source record: 14138
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Chuck Harris wrote:
> I didn't think that you would be so humor impaired that you would
> miss the meaning of this simple thread. This is just plain old
> ham banter the likes of which is heard daily on the informal nets
> on the ham bands, or at hamfests everywhere.

And occasionally on Usenet. :)

--
If John McCain gets the 2008 Republican Presidential nomination,
my vote for President will be a write-in for Jiang Zemin.

788. Re: Amateur Radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 19:02:31 UTC
From: mustafa umut sarac <mustafaumutsarac@gmail.com>
Message-ID: <1137870151.193605.195340@z14g2000cwz.googlegroups.com>
Source record: 14139

Hello again ,

May be you are right . A passive radar can do the job. I saw at
internet , some italian researchers use tv satellite source and single
lnb receiver and they create an radar image of buildings with this
passive radar. Their results are terrible and neither look like 2 d
cheapest camera image nor a most basic radar image.

And I want a few centimeters res dem image.
I think I must satellite transmitters as source.
Where can I learn the satellite routes and their frequencies ?
What kind of receiver and antenna success ?
I found ku band satellite receivers with lnb for 120 usd. Do they work
for me ?
They are the highest frequecy receivers I could find cheap.
Are there higher frequency cheap receivers or schematics at internet.
I could not find.
And they must be compatible with satellites.
Do gunnplexer receivers work ? They are really cheap .
Awaiting your ideas .

Best ,

Mustafa Umut Sarac

Istanbul

THE-RFI-EMI-GUY yazdi:
> If you think of it, man is illuminating the earth with RF "photons"
> continually. It should be possible to image all types of structures in
> 3D with the proper receivers.
>
> Mike Young wrote:
>
> > Not to drag it off topic, but I'm confused about what looks like
> > ground shadows in Sandia's SAR images. For example, the tower shadow
> > in http://www.sandia.gov/radar/movies/solar.mov continually points
> > toward the "viewer". Is this reflected radiation from the tower off
> > the ground?? Really weird false lighting effect if that's what it is.
> > Also, ground shadows under trees in other images make them look like
> > false color satellite photos.
> >
> > I think if you're going to do it, large synthetic apertures would be
> > most interesting. :)
> >
> > Mike.

> >
> > "mustafa umut sarac" <mustafaumutsarac@gmail.com> wrote in message
> > news:1137777023.341298.24860@g43g2000cwa.googlegroups.com...
> >
> >> I want to take high res mountain and city pictures with homebrew radar.
> >> Some use passive radars and produce synthetic aperture radar images.
> >> Passive radars use gsm , vhf , uhf , sw , fm , satellite transmitters .
> >> But I am not sure about the quality of resulting image.
> >> - Some italian researchers did it but I saw the images and I did not
> >> like.-
> >> If it will not not satisfy my need , I will want to build a transmitter
> >> and receiver.
> >> Do I need to use a gunnplexer ? Or is there any new transmitters at
> >> market ?
> >> What is your idea for building a sar ?
> >
> >
> >
>
> --
> Joe Leikhim K4SAT
> "The RFI-EMI-GUY"©
>
> "Treason doth never prosper: what's the reason?
> For if it prosper, none dare call it treason."
>
> "Follow The Money" ;-P

789. Highest RF Satellite receiver schematic- diy passive sar radar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 19:12:33 UTC
From: mustafa umut sarac <mustafaumutsarac@gmail.com>
Message-ID: <1137870753.903395.118490@g49g2000cwa.googlegroups.com>
Source record: 14140

I need to know the ku band or higher frequncy satellites which pass the
Istanbul and central Anatolia and I need to build a receiver which
collects the rf from mountains and city.
Where can I find these receivers schematics to build ?

Mustafa Umut Sarac

790. Re: FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 19:55:03 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e3c315d48cdd3a998972d@news-central.giganews.com>
Source record: 14141
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

In article <dqt5su01t19@drn.newsguy.com>, Winfield_member@newsguy.com
says...
> Shit, John, you're selling your stuff!??!! What's going on?

Short answer: I treat eBay like a giant storage locker, where they pay
to keep my stuff while I'm not using it. :-)

Long answer: my usual M.O. is to undertake long-term personal projects
in batches of two or three, which often take years at a time. I've
recently reached a point in one of those cycles where I'm happy with the
results and content to call it all "done" for the time being.

My next big thing is purely software-based, in an entirely-unrelated
field. I've already put a lot of work into this project, and it's
become apparent that I'm going to have to focus on it to the exclusion
of pretty much everything else if I'm ever going to finish it. Because
I've got at least another year of software work ahead, it doesn't make
sense for me to pay to store a lot of hardware that someone else could
be using towards productive/fun ends.

I'm not the least bit happy about giving up some of that gear,
particularly the 8566B. But if I keep it around, I will play with it.
Historically, that's been a fairly-serious (almost addiction-level)
personal problem. It gets in the way of other long-term goals, so I
have to take positive, hard-to-undo steps to move ahead.

Watch Gandalf trying to convince Bilbo to give up his favorite toy, and
you'll get the idea...

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam
---

791. Re: Fair market value of salvaged parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 20:55:57 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <xdxAf.12774$_S7.8956@newssvr14.news.prodigy.com>
Source record: 14142

Put a dozen or so of each on eBay and you'll get the best answer as to
value.

--

73
Hank WD5JFR
"The Eternal Squire" <eternalsquire@hotmail.com> wrote in message
news:1137787674.639411.263920@z14g2000cwz.googlegroups.com...
> Hi,
>
> For tax purposes I need to know how I can determine the fair market
> value of a resistor,
> capacitor, inductor, or active component in working condition that is
> salvaged from
> scrapped equipment.
>
> One way, I suppose, would be to ask how much a disinterested party like
> yourself(s)
> would be willing to pay. Another, I suppose, would be to treat each
> part as a piece of
> clothing and assign it 1/2 to 1/4 retail value as a used article.
>
> Opinions?
>
> Thanks,
>
> The Eternal Squire
>

792. Re: FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 22:06:38 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <hdyAf.2428$5O2.881@bignews4.bellsouth.net>
Source record: 14143
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

John Miles wrote:
> I'm looking to clear out some clean, working equipment at the end of a
> couple of long-term personal projects. This shortened URL will take you
> to eBay's "View Seller's Items" page for my account:
>
> http://snipurl.com/ls89
>
> Highlights include the nicest HP 8566B spectrum analyzer out of several
> that I've owned; an HP 8662A with OEM manuals and brand-new PS filter
> caps; and an HP 5345A counter with enough spares and accessories to
> satisfy any ECL computing buff.
>
> Most of these items include manuals, and all of them will be sold with
> 3-day buyer inspection periods. Local pickup in Seattle OK. Even if
> you're not in the market, several of the listings include some
> interesting HP Journal .PDFs and other literature. Check 'em out!
>
> -- jm
>
> --
> http://www.qsl.net/ke5fx
> Note: My E-mail address has been altered to avoid spam
> --
I'm tempted on that TEK 485. I have a working (but UGLY) 454 scope
and the 485 is sortof it's smarter brother. The shipping charges from
your neck of the woods is a killer though (long distance cross country
to FL). I'm not sure if my 454 has the p11 phospher or P2 or P31, would
the option be stamped on the nameplate?

793. Re: anybody has barebones superhet schematics (QST june 82)?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-21 22:20:27 UTC
From: aadu.adok@gmail.com
Message-ID: <1137882027.756876.265720@g44g2000cwa.googlegroups.com>
Source record: 14144

Hi Bill,

it would be really helpful if you could scan it and email to
aadu.adok@gmail.com

thanks in advance,
Aadu Adok
Tallinn - Estonia

794. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 00:13:10 UTC
From: Casual Fool <CasualFool@fakeemailadress.com>
Message-ID: <n2h5t1lm38laa1lvmokepccmvq0cellg6h@4ax.com>
Source record: 14147

On Wed, 18 Jan 2006 22:43:07 -0600, Kerry Miller
<kmiller01at@ticnet.com> wrote:

>I've got a problem with my Astron RS-20 power supply. With no load,
>it's fine, but anything above 4amps or so makes it drop way down and my
>rig drops out of lock. I haven't measured it under load but the rig
>works ok to 10 or 11 volts so it must be dropping below that.
>
>I found a schematic and downloaded it, all the voltages are fairly close
>to what it says on the schematic with no load, I haven't made any
>measurements with a load on it. I'll pick up a headlight tomorrow to
>put a load on it and make more measurements.
>
>Does anybody have any ideas?
>
>Thanks,
>Kerry, WD5ABC

Hi Kerry, Since you have the voltage, and I assume that you checked it at around 13.8 volts, and are not getting the current, there are usually just a few simple things that usually crap out on these power supplies. Please note, I have 3 or 4 RS-35s, (not an RS-20) but they are built alike, enough so, that you should be able to figure out the problem. First, providing the pass transisitors are good, and with the power off, and AC unplugged, and filter caps discharged, look on the backside of the supply, and you will see 4 sets of double paralelled 5 Watt .05 white, square inch long power resistors connected between the 4 pass transistors and BUS. Using a ohmmeter, check these for around .025 Ohms resistance. If its a taste higher, OK... However, once you get to around an Ohm or more, your power supply will exibit the conditions you have mentioned. These resistors provide emitter pass transistor protection as I recall, and many times will fry, and you will not know it unless you measure them. If I find these resistors have gone south, I further test the supply by jumping the resistors with test jumpers. You'll know right away if the problem went away by using a test rig to draw some current. PLEASE NOTE, I have fixed quite a few Astron supplies, BUT if you blow your supply up (or test radio) even more than it is, don't blame me for any info I have provided. If it works, change out the resistors. I don't recommend you just jump them out..Oh, BTW, since you have the LM723 regulator, look on the bottom side of the board, and see if there is a resistor, hanging in mid air, which has a wire connected to it that runs down to the bottom floor of the supply, and is attached to a 3 prong transistor in a T0-220 case. Sometimes, this resistor will fry, causing current problems too.. One of my early supplies has the LM317 regulator, but,

you won't have to worry about this, as this requlator is not there, however, the mounting holes (open of course) are still there on the mainboard in the upper left corner.. Hopefully, this will help.. Best Luck OM.. Tony, WB8MLA

795. Re: FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 00:17:09 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e3c6eceb464f96298972e@news-central.giganews.com>
Source record: 14145
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

In article <hdyAf.2428$5O2.881@bignews4.bellsouth.net>,
wa2mzeNOTTHIS@bellsouth.net says...

> I'm tempted on that TEK 485. I have a working (but UGLY) 454 scope
> and the 485 is sortof it's smarter brother. The shipping charges from
> your neck of the woods is a killer though (long distance cross country
> to FL). I'm not sure if my 454 has the p11 phospher or P2 or P31, would
> the option be stamped on the nameplate?
>

I believe that all the 454s had P31 phosphors, going by personal
observation and Sphere Research's CRT listings. That's what's in my
'backup' 454 (which isn't for sale).

To some extent it's like trying to prove that no crows are white,
though. Tek made some oddball scopes in small quantities over the
years, so you can't be too sure what's out there.

-- jm

---

http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

---

796. Question about Tektronix SC501 scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 00:19:59 UTC
From: hexter@blazenet.net
Message-ID: <Q62dnVEOYNkyUk_eRVn-tw@suscom.com>
Source record: 14146

Hi folks,

I recently bought a used Tek SC 501 scope to plug into my TM500 series rack. It is only a 5mhz unit and I bought it more for audio and afsk type projects. The highest unmagnified writing speed is 1us/div and with the X5 mag it's 200ns/div.

The crt beam seems very feeble at these two highest writing speeds. Very unimpressive for what I would call Tek's normal high standards. Not in the same ballpark as my SC502 dual trace unit for instance.

This unit is used and came from a GE lab environment. It perhaps has thousands of hours on it, I'm not sure.

Were these SC 501 scopes just a dog or is my crt shot??

I notice the literature lists a very lame 1KV as the acceleration voltage. That is pretty low for the job at hand isn't it?

Thanks to all who reply.

797. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 00:42:43 UTC
From: hexter@blazenet.net
Message-ID: <Q4ednWpLt-CeSE_eRVn-rg@suscom.com>
Source record: 14148

In article <CNEzf.140599$WH.64582@dukeread01>, kmiller01at@ticnet.com says...
>
>I've got a problem with my Astron RS-20 power supply. With no load,
>it's fine, but anything above 4amps or so makes it drop way down and my
>rig drops out of lock. I haven't measured it under load but the rig
>works ok to 10 or 11 volts so it must be dropping below that.
>
>I found a schematic and downloaded it, all the voltages are fairly close
>to what it says on the schematic with no load, I haven't made any
>measurements with a load on it. I'll pick up a headlight tomorrow to
>put a load on it and make more measurements.
>
>Does anybody have any ideas?
>
>Thanks,
>Kerry, WD5ABC

Is it just simply RF getting back into your supply and causing
havoc? Perhaps the supply is O.K.? You need at least 3 headlights
to get the supply under a load that compares to your rig. Try
more lights and see if it craps out.

798. Re: Question about Tektronix SC501 scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 00:43:05 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <xn0ehi2ch1yoht000@cnews.newsguy.com>
Source record: 14149

Gudmundur wrote:

>
> The crt beam seems very feeble at these two highest writing speeds.
> Very unimpressive for what I would call Tek's normal high standards.
> Not in the same ballpark as my SC502 dual trace unit for instance.
~~~~~~

Are you triggering the sweep at the higher speeds or just letting it
auto-trigger? Auto-trigger is done at a low rate and makes the sweep
very dim until it gets an actual high frequency trigger.

Bill, W6WRT
~~~~~~

799. Re: FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 01:21:39 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dqumn30hll@drn.newsguy.com>
Source record: 14151
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

John Miles wrote...
>
> My next big thing is purely software-based, in an
> entirely-unrelated field.

We were afraid of that: the dark side, you know.

> I'm not the least bit happy about giving up some of that
> gear, particularly the 8566B.

A real jewel, already up to $3700, with six days to go.
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=7583597242

--
Thanks,
- Win

800. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 01:26:59 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <11t5nr5pfngo16e@corp.supernews.com>
Source record: 14150
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"Mike Coslo" <mjc5remove@psu.edu> wrote in message
news:43D1354C.8060708@psu.edu...
> Considering that some 73 percent of email is spam and/or virus laden
> garbage, and that there are much better ways for Hams to get their email
> if they really want to, utilizing HF for email solutions is like an answer
> to ten year old questions.

For people who actually get significant portions of spam, I agree with
you -- I'm a little leery of them getting their e-mail via HF! On the other
hand, I think that most people who make a minimal effort can deal with
having multiple e-mail accounts, and being very careful to keep the
"important" ones off of spam lists. (I have a couple that have never
received spam, because probably no more than a dozen people know of them!)

> Besides - thinking that email is "High-Tech" is to start off with an
> erroneous assumption.

It's as "high tech" as SSB voice. :-)

801. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 01:40:20 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <11t5ok6fvdr9602@corp.supernews.com>
Source record: 14152
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Hi Mike,

"Mike Coslo" <mjc5remove@psu.edu> wrote in message
news:43D13915.4020009@psu.edu...
> I dunno, Joel. Are you saying that using a Ham radio to send email is
> going to impress someone?

I'm saying that putting up a big sign saying, "Send e-mail here!" and sitting people down in front of a computer (say... a mini Mac :-) running Outlook or some similar easy-to-use mail client that pretty much anyone (who's active on the Internet at all) can figure out how to use is a considerably bigger help than putting up a sign saying, "Voice communications relayed here!" and having a licensed ham sit there, take someone's message, relay it to another ham outside the affected area, they make a phone call to a family member (or whatever). The former just seems a lot more efficient to me.

> It just seems so odd to me that people who can now text message others
> with their cell phones, and IM each other on a regular basis are going to
> be impressed by a big HF setup.

Sure, if those people are actually in a city, interstate corridor, etc., where there's cell phone service. If not -- as folks into sailing the ocean quickly find out -- suddenly having at least some low bandwidth e-mail connection is a lot better than nothing.

I've posted before that my "grand vision" for amateur radio runs along the lines of people within cities or major corridors using WiFi, EVDO/EDGE, WiMax, etc. -- multi-megabit per second connections, that use ISM bands so actually don't require hams at all to set them up, those who are camping/hiking/traveling outside of such places using a presently non-existant network of hilltop repeaters that operate at some many tens to low hundreds of kilbits per second (128kbps is a favorite of mine) with, e.g., 5W handheld radios, and those truly out in the "the middle of nowhere" (the ocean, the outback, etc.) use HF at a couple kilobits per second. Developing that "middle" ground of speed vs. coverage would do a lot to relieve pressure on HF where of course there is so little specturm to begin with; I have a suspicion that an awful lot of, e.g., WinLink traffic comes from people who are still easily within range of being able to hit at least a couple of hilltop repeaters with 5W or less.

---Joel

802. Re: FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 01:52:09 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e3c850c608649b898972f@news-central.giganews.com>
Source record: 14153
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

In article <dqumn30hll@drn.newsguy.com>, Winfield_member@newsguy.com
says...

> A real jewel, already up to $3700, with six days to go.
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=7583597242

Look on the bright side... maybe all of the other bidders will cancel
their bids or get tossed by eBay for various reasons, and you'll get it
for $1.00. :)

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam
---

803. Re: Question about Tektronix SC501 scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 02:48:43 UTC
From: hexter@blazenet.net
Message-ID: <sLydnSnNEa0Wb0_eRVn-hQ@suscom.com>
Source record: 14154

In article <xn0ehi2ch1yoht000@cnews.newsguy.com>, noway@nohow.com says...
>
>Gudmundur wrote:
>
>>
>> The crt beam seems very feeble at these two highest writing speeds.
>> Very unimpressive for what I would call Tek's normal high standards.
>> Not in the same ballpark as my SC502 dual trace unit for instance.
>~~~~~~
>
>Are you triggering the sweep at the higher speeds or just letting it
>auto-trigger? Auto-trigger is done at a low rate and makes the sweep
>very dim until it gets an actual high frequency trigger.
>
>Bill, W6WRT

Bill, I know exactly what you are saying and I was triggering from
a sinewave signal generator at rates from 1mhz to 10mhz where the
scopes bandwidth becomes the limit of usability.

Most Tek scopes produce a trace that looks like a green laser beam.
This thing is like a 2AP1 or 2BP1 and lacks that normal Tek punch,
but as mentioned, it only has 1kv of acceleration potential so I am
guessing lame is the name of the game.

804. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 02:53:41 UTC
From: Mike Coslo <mremovethiscoslo@adelphia.net>
Message-ID: <0LadndUsKL4pbk_eRVn-pw@adelphia.com>
Source record: 14155
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Joerg wrote:
> Hello Mike,
>
>
>>> Sure. Family is still important. I'd like to be closer now that my
>>> mother is getting older (92) and won't be around forever. We missed
>>> being close to my MIL (died a year ago) and the FIL (20 years ago).
>>> Seeing family once or twice a year is a negative. Living next door
>>> is on the other extreme, however.
>>
>>
>> Ain't that the Truff! While our respective siblings moved away, My XYL
>> and myself get the fun job of taking care of all the aging related
>> catastrophes of the parental units, while the others just do whatever
>> it is that they do.
>>
>
> Doesn't necessarily mean they signed off. We live way too far from any
> relatives. So, we picked some 'instant relatives' in nursing homes and
> so on. There are plenty of people there who are never visited by anyone
> else.
Doesn't necessarily, true enough. But I'd be willing to wager that in
most cases it is exactly that, signing off.

- 73 de Mike KB3EIA -

805. Re: Question about Tektronix SC501 scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 03:07:52 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <xn0ehi67s56mo000@cnews.newsguy.com>
Source record: 14156

Gudmundur wrote:

> Most Tek scopes produce a trace that looks like a green laser beam.
> This thing is like a 2AP1 or 2BP1 and lacks that normal Tek punch,
> but as mentioned, it only has 1kv of acceleration potential so I am
> guessing lame is the name of the game.
~~~~~~

1 kv is pretty low indeed. I'm surprised Tek let it out the door.

Bill, W6WRT
(10-year Tek employee)
~~~~~~

806. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 03:25:17 UTC
From: fmmck@aol.com
Message-ID: <fmmck-2101062225170001@ac813879.ipt.aol.com>
Source record: 14157

In article <GNhAf.141967$WH.127022@dukeread01>, Kerry Miller
<kmiller01at@ticnet.com> wrote:

> Have any of you guys tried the new switching power supplies? I've seen
> the one at Radio Shack (claims 25a but I doubt it), MFJ and Astron but
> haven't ever used one. I normally just run 1 HF rig (max 100w) and a
> small VHF rig (max 25w) for packet. Is a switcher solid and reliable
> enough for something like that? I've considered getting something like
> that and rebuilding the Astron when I can get the parts.

Kerry-

I have three switching supplies: One from Radio Shack, one from MFJ and
one from Icom (PS-125). They all work quite well as far as delivering
rated current.

The problem is that the high frequency switching noise can be picked up by
an HF receiver. The Radio Shack unit is TERRIBLE in this regard. The MFJ
is fairly good and the Icom is the best. Even so, the Icom switching
noise is picked up if it is anywhere near the antenna.

I'm currently using a makeshift indoor antenna consisting of a dipole made
of a pair of mobile whips on the second floor. Because of the noise
problem, I've gone back to using an old Kenwood linear supply with my Icom
756 Pro II. This radio has the band scope, so you can see the noise floor
increase across the band when the switching power supply is turned on.

73, Fred, K4DII

807. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 03:42:28 UTC
From: Mike Coslo <mremovethiscoslo@adelphia.net>
Message-ID: <GrqdndVNUIa-Yk_eRVn-ig@adelphia.com>
Source record: 14158
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Joel Kolstad wrote:
> "Mike Coslo" <mjc5remove@psu.edu> wrote in message
> news:43D1354C.8060708@psu.edu...
>
>>Considering that some 73 percent of email is spam and/or virus laden
>>garbage, and that there are much better ways for Hams to get their email
>>if they really want to, utilizing HF for email solutions is like an answer
>>to ten year old questions.
>
>
> For people who actually get significant portions of spam, I agree with
> you -- I'm a little leery of them getting their e-mail via HF! On the other
> hand, I think that most people who make a minimal effort can deal with
> having multiple e-mail accounts, and being very careful to keep the
> "important" ones off of spam lists. (I have a couple that have never
> received spam, because probably no more than a dozen people know of them!)

Not the point Joel. That 75 percent is the 3:1 signal to noise ratio.
Or rather noise to signal! 8^) It is there whether you filter it out or
not.

>
>>Besides - thinking that email is "High-Tech" is to start off with an
>>erroneous assumption.
>
>
> It's as "high tech" as SSB voice. :-)

Well, maybe a tad more H-T! I like to get people to think of other
things besides imitation. These days everyone looks at the Internet as a
high tech playground. And they want to fit "Internet training wheels" on
everything. When you consider what Hams are doing these days to get a
good wide bandwidth Internet connection across large distances, the
transmission of email on HF just seems a day late and about ten dollars
short.

What I would like is a digital HF voice connection that doesn't require
channelization (I'd like to be able to tune like I do with SSB) and not
have to know when the other OP starts transmitting. I also want that
digital voice to take up *less* space than SSB. I'd like SSTV that isn't
SSTV - I want real motion with small bandwidth. I want HF with a lot
less noise. It doesn't need to be FM, but I would like adaptive
algorithms that sort out the signal and pretty it up so that my poor
ears can make good sense of it without too much strain. I want my rig to

have a wireless interface to my computer and or other rigs in the vicinity. I *don't* want my computer to be my rig. If that happens it means I have to buy another computer because I use my computer for other things while I talk on my rig.

In short, I want the ARS to move into the future. I just don't think that email is that move.

- 73 de Mike KB3EIA -

808. Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 03:44:05 UTC
From: Jeffrey Bauman <jbauman2@earthlink.net>
Message-ID: <9cDAf.11050$ZA2.9910@newsread1.news.atl.earthlink.net>
Source record: 14159

I'm considering building the am/cw transmitter in the 1966 handbook (probably in others, too). It runs a single 6146 in the final.

I am curious if anyone has ever built that rig. If I build it, it will probably be with an outboard power supply, and a single switch for input / tank band switching.

Also curious: Anyone ever homebrewed a DX-60?

Jeff
W8KZW

809. I need a over voltage (crowbar) circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 05:15:59 UTC
From: Bill <bcrann@hotmail.com>
Message-ID: <3yEAf.22861$xk1.743522@news20.bellglobal.com>
Source record: 14160

I am looking for a simple over voltage circuit for my 13.8V 20Amp power supply. I have googled it and found a few using zener diodes but some zeners can be off as much as 20%. I would like to have it activate at 15V or less. Thanks in advance.

Bill

810. Re: Fair market value of salvaged parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 06:43:37 UTC
From: The Eternal Squire <eternalsquire@hotmail.com>
Message-ID: <1137912217.665369.46650@f14g2000cwb.googlegroups.com>
Source record: 14161

Thank you all.

811. Re: Fair market value of salvaged parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 07:08:07 UTC
From: The Eternal Squire <eternalsquire@hotmail.com>
Message-ID: <1137913687.475736.110010@z14g2000cwz.googlegroups.com>
Source record: 14162

Tim Shoppa wrote:
> The Eternal Squire wrote:
> > This is to determine initial corporate inventory.
>
> My advice here is to choose the method that gives you an answer of
> zero. Otherwise you have to deal with inventory taxes (depending on
> locality).
>
> > The fair market
> > value of an item is defined as the price a disinterested party is
> > willing to pay for it in an arm's length transaction. So that value
> > of stripped components actually isn't negative, this is why salvage
> > works: it creates value by selling saleable parts from a valueless
> > scrapped object.
>
> If necessary, do not create taxable value until you can sell it.
> "Creating value" that you have to pay inventory taxes on is foolish.

Yes, I had better look. I thought though that inventory taxes take
effect on an increase in inventory... because otherwise you would
have to pay taxes on the same inventory year after year. Do people
really do that?

>
> The folks that actually do this stuff for a living (usually meager, but
> they seem to enjoy it) quickly learn that if you aren't turning over
> your inventory several times a year, that you aren't making any money.
>

Okay.

> Realistically the IRS may very well classify your attempted business
> activities as a hobby if all your components sit in boxes for years
> without getting sold.

Actually, I want to sell my used stuff and replace with new. I'm also
sitting on top of a pile of (s)crap that I hope I can use to raise
funds.

>And classifying it yourself as a hobby may be a good thing too, at least
>psychologically.

I just got laid off by an engineering company some months ago. I've
switched
roles with my wife, so that now I am a full time homemaker and parent
for my

two year old. That part is wonderful, but I want to make sure my prior skills
and drive will not go to a total waste. I have found the possibilities for
employment as a software engineering to be rather dismal to do the latest
mania regarding offshoring.

I'd rather go into business for myself and develop some type of
intellectual property, whether it be software, hardware, or
entertainment. To this end I filed papers to start
an LLC. I am going to elect taxation as a C corporation, because I want its finances
totally seperate from mine, reinforcing the liability shield. If a C corporation does not
earn very much in a short period of time but stays out of debt in the
long term, this is not a hobby, just a very slowly growing business.

> Some localities also tax personal (non-business-inventory) property and
> I also advise you to not inflate this number either!

Inflate nothing! I just want to know what the right thing is so that I can do
it.

> Important note: I am not in any way a business or tax advisor. But I do
> know (through the school of hard knocks) what I have to do to keep my
> hobbies/obsessions from becoming some stupid time-and-money-sink
> business model :-). That doesn't mean I don't do them, it just means
> that I keep them in a separate compartment in my head full of holes.
>
> Tim.

And I've got nothing better to do right now than to take what was my hobby and
try to make something out of it.. I have a fair amount of weekly time and the
rest of my life to decide what to do with it. I have plenty of (s)crap. I have
a little bit of money. But what I am suffering most from is a lack of
a decent idea.

The Eternal Squire

812. Re: I need a over voltage (crowbar) circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 07:54:08 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e3cc64b3ac20d8c989730@news-central.giganews.com>
Source record: 14163

In article <3yEAf.22861$xk1.743522@news20.bellglobal.com>,
bcrann@hotmail.com says...
> I am looking for a simple over voltage circuit for my 13.8V 20Amp power
> supply. I have googled it and found a few using zener diodes but some
> zeners can be off as much as 20%. I would like to have it activate at 15V
> or less. Thanks in advance.
>
> Bill
>
>
>
Check out the section that begins on page 97 of this book:
http://www.onsemi.com/pub/Collateral/HB206-D.PDF (1.1 MB)

Looks like kind of a pain to find the MC3423 chip that they use, but the
principles in the book are still worth looking at.

I would probably use a bandgap reference and a comparator to trip the
SCR. An RC time constant on the voltage sample to the comparator would
be a good idea to prevent false triggering during startup, and to
improve noise immunity...

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam
---

813. Re: I need a over voltage (crowbar) circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 11:48:56 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1137930536.231170.311290@g43g2000cwa.googlegroups.com>
Source record: 14164

John Miles wrote:
> In article <3yEAf.22861$xk1.743522@news20.bellglobal.com>,
> bcrann@hotmail.com says...
> > I am looking for a simple over voltage circuit for my 13.8V 20Amp power
> > supply. I have googled it and found a few using zener diodes but some
> > zeners can be off as much as 20%. I would like to have it activate at 15V
> > or less. Thanks in advance.
> >
> > Bill
> >
> >
> >
> Check out the section that begins on page 97 of this book:
> http://www.onsemi.com/pub/Collateral/HB206-D.PDF (1.1 MB)
>
> Looks like kind of a pain to find the MC3423 chip that they use, but the
> principles in the book are still worth looking at.

I checked on the Freescale site (it was a Motorola device) and it is no
longer made. They are probably still available, however, from surplus
sources.

Leon

814. Re: FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 12:47:44 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dqvutg0okj@drn.newsguy.com>
Source record: 14165
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

John Miles wrote...
>
> Winfield Hill says...
>
>> A real jewel, already up to $3700, with six days to go.
>> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=7583597242
>
> Look on the bright side... maybe all of the other bidders will cancel
> their bids or get tossed by eBay for various reasons, and you'll get
> it for $1.00. :)

That would be the day. What's the right price for your 8566B with manuals, etc.? I see Nick at Ridge Equipment has one up for $9k, but I doubt he'll sell it. Looking at the last 30 days, I see one fellow who had two "untested" units, accepting $3100 "best offers" for each, and another guy who got a $2700 "buy-it-now" sale for his "untested" unit with a "dim screen". All three "untested" units had photos indicating reasonable physical condition and some kind of apparently-proper display operation. There's another one, "as is" with a dark-screen photo, starting at $6499, with no bidders.

--
Thanks,
- Win

815. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 13:57:58 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43D38F42.888D9978@earthlink.net>
Source record: 14166
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

```
Winfield Hill wrote:
>
> Michael A. Terrell wrote...
> >
> > Winfield Hill wrote:
> >>
> >> Michael A. Terrell wrote...
> >>>
> >>> How many do you need, and can you use ones pulled from PC boards?
> >>> I may have some left that I pulled from damaged boards.
> >>
> >> One or two may be enough for proof-of-principle measurements.
> >
> > I'll see if I can find a couple for you.
>
> OK, I'll trade you some 1500V damper diodes, with datasheets.
> They should be interesting additions to your parts inventory.
>
> --
> Thanks,
> - Win

Win, I did a lot of digging and the best I can find is five glass
1N4004s. I have either used up all of the glass 1N4007s, or didn't but
them back into the right place the last time I used some of them. Are
they high enough voltage to test your circuit? If they are, E-mail me
with a shipping address, and I'll send them to you. I appreciate the
offer of the parts, but I am to the point that I don't feel well enough
to do anything at my workbench. It has been about 18 months since I felt
like trying to do anything, and most of my test equipment was water
damaged in the 2004 hurricanes. Its just too depressing to try to work
with what little is left.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida
```

816. Re: I need a over voltage (crowbar) circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 15:25:40 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <p7idnVzewfxoPk7eRVn-gg@comcast.com>
Source record: 14167

"Bill" <bcrann@hotmail.com> wrote in message
news:3yEAf.22861$xk1.743522@news20.bellglobal.com...
>I am looking for a simple over voltage circuit for my 13.8V 20Amp power
>supply. I have googled it and found a few using zener diodes but some
>zeners can be off as much as 20%. I would like to have it activate at 15V
>or less. Thanks in advance.
>
> Bill
How about a Zener with an SCR?
http://www.kbt-dc-supplies.com/crowbar.php

Crow Bar Circuit
This circuit can be added to any power supply that does not have it already. The value of the SCR should be whatever the supply is capable of producing as maximum output current. The way this works is sort of like this: The zener diode monitors the output voltage of the power supply.

When the voltage gets to 15 volts, the Zener diode conducts. In turn this fires the SCR and therefore short circuits the output of the supply. This then in turn, draws so much current that it destroys the AC input fuse. That is why it is so very important to use only the minimum rated fuse to get the job done. All this happens so fast that it stops any over voltage from reaching the equipment that is powered by the power supply.

The way we figure out what the value of the AC input fuse should be, sort of goes like this: As a rule of thumb, I divide the output maximum current by 4 and that is what I use for the value of the AC input fuse.

817. Re: I need a over voltage (crowbar) circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 15:55:08 UTC
From: mark <pd_dude@psdude.com>
Message-ID: <43D3AAD9.6FCCBE0D@psdude.com>
Source record: 14168

Digikey has the mc3423 in stock under a dollar.
it is from OnSemi.

BTW, TrippLite uses the mc3423 in their
linear power supplies.

818. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 16:36:30 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <BFF8F48E.23B05%dbowey@comcast.net>
Source record: 14169
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On 1/21/06 7:42 PM, in article GrqdndVNUIa-Yk_eRVn-ig@adelphia.com, "Mike Coslo" <mremovethiscoslo@adelphia.net> wrote:

> Joel Kolstad wrote:
>> "Mike Coslo" <mjc5remove@psu.edu> wrote in message
>> news:43D1354C.8060708@psu.edu...
>>
>>> Considering that some 73 percent of email is spam and/or virus laden
>>> garbage, and that there are much better ways for Hams to get their email
>>> if they really want to, utilizing HF for email solutions is like an answer
>>> to ten year old questions.
>>
>>
>> For people who actually get significant portions of spam, I agree with
>> you -- I'm a little leery of them getting their e-mail via HF! On the other
>> hand, I think that most people who make a minimal effort can deal with
>> having multiple e-mail accounts, and being very careful to keep the
>> "important" ones off of spam lists. (I have a couple that have never
>> received spam, because probably no more than a dozen people know of them!)
>
> Not the point Joel. That 75 percent is the 3:1 signal to noise ratio.
> Or rather noise to signal! 8^) It is there whether you filter it out or
> not.
>
>>
>>> Besides - thinking that email is "High-Tech" is to start off with an
>>> erroneous assumption.
>>
>>
>> It's as "high tech" as SSB voice. :-)
>
> Well, maybe a tad more H-T! I like to get people to think of other
> things besides imitation. These days everyone looks at the Internet as a
> high tech playground. And they want to fit "Internet training wheels" on
> everything. When you consider what Hams are doing these days to get a
> good wide bandwidth Internet connection across large distances, the
> transmission of email on HF just seems a day late and about ten dollars
> short.
>
> What I would like is a digital HF voice connection that doesn't require
> channelization (I'd like to be able to tune like I do with SSB) and not
> have to know when the other OP starts transmitting. I also want that
> digital voice to take up *less* space than SSB. I'd like SSTV that isn't

> SSTV - I want real motion with small bandwidth. I want HF with a lot
> less noise. It doesn't need to be FM, but I would like adaptive
> algorithms that sort out the signal and pretty it up so that my poor
> ears can make good sense of it without too much strain. I want my rig to
> have a wireless interface to my computer and or other rigs in the
> vicinity. I *don't* want my computer to be my rig. If that happens it
> means I have to buy another computer because I use my computer for other
> things while I talk on my rig.
>
> In short, I want the ARS to move into the future. I just don't think
> that email is that move.
>
> - 73 de Mike KB3EIA -

You can have all those "I wannas" on the day you invent zero bandwidth CW (you know, those old-fashioned dit and dahs). In the meanwhile, grow up and get a brain.

Don

819. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 17:01:16 UTC
From: Fred Bloggs <nospam@nospam.com>
Message-ID: <43D3BA58.9080504@nospam.com>
Source record: 14170
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

> It strikes me as a simple case of consequences of actions. US public
> education is of low quality, so people arent coming out well educated,
> motivated, or able to make good of their lives. When a country's
> education is as good as it can be, instead of as bad as it can be, not
> surprisingly people come out more capable, more motivated and so on,
> and go on and do well.
>
> This is a basic error in American politics. Spend as little as possible
> so I get to keep my share, but its then a greater share of less in
> total. The only way a country will do better and better over time is if
> education is as good a quality as one can get.
>
> When you produce so many badly educated people, there becomes no longer
> the ability for the masses to understand the issues well enough to make
> the right policy choices, and things decline even further. Through
> history, those societies that have done relatively well have been ones
> where education was regarded as real important. It is a simple choice
> for US to make, but US seems to show no insight into its condition.
>

Those published statistics about the US education system have been
debunked as utter bull_sh_t! Some U of Arizona specialists dared to be
politically incorrect and reform the statistics on the basis of
percentage of students "living in poverty"- codeword for black. Those
schools with zero per cent, and there are enough of them, lead the world
in output of highly educated students. Even the schools with as much as
25% of student body living in poverty placed in the top ten. Then of
course as the poverty crowd becomes larger the quality of output
nosedives into the sewer.
Another very common misbelief of you engineering centric know-nothings
is that engineering education is somehow very tough- and at the personal
level I find that to be highly laughable- engineering eductaion is pure
recreation to those so-inclined. Anyone finding it to be a challenge has
picked the wrong course of study. There are other fields of study that
are far tougher and challenging than engineering.

820. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 20:17:47 UTC
From: "wa2mze(spamless)" <"wa2mze(spamless)"@bellsouth.net>
Message-ID: <4JRAf.9605$TK2.151@bignews1.bellsouth.net>
Source record: 14171

Jeffrey Bauman wrote:
> I'm considering building the am/cw transmitter in the 1966 handbook
> (probably in others, too). It runs a single 6146 in the final.
>
> I am curious if anyone has ever built that rig. If I build it, it will
> probably be with an outboard power supply, and a single switch for input /
> tank band switching.
>
> Also curious: Anyone ever homebrewed a DX-60?
>
> Jeff
> W8KZW
>
>
I built a similar rig, but it was weakly based on that design.
Mine had a 6GK6 oscillator and a 6146 final. It was built inside
a chassis with the tubes mounted on a subchassis inside. The tubes
were "sideways" and holes were drilled in the chassis-cabinet for
ventilation.

I am assuming the same transmitter was described in the 1967 HB (which
was the first HB I ever bought). You might as well leave out the
AM modulator since it will be useless today. Back in '66-'67 there
were still some people on AM (mostly on 80 and 10 meters), but today
it's completly gone. Low cost SSB xcvrs wiped out AM by the mid 1970's.

I was thinking of building a simple rig again but with a 1625 in the final.
I have about a dozen of these bottles in the junk box along with half as many
6AG7's. The crystals will be the scarce items these days (well expensive
anyway).

821. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 21:02:31 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrndt7sn7.25d0.bit-bucket@shell.config.com>
Source record: 14172

On Sun, 22 Jan 2006 15:17:47 -0500, wa2mze(spamless) wrote:
>
> You might as well leave out the
> AM modulator since it will be useless today. Back in '66-'67 there
> were still some people on AM (mostly on 80 and 10 meters), but today
> it's completly gone.

OH, Really!?? Snert! - Sporf! - Snurt! TNX for the laugh!

Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
Pueblo, Colorado | @ | Jonesy | OS/2 __
38.24N 104.55W | config.com | DM78rf | SK

822. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 21:10:31 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <bxSAf.3549$Ez3.3368@trnddc03>
Source record: 14173

>>
.
>
> I am assuming the same transmitter was described in the 1967 HB (which
> was the first HB I ever bought). You might as well leave out the
> AM modulator since it will be useless today. Back in '66-'67 there
> were still some people on AM (mostly on 80 and 10 meters), but today
> it's completly gone. Low cost SSB xcvrs wiped out AM by the mid 1970's.
>
Are you serious? The only phone I listen to are the A.M. gang- wonderful
rigs from the past on 3885, 7290 etc. There's someone on all day long- and
unlike the SSB gang, these guys know theory and are active builders/
restorers- perhaps the best that amateur radio has to offer today.

Dale W4OP

823. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 21:13:01 UTC
From: clifto <clifto@clifto.com>
Message-ID: <t39da3-o1u.ln1@remote.clifto.com>
Source record: 14174
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Michael A. Terrell wrote:
> I appreciate the
> offer of the parts, but I am to the point that I don't feel well enough
> to do anything at my workbench. It has been about 18 months since I felt
> like trying to do anything, and most of my test equipment was water
> damaged in the 2004 hurricanes. Its just too depressing to try to work
> with what little is left.

That sucks. Sorry it happened to you.

--
If John McCain gets the 2008 Republican Presidential nomination,
my vote for President will be a write-in for Jiang Zemin.

824. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 21:16:02 UTC
From: Kerry Miller <kmiller01at@ticnet.com>
Message-ID: <uCSAf.142900$WH.136740@dukeread01>
Source record: 14175

Fred McKenzie wrote:
> In article <GNhAf.141967$WH.127022@dukeread01>, Kerry Miller
> <kmiller01at@ticnet.com> wrote:
>
>
>>Have any of you guys tried the new switching power supplies? I've seen
>>the one at Radio Shack (claims 25a but I doubt it), MFJ and Astron but
>>haven't ever used one. I normally just run 1 HF rig (max 100w) and a
>>small VHF rig (max 25w) for packet. Is a switcher solid and reliable
>>enough for something like that? I've considered getting something like
>>that and rebuilding the Astron when I can get the parts.
>
>
> Kerry-
>
> I have three switching supplies: One from Radio Shack, one from MFJ and
> one from Icom (PS-125). They all work quite well as far as delivering
> rated current.
>
> The problem is that the high frequency switching noise can be picked up by
> an HF receiver. The Radio Shack unit is TERRIBLE in this regard. The MFJ
> is fairly good and the Icom is the best. Even so, the Icom switching
> noise is picked up if it is anywhere near the antenna.
>
> I'm currently using a makeshift indoor antenna consisting of a dipole made
> of a pair of mobile whips on the second floor. Because of the noise
> problem, I've gone back to using an old Kenwood linear supply with my Icom
> 756 Pro II. This radio has the band scope, so you can see the noise floor
> increase across the band when the switching power supply is turned on.
>
> 73, Fred, K4DII
Thanks for the info. I picked up one of the RS supplies yesterday, and
you're right, it's pretty noisy on 80m, especially on my longwire which
terminates inside the shack. On 40m and above and on the outside
antenna (dipole or vertical) it's fine and below my noise floor. I
found a mod for it with some toroids and caps across the output to
filter it a little, I'll probably try that but it's workable for now
as-is since I don't work much 80m.

It will keep me on the air until I fix the Astron, I'll probably put the
Astron back on the HF rig and use the RS switching supply on VHF and UHF.

73,
Kerry
WD5ABC

825. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 21:27:35 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <Yv-dnc1l_NxUZU7eRVn-jw@comcast.com>
Source record: 14176

"Dale Parfitt" <par@parelectronics.com> wrote in message
news:bxSAf.3549$Ez3.3368@trnddc03...
>>
>> I am assuming the same transmitter was described in the 1967 HB (which
>> was the first HB I ever bought). You might as well leave out the
>> AM modulator since it will be useless today. Back in '66-'67 there
>> were still some people on AM (mostly on 80 and 10 meters), but today
>> it's completly gone. Low cost SSB xcvrs wiped out AM by the mid 1970's.
>>
> Are you serious? The only phone I listen to are the A.M. gang- wonderful
> rigs from the past on 3885, 7290 etc. There's someone on all day long- and
> unlike the SSB gang, these guys know theory and are active builders/
> restorers- perhaps the best that amateur radio has to offer today.
>
> Dale W4OP
I have to wait a bit later in the evening (season/band changes) and they can
be heard in Chicago area ... there is also the 160 meter gang .. and that
truly is like listening to late night AM broadcast.

w9gb

826. Re: HF Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 22:41:25 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <0vidnVUiZPuBl0neRVnyjw@pipex.net>
Source record: 14177

> Im building a HF linear using four PL519's. Can i use 2oz copper PCB for
> the base to fit the valves too?????? as Im not very good at cutting and
> messing with metal.
==========
Don't understand what you mean with '2 oz copper PCB' ,but any fibreglass single or double sided PCB would be suitable , provided you don't put heavy stuff on it like PS transformers etc. If double sided make sure both sides make good galvanic contact at various locations.
I also like using PCB for (not too large) chassis and enclosures. Same material screens can be readily soldered-in. Another advantage is that where necessary components can be bonded to ground (chassis) directly.

Frank GM0CSZ / KN6WH

827. Re: Fair market value of salvaged parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 23:03:45 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <loudnRpGTfzPkkneRVnyuQ@pipex.net>
Source record: 14178

> One way, I suppose, would be to ask how much a disinterested party like
> yourself(s)
> would be willing to pay. Another, I suppose, would be to treat each
> part as a piece of
> clothing and assign it 1/2 to 1/4 retail value as a used article.
>
> Opinions?
==========
The quality of components from scrapped equipment can be doubtful
,especially when the said components are removed while being exposed to a
high temperature.
I do use components from scrapped equipment ,but only when I remove them
myself ,knowing how hot they were upon removal . If removal sometimes takes
rather long time , I discard the freed components .
Moreover I always check freed components for stability and if OK only use
them for simple (auxilliary) equipment.
Frank GM0CSZ / KN6WH

828. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 23:13:49 UTC
From: garigue <garigue@comcast.net>
Message-ID: <RsmdnYR6hqQ7jEnenZ2dnUVZ_tWdnZ2d@comcast.com>
Source record: 14179

> >
> > You might as well leave out the
> > AM modulator since it will be useless today. Back in '66-'67 there
> > were still some people on AM (mostly on 80 and 10 meters), but today
> > it's completly gone.
>
> OH, Really!?? Snert! - Sporf! - Snurt! TNX for the laugh!
>
> Jonesy
> --
> Marvin L Jones | jonz | W3DHJ | linux
> Pueblo, Colorado | @ | Jonesy | OS/2 __
> 38.24N 104.55W | config.com | DM78rf | SK

Yepper ....just like the fellow on 2 meters said ....nobody uses CW anymore .....its DOA . I just like to put up my feet, lean back, and open an Iron City Beer and enjoy the quality of those AM signals ... and this from a 99.99% CWist. My buddy built on of those rigs in 66 and it worked fine with his Mor-Gain antenna ...even with the hardware cloth safety mesh covering the chassis. Lots 'o fun.

God Bless and 73 all ..... KI3R Tom in Belle Vernon PA

829. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 23:14:11 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dr13k301241@drn.newsguy.com>
Source record: 14180
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

clifto wrote...
>
>Michael A. Terrell wrote:
>> I appreciate the
>> offer of the parts, but I am to the point that I don't feel well enough
>> to do anything at my workbench. It has been about 18 months since I felt
>> like trying to do anything, and most of my test equipment was water
>> damaged in the 2004 hurricanes. Its just too depressing to try to work
>> with what little is left.
>
> That sucks. Sorry it happened to you.

Yeah. I have some extra instruments not doing anything, if you feel
well enough not to use that as an excuse. I get stuff real cheap on
eBay, and sometimes Harvard types are too proud to use it. And they
also give me stuff nobody wants. A perfectly-fine HP oscilloscope,
for example. Before anybody makes a remark, yes I've used HP scopes,
used them in EE lab years ago, and have a 500MHz 4-channel Infinium
plus an Agilent's 300MHz MSO on my bench now, so hide that smirk. :-)

--
Thanks,
- Win

830. Re: FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-22 23:34:22 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e3db657417cb5bf989731@news-central.giganews.com>
Source record: 14181
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

In article <dqvutg0okj@drn.newsguy.com>, Winfield_member@newsguy.com
says...
> That would be the day. What's the right price for your 8566B with
> manuals, etc.? I see Nick at Ridge Equipment has one up for $9k,
> but I doubt he'll sell it. Looking at the last 30 days, I see one
> fellow who had two "untested" units, accepting $3100 "best offers"
> for each, and another guy who got a $2700 "buy-it-now" sale for his
> "untested" unit with a "dim screen". All three "untested" units had
> photos indicating reasonable physical condition and some kind of
> apparently-proper display operation. There's another one, "as is"
> with a dark-screen photo, starting at $6499, with no bidders.

It's tough to say. At the end of the day it's worth whatever the
second-highest bidder thinks it's worth. Ordinarily, I'd wait for all
those others to sell or otherwise disappear from the field before
putting one up for sale, but I think this one will out-compete the
others without any trouble... at least among buyers who know what
they're looking for. A dim CRT is not a good thing on these units,
because the focus is the first thing to go. By the time the emission is
down, you don't get a very clean image.

At any rate, a $9K starting bid on an 8566B with a DOA-only guarantee is
just a waste of a listing fee, and everybody's time to boot. Much
better to start low and encourage people to look at the item on its
merits. I'd be surprised if mine doesn't land in the $6K-$7K
neighborhood. $8K-$9K is a high but still-fair price, if someone has
the cash on hand and has been waiting for the right one.

That particular 8566B from Ridge does look clean, but it has some
serious phase-noise peaking going on. (Compare his CRT image with the
same shot in my auction, particularly taking the different reference
levels into account.) Even if you paid $9K for his, you'd still want to
open it up and poke around the first-LO synthesizer with an ESR meter.
Something -- probably something cheap but difficult to find -- is
packing up and getting ready to go out to lunch in that one.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam
---

831. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 00:05:40 UTC
From: - exray - <exray@coqui.net>
Message-ID: <11t87en9s43117e@corp.supernews.com>
Source record: 14182

wa2mze(spamless) wrote:

>
>
> You might as well leave out the
> AM modulator since it will be useless today. Back in '66-'67 there
> were still some people on AM (mostly on 80 and 10 meters), but today
> it's completly gone. Low cost SSB xcvrs wiped out AM by the mid 1970's.

Uh-oh.

-Bill

832. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 00:39:23 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <xn0ehjgtm2uhq1002@cnews.newsguy.com>
Source record: 14184

wa2mze(spamless) wrote:

> Back in '66-'67 there
> were still some people on AM (mostly on 80 and 10 meters), but today
> it's completly gone.
~~~~~~

You need to get out more. AM is alive and well on both 160 and 75
meters every day, and on ten meters when it's open.

Bill, W6WRT
~~~~~~

833. Re: HF Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 00:46:30 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <xn0ehjgzx33m9o003@cnews.newsguy.com>
Source record: 14185

Highland Ham wrote:

> make sure both sides make good galvanic contact at various locations.
~~~~~~

"Galvanic contact"? Are you trying to generate electricity or
electrocute someone?

1. Go to dictionary.
2. Look up "galvanic".
3. Don't do it.

Bill, W6WRT
~~~~~~

834. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 00:47:53 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1137977273.775901.317080@g49g2000cwa.googlegroups.com>
Source record: 14183

Jeffrey Bauman wrote:
> I'm considering building the am/cw transmitter in the 1966 handbook
> (probably in others, too). It runs a single 6146 in the final.
>
> I am curious if anyone has ever built that rig. If I build it, it will
> probably be with an outboard power supply, and a single switch for input /
> tank band switching.

Not that exact rig, but I've built similar 6146 transmitters. One gotcha with the oscillator-final setup is that you may not end up with enough drive on 21 and 28 MHz, if those bands matter to you. The Eico 720 improves on this by using a buffer/multiplier.

I like the Eico 720 design, but a weakness is lack of VR regulation leading to chirp (especially if you multiply up.)

The handbook transmitter doesn't include a clamping tube, so if for some reason you have no or insufficient drive you can find your final tube dissipating too much power and melting down. But, elsewhere in that handbook you will find several examples of clampers.

Bandswitching and plate choke resonances are easier to deal with if you limit yourself to 2 bands or so (say 80 and 40 or 40 and 20).

Every handbook from the late 40's up through the early 70's has a CW transmitter rig of similar spirit, earlier ones using a 1625 or 807 or something similar.

Tim.

835. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 01:20:24 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <sbWAf.14719$Jd.13168@newssvr25.news.prodigy.net>
Source record: 14186
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Hello Mike,

> Doesn't necessarily, true enough. But I'd be willing to wager that
> in most cases it is exactly that, signing off.
>

I think you are right about the majority of cases. We see that a lot in nursing homes. People think that once they got Grandpa signed up there it's all taken care of and they can go about their business. There are people who haven't had a relative visit in months. No idea why. I mean, where else could you listen to someone talking about the great depression who has actually lived through it? It dashed his engineering career but he became the head barkeeper in a famous hotel where movie stars hung out. Lots of more stories. He passed away now and his grandkids probably never heard many of those stories. It's been a while but I still miss him.

Regards, Joerg

http://www.analogconsultants.com

836. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 01:47:05 UTC
From: meow2222@care2.com
Message-ID: <1137980825.259214.123510@g47g2000cwa.googlegroups.com>
Source record: 14187
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Winfield Hill wrote:

> Yeah. I have some extra instruments not doing anything, if you feel
> well enough not to use that as an excuse. I get stuff real cheap on
> eBay, and sometimes Harvard types are too proud to use it. And they
> also give me stuff nobody wants. A perfectly-fine HP oscilloscope,
> for example. Before anybody makes a remark, yes I've used HP scopes,
> used them in EE lab years ago, and have a 500MHz 4-channel Infinium
> plus an Agilent's 300MHz MSO on my bench now, so hide that smirk. :-)

People are funny. I had a 2 MHz scope once, did lots with it. You can
use scopes well above their f_max with a simple envelope detector.

NT

837. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 01:52:27 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <11t8dms9qbq3e7f@corp.supernews.com>
Source record: 14188
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Hi Mike,

"Mike Coslo" <mremovethiscoslo@adelphia.net> wrote in message
news:GrqdndVNUIa-Yk_eRVn-ig@adelphia.com...
> Not the point Joel. That 75 percent is the 3:1 signal to noise ratio. Or
> rather noise to signal! 8^) It is there whether you filter it out or not.

I disagree. When you start finding that every e-mail message you receive takes a minute to receive (rather than 15 milliseconds), people start to become a lot more cautious with their e-mail addresses, and thereby inherently reduce the amount of spam to little or nothing. I'd wager that the Winlinks, for instance, receive nowhere _near_ 75% of their e-mail as spam; I'd be surprised if it's 10%.

> I also want that digital voice to take up *less* space than SSB.

Well, coding theory is very well understood these days, so you can certainly have it take up less space that the typical 3kHz SSB transmission if you're willing to start trading off quality for reliability (...both of which also trade off with power, of course).

> I'd like SSTV that isn't SSTV - I want real motion with small bandwidth.

Well, again, it's all a matter of tradeoffs. "Real motion in a small bandwidth" implies something along the lines of (1) lots of power or (2) lots of compression, which will break down for, e.g., fast action scenes. The problems you're citing here are exactly the same as what the cell phone guys have to solve, and believe me, there are lots of clever people working on solutions. Getting that technology transferred over to amateur radio is going to be the tricky part...

> I want my rig to have a wireless interface to my computer and or other
> rigs in the vicinity. I *don't* want my computer to be my rig.

You know that something like a Bluetooth interface on your rig would actually take up more transistors than a complete vintage-'80s computer like an Apple II or a Commodore 64, right? :-)

> If that happens it means I have to buy another computer because I use my
> computer for other things while I talk on my rig.

Sure, but with decent desktop computers (complete with monitor, etc.) going for <$500 these days, can't you just think of it as a "$500 rig accessory" and not a computer?

---Joel

838. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 07:17:55 UTC
From: Ben Bradley <ben_nospam_bradley@frontiernet.net>
Message-ID: <a609t1d8eibflvt5tifh5qal373qbe0qmq@4ax.com>
Source record: 14189
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On 15 Jan 2006 18:54:18 -0800, "Too_Many_Tools"
<too_many_tools@yahoo.com> wrote:

>"In a crosspost to a large but apparently related set of newsgroups,
>specifically:
>sci.electronics.design,
>rec.radio.amateur.homebrew,
>sci.electronics.equipment,
>sci.electronics.repair and
>comp.robotics.misc; "
>
>Is there a problem with posting a suitable topic to a number of groups
>that would find it interesting?
>
>It definitely was not meant to be spam.

I didn't call it spam, as I said the topic does seem related to all
the groups listed. I didn't mean to sound TOO irritated, though a
large part of the thread degenerated into a debate over whether
amateur radio is still a viable activity in light of the Internet and
other things.

But I'm disappointed no one commented on the content of my post.
Perhaps I didn't quite know the operation of the things I made with
those kits, but I can fairly well remember the schematics, and of
course know NOW how they work.

Did anyone else learn anything from these kits???

>TMT

839. Re: I need a over voltage (crowbar) circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 14:42:05 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1138027325.703906.190520@g49g2000cwa.googlegroups.com>
Source record: 14190

Bill wrote:
> I am looking for a simple over voltage circuit for my 13.8V 20Amp power
> supply. I have googled it and found a few using zener diodes but some
> zeners can be off as much as 20%. I would like to have it activate at 15V
> or less. Thanks in advance.

20% Zener tolerances probably do exist - but don't buy those parts!

5% Zeners (1N47xx series for example) are readily available for a few
cents.

For a little more money you can do a band-gap etc. but that's
overspecifying most of the time. The crowbar is there to protect you
when your pass transistor fails shorted, it's not there for any actual
regulation.

Tripping the crowbar at 15V when the nominal supply is 13.8V is cutting
it too close IMHO - that is less than 10% overvoltage. Look at crowbar
set points on commercial supplies - they are usually 20 or 25% above
nominal output voltage. Running it too close may very well result in
unwanted crowbar action with inductive/capacitive loads or load
transients.

Few loads will fry with 10% overvoltage, and some may malfunction but
few will fry at 25% overvoltage.

Tim.

840. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 15:17:13 UTC
From: kensmith@green.rahul.net
Message-ID: <dr2s1psrl4@blue.rahul.net>
Source record: 14191
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

In article <1137980825.259214.123510@g47g2000cwa.googlegroups.com>,
<meow2222@care2.com> wrote:
[....]
>People are funny. I had a 2 MHz scope once, did lots with it. You can
>use scopes well above their f_max with a simple envelope detector.

I had one with about a 30KHz bandwidth. The nice thing about it was that
you could switch to driving the plates externally.

It got lost in a flood :<

--
--
kensmith@rahul.net forging knowledge

841. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 16:14:04 UTC
From: rrah@pencoys.org.uk
Message-ID: <43d4ff85.892415390@news.madasafish.com>
Source record: 14192

On Sun, 22 Jan 2006 15:17:47 -0500, "wa2mze(spamless)"
<"wa2mze(spamless)"@bellsouth.net> wrote:

>You might as well leave out the
>AM modulator since it will be useless today. Back in '66-'67 there
>were still some people on AM (mostly on 80 and 10 meters), but today
>it's completly gone.

Thats interesting, I wonder what mode I was using on 2m last Sunday
morning?.
It was an AM qso over a distance of about 90 miles, received an R5-S3
and gave an R5-S2. Both of us were running about 2.5w
--

842. WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 16:39:46 UTC
From: Tobin Fricke <fricke@ocf.berkeley.edu>
Message-ID: <Pine.SOL.4.63.0601222137070.21828@conquest.OCF.Berkeley.EDU>
Source record: 14193
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

As a project to learn more about building radio receivers, I'd like to build a WWV receiver (or maybe a receiver for the Canadian station CHU, since it's nearby and the format sounds easier to decode). I'm looking for suggestions for how to design such a radio, reading material, etc.

I was thinking it might be easier to design a fixed-frequency receiver (rather than a tunable one) because I could just select the L and C in the resonant circuit to give the right frequency. Or, since WWV is at such "round number" frequencies, maybe I could somehow use a crystal oscillator?

thank you,
Tobin
--
http://web.pas.rochester.edu/~tobin/

843. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 16:53:44 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <C5qdnaHvLI-Pl0jeRVn-og@web-ster.com>
Source record: 14194
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

Tobin Fricke wrote:
> As a project to learn more about building radio receivers, I'd like to
> build a WWV receiver (or maybe a receiver for the Canadian station CHU,
> since it's nearby and the format sounds easier to decode). I'm looking
> for suggestions for how to design such a radio, reading material, etc.
>
> I was thinking it might be easier to design a fixed-frequency receiver
> (rather than a tunable one) because I could just select the L and C in
> the resonant circuit to give the right frequency. Or, since WWV is at
> such "round number" frequencies, maybe I could somehow use a crystal
> oscillator?
>
> thank you,
> Tobin
> --
> http://web.pas.rochester.edu/~tobin/

You could build a direct conversion receiver with a crystal oscillator.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

844. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 17:05:21 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1138035921.105584.288440@o13g2000cwo.googlegroups.com>
Source record: 14195
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

Tobin Fricke wrote:
> As a project to learn more about building radio receivers, I'd like to
> build a WWV receiver (or maybe a receiver for the Canadian station CHU,
> since it's nearby and the format sounds easier to decode). I'm looking
> for suggestions for how to design such a radio, reading material, etc.
>
> I was thinking it might be easier to design a fixed-frequency receiver
> (rather than a tunable one) because I could just select the L and C in the
> resonant circuit to give the right frequency. Or, since WWV is at such
> "round number" frequencies, maybe I could somehow use a crystal
> oscillator?

You might look at the Ramsey electronics 10 MHz WWV receiver kit. It's
a pretty basic crystal controlled superhet/ceramic filter/AM detector
with AGC.

Tim.

845. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 17:28:02 UTC
From: "John S." <hjsjms@cs.com>
Message-ID: <1138037282.591618.54410@o13g2000cwo.googlegroups.com>
Source record: 14196
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

Tobin Fricke wrote:
> As a project to learn more about building radio receivers, I'd like to
> build a WWV receiver (or maybe a receiver for the Canadian station CHU,
> since it's nearby and the format sounds easier to decode). I'm looking
> for suggestions for how to design such a radio, reading material, etc.
>
> I was thinking it might be easier to design a fixed-frequency receiver
> (rather than a tunable one) because I could just select the L and C in the
> resonant circuit to give the right frequency. Or, since WWV is at such
> "round number" frequencies, maybe I could somehow use a crystal
> oscillator?

Are you looking to decode the data transmissions or listen to the voice
signals. If the former it may take something more sophisticated
because you will have to feed a decoder.

846. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 19:14:50 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2006.01.23.19.15.15.480135@example.net>
Source record: 14197
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Sun, 22 Jan 2006 13:57:58 +0000, Michael A. Terrell wrote:
> Winfield Hill wrote:
>> Michael A. Terrell wrote...
>> > Winfield Hill wrote:
>> >> Michael A. Terrell wrote...
>> >>>
>> >>> How many do you need, and can you use ones pulled from PC boards?
>> >>> I may have some left that I pulled from damaged boards.
>> >>
>> >> One or two may be enough for proof-of-principle measurements.
>> >
>> > I'll see if I can find a couple for you.
>>
>> OK, I'll trade you some 1500V damper diodes, with datasheets.
>> They should be interesting additions to your parts inventory.
>>
>
> Win, I did a lot of digging and the best I can find is five glass
> 1N4004s.

As reluctant as I am to contradict a fart who's even older than me, if
it's glass, it isn't a 1N4004:
http://www.datasheetcatalog.com/datasheets_pdf/1/N/4/0/1N4004.shtml

Cheers!
Rich

847. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 19:18:33 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2006.01.23.19.19.03.935835@example.net>
Source record: 14048
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Sun, 22 Jan 2006 15:14:11 -0800, Winfield Hill wrote:

> clifto wrote...
>>
>>Michael A. Terrell wrote:
>>> I appreciate the
>>> offer of the parts, but I am to the point that I don't feel well enough
>>> to do anything at my workbench. It has been about 18 months since I felt
>>> like trying to do anything, and most of my test equipment was water
>>> damaged in the 2004 hurricanes. Its just too depressing to try to work
>>> with what little is left.
>>
>> That sucks. Sorry it happened to you.
>
> Yeah. I have some extra instruments not doing anything, if you feel
> well enough not to use that as an excuse. I get stuff real cheap on
> eBay, and sometimes Harvard types are too proud to use it. And they
> also give me stuff nobody wants. A perfectly-fine HP oscilloscope,
> for example. Before anybody makes a remark, yes I've used HP scopes,
> used them in EE lab years ago, and have a 500MHz 4-channel Infinium
> plus an Agilent's 300MHz MSO on my bench now, so hide that smirk. :-)

Well, I've been known to disdain HP scopes because their sync sucks,
and their knobs have terrible backlash, but at that price, hey, beggars
can't be choosers!

You already have my snail mail address - third or fourth class can't
be that expensive - I've gone some years without a scope - a couple more
weeks certainly isn't going to do me any harm! <hint, hint>

Thanks!
Rich

848. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 20:02:38 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1138046558.006614.8540@g44g2000cwa.googlegroups.com>
Source record: 14049
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"Another very common misbelief of you engineering centric know-nothings

is that engineering education is somehow very tough- and at the
personal
level I find that to be highly laughable- engineering eductaion is pure

recreation to those so-inclined. Anyone finding it to be a challenge
has
picked the wrong course of study. There are other fields of study that
are far tougher and challenging than engineering."

And those other fields are?

In my opinion, science and engineering ARE some of the most toughest
and competive fields that exist.

TMT

849. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 21:17:31 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <BFFA87EB.23D9D%dbowey@comcast.net>
Source record: 14050
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On 1/23/06 12:02 PM, in article
1138046558.006614.8540@g44g2000cwa.googlegroups.com, "Too_Many_Tools"
<too_many_tools@yahoo.com> wrote:

> "Another very common misbelief of you engineering centric know-nothings
>
> is that engineering education is somehow very tough- and at the
> personal
> level I find that to be highly laughable- engineering eductaion is pure
>
> recreation to those so-inclined. Anyone finding it to be a challenge
> has
> picked the wrong course of study. There are other fields of study that
> are far tougher and challenging than engineering."
>
> And those other fields are?
>
> In my opinion, science and engineering ARE some of the most toughest
> and competive fields that exist.

But, as you implied, only to those who are not so-inclined.

>
> TMT
>

850. liste

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 21:21:27 UTC
From: F4DRH <F4DRH@wanadoo.fr>
Message-ID: <43d548d7$0$23286$8fcfb975@news.wanadoo.fr>
Source record: 14051

- envoyer les fichiers de review 2G et 3G Junior
- Appeler C�line
- R�cup�rer Fichier SabaPublisher 3G Junior
- Pr�parer ppt (SabaPublisher) intro
- Pr�parer MSO
- Pr�parer CV
- Pr�parer entretien ELAM

851. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 21:48:33 UTC
From: clifto <clifto@clifto.com>
Message-ID: <hivfa3-fdi.ln1@remote.clifto.com>
Source record: 14052
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Winfield Hill wrote:
> Before anybody makes a remark, yes I've used HP scopes,
> used them in EE lab years ago, and have a 500MHz 4-channel Infinium
> plus an Agilent's 300MHz MSO on my bench now, so hide that smirk. :-)

I've used H-P scopes, too. They're perfectly fine scopes if you don't need
triggered sweep[1]. Some of them even play games.

[1] even those old Telequipment units would trigger on *some* waveforms.
--
If John McCain gets the 2008 Republican Presidential nomination,
my vote for President will be a write-in for Jiang Zemin.

852. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 22:07:18 UTC
From: mcalhoun@ksu.edu
Message-ID: <dr3k2m$9ks@unix1.cc.ksu.edu>
Source record: 14054

>> I'm considering building the am/cw transmitter in the 1966 handbook
>> (probably in others, too). It runs a single 6146 ....
>I built a similar rig, but it was weakly based on that design.
>Mine had a 6GK6 oscillator and a 6146 final....

>I was thinking of building a simple rig again but with a 1625 in the final.
>I have about a dozen of these bottles in the junk box ....

When I find the right round tuit I want to use TEN 1625's with their
filaments series'd across the 120 VAC line in a simple CW rig. Can't
find it right now, but somewhere around here I have an article from
an old radio magazine describing just such a transmitter.

IIRC, the capacitance from ten tubes limited it to the lower HF band(s),
but it still seems like an easy way to get 750 watts!
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

853. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 22:12:05 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1138054325.381251.183220@g43g2000cwa.googlegroups.com>
Source record: 14053
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"But, as you implied, only to those who are not so-inclined. "

LOL

As I asked, what other fields are tougher?

In colleges in the United States, they use the freshmen and sophmore
engineering track classes to separate the wheat from the chaff with the
wheat going on to engineering and science careers.

Where does the chaff go...business and politics?

TMT

854. Re: how can a casette deck receive a radio program

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 22:33:53 UTC
From: Ted Bruce <kilocycles**@**yahoo.com>
Message-ID: <gamat19m1j22pn8sje8bqqiflalsvac6ej@4ax.com>
Source record: 14055

On Thu, 19 Jan 2006 15:49:06 +0100, "Siggi" <smusnmrNOSPAM@yahoo.com>
wrote:

>Sorry, folks, I am not a radio amateur, but this question puzzles me for
>years, ever since I heared radio programs in an ordinary audio recorder or
>now, in the speakers of my PC. Admitted, we live close to a lot of short
>wave staions, but how can this be? is it diodes in my PC that do the job?
>An electrical engineer friend told me he knows other friends having the same
>experience, but suggested I ask a radi newsgroup. Here I am.
>
>Can you help me?
>
>Thanks, Siggi
>
>P.S. As a child I experimented with a high-resistance speakers and a copper
>penny - heated on one side to function as a detector - but then this was a
>(crude) detector!
>
When I was a kid back in the early '60's, our welded-wire fence picked
up the local AM station.

855. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 22:47:06 UTC
From: Ted Bruce <kilocycles**@**yahoo.com>
Message-ID: <hsmat1t8gqo3dmq6gffr20a4ggohv45egu@4ax.com>
Source record: 14056

On Sun, 22 Jan 2006 03:44:05 GMT, "Jeffrey Bauman"
<jbauman2@earthlink.net> wrote:

>I'm considering building the am/cw transmitter in the 1966 handbook
>(probably in others, too). It runs a single 6146 in the final.
>
>I am curious if anyone has ever built that rig. If I build it, it will
>probably be with an outboard power supply, and a single switch for input /
>tank band switching.
>
>Also curious: Anyone ever homebrewed a DX-60?
>
>Jeff
>W8KZW
>

I have the "Inexpensive 75-Watt Transmitter" from the 1964 Handbook.
It's a 12BY7 oscillator driving a 1625. I bought it on eBay a couple
of years ago, and it looks just like the one in the Handbook, with the
vertically mounted meter, coil shields and exact layout. For some
reason, it got painted black somewhere along the way.

I tried it out a few months ago, and should have reformed the caps.
Kerpow!!! So, I've got some work to do on it.
Ted KX4OM

856. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-23 22:52:17 UTC
From: Ted Bruce <kilocycles**@**yahoo.com>
Message-ID: <ganat1pgvqhvpp57r5l8s1voq3br77jgh5@4ax.com>
Source record: 14057

On Mon, 23 Jan 2006 08:39:46 -0800, Tobin Fricke
<fricke@ocf.berkeley.edu> wrote:

>As a project to learn more about building radio receivers, I'd like to
>build a WWV receiver (or maybe a receiver for the Canadian station CHU,
>since it's nearby and the format sounds easier to decode). I'm looking
>for suggestions for how to design such a radio, reading material, etc.
>
>I was thinking it might be easier to design a fixed-frequency receiver
>(rather than a tunable one) because I could just select the L and C in the
>resonant circuit to give the right frequency. Or, since WWV is at such
>"round number" frequencies, maybe I could somehow use a crystal
>oscillator?
>
>thank you,
>Tobin
The 30 meter Vectronics direct conversion receiver kit can be tuned to
receive WWV. I built one, and before I moved the range up to the 30
meter ham band at 10.100MHz, I used it with WWV at 10.000 MHz to
calibrate my frequency counter.
Ted KX4OM

857. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 00:14:05 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43D57129.5EFD1EB8@earthlink.net>
Source record: 14058
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Rich Grise wrote:
>
> On Sun, 22 Jan 2006 13:57:58 +0000, Michael A. Terrell wrote:
> > Winfield Hill wrote:
> >> Michael A. Terrell wrote...
> >> > Winfield Hill wrote:
> >> >> Michael A. Terrell wrote...
> >> >>>
> >> >>> How many do you need, and can you use ones pulled from PC boards?
> >> >>> I may have some left that I pulled from damaged boards.
> >> >>
> >> >> One or two may be enough for proof-of-principle measurements.
> >> >
> >> > I'll see if I can find a couple for you.
> >>
> >> OK, I'll trade you some 1500V damper diodes, with datasheets.
> >> They should be interesting additions to your parts inventory.
> >>
> >
> > Win, I did a lot of digging and the best I can find is five glass
> > 1N4004s.
>
> As reluctant as I am to contradict a fart who's even older than me, if
> it's glass, it isn't a 1N4004:
> http://www.datasheetcatalog.com/datasheets_pdf/1/N/4/0/1N4004.shtml
>
> Cheers!
> Rich

So, you think that a single datasheet covers all manufacturers, and
all production runs? Once again, you show a great lack of
understanding. I have several glass 1N4004 diodes in front of me.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

858. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 00:36:22 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dr3sq6$6t1$1@engnntp2.cig.mot.com>
Source record: 14059

I built one around '62-'63 from the Handbook. It was ONLY a 6146 amp. I duplicated the osc/driver of the Eico 720 to drive it. I think the amp had a "gimmic* neutralizing cap. I'll probably find it in my mom's house when I have to sell it.
73, Steve, K,9.D;C'I

"Jeffrey Bauman" <jbauman2@earthlink.net> wrote in message news:9cDAf.11050$ZA2.9910@newsread1.news.atl.earthlink.net...
> I'm considering building the am/cw transmitter in the 1966 handbook
> (probably in others, too). It runs a single 6146 in the final.
>
> I am curious if anyone has ever built that rig. If I build it, it will
> probably be with an outboard power supply, and a single switch for input /
> tank band switching.
>
> Also curious: Anyone ever homebrewed a DX-60?
>
> Jeff
> W8KZW
>
>

859. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 00:38:15 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dr3stn$737$1@engnntp2.cig.mot.com>
Source record: 14060

Forgot. 3885 is an AM freq and I think 7295, but not sure. You'll also
hear some on 160.
73, K9DCI

"Mike W" <rrah@pencoys.org.uk> wrote in message
news:43d4ff85.892415390@news.madasafish.com...
> On Sun, 22 Jan 2006 15:17:47 -0500, "wa2mze(spamless)"
> <"wa2mze(spamless)"@bellsouth.net> wrote:
>
>
> >You might as well leave out the
> >AM modulator since it will be useless today. Back in '66-'67 there
> >were still some people on AM (mostly on 80 and 10 meters), but today
> >it's completly gone.
>
> Thats interesting, I wonder what mode I was using on 2m last Sunday
> morning?.
> It was an AM qso over a distance of about 90 miles, received an R5-S3
> and gave an R5-S2. Both of us were running about 2.5w
> --
>
>

860. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 01:42:43 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <BFFAC613.23DEA%dbowey@comcast.net>
Source record: 14061
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On 1/23/06 2:12 PM, in article
1138054325.381251.183220@g43g2000cwa.googlegroups.com, "Too_Many_Tools"
<too_many_tools@yahoo.com> wrote:

> "But, as you implied, only to those who are not so-inclined. "
>
> LOL
>
> As I asked, what other fields are tougher?
>
> In colleges in the United States, they use the freshmen and sophmore
> engineering track classes to separate the wheat from the chaff with the
> wheat going on to engineering and science careers.
>
> Where does the chaff go...business and politics?

Yes. Many get an MBA and then get into electronics companies to screw all
the technical people and steal big dollars from the organization. Some of
the remainder become outstanding engineers.

Don

>
> TMT
>

861. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 02:14:55 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1138068895.375602.223040@z14g2000cwz.googlegroups.com>
Source record: 14062
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"ah, the idjits are going into idjit jobs, just like they always did.
More of the smarter kids are going into medicine, law, and business.
It takes more effort and money than engineering, perhaps, but the
payoff is you are less likely to be outsourced or become obsolescent
halfway through your working life."

I disagree...it takes LESS effort to do medicine, law and business than
engineering.

Money...yes for medicine....effort...no.

Law and business...it takes little intellect to succeed in both fields.

TMT

862. Tube type 10 MHz VFO controlled xmtr - ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 02:37:10 UTC
From: - exray - <exray@coqui.net>
Message-ID: <11tb4mo6vbvvj27@corp.supernews.com>
Source record: 14063

I'm pondering building a 10 MHz CW xmtr. Single band would suit me,
10-50 watts maybe?. I wanna use tubes.
Am thinking about a 2-3 Mhz VFO mixing with an old surplus 7-8 Mc xtal.
I guess a guy could finagle a 2-bander (40/30) with ~8.5 xtal and ~1.5
VFO...hmmm, thats another thought.

Has anyone done something along these lines or maybe a 40/20 rig that I
could scale for 30 meters?

73,
Bill WX4A

863. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 02:51:37 UTC
From: Dan/W4NTI <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <ZCgBf.4535$rH5.1582@newsread2.news.atl.earthlink.net>
Source record: 14064

"wa2mze(spamless)" <"wa2mze(spamless)"@bellsouth.net> wrote in message
news:4JRAf.9605$TK2.151@bignews1.bellsouth.net...
> Jeffrey Bauman wrote:
>> I'm considering building the am/cw transmitter in the 1966 handbook
>> (probably in others, too). It runs a single 6146 in the final.
>>
>> I am curious if anyone has ever built that rig. If I build it, it will
>> probably be with an outboard power supply, and a single switch for input
>> /
>> tank band switching.
>>
>> Also curious: Anyone ever homebrewed a DX-60?
>>
>> Jeff
>> W8KZW
>>
>>
> I built a similar rig, but it was weakly based on that design.
> Mine had a 6GK6 oscillator and a 6146 final. It was built inside
> a chassis with the tubes mounted on a subchassis inside. The tubes
> were "sideways" and holes were drilled in the chassis-cabinet for
> ventilation.
>
> I am assuming the same transmitter was described in the 1967 HB (which
> was the first HB I ever bought). You might as well leave out the
> AM modulator since it will be useless today. Back in '66-'67 there
> were still some people on AM (mostly on 80 and 10 meters), but today
> it's completly gone. Low cost SSB xcvrs wiped out AM by the mid 1970's.
>
> I was thinking of building a simple rig again but with a 1625 in the
> final.
> I have about a dozen of these bottles in the junk box along with half as
> many
> 6AG7's. The crystals will be the scarce items these days (well expensive
> anyway).
>

Just curious why you think the AM modulator will be "useless today" ?????
I'll have to tell those AMers running DX-?? equipment to stop talking into
the mic, right?

Dan/W4NTI

864. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 03:29:50 UTC
From: Keith <krw@att.bizzzz>
Message-ID: <pan.2006.01.24.03.29.48.737058@att.bizzzz>
Source record: 14065
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On Mon, 23 Jan 2006 14:12:05 -0800, Too_Many_Tools wrote:

> "But, as you implied, only to those who are not so-inclined. "
>
> LOL
>
> As I asked, what other fields are tougher?
>
> In colleges in the United States, they use the freshmen and sophmore
> engineering track classes to separate the wheat from the chaff with the
> wheat going on to engineering and science careers.
>
> Where does the chaff go...business and politics?

"Education" or economics.

--
Keith

865. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 04:55:08 UTC
From: Kerry <kmiller@none.com>
Message-ID: <GriBf.144439$WH.91382@dukeread01>
Source record: 14066

Gudmundur wrote:
> In article <CNEzf.140599$WH.64582@dukeread01>, kmiller01at@ticnet.com says...
>
>>I've got a problem with my Astron RS-20 power supply. With no load,
>>it's fine, but anything above 4amps or so makes it drop way down and my
>>rig drops out of lock. I haven't measured it under load but the rig
>>works ok to 10 or 11 volts so it must be dropping below that.
>>
>>I found a schematic and downloaded it, all the voltages are fairly close
>>to what it says on the schematic with no load, I haven't made any
>>measurements with a load on it. I'll pick up a headlight tomorrow to
>>put a load on it and make more measurements.
>>
>>Does anybody have any ideas?
>>
>>Thanks,
>>Kerry, WD5ABC
>
>
> Is it just simply RF getting back into your supply and causing
> havoc? Perhaps the supply is O.K.? You need at least 3 headlights
> to get the supply under a load that compares to your rig. Try
> more lights and see if it craps out.
>

Nothing normal ever seems to happen to me... I did go out to get a 2nd headlight so I could get about 7.75 amps on it. I found a 1000uf capacitor that had a leg corroded so badly that apparently during the move it wiggled around enough to break loose. I went to the local Radio Shack (which, by the way, has apparently turned into a cell phone store) and they didn't have any 1000uf but they did have some 470uf caps so I put two of them in parallel to get close to see if it mattered. Pins 11 and 12 showed about 8 or 9 volts too low before but now they are right on according to the chart on the Astron schematic. I connected one headlight (3.75 amps) and turned on the supply. It showed 13.59 volts. Then I connected the 2nd headlight (4 amps) and it stayed dead on 13.59 volts. Looks like I'm in business!

Somebody has been into this supply before and butchered it, so I may clean up a few things while I'm in it. I guess I should fix that capacitor, the next guy in there will say the same about me if he sees 2 paralleled 470ufs instead of a 1000 uf!

THanks for your help guys!

73,
Kerry
WD5ABC
PS This post may look different, I'm on my Linux box out in the shack
tonight.

866. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 05:27:07 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <BFFAFAAB.23EB6%dbowey@comcast.net>
Source record: 14067
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On 1/23/06 6:14 PM, in article
1138068895.375602.223040@z14g2000cwz.googlegroups.com, "Too_Many_Tools"
<too_many_tools@yahoo.com> wrote:

> "ah, the idjits are going into idjit jobs, just like they always did.
> More of the smarter kids are going into medicine, law, and business.
> It takes more effort and money than engineering, perhaps, but the
> payoff is you are less likely to be outsourced or become obsolescent
> halfway through your working life."
>
> I disagree...it takes LESS effort to do medicine, law and business than
> engineering.
>
> Money...yes for medicine....effort...no.

You are clearly FOS, and lack any first hand knowledge about this. Medicine
takes great determination, money, and effort.

Perhaps you had trouble with engineering because you are one of those not
suited to it.

>
> Law and business...it takes little intellect to succeed in both fields.
>
> TMT
>

867. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 06:08:29 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1138082909.085752.34230@g44g2000cwa.googlegroups.com>
Source record: 14068
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"You are clearly FOS, and lack any first hand knowledge about this.
Medicine
takes great determination, money, and effort.

Perhaps you had trouble with engineering because you are one of those
not
suited to it."

You are the one FOS....you are talking to someone who has done well in
several of the fields we are discussing.

Medicine uses what science/engineering provides for it....and they are
grossly overpaid for it. Without technology, medicine would be the
voodoo that it was and many times still is.

TMT

868. FS: pr 813s and 1625 driver in 3-ft rack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 10:12:41 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <t4nBf.42166$Q11.9999@tornado.ohiordc.rr.com>
Source record: 14069

FS: pr 813s and 1625 driver in 3-ft rack

Driver and final r-f deck are completed, 80-10M c-w, ps for final must be built: have xfmr and caps, no diodes or chassis. 5 813 tubes total available.

Pix available. Sri, no part out.

$200 or near offer. Shipping/insurance extra, naturally.

73, Dave, N3HE
Cincinnati OH 45251

869. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 12:18:52 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <IYoBf.1$4I6.0@fe03.lga>
Source record: 14070
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

"John S." <hjsjms@cs.com> wrote in message
news:1138037282.591618.54410@o13g2000cwo.googlegroups.com...

> Are you looking to decode the data transmissions or listen to the voice
> signals. If the former it may take something more sophisticated
> because you will have to feed a decoder.

Well, the 60 kHz WWVB transmissions were designed to be decoded, and there
are a fair number of projects out there to do just that. However, depending
on where you are, you can typically only hear WWVB for a small part of the
day.

..

870. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 13:58:26 UTC
From: Allison-nospam@nouce.bellatlantic.net
Message-ID: <macct1paiov2p1cefc5ncqo3lc1f7ar8fh@4ax.com>
Source record: 14071

On Mon, 23 Jan 2006 08:39:46 -0800, Tobin Fricke
<fricke@ocf.berkeley.edu> wrote:

>As a project to learn more about building radio receivers, I'd like to
>build a WWV receiver (or maybe a receiver for the Canadian station CHU,
>since it's nearby and the format sounds easier to decode). I'm looking
>for suggestions for how to design such a radio, reading material, etc.
>
>I was thinking it might be easier to design a fixed-frequency receiver
>(rather than a tunable one) because I could just select the L and C in the
>resonant circuit to give the right frequency. Or, since WWV is at such
>"round number" frequencies, maybe I could somehow use a crystal
>oscillator?
>
>thank you,
>Tobin

How about a simple one to three transistor regenative reciever. There
are several on the net.

Here's a few:

w1.859.telia.com/~u85920178/rx/regenrx.htm
http://www.techlib.com/electronics/regen.html
http://www.tricountyi.net/~randerse/regen.htm

Try Google for more.

Allison
no spam, no uce!

871. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 14:15:27 UTC
From: "John S." <hjsjms@cs.com>
Message-ID: <1138112127.233176.111290@g44g2000cwa.googlegroups.com>
Source record: 14072
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

xpyttl wrote:
> "John S." <hjsjms@cs.com> wrote in message
> news:1138037282.591618.54410@o13g2000cwo.googlegroups.com...
>
> > Are you looking to decode the data transmissions or listen to the voice
> > signals. If the former it may take something more sophisticated
> > because you will have to feed a decoder.
>
> Well, the 60 kHz WWVB transmissions were designed to be decoded, and there
> are a fair number of projects out there to do just that. However, depending
> on where you are, you can typically only hear WWVB for a small part of the
> day.
>
> ..

True, but his message did not make that clear. A receiver that tunes
to the HF voice signals won't work well on the LF band.

872. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 15:40:41 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <BFFB8A79.23F67%dbowey@comcast.net>
Source record: 14073
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On 1/23/06 10:08 PM, in article
1138082909.085752.34230@g44g2000cwa.googlegroups.com, "Too_Many_Tools"
<too_many_tools@yahoo.com> wrote:

> "You are clearly FOS, and lack any first hand knowledge about this.
> Medicine
> takes great determination, money, and effort.
>
> Perhaps you had trouble with engineering because you are one of those
> not
> suited to it."
>
> You are the one FOS....you are talking to someone who has done well in
> several of the fields we are discussing.
>
> Medicine uses what science/engineering provides for it....and they are
> grossly overpaid for it. Without technology, medicine would be the
> voodoo that it was and many times still is.
>
> TMT
>

Beating your chest and repeating yourself doesn't change anything..... You
are still ignorant of the facts.

Don

873. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 15:58:14 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1138118294.691898.166020@o13g2000cwo.googlegroups.com>
Source record: 14074

Allison-nospam@nouce.bellatlantic.net wrote:
> How about a simple one to three transistor regenative reciever.

In principle that's a great idea, but the gotcha is that very near WWV's 10MHz frequency there are a lot of powerhouse SW broadcasters. Here on the East Coast in the evenings, there are at least 10 SW broadcasters each of which are 10x more powerful all within +/- 100kHz of 10MHz, several of them within 10kHz of 10MHz.

If I fire up my regenerative receiver (my trusty old Space Spanner that my Dad bought for me when I was in 2nd grade!) WWV 10MHz reception does not work at all in the evenings due to those broadcasters, my particular regen just does not deal well with all those stations packed so tight together. The adjacent broadcasters block up the receiver or sometimes the regen locks onto them instead!

On 5 or 15 or 20 MHz, or on the west coast, the regenerative may welll work better. (There are SW broadcasters near 5 and 15 but not nearly so close and not nearly so packed.)

If the OP is looking for a build-it-yourself SW receiver for picking up the powerhouse SW broadcasters, then a regen is a fine choice. In fact my complaint is that my regen doesn't pick up WWV because of all those other broadcasters outgunning it here :-).

Ten-Tec and others sell really nice regenerative receiver kits for SW.

Tim.

874. Re: Tube type 10 MHz VFO controlled xmtr - ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 16:11:05 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1138119065.743337.247940@f14g2000cwb.googlegroups.com>
Source record: 14075

Exray wrote:

> Am thinking about a 2-3 Mhz VFO mixing with an old surplus 7-8 Mc xtal.

The 10MHz band is so narrow (10.1 through what, 10.14 MHz?) that a
couple of crystals and some rubbering can cover it.

The VFO+mixer scheme is great for a multi-band SSB xcvr but the
complexity really isn't needed in a CW transmitter. Just build a VFO
straight for 10MHz, or double up from 5MHz (lots of 5MHz VFO plans in
all the handbooks) or triple up from 3.3x MHz.

Tim KA0BTD

875. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 16:28:55 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11tcli3npls3nf7@corp.supernews.com>
Source record: 14076
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

"xpyttl" <xpyttl_NOSPAM@earthling.net> wrote in message
news:IYoBf.1$4I6.0@fe03.lga...
> However, depending on where you are, you can typically only hear WWVB for a
> small part of the day.

Does a bigger antenna help? Or is there just so much more background noise
than signal that it's a lost cause?

Hmm... isn't the data rate something like 1bps? Maybe they could do some
direct sequence spreading at 100Hz or so and improve the link margin a handful
of dB... :-)

876. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 17:20:35 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43D661BF.2E66305B@earthlink.net>
Source record: 14077
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

Joel Kolstad wrote:
>
> "xpyttl" <xpyttl_NOSPAM@earthling.net> wrote in message
> news:IYoBf.1$4I6.0@fe03.lga...
> > However, depending on where you are, you can typically only hear WWVB for a
> > small part of the day.
>
> Does a bigger antenna help? Or is there just so much more background noise
> than signal that it's a lost cause?
>
> Hmm... isn't the data rate something like 1bps? Maybe they could do some
> direct sequence spreading at 100Hz or so and improve the link margin a handful
> of dB... :-)

And lose the ability to be used as a frequency standard?

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

877. Gunnplexer connected to antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 18:10:54 UTC
From: mustafa umut sarac <mustafaumutsarac@gmail.com>
Message-ID: <1138126254.529100.134230@g43g2000cwa.googlegroups.com>
Source record: 14078

Can gunplexer transmitter and receiver can be mounted to external
antennas ?

Best ,

Mustafa Umut Sarac

878. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 18:33:31 UTC
From: Allison-nospam@nouce.bellatlantic.net
Message-ID: <3jsct1d0vlqmlf00dndg0entinpco5m9o9@4ax.com>
Source record: 14079

On 24 Jan 2006 07:58:14 -0800, "Tim Shoppa" <shoppa@trailing-edge.com>
wrote:

>Allison-nospam@nouce.bellatlantic.net wrote:
>> How about a simple one to three transistor regenative reciever.
>
>In principle that's a great idea, but the gotcha is that very near
>WWV's 10MHz frequency there are a lot of powerhouse SW broadcasters.
>Here on the East Coast in the evenings, there are at least 10 SW
>broadcasters each of which are 10x more powerful all within +/- 100kHz
>of 10MHz, several of them within 10kHz of 10MHz.
>
>If I fire up my regenerative receiver (my trusty old Space Spanner that
>my Dad bought for me when I was in 2nd grade!) WWV 10MHz reception does
>not work at all in the evenings due to those broadcasters, my
>particular regen just does not deal well with all those stations packed
>so tight together. The adjacent broadcasters block up the receiver or
>sometimes the regen locks onto them instead!
>
>On 5 or 15 or 20 MHz, or on the west coast, the regenerative may welll
>work better. (There are SW broadcasters near 5 and 15 but not nearly so
>close and not nearly so packed.)
>
>If the OP is looking for a build-it-yourself SW receiver for picking up
>the powerhouse SW broadcasters, then a regen is a fine choice. In fact
>my complaint is that my regen doesn't pick up WWV because of all those
>other broadcasters outgunning it here :-).
>
>Ten-Tec and others sell really nice regenerative receiver kits for SW.
>
>Tim.

The trick with regens is to couple as loosely as possible. There is
enough gain in most regens that even a very loose coupling is enough
to overlaod and flatten out the selectivity.

At 5mhz I have no difficulty here is MA and at 10mhz it's still not a
problem. I've even heard WWVH from here when propagation was good.

Allison

879. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 19:13:32 UTC
From: mzenier@eskimo.com
Message-ID: <dr8cn1$3a3$1@eskinews.eskimo.com>
Source record: 14012
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

In article <IYoBf.1$4I6.0@fe03.lga>,
xpyttl <xpyttl_NOSPAM@earthling.net> wrote:
>"John S." <hjsjms@cs.com> wrote in message
>news:1138037282.591618.54410@o13g2000cwo.googlegroups.com...
>
>> Are you looking to decode the data transmissions or listen to the voice
>> signals. If the former it may take something more sophisticated
>> because you will have to feed a decoder.
>
>Well, the 60 kHz WWVB transmissions were designed to be decoded, and there
>are a fair number of projects out there to do just that. However, depending
>on where you are, you can typically only hear WWVB for a small part of the
>day.

The same time code is in the WWV HF signals as a 100 Hz, One Baud, pulse
duration modulated subcarrier tone. If you've only got a communications
grade speaker in your receiver, you may not notice it.

Mark Zenier mzenier@eskimo.com
Googleproofaddress(account:mzenier provider:eskimo domain:com)

880. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 19:17:35 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1138130255.659502.5070@z14g2000cwz.googlegroups.com>
Source record: 14080
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

"Beating your chest and repeating yourself doesn't change anything.....
You
are still ignorant of the facts.

Don "

Well Don, why don't you enlighten us with "The Facts"?

I look forward to hearing them.

Until then, you have little creditability with me.

As for me "repeating", well sometimes you have to repeat the material
for the slower ones in the group....I said. "sometimes you have to
repeat the material for the slower ones in the group". LOL

TMT

881. Re: Tube type 10 MHz VFO controlled xmtr - ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 19:18:06 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <PeqdnRCss9_64EveRVn-uw@web-ster.com>
Source record: 14081

Tim Shoppa wrote:

> Exray wrote:
>
>
>>Am thinking about a 2-3 Mhz VFO mixing with an old surplus 7-8 Mc xtal.
>
>
> The 10MHz band is so narrow (10.1 through what, 10.14 MHz?) that a
> couple of crystals and some rubbering can cover it.

How easy is it to rubber a crystal in a tube oscillator?

(note to OP: If you use any of the older designs for a crystal
oscillator make sure your crystal can handle it -- the older crystals
were physically larger & could handle more power)
>
> The VFO+mixer scheme is great for a multi-band SSB xcvr but the
> complexity really isn't needed in a CW transmitter. Just build a VFO
> straight for 10MHz, or double up from 5MHz (lots of 5MHz VFO plans in
> all the handbooks) or triple up from 3.3x MHz.
>
> Tim KA0BTD
>
That's how I'd do it -- probably by tripling from 3.3x MHz, 'cause then
I could use the same VFO for other bands. One could, in fact, just use
one of the Handbook designs with the right coil set and possibly a
capacitor switched into the VFO to pull the frequency down a bit.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

882. Re: Gunnplexer connected to antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 21:15:33 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <43d698b5.109163318@news.blueyonder.co.uk>
Source record: 14082

On 24 Jan 2006 10:10:54 -0800, "mustafa umut sarac"
<mustafaumutsarac@gmail.com> wrote:

>
>Can gunplexer transmitter and receiver can be mounted to external
>antennas ?
>
>Best ,
>
>Mustafa Umut Sarac

Yes, of course, but you'll need to waterproof the installation

Peter, G3PHO

883. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 22:43:07 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <74yBf.35$gX6.31@fe07.lga>
Source record: 14083

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
news:1138118294.691898.166020@o13g2000cwo.googlegroups.com...
> Allison-nospam@nouce.bellatlantic.net wrote:
>> How about a simple one to three transistor regenative reciever.
>
> In principle that's a great idea, but the gotcha is that very near
> WWV's 10MHz frequency there are a lot of powerhouse SW broadcasters.

Well, I suppose it depends on where OP is. Here in the middle, 10 MHz isn't much of a problem but 15 is.

HOWEVER, 10 has one huge advantage -- there are very low cost uP crystals for 10 MHz, so building even a simple reciever with a brick wall front end isn't such a big deal, if the only frequency you care about is 10 MHz. Personally, I'd go with a DC rather than a regen - a lot simpler and these days, a simple SA612 will give you way more sensitivity than you can possibly use on 10 MHz for a couple bucks. Well, with a crystal filter in front maybe you will need a little amp, not so sure. But still quite a bit simpler than a regen. Heck, if the local QRM isn't too strong, I bet a 10 MHz uP crystal, a 612 and an audio amp (like a 386 or so) is all you would need.

A friend of mine did an article on a simple WWV reciever for QRP Homebrewer recently, issue #5 I think. He was more interested in the frequency standard than hearing the sounds, so his contribution was recognizing the zero beat, but still an interesting article if you can find a copy.

..

884. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 23:38:02 UTC
From: Allison-nospam@nouce.bellatlantic.net
Message-ID: <ceedt1php5bc63mc8eqobt8e6vij7268mg@4ax.com>
Source record: 14084

On Tue, 24 Jan 2006 17:43:07 -0500, "xpyttl"
<xpyttl_NOSPAM@earthling.net> wrote:

>"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
>news:1138118294.691898.166020@o13g2000cwo.googlegroups.com...
>> Allison-nospam@nouce.bellatlantic.net wrote:
>>> How about a simple one to three transistor regenative reciever.
>>
>> In principle that's a great idea, but the gotcha is that very near
>> WWV's 10MHz frequency there are a lot of powerhouse SW broadcasters.
>
>Well, I suppose it depends on where OP is. Here in the middle, 10 MHz isn't
>much of a problem but 15 is.
>
>*HOWEVER*, 10 has one huge advantage -- there are very low cost uP crystals
>for 10 MHz, so building even a simple reciever with a brick wall front end
>isn't such a big deal, if the only frequency you care about is 10 MHz.
>Personally, I'd go with a DC rather than a regen - a lot simpler and these
>days, a simple SA612 will give you way more sensitivity than you can
>possibly use on 10 MHz for a couple bucks. Well, with a crystal filter in
>front maybe you will need a little amp, not so sure. But still quite a bit
>simpler than a regen. Heck, if the local QRM isn't too strong, I bet a 10
>MHz uP crystal, a 612 and an audio amp (like a 386 or so) is all you would
>need.
>
>A friend of mine did an article on a simple WWV reciever for QRP Homebrewer
>recently, issue #5 I think. He was more interested in the frequency
>standard than hearing the sounds, so his contribution was recognizing the
>zero beat, but still an interesting article if you can find a copy.
>

For wwv I consider DC the least useful. One approach I've also tried
is 9.6mhz crystal LO and use 455khz if can retuned to 400khz. that
works and uses fairly easy to get parts. That allows a diode
detector for zero beat against external sources and copy of the audio
without beats.

Allison

885. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-24 23:47:16 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <BFFBFC84.24089%dbowey@comcast.net>
Source record: 14085
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On 1/24/06 11:17 AM, in article
1138130255.659502.5070@z14g2000cwz.googlegroups.com, "Too_Many_Tools"
<too_many_tools@yahoo.com> wrote:

> "Beating your chest and repeating yourself doesn't change anything.....
> You
> are still ignorant of the facts.
>
> Don "
>
> Well Don, why don't you enlighten us with "The Facts"?
>
> I look forward to hearing them.

My facts are that I raised three children, who from the oldest to the youngest, got their degrees in chemistry, physics, and medicine (MD) respectively. I know what they and their friends went through in the several programs, and what their lives have been like since graduating. Only the medical students were treated like indentured slaves, and forced to work 16 and more hours a day during the internship and residency. My daughter, after completing her normal residency (internal medicine), opted for another year in a work/study program in infectious diseases. In her practice, she writes off a lot of billable hours for her patients. She doesn't do much more than break even with her costs many months. Her husband, a Urology surgeon has a higher income, but also writes off quite a bit. A typical workday is 12 hours, plus calls at home and some weekend work.

My other two children, and myself, worked hard at getting through school, but had lots of playtime. It was work, but not torturous as it was with the medical students.

>
> Until then, you have little creditability with me.

I'm so glad.

>
> As for me "repeating", well sometimes you have to repeat the material
> for the slower ones in the group....I said. "sometimes you have to
> repeat the material for the slower ones in the group". LOL

Oh, yes, that was humorous.

>
> TMT
>

886. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 03:01:57 UTC
From: Homer J Simpson <nobody@nowhere.com>
Message-ID: <FSBBf.109879$AP5.18675@edtnps84>
Source record: 14086
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
news:43D57129.5EFD1EB8@earthlink.net...

> So, you think that a single datasheet covers all manufacturers, and
> all production runs? Once again, you show a great lack of
> understanding. I have several glass 1N4004 diodes in front of me.

400 PIV?

887. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 03:20:48 UTC
From: Tobin Fricke <fricke@ocf.berkeley.edu>
Message-ID: <Pine.SOL.4.63.0601241917560.18810@conquest.OCF.Berkeley.EDU>
Source record: 14087
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

On Mon, 23 Jan 2006, John S. wrote:

> Are you looking to decode the data transmissions or listen to the voice
> signals. If the former it may take something more sophisticated because
> you will have to feed a decoder.

I'm interested in both. From the radio perspective, I'll certainly be happy (but not satisfied) when I am able to hear the station's audio. However, I was thinking this would be a good project in part because it leads to the logical extension of decoding the time signals. My plan of attack is to first try to get the audio, then try inputting it to the audio input of a PC and writing a program to decode the time signal, and finally implementing some kind of microprocessor-based decoder.

Tobin Fricke
--
http://web.pas.rochester.edu/~tobin/

888. shortwave

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 03:25:22 UTC
From: Tobin Fricke <fricke@ocf.berkeley.edu>
Message-ID: <Pine.SOL.4.63.0601241923010.18810@conquest.OCF.Berkeley.EDU>
Source record: 14088
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

On Tue, 24 Jan 2006, Tim Shoppa wrote:

> In principle that's a great idea, but the gotcha is that very near WWV's
> 10MHz frequency there are a lot of powerhouse SW broadcasters. Here on
> the East Coast in the evenings, there are at least 10 SW broadcasters
> each of which are 10x more powerful all within +/- 100kHz of 10MHz,
> several of them within 10kHz of 10MHz.

What are these high-power shortwave stations on the east coast? I often
wonder what is "out there" these days to tune in.

Tobin

889. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 03:41:46 UTC
From: Tobin Fricke <fricke@ocf.berkeley.edu>
Message-ID: <Pine.SOL.4.63.0601241932110.18810@conquest.OCF.Berkeley.EDU>
Source record: 14089

On Tue, 24 Jan 2006, xpyttl wrote:

> Well, I suppose it depends on where OP is. Here in the middle, 10 MHz isn't
> much of a problem but 15 is.

I am in Rochester, NY.

> *HOWEVER*, 10 has one huge advantage -- there are very low cost uP crystals
> for 10 MHz, so building even a simple reciever with a brick wall front end
> isn't such a big deal, if the only frequency you care about is 10 MHz.

Yes, that is what I was thinking. Is there a simple way to do frequency multiplication (or division) to get 2.5, 5, 15, and 20 MHz additionally, and thus be able to switch between all of the WWV frequencies?

"Brick wall front end"?

> Personally, I'd go with a DC rather than a regen - a lot simpler and these
> days, a simple SA612 will give you way more sensitivity than you can
> possibly use on 10 MHz for a couple bucks.

> Heck, if the local QRM isn't too strong, I bet a 10 MHz uP crystal, a
> 612 and an audio amp (like a 386 or so) is all you would need.

That sounds great.

> A friend of mine did an article on a simple WWV reciever for QRP Homebrewer
> recently, issue #5 I think. He was more interested in the frequency
> standard than hearing the sounds, so his contribution was recognizing the
> zero beat, but still an interesting article if you can find a copy.

I don't see any articles on WWV receivers there... Does anything look familiar: http://www.njqrp.org/data/qrp_homebrewer.html

thanks,
Tobin Fricke

--
http://web.pas.rochester.edu/~tobin/

890. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 03:43:45 UTC
From: Tobin Fricke <fricke@ocf.berkeley.edu>
Message-ID: <Pine.SOL.4.63.0601241941580.18810@conquest.OCF.Berkeley.EDU>
Source record: 14090

On Tue, 24 Jan 2006, Allison-nospam@nouce.bellatlantic.net wrote:

> For wwv I consider DC the least useful. One approach I've also tried

What do yo umean by "least useful"?

> is 9.6mhz crystal LO and use 455khz if can retuned to 400khz. that
> works and uses fairly easy to get parts. That allows a diode
> detector for zero beat against external sources and copy of the audio
> without beats.

What is the 400 kHz used for?

Tobin Fricke
--
http://web.pas.rochester.edu/~tobin/

891. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 04:02:03 UTC
From: - exray - <exray@coqui.net>
Message-ID: <11tdu1soq6a9bb3@corp.supernews.com>
Source record: 14091

Tobin Fricke wrote:

>> is 9.6mhz crystal LO and use 455khz if can retuned to 400khz. that
>> works and uses fairly easy to get parts. That allows a diode
>> detector for zero beat against external sources and copy of the audio
>> without beats.
>
>
> What is the 400 kHz used for?
>
> Tobin Fricke

Incoming 10.000 MHz signal with a 9.600 xtal heterodyne oscillator will create at .400 IF frequency. If you had a 9.545 xtal then a .455 IF would add up to the 10.000 incoming freq. Six of one, half dozen of the other. Thats based on an easy to find crystal.

You asked in another reply about the other nearby signals to 10.000. There's plenty! The 9900-10000 freqs are in common use these days and there's a few powerhouses. I recall a strong BBC outlet on 9985 I think it is?

That said, on any receiver worth its salt they should not be an issue. I have no trouble at all with WWV on 10 Mhz on even simple 1-2 tube regen rcvrs at my location (KP4). Thats not a recommendation for simple 1-2 tube receivers in as much as to say that overloading is something to be considered. You might oughta try listening on a real receiver first to get a feel for the band and general reception capabilities at 10 MHz. You can get one of those cheapo Chinese digital shortwave radios nowadays for under $50, non digital for about $15-20. Not only will they reveal how well WWV/10 is received at your location but you may get a real-time example of overloading effects as well!

-Bill

892. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 04:06:22 UTC
From: Tobin Fricke <fricke@ocf.berkeley.edu>
Message-ID: <Pine.SOL.4.63.0601242005330.19638@conquest.OCF.Berkeley.EDU>
Source record: 14092

On Tue, 24 Jan 2006, Allison-nospam@nouce.bellatlantic.net wrote:

> The trick with regens is to couple as loosely as possible. There is
> enough gain in most regens that even a very loose coupling is enough to
> overlaod and flatten out the selectivity.

Could you recommend a good introduction to the theory of the regenerative
receiver (and superregen)?

thanks,
Tobin

893. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 05:31:23 UTC
From: - exray - <exray@coqui.net>
Message-ID: <11te39cnppt5t03@corp.supernews.com>
Source record: 14093

Tobin Fricke wrote:

> On Tue, 24 Jan 2006, Allison-nospam@nouce.bellatlantic.net wrote:
>
>> The trick with regens is to couple as loosely as possible. There is
>> enough gain in most regens that even a very loose coupling is enough
>> to overlaod and flatten out the selectivity.
>
>
> Could you recommend a good introduction to the theory of the
> regenerative receiver (and superregen)?
>
> thanks,
> Tobin
>

I'll recommend a little book that is readily available. "Secrets of Homebuilt Regenerative Receivers" by C.F. "Rock" Rockey. Its a Lindsay Publications book.
Rockey does a good job at simplifying the simple :) Basically the concept of a regen is feeding the output back into the input for reamplification. Theoretically its a somewhat infinite process in that the reamplification continues repeating itself resulting in very high gain at the particular frequency the set is tuned to and thats also where the selectivity improvement comes from.
Its similar to oscillation in a tube.

The coupling issue mentioned by Allison is related in the sense that heavy antenna loading will decrease the circuit Q and consequently decrease its selectivity as the regenerative signal makes its round-trip thru the circuit. That opens the window for strong stations that are well off frequency to easily overload the circuit as a whole due to the high magnitude of amplification. You'll see some circuits with direct antenna connections to the tank circuit (bad)...some use a separate antenna winding on the coil (better) some use capacitive coupling to the tank...some use a combination of both.

Easy enough to build one for grins...might not be as stable as you would want for your decoding project but would be a good, fun exercise just the same.

GL,
Bill

894. SolderSmoke14:LTSpice,feedback,PIC,diplexer,whale!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 06:25:58 UTC
From: bill.meara@gmail.com
Message-ID: <1138170358.823578.319560@g14g2000cwa.googlegroups.com>
Source record: 14094
Cross-posted to: sci.electronics.basics,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.misc

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Topics discussed in SolderSmoke 14:
-- LTSpice: QRP-L discussion, WA5BDU tutorial, KE6US site
-- Understanding feedback amps
-- Model of Warbler amplifier
-- PIC-El board frequency counter
-- Color burst crystal filters
-- 70cm/2m diplexer & butane soldering iron
-- SolderSmoke's BLOG
-- The return of the Stardust spacecraft
-- The whale that visited Bill's neighborhood
-- HCJB and quads
-- Mailbag

Listen at: http://www.ourmedia.org/user/36170
just scroll down to SolderSmoke #14 Our Blog is a bit further down on the page.

Background:
Tired of listening to Led Zepplin or NPR on your I-Pod? Wouldn't you like to be able to carry with you a show about homebrew electronics? Mike in Juneau, Alaska, and Bill, in London, England meet regularly on the ECHOLINK system to discuss their homebrew radio projects. We are making them available as PODCASTS.

You can subscribe to the program, have them downloaded to your MP-3 player, and listen to them at your convenience. To subscribe, just cut and paste this URL into your I-poder (or similar) software.

http://www.ourmedia.org/mediarss/user/36170

If you don't have an MP3 player you can just go to the site below and listen to the latest program (and earlier editions) using the audio software on your computer.

http://www.ourmedia.org/user/36170

We hope you enjoy the program. Please send us feedback.

Regards from London
Bill
http://www.qsl.net/n2cqr

895. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 06:30:06 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <8n6et1hcjnf247d10dor5afqn67ma9i2sp@4ax.com>
Source record: 14095
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

On Tue, 24 Jan 2006 17:20:35 GMT, "Michael A. Terrell"
<mike.terrell@earthlink.net> wrote:

>Joel Kolstad wrote:
>>
>> "xpyttl" <xpyttl_NOSPAM@earthling.net> wrote in message
>> news:IYoBf.1$4I6.0@fe03.lga...
>> > However, depending on where you are, you can typically only hear WWVB for a
>> > small part of the day.
>>
>> Does a bigger antenna help? Or is there just so much more background noise
>> than signal that it's a lost cause?
>>
>> Hmm... isn't the data rate something like 1bps? Maybe they could do some
>> direct sequence spreading at 100Hz or so and improve the link margin a handful
>> of dB... :-)

If the problem is more or less random noise, what is the point of
spreading the transmit signal, since the same noise density would
appear in a specific bandwidth after despreading.

> And lose the ability to be used as a frequency standard?

The GPS signal is DSSS and it can be used as a time and/or frequency
standard.

Paul

896. Re: Gunnplexer connected to antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 07:10:27 UTC
From: Lynn Coffelt <coffelt2@comcast.net>
Message-ID: <dr789k$7n6$1@domitilla.aioe.org>
Source record: 14096

"mustafa umut sarac" <mustafaumutsarac@gmail.com> wrote in message
news:1138126254.529100.134230@g43g2000cwa.googlegroups.com...
>
> Can gunplexer transmitter and receiver can be mounted to external
> antennas ?
>
> Best ,
>
> Mustafa Umut Sarac

I can't be much help here, but maybe someone else remembers better
about a scheme dubbed "open wire waveguide"..... I'm very foggy on the
details, but seems like the system was tried with the gunnplexer. An old QST
or CQ think I think..... 50 years ago?
Old Chief Lynn..... W7LTQ

897. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 07:25:48 UTC
From: Lynn Coffelt <coffelt2@comcast.net>
Message-ID: <dr796b$8vt$1@domitilla.aioe.org>
Source record: 14097

> >I was thinking of building a simple rig again but with a 1625 in the
final.
> >I have about a dozen of these bottles in the junk box ....
>
> When I find the right round tuit I want to use TEN 1625's with their
> filaments series'd across the 120 VAC line in a simple CW rig. Can't
> find it right now, but somewhere around here I have an article from
> an old radio magazine describing just such a transmitter.
>
> IIRC, the capacitance from ten tubes limited it to the lower HF band(s),
> but it still seems like an easy way to get 750 watts!
> --
> --Myron A. Calhoun.

Hey, Man, I don't know about TEN 1625's, but I did try five 1625's (in
parallel, of course) and could work up to 40 CW..... (as an American in
France, F7CT). Almost 1000VDC on the plates, and they did get pretty rosy
on a long "dah". 1625's could be drawn by the basket full from the MARS
storeroom at Toul Rosieres Air Base, France. 1962.....1963?
Old Chief Lynn..... W7LTQ

898. Re: Gunnplexer connected to antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 09:33:03 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1138181583.213506.120260@f14g2000cwb.googlegroups.com>
Source record: 13998

Oh yes, I remeber that! it was dubbed G-Line from its inventor, Georges Goubaut, canadian I think.
that line has very low losses and can operate wonderfully. However, in this case it's going to be hard to couple the cavity to such a line.
the Gunnplexer is phase sensitive and needs circular polarized antennas to operate correctly. I would suggest that a better approach would be to waterproof the whole thing and locate it on the tower, going down with cables on the low frequency side. I used to peel off the mica window found on old kerosene burning heating stoves and ose that with a few dabs of RTV to waterproof the cavity opening and put the whole on the roof.
Saandy 4Z5KS

899. Re: Gunnplexer connected to antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 09:34:16 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1138181656.569675.6850@g14g2000cwa.googlegroups.com>
Source record: 13999

BTW, it appeared in Popular Electronics. I still have a copy of the
pater somewhere at home.

900. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 11:22:17 UTC
From: Mike <nomtrxspam@comcast.net>
Message-ID: <qgnet19dsv9rmbk13obokug8flgbckj1r2@4ax.com>
Source record: 14000

On Tue, 24 Jan 2006 20:06:22 -0800, Tobin Fricke
<fricke@ocf.berkeley.edu> wrote:

>On Tue, 24 Jan 2006, Allison-nospam@nouce.bellatlantic.net wrote:
>
>> The trick with regens is to couple as loosely as possible. There is
>> enough gain in most regens that even a very loose coupling is enough to
>> overlaod and flatten out the selectivity.
>
>Could you recommend a good introduction to the theory of the regenerative
>receiver (and superregen)?
>
>thanks,
>Tobin
You may want to consider this little regen receiver project. The board
for it is available from Far Circuits for around $5, or you could make
your own board.
http://www.electronics-tutorials.com/receivers/regen-radio-receiver.htm

Mike

901. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 12:19:47 UTC
From: Allison-nospam@nouce.bellatlantic.net
Message-ID: <56ret197gnch4vetbe7p4tia0p6vfgdir4@4ax.com>
Source record: 14001

On Tue, 24 Jan 2006 20:06:22 -0800, Tobin Fricke
<fricke@ocf.berkeley.edu> wrote:

>On Tue, 24 Jan 2006, Allison-nospam@nouce.bellatlantic.net wrote:
>
>> The trick with regens is to couple as loosely as possible. There is
>> enough gain in most regens that even a very loose coupling is enough to
>> overlaod and flatten out the selectivity.
>
>Could you recommend a good introduction to the theory of the regenerative
>receiver (and superregen)?
>
>thanks,
>Tobin

I Don't have any but I'd look on the net as there are gobs of circuits
with explanation. However the best explaied ones may be the older
tube designs.

Allison

902. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 12:22:58 UTC
From: Allison-nospam@nouce.bellatlantic.net
Message-ID: <garet1l1n016psf9vks8q088rb53v9ltf6@4ax.com>
Source record: 14002

On Tue, 24 Jan 2006 19:43:45 -0800, Tobin Fricke
<fricke@ocf.berkeley.edu> wrote:

>On Tue, 24 Jan 2006, Allison-nospam@nouce.bellatlantic.net wrote:
>
>> For wwv I consider DC the least useful. One approach I've also tried
>
>What do yo umean by "least useful"?

I consider recieving AM transmissions with a system more optimum a
less than desireable thing unless the LO is locked (PLL) to the source
and thats a lot of complication.

>
>> is 9.6mhz crystal LO and use 455khz if can retuned to 400khz. that
>> works and uses fairly easy to get parts. That allows a diode
>> detector for zero beat against external sources and copy of the audio
>> without beats.
>
>What is the 400 kHz used for?

IF amplifer as in superhet style of reciever.

Allison

903. Rotor soggestion

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 12:34:12 UTC
From: amdx <amdx@worldnet.att.net>
Message-ID: <8f473$43d7704b$18d6b488$6453@KNOLOGY.NET>
Source record: 14003

I'm going to buy a rotor for my flag antenna. I have a rotor now but it is
one of the old TV antenna rotors with a control unit that goes klunk, klunk,
klunk,
as the antenna turns. I'm hope newer rotors have quiet control units.
It doesn't have to be heavy duty the TV antenna rotor has worked fine.
What are some rotor suggestions?

P.S. Has anyone built a quiet control unit for the old Alliance U-110 rotor?
My rotor works fine, but the klunking at midnight bothers my wife!

Mike

904. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 13:34:17 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <A7LBf.1$T07.0@fe04.lga>
Source record: 14004

"Tobin Fricke" <fricke@ocf.berkeley.edu> wrote in message
news:Pine.SOL.4.63.0601241932110.18810@conquest.OCF.Berkeley.EDU...

> I don't see any articles on WWV receivers there... Does anything look
> familiar: http://www.njqrp.org/data/qrp_homebrewer.html

Sorry, I meant "Homebrewer" rather than "QRP Home brewer". The AmQRP rag
rather than the now-defunct NJQRP mag.

..

905. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 15:02:06 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dr83te02oth@drn.newsguy.com>
Source record: 14006
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Rich Grise wrote...
>
> As reluctant as I am to contradict a fart who's even older than
> me, if it's glass, it isn't a 1N4004:
> http://www.datasheetcatalog.com/datasheets_pdf/1/N/4/0/1N4004.shtml

You're probably wrong, of course, as Michael Terrell points out,
but I'll have to admit that's an impressive list, and I love the
manufacturer's logos, 26 of them, all lined up. Sigh, I only have
datasheets from 20, stored in my computer. But, I have them from
Won-Top, Leshan Radio, Gulf Semi, Formosa Micro, Dachang, and
Bytesonic, to name a few they don't have, SFAICS. Plus, I have
multiple versions from several of the companies. So there!

So many files, so little time.

--
Thanks,
- Win

906. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 15:13:51 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43D79586.23110735@earthlink.net>
Source record: 14005
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

Paul Keinanen wrote:
>
> The GPS signal is DSSS and it can be used as a time and/or frequency
> standard.

So, you want everyone still using WWVB for a frequency standard to
spend wads of cash to convert?

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

907. www.datasheetcatalog.com - great datasheet site (was Re: Unusual functions of cheap parts)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 15:26:04 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dr85ac02tne@drn.newsguy.com>
Source record: 14007
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Winfield Hill wrote...
>
> Rich Grise wrote...
>>
>> As reluctant as I am to contradict a fart who's even older than
>> me, if it's glass, it isn't a 1N4004:
>> http://www.datasheetcatalog.com/datasheets_pdf/1/N/4/0/1N4004.shtml
>
> You're probably wrong, of course, as Michael Terrell points out,
> but I'll have to admit that's an impressive list, and I love the
> manufacturer's logos, 26 of them, all lined up. Sigh, I only have
> datasheets from 20, stored in my computer. But, I have them from
> Won-Top, Leshan Radio, Gulf Semi, Formosa Micro, Dachang, and
> Bytesonic, to name a few they don't have, SFAICS. Plus, I have
> multiple versions from several of the companies. So there!
>
> So many files, so little time.

Correction, they had Leshan Radio, listed as LRC. What a great
site,** now I have 1n4000-series data from 35 manufacturers.
That's got to be a record. Maybe I can stop now. [smile]

** They do append their own announcement page, "This datasheet
has been download from: www.datasheetcatalog.com - Datasheets
for electronics components." but at least it's on the last page.

--
Thanks,
- Win

908. Re: Rotor soggestion

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 15:59:46 UTC
From: Lynn Coffelt <coffelt2@comcast.net>
Message-ID: <dr87a4ees1@domitilla.aioe.org>
Source record: 14008

> I'm going to buy a rotor for my flag antenna. I have a rotor now but it is
> one of the old TV antenna rotors with a control unit that goes klunk,
klunk,
> klunk,
> as the antenna turns. I'm hope newer rotors have quiet control units.
> It doesn't have to be heavy duty the TV antenna rotor has worked fine.
> What are some rotor suggestions?
>
> P.S. Has anyone built a quiet control unit for the old Alliance U-110
rotor?
> My rotor works fine, but the klunking at midnight bothers my wife!
>
> Mike
I used to love the klunk, klunk, klunk..... it was when the klunking
stopped before it reached it's destination that bugged me! <grin>
There is some food for thought at the following web site:

http://www.rotorservice.com/press3-alliance.htm

Old Chief Lynn, W7LTQ

909. Small Workshops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 16:07:49 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1138205269.297247.222590@g47g2000cwa.googlegroups.com>
Source record: 14009
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I would be interested in hearing and seeing examples of very small workshops (closets/small apartments/small bedrooms) and how people have adapted a workshop to a very small space. Pictures or links to pictures would be great. I would think the challenges of lighting, ventilation, power and space would create some interesting solutions. Any articles that discuss this subject would also be welcome.

Thanks for any contributions you might offer.

TMT

910. Re: Small Workshops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 16:29:15 UTC
From: CLFE <Junkmail@clfurent.com>
Message-ID: <43d7a74e$0$8274$ecde5a14@news.coretel.net>
Source record: 14010
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1138205269.297247.222590@g47g2000cwa.googlegroups.com...
>I would be interested in hearing and seeing examples of very small
> workshops (closets/small apartments/small bedrooms) and how people have
> adapted a workshop to a very small space. Pictures or links to pictures
> would be great. I would think the challenges of lighting, ventilation,
> power and space would create some interesting solutions. Any articles
> that discuss this subject would also be welcome.
>
> Thanks for any contributions you might offer.
>
> TMT
>

WOW, too bad I didn't see this about 20 years ago. Three experiences - I had a back room in our basement - the house being 4 rooms - small at that. The room I got was like 5'4" high, which I had to duck to walk into as there was a step up into it - were it flat with the rest of the basement - I'd have had no trouble. It was about 6' deep from door to back wall and 5' wide. I had two very small tables in it, a chair and used the small nooks and crannies for storage. The one table being my bench. I was crowded - but I can say - all was in easy reach..... I even had a stereo there for music, bright lights for total illumination, and a few other nice additions. In another home I lived in, I had a small closet for my workbench "and" Ham shack, we were in an apartment building, no basement and the new bride didn't want to see the stuff. Crowded as much as if not more than my room as mentioned above, but hey - it worked for the time. There is something to be said about those close quarters - one thing as I mentioned, all in easy reach. I have a lot more room now, but I DO sort of miss those days! It just goes to show, you adapt when you have to. The more room you get - the more junk you tend to rack up.... As to lighting, I addressed mine as mentioned. Ventilation, it could get stuffy, if soldering a lot - if working on tube equipment, it could get warm. And, if ya ate something good for dinner, you could stink yourself out too! Power - you tend to utilize all sockets and pipe some in from outter rooms if need be. It isn't the end of the world having to deal with such an issue. As they say, ya gotta do - what ya gotta do..... I've even had my work areas when staying in a 26' camper - utilizing - again, any available space. Actually - it can be neat! Its all in how you lay it out and approach it in your mind. One thing - DO NOT block yourself in - in case of fire or shock hazard. Take any appropriate precautions against fire and so on.

CLFE

911. Re: Small Workshops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 16:34:44 UTC
From: n cook <diverse8@gazeta.pl>
Message-ID: <dr8965$83p$1@inews.gazeta.pl>
Source record: 14011
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Too_Many_Tools <too_many_tools@yahoo.com> wrote in message
news:1138205269.297247.222590@g47g2000cwa.googlegroups.com...
> I would be interested in hearing and seeing examples of very small
> workshops (closets/small apartments/small bedrooms) and how people have
> adapted a workshop to a very small space. Pictures or links to pictures
> would be great. I would think the challenges of lighting, ventilation,
> power and space would create some interesting solutions. Any articles
> that discuss this subject would also be welcome.
>
> Thanks for any contributions you might offer.
>
> TMT
>

Hint for increasing storage space where there is little wall space
available.
For doubling the storage capacity of an existing
wall of steel cased,plastic drawered component
storage cabinets.
Obtain some extruded aluminium channel sliding
door gear used in domestic clothes cupboards etc.
Fix the runners to the top of the cabinet/cabinets.Fix channel to
ceiling/stout shelf in
front of and above(to avoid fouling top layer of drawers) the existing wall
mounted cabinets.
Fix a couple of PTFE slabs to base/rear to run against a sheet of wood or
metal fixed under
the existing units. Cabinets can be doubled up,pop-rivetted together
vertically with bridging
plates across the joins. Even trebled up if heavy components are placed in
the wall mounted units. For every
3 existing units maximum of 2 sliding ones for access,for 4 fixed then 3
sliding etc.
Theoretically 2 layers of sliding and 1 layer fixed cabinets would be
possible.

Other than the obvious comment - more mains outlets,
anyone any ideas for avoiding the rat's nest of knotted mains leads to
numerous test gear hanging around for perhaps once or twice a month use, so
not on a shelf
for once a year use. ?

--
Diverse Devices, Southampton, England
electronic hints and repair briefs , schematics/manuals list on
http://home.graffiti.net/diverse:graffiti.net/

912. Re: Small Workshops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 18:11:46 UTC
From: meow2222@care2.com
Message-ID: <1138212706.229245.94740@g14g2000cwa.googlegroups.com>
Source record: 14013
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Too_Many_Tools wrote:
> I would be interested in hearing and seeing examples of very small
> workshops (closets/small apartments/small bedrooms) and how people have
> adapted a workshop to a very small space. Pictures or links to pictures
> would be great. I would think the challenges of lighting, ventilation,
> power and space would create some interesting solutions. Any articles
> that discuss this subject would also be welcome.
>
> Thanks for any contributions you might offer.
>
> TMT

Guilty m'lud. However I dont see what the challenges are exactly.
Lighting is the same as anywhere else, except you'll only have 2 lights
on at most. Ventilation, I assume it has a door and window. If not, it
still has a door... one hopes!

Power is simple enough, just flex and multiple sockets, route the flex
wherever it can go. Modern 4/6/8 way sockets have made this very quick
to implement. Wiring them in pairs makes them usful, 4 outlets isnt
much use. Shortening leads can avoid a whole lotta wiring mess. 2x IEC
leads in one plug tidies things up too. Many British plugs will grip 2
flexes happily, though not all.

Space... it all follows simply from one basic concept: storage
effciency. Storage efficiency is the volume of goods divided by the
volume of space its stored in. If you have say a 2'x4' table, and have
1 foot depth of kit on it, and another 1' underneath, your efficiency
is 2'/8', 25%. (8' is the floor to ceiling height). Always store from
floor to ceiling, any unused space is not good. Using standardised box
sizes makes for better packing than odd sizes.

Theres nothing difficult about working in small workshops, as long as
you dont care about neatness, order, and dont mind working with goods
stored overhead, wires running up table legs, narrow access passages
and so on. Forget about swivel chairs.

Dont forget to make the storage boxes as frogs legs, heads, arteries,
etc. It keeps visitors at bay.

NT

913. Re: Small Workshops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 18:13:44 UTC
From: meow2222@care2.com
Message-ID: <1138212824.679474.225950@g49g2000cwa.googlegroups.com>
Source record: 14014
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Too_Many_Tools wrote:
> I would be interested in hearing and seeing examples of very small
> workshops (closets/small apartments/small bedrooms) and how people have
> adapted a workshop to a very small space. Pictures or links to pictures
> would be great. I would think the challenges of lighting, ventilation,
> power and space would create some interesting solutions. Any articles
> that discuss this subject would also be welcome.
>
> Thanks for any contributions you might offer.
>
> TMT

one last point: you wont see pics of small workshops. Its not possible
to capture the whole shop, or even much of it, from one camera
position. And to see anything you'd need a very wide angle lens, which
most people dont have.

NT

914. Re: Small Workshops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 18:21:53 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <g1gft1l8bbv54vpu894sq0v4gj50mcd573@4ax.com>
Source record: 14015
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On 25 Jan 2006 10:13:44 -0800, meow2222@care2.com wrote:

>Too_Many_Tools wrote:
>> I would be interested in hearing and seeing examples of very small
>> workshops (closets/small apartments/small bedrooms) and how people have
>> adapted a workshop to a very small space. Pictures or links to pictures
>> would be great. I would think the challenges of lighting, ventilation,
>> power and space would create some interesting solutions. Any articles
>> that discuss this subject would also be welcome.
>>
>> Thanks for any contributions you might offer.
>>
>> TMT
>
>one last point: you wont see pics of small workshops. Its not possible
>to capture the whole shop, or even much of it, from one camera
>position. And to see anything you'd need a very wide angle lens, which
>most people dont have.
>
>NT

Can't get a picture because it was in my previous house...

Six foot wide closet with folding doors.

Bought a pre-made Formica kitchen counter at Home Depot, notched it to
fit and dropped it in as my bench.

Multiple outlet strip across the back. Parts cabinets above.
Fluorescent fixture above, plus a small goose-neck for close-up
illumination.

Close the doors and you weren't aware it was there... wife loved it
;-)

Now-a-days I solder maybe twice a year... haul out scope, signal
generator and DVM, and just do it on my office desk.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat

| http://www.analog-innovations.com | 1962 |

It's what you learn, after you know it all, that counts.

915. Re: Small Workshops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 18:33:34 UTC
From: Seafarer@wanadoo.co.uk
Message-ID: <43d7c3b4.932703@news.wanadoo.co.uk>
Source record: 14016
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On 25 Jan 2006 08:07:49 -0800, "Too_Many_Tools"
<too_many_tools@yahoo.com> wrote:

>I would be interested in hearing and seeing examples of very small
>workshops (closets/small apartments/small bedrooms) and how people have
>adapted a workshop to a very small space. Pictures or links to pictures
>would be great. I would think the challenges of lighting, ventilation,
>power and space would create some interesting solutions. Any articles
>that discuss this subject would also be welcome.
>
>Thanks for any contributions you might offer.
>
>TMT
>
Best thing I ever did was to use kitchen tops for the workbench.As
they have a sloping edge,I placed two together with the slope abutting
in the middle to form a V shape.
this has caught more dropped screws etc also a good place to lay
screwdrivers etc to stop them rolling off the bench.A good safety
idea,well at least for me.regards

916. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 18:48:44 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1138214924.921270.8320@g44g2000cwa.googlegroups.com>
Source record: 14017

Allison wrote:
> [Regens]
> The trick with regens is to couple as loosely as possible.

And, to the original poster (Tobin), don't take anything I wrote as being bad about regeneratives being a great first receiver project. They are a wonderful first receiver project. Just don't do it to receive one particular station, do it instead to receive all the interesting stuff going on.

Tim.

917. Re: Small Workshops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 19:47:01 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43D7D58A.EEFB08B6@earthlink.net>
Source record: 14018
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Jim Thompson wrote:
>
>
> haul out scope, signal
> generator and DVM, and just do it on my office desk.

Pervert!

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

918. Coax Cable, Connectors & Adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-25 21:05:23 UTC
From: AAA RF Products <sales@aaarfproducts.com>
Message-ID: <5KRBf.13121$sA3.9027@fed1read02>
Source record: 14019
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.homebrew,rec.radio.cb

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919. Re: I need a over voltage (crowbar) circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-26 03:03:38 UTC
From: Bill <bcrann@hotmail.com>
Message-ID: <a_WBf.13793$ft2.215790@news20.bellglobal.com>
Source record: 14020

Thanks for all the help guys. The link to the book is very useful. I look at higher tolerance zeners and move my active voltage up to 16V and try that. Thanks again for all the info.

Bill

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message news:1138027325.703906.190520@g49g2000cwa.googlegroups.com...
> Bill wrote:
>> I am looking for a simple over voltage circuit for my 13.8V 20Amp power
>> supply. I have googled it and found a few using zener diodes but some
>> zeners can be off as much as 20%. I would like to have it activate at
>> 15V
>> or less. Thanks in advance.
>
> 20% Zener tolerances probably do exist - but don't buy those parts!
>
> 5% Zeners (1N47xx series for example) are readily available for a few
> cents.
>
> For a little more money you can do a band-gap etc. but that's
> overspecifying most of the time. The crowbar is there to protect you
> when your pass transistor fails shorted, it's not there for any actual
> regulation.
>
> Tripping the crowbar at 15V when the nominal supply is 13.8V is cutting
> it too close IMHO - that is less than 10% overvoltage. Look at crowbar
> set points on commercial supplies - they are usually 20 or 25% above
> nominal output voltage. Running it too close may very well result in
> unwanted crowbar action with inductive/capacitive loads or load
> transients.
>
> Few loads will fry with 10% overvoltage, and some may malfunction but
> few will fry at 25% overvoltage.
>
> Tim.
>

920. Use a Heathkit phone patch for recording phone conversations?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-26 03:41:38 UTC
From: SharePointShow@gmail.com
Message-ID: <1138246898.535425.41350@f14g2000cwb.googlegroups.com>
Source record: 14021

I've just picked up an old Heathkit HD-15 Hybrid phone patch. Can someone tell me whether it's possible to set this up apart from ham gear, simply to record telephone conversations, and if so, how? I need a way of balancing the local and remote voices and figured perhaps this old phone patch can be put to a slightly different purpose...

Gene
K3ESK

921. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-26 03:43:04 UTC
From: mcalhoun@ksu.edu
Message-ID: <dr9gg8$k9q@unix1.cc.ksu.edu>
Source record: 14022

```
>....[snip]....
>and they didn't have any 1000uf but they did have some 470uf caps so I
>put two of them in parallel to get close to see if it mattered....
^^^^^^^^

I sure hope you meant "series"!-)
---
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)
```

922. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-26 06:21:09 UTC
From: budgie <me@privacy.net>
Message-ID: <eiqgt1lkpeg9oetfc51pqvpcb4no50cl0k@4ax.com>
Source record: 14023

On 25 Jan 2006 21:43:04 -0600, mcalhoun@ksu.edu wrote:

>>....[snip]....
>>and they didn't have any 1000uf but they did have some 470uf caps so I
>>put two of them in parallel to get close to see if it mattered....
> ^^^^^^^^
>
>I sure hope you meant "series"!-)

Why?

923. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-26 06:51:27 UTC
From: LenAnderson@ieee.org
Message-ID: <1138258287.373404.171110@z14g2000cwz.googlegroups.com>
Source record: 14024
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

From: mzenier@eskimo.com (Mark Zenier) on Tues, Jan 24 2006 7:13 pm

>xpyttl <xpyttl_NOSPAM@earthling.net> wrote:
>>"John S." <hjsjms@cs.com> wrote in message

>>> Are you looking to decode the data transmissions or listen to the voice
>>> signals. If the former it may take something more sophisticated
>>> because you will have to feed a decoder.
>>
>>Well, the 60 kHz WWVB transmissions were designed to be decoded, and there
>>are a fair number of projects out there to do just that. However, depending
>>on where you are, you can typically only hear WWVB for a small part of the
>>day.

For information on the WWV, WWVH, WWVB time codes and signal
strength, go to: http://tf.nist.gov/timefreq/index.html

From the coverage diagrams (every 2 hours), most of the
contiguous states of the USA get sufficient signal from
WWVB in any 24-hour period. That has been observed here
(Los Angeles County) using a 2 1/2 foot diameter loop;
distance to Ft. Collins is roughly 800 miles (?).

By actual test, my LaCrosse radio wristwatch was able to
sync on WWVB on an auto trip to Wisconsin and back over
September to October. Typically such radio watches only
begin checking/syncing after midnight local time. The
internal quartz timing oscillator remains stable (for
time indication) within one second in 24 hours.

Radio clocks are consumer electronics items that typically
cost $20 to $30 (depending on display size and extras such
as local temperator). If all that is wanted is automatic
time setting, it may not be a good return on time
investment to build one's own automatic-setting clock.
Those radio clocks aren't much good for zero-beating a
local frequency standard except: If the local standard
is counted down to 1-second pulses for comparison with
the radio clock (arduous process to check).

>>The same time code is in the WWV HF signals as a 100 Hz, One Baud, pulse
>>duration modulated subcarrier tone. If you've only got a communications
>>grade speaker in your receiver, you may not notice it.

There was once a KIT for a WWV time code receiver (Heathkit?).
As memory serves, it cost about $400 just for the kit! That

was in much older days before 25-cent 74LS00 chips.

The original requestor wanted a WWV receiver, presumably to zero-beat a local crystal standard. ANY HF receiver will do for that, but preferrably one whose S-Meter can show very slow beats (well below 100 Hz). As another suggested, a cheapo import SWL receiver can do that, adding only a metering connection to the internal AGC line (for the slow zero beat). Bandwidth of the IF is not of great importance since the time-frequency bands are wider than the usual cheapo receiver IF bandwidth.

In the northern Los Angeles area, I've never had a problem picking up either WWV or WWVH on 5, 10, or 15 MHz, even with a few feet of hook-up wire as an antenna. That's over a 42 year residence in this same house here. The time ticks are good for checking progressive aging of local frequency standards which are counted down to 1 second output...that compared with the time tick in delay...and delay change (to indicate very slow changes in the local frequency standard).

The time tick method was once the ONLY precise way to check out local L.A. frequency standards when WWV was located back east. That preciseness was to better than 1 part per million.

A simple TRF arrangement tuned to 5 MHz will do the trick for a receiver used solely for zero-beating and hearing the voice announcements and time ticks. The interstage tuning will be stable enough to pick up WWV or WWVH. To get 10 or 15 MHz carriers, add a mixer to the antenna input with a local oscillator of 5 and 10 MHz. A local frequency standard can supply that; no extra LO crystals required. Four stages tuned to 5 MHz with Q = 100 will result in an overall TRF/IF bandwidth of about 20 KHz, quite adequate for WWV/WWVH.

LenAnderson@ieee.org

924. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-26 07:12:08 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43D87611.8F511BC@earthlink.net>
Source record: 14025
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Homer J Simpson wrote:
>
> "Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
> news:43D57129.5EFD1EB8@earthlink.net...
>
> > So, you think that a single datasheet covers all manufacturers, and
> > all production runs? Once again, you show a great lack of
> > understanding. I have several glass 1N4004 diodes in front of me.
>
> 400 PIV?

Sure. Why not? They are as big as the plastic versions.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

925. Re: I need a over voltage (crowbar) circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-26 11:34:00 UTC
From: Mike <nomtrxspam@comcast.net>
Message-ID: <ancht19i7pf3nfn7qkukd5ef68clteaukn@4ax.com>
Source record: 14026

On Sun, 22 Jan 2006 01:45:59 -0330, "Bill" <bcrann@hotmail.com> wrote:

>I am looking for a simple over voltage circuit for my 13.8V 20Amp power
>supply. I have googled it and found a few using zener diodes but some
>zeners can be off as much as 20%. I would like to have it activate at 15V
>or less. Thanks in advance.
>
>Bill
>
Take a look at Fig 24 and Fig 25 in the data sheet for the TL431.
http://www.onsemi.com/pub/Collateral/TL431-D.PDF
Very accurate, cheap, and simple.
The TL431 is available in a TO-92 pkg.
Mike

926. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-26 12:54:31 UTC
From: "John, N9JG" <john@gotwals.XremoveY.com>
Message-ID: <bE3Cf.734239$_o.489423@attbi_s71>
Source record: 14027

Mcalhoun must have been thinking about resistors!

"budgie" <me@privacy.net> wrote in message
news:eiqgt1lkpeg9oetfc51pqvpcb4no50cl0k@4ax.com...
> On 25 Jan 2006 21:43:04 -0600, mcalhoun@ksu.edu wrote:
>
>>>....[snip]....
>>>and they didn't have any 1000uf but they did have some 470uf caps so I
>>>put two of them in parallel to get close to see if it mattered....
>> ^^^^^^^^
>>
>>I sure hope you meant "series"!-)
>
> Why?

927. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-26 18:39:52 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-C60C77.09413226012006@netnews.worldnet.att.net>
Source record: 14028

In article <dr9gg8$k9q@unix1.cc.ksu.edu>, mcalhoun@ksu.edu wrote:

> >....[snip]....
> >and they didn't have any 1000uf but they did have some 470uf caps so I
> >put two of them in parallel to get close to see if it mattered....
> ^^^^^^^^
>
> I sure hope you meant "series"!-)
> ---

I hope you are an underclassman, who hasn't actually taken any college
level classes in Electronics Design or Circuit Evaluation. If not,
you definitly ask for your money back, because you didn't learn anything.

Me

928. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-27 00:17:15 UTC
From: jgboyles@aol.com
Message-ID: <1138321035.265958.85010@g43g2000cwa.googlegroups.com>
Source record: 14029

Me wrote:
> In article <dr9gg8$k9q@unix1.cc.ksu.edu>, mcalhoun@ksu.edu wrote:
>
> > >....[snip]....
> > >and they didn't have any 1000uf but they did have some 470uf caps so I
> > >put two of them in parallel to get close to see if it mattered....
> > ^^^^^^^^
> >
> > I sure hope you meant "series"!-)
> > ---
>
> I hope you are an underclassman, who hasn't actually taken any college
> level classes in Electronics Design or Circuit Evaluation. If not,
> you definitly ask for your money back, because you didn't learn anything.
>
> Me
2 470uf in parallel is close to 1000uf. This was on the Extra class
Ham exam. I got my ticket 40 years ago. Why do you think an Amateur
Radio Operator should necessarily have college level Electronics Design
Experience? This is an Amateur newsgroup, unless cross-posting.
Gary N4AST

929. Re: Gunnplexer connected to antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-27 00:48:23 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <r5eCf.52630$iD.19961@trnddc08>
Source record: 14030

"Saandy , 4Z5KS" <hardware2@ift-int.com> wrote in message
news:1138181583.213506.120260@f14g2000cwb.googlegroups.com...
> Oh yes, I remeber that! it was dubbed G-Line from its inventor, Georges
> Goubaut, canadian I think.
> that line has very low losses and can operate wonderfully. However, in
> this case it's going to be hard to couple the cavity to such a line.
> the Gunnplexer is phase sensitive and needs circular polarized antennas
> to operate correctly.

The Gunnplexers I have owned (AR I believe) were linear polarized.
With those, it's just a matter of getting waveguide to the antenna- this may
not be cheap especially if you need flexible transitions.
Tower mounting obviates this but temp variations will move the Gunnplexer
all over the place.
Dale W4OP

930. Re: Use a Heathkit phone patch for recording phone conversations?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-27 02:17:26 UTC
From: Butch Magee <lynyrd@cableone.net>
Message-ID: <11tj0lmhlk063f9@corp.supernews.com>
Source record: 14031

SharePointShow@gmail.com wrote:
> I've just picked up an old Heathkit HD-15 Hybrid phone patch. Can
> someone tell me whether it's possible to set this up apart from ham
> gear, simply to record telephone conversations, and if so, how? I need
> a way of balancing the local and remote voices and figured perhaps this
> old phone patch can be put to a slightly different purpose...
>
> Gene
> K3ESK
>
Nope! Buy a stick on sucker mic and plug it into your recorder.

931. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-27 03:09:50 UTC
From: Mike Coslo <mremovethiscoslo@adelphia.net>
Message-ID: <SMadnSSsl8ljE0TenZ2dnUVZ_sydnZ2d@adelphia.com>
Source record: 14032
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Don Bowey wrote:

> You can have all those "I wannas" on the day you invent zero bandwidth CW
> (you know, those old-fashioned dit and dahs). In the meanwhile, grow up and
> get a brain.

Yawn.

932. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-27 04:25:19 UTC
From: "James T. White" <SPAMjtwhiteGUARD@hal-pc.org>
Message-ID: <43d9a0e5$0$1277$a726171b@news.hal-pc.org>
Source record: 14033
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

"Tobin Fricke" <fricke@ocf.berkeley.edu> wrote in message
news:Pine.SOL.4.63.0601222137070.21828@conquest.OCF.Berkeley.EDU
> As a project to learn more about building radio receivers, I'd like to
> build a WWV receiver (or maybe a receiver for the Canadian station
> CHU, since it's nearby and the format sounds easier to decode). I'm
> looking for suggestions for how to design such a radio, reading
> material, etc.
>
> I was thinking it might be easier to design a fixed-frequency receiver
> (rather than a tunable one) because I could just select the L and C
> in the resonant circuit to give the right frequency. Or, since WWV
> is at such "round number" frequencies, maybe I could somehow use a
> crystal oscillator?
>
> thank you,
> Tobin

You might try and find a user manual for the old Heathkit GC-1000 Most
Accurate Clock.
It synchonizes the clock and local oscillator to the WWV transmissions
at 5, 10 or 15 MHz. The kit came with a preassembled and prealigned RF
board but you still had to assemble the data recovery and other parts of
the unit. The manual includes full schematics (including RF board) and
a good theory of operation section. The only thing missing are
instructions on aligning the RF board. The silly thing works pretty but
I had to build an antenna and install it in by attic to get it to
sychronize reliably.

--
James T. White

933. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-27 06:20:07 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <BFFEFB97.24681%dbowey@comcast.net>
Source record: 14034
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

On 1/26/06 7:09 PM, in article
SMadnSSsl8ljE0TenZ2dnUVZ_sydnZ2d@adelphia.com, "Mike Coslo"
<mremovethiscoslo@adelphia.net> wrote:

> Don Bowey wrote:
>
>> You can have all those "I wannas" on the day you invent zero bandwidth CW
>> (you know, those old-fashioned dit and dahs). In the meanwhile, grow up and
>> get a brain.
>
> Yawn.

Well, deja vu.... If it wasn't clear, "yawn" is what I thought of your
pompous, and mindless post.

934. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-27 07:14:21 UTC
From: Frank Raffaeli <SNIPrf_man_frTHIS@yahoo.com>
Message-ID: <1138346061.407803.231670@g47g2000cwa.googlegroups.com>
Source record: 14035
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Some of the things you *want* are possible, but not without
clarification and compromise. I think I can do the digital voice and
the SSTV, depending on the C&C.

Frank Raffaeli
http://www.aomwireless.com/

935. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-27 12:47:23 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <LDoCf.5$5x3.3@fe07.lga>
Source record: 14036

<jgboyles@aol.com> wrote in message
news:1138321035.265958.85010@g43g2000cwa.googlegroups.com...

> 2 470uf in parallel is close to 1000uf. This was on the Extra class
> Ham exam.

Wow - I don't remember anything that basic when I took my Extra.

..

936. Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-27 17:04:28 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1138381468.082263.138120@g44g2000cwa.googlegroups.com>
Source record: 14037
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

What is Ham Radio?

(Preface)
It is becoming increasingly difficult to fly the flag for
decency and for civilised behaviour in Radio Hammery. Even
the Usenet newsgroups dedicated to the cause have degenerated
into a hotbed of abusive onslaughts by those who ought to know better.
However, there still exists the fundamental basis on which Ham
Radio is based, and that will never die. This FAQ ("What Is
Ham Radio?") will be regularly published and will not be
shouted or bullied down. It is important that those of a
technical bent, who are the natural seed-corn of Radio Hammery
and who gravitate towards us to be the real novitiate, can
still find us, (and know that we are still here), their fellows.

-----ooooo-----

Please remember that this FAQ is a _POSITIVE EXHORTATION_
to you to exert yourselves to join our fraternity! (If you find
otherwise, then perhaps you are already classing yourself in the
mediocre groups of those who are criticised in the FAQ and from
whom we _MUST_ dissociate? If so - it's never too late for
a re-taxonomisation on your part - there's nothing elitist about
us, and we welcome all those who are prepared to put themselves
out in order to join our ranks!)

-----ooooo-----
(Article)
So,.....What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One such CB type is the so-called "Not-Ham". Otherwise
known as the CBer-Masquerading-As-A-Radio-Ham, this type
had their background in the hobby that is CB Radio and not
in the technical pursuits that lead up to a coveted Ham licence.
Easily recognised by their boasts of the criminal activity of
11 metre SSB operation, one wonders why they don't go back to
the CB Bands if such bands are dearer in their hearts than are the Ham
Bands? No _REAL Radio Hams associate with those who made an
illegal installation of transmitting equipment before being
in possession of an appropriate licence.

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B
licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

937. not interested and hold the shit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-27 17:07:11 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1138381630.956149.152110@g47g2000cwa.googlegroups.com>
Source record: 14038
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Orator For Decency wrote:
> What is Ham Radio?
>
> (Preface)
> It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery.
indeed since you lack any it must be very hard

938. Re: not interested and hold the shit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-27 17:22:21 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <7flkt1lf6o6dkdlv3bnl61hsjnutj7f703@4ax.com>
Source record: 14039
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

an old friend wrote:

>Orator For Decency wrote:
>
>> What is Ham Radio?
>>
>> It is becoming increasingly difficult to fly the flag for
>> decency and for civilised behaviour in Radio Hammery.

<snip>

I didn't know he'd started; his behaviour on this ng is execrable.

Does his so-called 'faq' now contain a warning about not repairing
compact valve PAs with 600V on the anode?

Or has he still got his head stuck in the sand?

from
Aero Spike

939. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-27 17:48:20 UTC
From: G4KFK <mike@g4kfk.co.uk>
Message-ID: <1138384100.149962.309080@g47g2000cwa.googlegroups.com>
Source record: 14040
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Orator For Decency wrote:
> It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery. Even

We've seen your idea of civilised behaviour, G4SDW - posting nasty
comments like these using anagrams of another amateur's name:
http://groups.google.com/group/uk.radio.amateur/msg/7ff9b267900f1c9e?dmode=source

It's the kind of "civilised behaviour" that the hobby can do without.

73
Mike G4KFK

940. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-27 18:45:03 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-137C12.09464427012006@netnews.worldnet.att.net>
Source record: 14041

In article <1138321035.265958.85010@g43g2000cwa.googlegroups.com>,
jgboyles@aol.com wrote:

> Me wrote:
> > In article <dr9gg8$k9q@unix1.cc.ksu.edu>, mcalhoun@ksu.edu wrote:
> >
> > > >....[snip]....
> > > >and they didn't have any 1000uf but they did have some 470uf caps so I
> > > >put two of them in parallel to get close to see if it mattered....
> > > ^^^^^^^^
> > >
> > > I sure hope you meant "series"!-)
> > > ---
> >
> > I hope you are an underclassman, who hasn't actually taken any college
> > level classes in Electronics Design or Circuit Evaluation. If not,
> > you definitly ask for your money back, because you didn't learn anything.
> >
> > Me
> 2 470uf in parallel is close to 1000uf. This was on the Extra class
> Ham exam. I got my ticket 40 years ago. Why do you think an Amateur
> Radio Operator should necessarily have college level Electronics Design
> Experience? This is an Amateur newsgroup, unless cross-posting.
> Gary N4AST
>

Gary, I was not commenting on the OP's statement, but the responders
question about capacitors in "SERIES".... If you will notice, in the
header of his responce, he is posting from ksu.edu which is a university.
Therefor he is either a Student, Professor, or Staff at that institution,
and should have known better, than to post such a STUPID Reply.

I notice that his Reply, also went right over your head as well, because
you didn't seem to realise that his "SERIES" comment was really LAME.

Just goes to show that even an Extra Class, can't read acuratly all thew
time......

Me

941. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-27 19:29:30 UTC
From: "John, N9JG" <john@gotwals.XremoveY.com>
Message-ID: <uwuCf.516236$084.262933@attbi_s22>
Source record: 14042

What makes you think that a janitor, who happens to be employed at a university, would know the difference between series and parallel capacitors?

"Me" <Me@shadow.orgs> wrote in message news:Me-137C12.09464427012006@netnews.worldnet.att.net...
[stuff]
> Gary, I was not commenting on the OP's statement, but the responders
> question about capacitors in "SERIES".... If you will notice, in the
> header of his responce, he is posting from ksu.edu which is a university.
> Therefor he is either a Student, Professor, or Staff at that institution,
> and should have known better, than to post such a STUPID Reply.
[stuff]

> Me

942. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-27 19:54:30 UTC
From: The Sweeny <jack.regan@hotmail.co.uk>
Message-ID: <1138391670.408583.60830@g49g2000cwa.googlegroups.com>
Source record: 14043
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Orator For Decency wrote:

> Blah Blah Blah

WE ARE NOT INTERESTED EVANS, SHUT IT, AND TAKE YOUR MEDICATION.

943. Emtech???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-27 19:57:18 UTC
From: rkhen@softhome.net
Message-ID: <1138391838.878531.31200@o13g2000cwo.googlegroups.com>
Source record: 14044

Hi all,

I got an Emtech antenna tuner kit for Christmas, but it's the BNC version and my shack is normal SO whatevers. I emailed the company weeks ago to ask how to exchange it, using the address on their website, which is on their mailing label. I got no answer. So last week I called. I got a generic phone company voice mail answer. ("You have reached [number]. Leave a message after the tone.") I left a message anyway. No answer to that either.

What's the deal with these people? And if they've folded their tent (but not apparently their sales department) is it just a matter of buying UHF connectors and swapping out the BNCs in the instructions? (This is my first homebrew project.)

Thanks,

Rob, KB7PWJ

944. Re: Fair market value of salvaged parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-27 20:54:56 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <IGfsXGPgio2DFwHj@g3ohx.demon.co.uk>
Source record: 14045

In message <1137788924.680167.126420@g49g2000cwa.googlegroups.com>, Tim Shoppa <shoppa@trailing-edge.com> writes
>> For tax purposes I need to know how I can
>> determine the fair market value of a resistor,
>> capacitor, inductor, or active component in
>> working condition that is salvaged from
>> scrapped equipment.
>
>Value of scrapped equipment: $1.
>
>Labor to strip components: $200.
>
>Value of stripped components: Negative $199.
>
>Is this for "income" determination or for "inventory tax" purposes?
>Inventory tax has to be the most anti-scrapyard thing ever imagined.
>
>Tim.
>

They say that accountants know the price of everything, and the value of nothing.
Ian.
--

945. Re: Emtech???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 00:21:47 UTC
From: "Galen, W8LNA" <w8lna@arrl.net>
Message-ID: <vOyCf.2006$wk5.228@news02.roc.ny>
Source record: 14046

rkhen@softhome.net wrote:
> Hi all,
>
> I got an Emtech antenna tuner kit for Christmas, but it's the BNC
> version and my shack is normal SO whatevers. I emailed the company
> weeks ago to ask how to exchange it, using the address on their
> website, which is on their mailing label. I got no answer. So last week
> I called. I got a generic phone company voice mail answer. ("You have
> reached [number]. Leave a message after the tone.") I left a message
> anyway. No answer to that either.
>
> What's the deal with these people? And if they've folded their tent
> (but not apparently their sales department) is it just a matter of
> buying UHF connectors and swapping out the BNCs in the instructions?
> (This is my first homebrew project.)
>
> Thanks,
>
> Rob, KB7PWJ
>

Their web page was up at about 00:15 Jan 28, UTC
http://emtech.steadynet.com/zm2.shtml

maybe check and make sure you have the correct phone number?

946. Re: Emtech???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 00:23:25 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <IvednRC2CYPiJEfeRVny1A@pipex.net>
Source record: 14047

> I got an Emtech antenna tuner kit for Christmas, but it's the BNC
> version and my shack is normal SO whatevers. >
==========
What's the problem ; just get a BNC to SO 239 adaptor or make a short lead
with the appropriate connectors.

Frank GM0CSZ / KN6WH

947. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 04:09:48 UTC
From: Mike Coslo <mremovethiscoslo@adelphia.net>
Message-ID: <buOdnZz6S4cWc0fenZ2dnUVZ_tWdnZ2d@adelphia.com>
Source record: 13948
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Don Bowey wrote:
> On 1/26/06 7:09 PM, in article
> SMadnSSsl8ljE0TenZ2dnUVZ_sydnZ2d@adelphia.com, "Mike Coslo"
> <mremovethiscoslo@adelphia.net> wrote:
>
>
>>Don Bowey wrote:
>>
>>
>>>You can have all those "I wannas" on the day you invent zero bandwidth CW
>>>(you know, those old-fashioned dit and dahs). In the meanwhile, grow up and
>>>get a brain.
>>
>>Yawn.
>
>
>
> Well, deja vu.... If it wasn't clear, "yawn" is what I thought of your
> pompous, and mindless post.

Okay Don, if you thought that my post was mindless, then perhaps you might go back and read it.

As a refresher and to paraphrase, I noted in this thread that Winlink is a day late and about ten dollars short. Getting email via HF radio is not high tech, not a good use of spectrum, and there are plenty of other technological achievements that would be of much more use to the ARS than that.

If you still think that that is stupid and pompous, then so be it.

- 73 de Mike KB3EIA -

948. Re: Emtech???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 05:22:13 UTC
From: Mike Young <boat042-spam@yahoo.com>
Message-ID: <9cDCf.28244$H71.9488@newssvr13.news.prodigy.com>
Source record: 13949

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:lvednRC2CYPiJEfeRVny1A@pipex.net...
>> I got an Emtech antenna tuner kit for Christmas, but it's the BNC
>> version and my shack is normal SO whatevers. >
> ====================================
> What's the problem ; just get a BNC to SO 239 adaptor or make a short lead
> with the appropriate connectors.

The problem is a couple of dB of loss on each side. Not everyone cares.

949. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 05:57:26 UTC
From: Oscar <oscar@cia.gov>
Message-ID: <43DB07C4.E0A613E4@cia.gov>
Source record: 13950

He may not be using a valid email address,
just like the one I just used !

950. Re: Emtech???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 08:01:37 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <je7mt1h3m2vijd4trefre8qn4kelvcsq30@4ax.com>
Source record: 13951

On Sat, 28 Jan 2006 05:22:13 GMT, "Mike Young"
<boat042-spam@yahoo.com> wrote:

>"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
>news:lvednRC2CYPiJEfeRVny1A@pipex.net...
>>> I got an Emtech antenna tuner kit for Christmas, but it's the BNC
>>> version and my shack is normal SO whatevers. >
>> ===================================
>> What's the problem ; just get a BNC to SO 239 adaptor or make a short lead
>> with the appropriate connectors.
>
>The problem is a couple of dB of loss on each side. Not everyone cares.

Connector losses are a serious issue in the GHz region, but since the
OP is talking about an antenna tuner, it appears that the usage is for
HF, this is not really an issue.

Extra connectors are a reliability issue on the long run, so replacing
the connectors on the tuner is a good idea if a thick coaxial cable is
to be used. For RG-58 the BNC is quite adequate.

Paul OH3LWR

951. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 10:18:55 UTC
From: Mark <nospam@nospam.com>
Message-ID: <drfgee$h1e$1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13952
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"The Sweeny" <jack.regan@hotmail.co.uk> wrote in message
news:1138391670.408583.60830@g49g2000cwa.googlegroups.com...
>
You are G4KFK and I claim my fiver ;-)

Mark

952. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 13:23:45 UTC
From: G4KFK <mike@g4kfk.co.uk>
Message-ID: <1138454625.024320.24390@o13g2000cwo.googlegroups.com>
Source record: 13953
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Mark wrote:
> You are G4KFK and I claim my fiver ;-)

And you are a twit, and I claim mine :-)

Read the headers and compare "The Sweeney's" IP address with those of
other regular posters to this ng!

73
Mike G4KFK

953. Re: FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 14:15:51 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <drfuan01rst@drn.newsguy.com>
Source record: 13956
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

xray wrote...
> On Sun, 22 Jan 2006, John Miles wrote:
>> Winfield says...
>>> That would be the day. What's the right price for your 8566B with
>>> manuals, etc.? I see Nick at Ridge Equipment has one up for $9k,
>>> but I doubt he'll sell it. Looking at the last 30 days, I see one
>>> fellow who had two "untested" units, accepting $3100 "best offers"
>>> for each, and another guy who got a $2700 "buy-it-now" sale for his
>>> "untested" unit with a "dim screen". All three "untested" units had
>>> photos indicating reasonable physical condition and some kind of
>>> apparently-proper display operation. There's another one, "as is"
>>> with a dark-screen photo, starting at $6499, with no bidders.
>>
>> It's tough to say. At the end of the day it's worth whatever the
>> second-highest bidder thinks it's worth. Ordinarily, I'd wait for
>> all those others to sell or otherwise disappear from the field before
>> putting one up for sale, but I think this one will out-compete the
>> others without any trouble... at least among buyers who know what
>> they're looking for. A dim CRT is not a good thing on these units,
>> because the focus is the first thing to go. By the time the emission
>> is down, you don't get a very clean image.
>>
>> At any rate, a $9K starting bid on an 8566B with a DOA-only guarantee
>> is just a waste of a listing fee, and everybody's time to boot. Much
>> better to start low and encourage people to look at the item on its
>> merits. I'd be surprised if mine doesn't land in the $6K-$7K
>> neighborhood. $8K-$9K is a high but still-fair price, if someone has
>> the cash on hand and has been waiting for the right one.
>
> So, am I right? John was not surprized (price) and Win is now the owner?

Correct. $6,380 after 16 bids from 12 bidders. I started the bidding
at $1.00, "aikidoka.steve" stole it from me with $2.00, and the battle
was joined. Last night electron55 took it from calibrate72pb with his
$6,280 bid at 18:29:44 and I outbid him one second later, 15 seconds
before the auction was to end at 9:30pm EST. My sniper service placed
a bid nine seconds later, but it wasn't needed, I was already a winner.
:-) http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=7583597242

I also grabbed John's 8568A 1.5GHz RF Section for $610.

These beauties will replace my inferior HP 8569B spectrum analyzer.

> Yikes. This means I have something besides political opinions in common
> with Win. We both have SA's that John M used to own and spent many hours
> fixing up for us.

We've got to stop meeting like this. :-)

--
Thanks,
- Win

954. BWD826 scope operation manual

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 14:26:48 UTC
From: Cosmo <peterlmiles@hotmail.com>
Message-ID: <43db7f3f$0$23262$afc38c87@news.optusnet.com.au>
Source record: 13954

Hi all!

I'm after a copy of a BWD826 scope operation manual. If some one is able to help it would be greatly appreiciated.

Cheers

Peter

955. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 14:37:20 UTC
From: The Sweeny <jack.regan@hotmail.co.uk>
Message-ID: <1138459039.986075.276610@g43g2000cwa.googlegroups.com>
Source record: 13955
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Mark wrote:

> "The Sweeny" <jack.regan@hotmail.co.uk> wrote in message
> news:1138391670.408583.60830@g49g2000cwa.googlegroups.com...
> >
> You are G4KFK and I claim my fiver ;-)
>
> Mark

A detective you'll never make.

Please send cheque for £5 made out to the police benevolent fund,
Detective Inspector Jack Regan,
New Scotland Yard
Broadway
London
SW1H 0BG

956. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 14:55:28 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1138460128.733701.312430@z14g2000cwz.googlegroups.com>
Source record: 13957
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

There is, indeed, a similarity of rather silly and infantile behaviour
between the two, but based on previous behaviours, she is more likely
to be one
of NOT-HAM, CANDID or Leigh Preece.

Whoever she is, who would wish to advertise themselves as such a
a fool as to repeatedly shout insults from the sideline?

Mark wrote:
> "The Sweeny" <jack.regan@hotmail.co.uk> wrote in message
> news:1138391670.408583.60830@g49g2000cwa.googlegroups.com...
> >
> You are G4KFK and I claim my fiver ;-)
>
> Mark

957. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 15:32:40 UTC
From: The Sweeny <jack.regan@hotmail.co.uk>
Message-ID: <1138462360.039471.62200@g49g2000cwa.googlegroups.com>
Source record: 13958
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

SHUT IT EVANS YOU NUTTER

958. pO* ***Hot stuff - check this out !!! pO*

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 17:37:32 UTC
From: tinman4 <tinman4@yahoo.com>
Message-ID: <Sx1Df.60473$C%3.48299@bignews2.bellsouth.net>
Source record: 13994

http://www.kaneva.com/checkout/stream.aspx?assetId=2017&free=0

959. 20.945MHz or 21.845MHz Xtals -who stocks them...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 18:33:00 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1138473180.371245.128190@z14g2000cwz.googlegroups.com>
Source record: 13959

Hi All,

Anyone know were I can buy these in HC49 or smaller, off the shelf and cheap ?

Thanks,

Mark

960. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 18:42:10 UTC
From: Bruce Lane <SpammersAreVermin@dev.null>
Message-ID: <MPG.1e455add4ab170fe989681@192.168.42.131>
Source record: 13960
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

In article <1138381468.082263.138120@g44g2000cwa.googlegroups.com>,
radio.ham@lycos.co.uk (known to some as Orator For Decency) scribed...

> What is Ham Radio?
>
> (Preface)
> It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery.

<drivelectomy>

For once, Beany, you couldn't be more correct. Your posts represent
a perfect example of exactly the kind of intolerance and LACK of
"civilised behaviour" that has permeated some parts of "Hammery"
(interesting word, BTW... Is it in Webster's yet?)

PLONK!

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute
(Known to some as Bruce Lane, KC7GR)
http://www.bluefeathertech.com -- kyrrin a/t bluefeathertech d-o=t calm
"Salvadore Dali's computer has surreal ports..."

961. 21.855 or 20.945MHz Xtals - who stocks them - corrected

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 18:49:09 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1138474149.229446.94300@f14g2000cwb.googlegroups.com>
Source record: 13961

Oops, not enough coffee.

21.4MHz + or - 455kHz is hopefully 21.855 and 20.945MHz

Whereabouts of a supplier with them in stock appreciated.

Thanks,

Mark.

962. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 19:00:57 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1138474857.416545.227850@z14g2000cwz.googlegroups.com>
Source record: 13962
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

1. Webster is a Yank dictionary and not an English one, so the
question is irrelevant.

2. Dictionaries do not prescribe they merely describe so the
question is, once again, irrelevant.

3. If it seems that I am being intolerant towards those who are not
Radio Hams by any stretch of the imagination, then, good. That
was and is my intention. We should guard jealously the privileges
that we have and stand apart from those who are simple appliance
operators and simple-minded CBers and who are indistinguishable
from the man-in-the-street with his GSM phone or CB walkie-talkie..

4. That said, I warmly encourage, as I have always done, everybody
without exception and without prejudice to exert themselves to
join our ranks. There is no snobbery in a wish to maintain standards.

5. Radio Hammery is a technical pursuit and I wish for it to always
remain so.

6. Whoever you are, I am critical of you for originating personal
remarks. There is no call for such. Ham Radio has traditions of
international gentlemanliness which seem to be lost on you. I am
not familiar with the Yankland licensing scheme; Is "KC7GR" some
form of CB licence?

Bruce Lane wrote:
> In article <1138381468.082263.138120@g44g2000cwa.googlegroups.com>,
> radio.ham@lycos.co.uk (known to some as Orator For Decency) scribed...
>
> > What is Ham Radio?
> >
> > (Preface)
> > It is becoming increasingly difficult to fly the flag for
> > decency and for civilised behaviour in Radio Hammery.
>
> <drivelectomy>
>
> For once, Beany, you couldn't be more correct. Your posts represent
> a perfect example of exactly the kind of intolerance and LACK of
> "civilised behaviour" that has permeated some parts of "Hammery"
> (interesting word, BTW... Is it in Webster's yet?)
>
> *PLONK!*
>

> --
> Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute
> (Known to some as Bruce Lane, KC7GR)
> http://www.bluefeathertech.com -- kyrrin a/t bluefeathertech d-o=t calm
> "Salvadore Dali's computer has surreal ports..."

963. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 19:02:10 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-3ECCF1.10035328012006@netnews.worldnet.att.net>
Source record: 13963

In article <uwuCf.516236$084.262933@attbi_s22>,
"John, N9JG" <john@gotwals.XremoveY.com> wrote:

> What makes you think that a janitor, who happens to be employed at a
> university, would know the difference between series and parallel
> capacitors?

and just how many unknowledgeable Janitors do you think read this
newsgroup.....and even if they did.....why would it be important
enough to them to post such a meaningless reply.....

Me

964. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 19:15:46 UTC
From: Internet Gateway Supporter_____ <scotland_glasgow@yahoo.co.uk>
Message-ID: <1138475746.236179.79310@g14g2000cwa.googlegroups.com>
Source record: 13964
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Gareth,

Have you not realised that 99.9% of the readers in this ng don't give a toss what you are posting ? The other 0.1 % are still laughing at your rantings !

965. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 19:26:43 UTC
From: huLLy <s2f@f2s.com>
Message-ID: <Yo6dnUxsc4TuWEbeRVnyig@giganews.com>
Source record: 13965
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Internet Gateway
Supporter_____ wrote:
> Gareth,
>
> Have you not realised that 99.9% of the readers in this ng don't give
> a toss what you are posting ? The other 0.1 % are still laughing at
> your rantings !

As are the dsp, engineering, maths, scouting etc groups that have also rejected his moronic rantings and personal attacks. It must be lonely out there for him.

--
huLLy
Tel: 07976 123278
ICQ 136-987-925

966. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 19:50:13 UTC
From: Toxic Waste <renting-a-room@nicks-place.com>
Message-ID: <VVPCf.111858$7p5.213@newsfe4-win.ntli.net>
Source record: 13966
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"huLLy" <s2f@f2s.com> wrote in message
news:Yo6dnUxsc4TuWEbeRVnyig@giganews.com...
> Internet Gateway
> Supporter_____ wrote:
>

> It must be lonely out there for him.

Not so Hully, the employment fairy has been very kind to him.

AIUI, he's been practicing the one and only line for his new job at
chippenham Railway Station..."spare any change"

HTH
tox

967. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 20:13:35 UTC
From: "John, N9JG" <john@gotwals.XremoveY.com>
Message-ID: <PfQCf.731364$x96.437519@attbi_s72>
Source record: 13967

Well, perhaps because they enjoy trolling?

"Me" <Me@shadow.orgs> wrote in message
news:Me-3ECCF1.10035328012006@netnews.worldnet.att.net...
> In article <uwuCf.516236$084.262933@attbi_s22>,
> "John, N9JG" <john@gotwals.XremoveY.com> wrote:
>
>> What makes you think that a janitor, who happens to be employed at a
>> university, would know the difference between series and parallel
>> capacitors?
>
> and just how many unknowledgeable Janitors do you think read this
> newsgroup.......and even if they did.....why would it be important
> enough to them to post such a meaningless reply.....
>

968. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 20:14:15 UTC
From: huLLy <s2f@f2s.com>
Message-ID: <D8GdnUFXyesKTUbenZ2dnUVZ8tydnZ2d@giganews.com>
Source record: 13968
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

lucifer@eternal-flames.gov wrote:
> On Sat, 28 Jan 2006 19:26:43 -0000, "huLLy" <s2f@f2s.com> wrote:
>
>> As are the dsp, engineering, maths, scouting etc groups that have
>> also rejected his moronic rantings and personal attacks. It must be
>> lonely out there for him.
>
> I'm assured he's just like that in real life.
>
> Nick

I so hope so.

--
huLLy
Tel: 07976 123278
ICQ 136-987-925

969. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 20:14:41 UTC
From: huLLy <s2f@f2s.com>
Message-ID: <DcCdnUUoW8QsTUbeRVnytg@giganews.com>
Source record: 13969
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Toxic Waste wrote:
> "huLLy" <s2f@f2s.com> wrote in message
> news:Yo6dnUxsc4TuWEbeRVnyig@giganews.com...
>> Internet Gateway
>> Supporter_____ wrote:
>>
>
>> It must be lonely out there for him.
>
> Not so Hully, the employment fairy has been very kind to him.
>

Rent boys in Portsmouth in full time employment?

--
huLLy
Tel: 07976 123278
ICQ 136-987-925

970. Re: Emtech???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 20:38:52 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <wDQCf.15160$K17.8925@trnddc03>
Source record: 13970

"Mike Young" <boat042-spam@yahoo.com> wrote in message
news:9cDCf.28244$H71.9488@newssvr13.news.prodigy.com...
> "Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
> news:lvednRC2CYPiJEfeRVny1A@pipex.net...
>>> I got an Emtech antenna tuner kit for Christmas, but it's the BNC
>>> version and my shack is normal SO whatevers. >
>> ===================================
>> What's the problem ; just get a BNC to SO 239 adaptor or make a short
>> lead with the appropriate connectors.
>
> The problem is a couple of dB of loss on each side. Not everyone cares.
>
I would be very interested in the measurements or documentation to support
the statement that the UHF-->BNC adapter caues a couple of dB loss

Dale W4OP

971. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 20:51:08 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <43dbd85f.88315190@news.blueyonder.co.uk>
Source record: 13971
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sat, 28 Jan 2006 19:46:00 +0000 (UTC), lucifer@eternal-flames.gov
wrote:

> I'm assured he's just like that in real life.
>
>Nick

What I can't understand Nick is that if anyone else other than
yourself posts a criticism of him he comes back with the usual "stupid
boy", "grow up" macros, yet when you post he leaves you alone!

What have you got that the rest of us don't have? :-)

Perhaps he fears the reception that he'll get when he finally goes
"Below" ..

Peter, G3PHO

972. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 22:31:52 UTC
From: "G1LVN (for it is he)" <gareth.paley@gmail.com>
Message-ID: <drgrcogjq1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13972
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"G4KFK" <mike@g4kfk.co.uk> wrote in message
news:1138454625.024320.24390@o13g2000cwo.googlegroups.com...
>
> Mark wrote:
>> You are G4KFK and I claim my fiver ;-)
>
> And you are a twit, and I claim mine :-)
>
> Read the headers and compare "The Sweeney's" IP address with those of
> other regular posters to this ng!
>
DON'T TELL ME... sweeney IS _IDI-AMIN :-)

973. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 22:41:25 UTC
From: Toxic Waste <renting-a-room@nicks-place.com>
Message-ID: <pqSCf.71371$Dg6.35422@newsfe3-gui.ntli.net>
Source record: 13973
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Peter" <microwaves@blueyonder.co.uk> wrote in message
news:43dbd85f.88315190@news.blueyonder.co.uk...
>
> What I can't understand Nick is that if anyone else other than
> yourself posts a criticism of him he comes back with the usual "stupid
> boy", "grow up" macros, yet when you post he leaves you alone!
>
> What have you got that the rest of us don't have? :-)
>
> Perhaps he fears the reception that he'll get when he finally goes
> "Below" ..
>
Nick, myself and most of the subscribers to this forum who have beaten him
in a debate at one time or another, have rather conveniently been placed in
his killfile.

Am I bovvered?
He's disrespecting me!
He can't take the shame?

tox

974. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-28 23:26:32 UTC
From: G4KFK <mike@g4kfk.co.uk>
Message-ID: <1138490792.050759.222930@g47g2000cwa.googlegroups.com>
Source record: 13974
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

G1LVN (for it is he) wrote:
> DON'T TELL ME... sweeney IS _IDI-AMIN :-)

Indeed - Jack Regan has moved to Kampala and is now active as 5X5IDI

G1LVN wins the fiver!

73
Mike G4KFK

975. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 00:08:35 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <pFTCf.5518$eY5.1511@bignews7.bellsouth.net>
Source record: 13975

garigue wrote:
>>>You might as well leave out the
>>>AM modulator since it will be useless today. Back in '66-'67 there
>>>were still some people on AM (mostly on 80 and 10 meters), but today
>>>it's completly gone.
>>
>>OH, Really!?? Snert! - Sporf! - Snurt! TNX for the laugh!
>>
>>Jonesy
>>--
>> Marvin L Jones | jonz | W3DHJ | linux
>> Pueblo, Colorado | @ | Jonesy | OS/2 __
>> 38.24N 104.55W | config.com | DM78rf | SK
>
>
> Yepper ....just like the fellow on 2 meters said ....nobody uses CW
> anymore .....its DOA . I just like to put up my feet, lean back, and open
> an Iron City Beer and enjoy the quality of those AM signals ... and this
> from a 99.99% CWist. My buddy built on of those rigs in 66 and it worked
> fine with his Mor-Gain antenna ...even with the hardware cloth safety mesh
> covering the chassis. Lots 'o fun.
>
> God Bless and 73 all ..... KI3R Tom in Belle Vernon PA
>
>
Well I havn't heard any AM on the HF bands in a long time, but I stand
corrected that some people still use it. Granted it's in the minority
and on "calling frequencies". I don't think those screen grid modulators
found in novice rigs were of much use though. They didn't have
much punch and poor audio. If you are going to go AM, a real plate
modulator is the only way to go. (I shudder to think what a plate
modulation transformer would cost these days....)

976. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 00:12:26 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <0JTCf.5529$eY5.3828@bignews7.bellsouth.net>
Source record: 13976

Mike W wrote:
> On Sun, 22 Jan 2006 15:17:47 -0500, "wa2mze(spamless)"
> <"wa2mze(spamless)"@bellsouth.net> wrote:
>
>
>
>>You might as well leave out the
>>AM modulator since it will be useless today. Back in '66-'67 there
>>were still some people on AM (mostly on 80 and 10 meters), but today
>>it's completly gone.
>
>
> Thats interesting, I wonder what mode I was using on 2m last Sunday
> morning?.
> It was an AM qso over a distance of about 90 miles, received an R5-S3
> and gave an R5-S2. Both of us were running about 2.5w
> --
>
>
I remember having a Gonset 2m communicator I as a novice.
Is there any am left on 2m? Can those new multi mode rigs
even transmit on am?

I never said AM doesn't have it's place. It's gone as a DX mode,
but on a quiet band is great for rag chewing.

977. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 00:16:38 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <YMTCf.5541$eY5.2581@bignews7.bellsouth.net>
Source record: 13977

Lynn Coffelt wrote:
>>>I was thinking of building a simple rig again but with a 1625 in the
>
> final.
>
>>>I have about a dozen of these bottles in the junk box ....
>>
>>When I find the right round tuit I want to use TEN 1625's with their
>>filaments series'd across the 120 VAC line in a simple CW rig. Can't
>>find it right now, but somewhere around here I have an article from
>>an old radio magazine describing just such a transmitter.
>>
>>IIRC, the capacitance from ten tubes limited it to the lower HF band(s),
>>but it still seems like an easy way to get 750 watts!
>>--
>>--Myron A. Calhoun.
>
>
> Hey, Man, I don't know about TEN 1625's, but I did try five 1625's (in
> parallel, of course) and could work up to 40 CW..... (as an American in
> France, F7CT). Almost 1000VDC on the plates, and they did get pretty rosy
> on a long "dah". 1625's could be drawn by the basket full from the MARS
> storeroom at Toul Rosieres Air Base, France. 1962......1963?
> Old Chief Lynn..... W7LTQ
>
>
Let's see... the output C of an 807 (1625 is the same) is 7pf, the input C
is 12pf. With 10 tubes thats 70pf output and 120pf input. Won't work
at all on 10m, and iffy on 20. Would be fine on 80 and 40.

978. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 00:17:46 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <0OTCf.5545$eY5.4503@bignews7.bellsouth.net>
Source record: 13978

Dan/W4NTI wrote:
> "wa2mze(spamless)" <"wa2mze(spamless)"@bellsouth.net> wrote in message
> news:4JRAf.9605$TK2.151@bignews1.bellsouth.net...
>
>>Jeffrey Bauman wrote:
>>
>>>I'm considering building the am/cw transmitter in the 1966 handbook
>>>(probably in others, too). It runs a single 6146 in the final.
>>>
>>>I am curious if anyone has ever built that rig. If I build it, it will
>>>probably be with an outboard power supply, and a single switch for input
>>>/
>>>tank band switching.
>>>
>>>Also curious: Anyone ever homebrewed a DX-60?
>>>
>>>Jeff
>>>W8KZW
>>>
>>>
>>
>>I built a similar rig, but it was weakly based on that design.
>>Mine had a 6GK6 oscillator and a 6146 final. It was built inside
>>a chassis with the tubes mounted on a subchassis inside. The tubes
>>were "sideways" and holes were drilled in the chassis-cabinet for
>>ventilation.
>>
>>I am assuming the same transmitter was described in the 1967 HB (which
>>was the first HB I ever bought). You might as well leave out the
>>AM modulator since it will be useless today. Back in '66-'67 there
>>were still some people on AM (mostly on 80 and 10 meters), but today
>>it's completly gone. Low cost SSB xcvrs wiped out AM by the mid 1970's.
>>
>>I was thinking of building a simple rig again but with a 1625 in the
>>final.
>>I have about a dozen of these bottles in the junk box along with half as
>>many
>>6AG7's. The crystals will be the scarce items these days (well expensive
>>anyway).
>>
>
>
> Just curious why you think the AM modulator will be "useless today" ?????
> I'll have to tell those AMers running DX-?? equipment to stop talking into

> the mic, right?
>
> Dan/W4NTI
>
>
I stand corrected that some people are still rag chewing on AM.
I never did like the screen modulator's though. No punch.

979. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 01:32:30 UTC
From: Walter Raleigh <walterraleigh69@hotmail.com>
Message-ID: <PWUCf.5103$j7.161021@news.indigo.ie>
Source record: 13979
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"G1LVN (for it is he)" <gareth.paley@gmail.com> wrote in message
news:drgrcogjq1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com...
> DON'T TELL ME... sweeney IS _IDI-AMIN :-)

F*ck me , you're smart aintcha.

--

vy 73 de Walter R.

980. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 01:42:02 UTC
From: From the shack of G1LVN <gareth.paley@gmail.invalid.com>
Message-ID: <drh6ha$d70$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13980
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Walter Raleigh" <walterraleigh69@hotmail.com> wrote in message
news:PWUCf.5103$j7.161021@news.indigo.ie...
>
> "G1LVN (for it is he)" <gareth.paley@gmail.com> wrote in message
> news:drgrcogjq1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com...
> > DON'T TELL ME... sweeney IS _IDI-AMIN :-)
>
> F*ck me , you're smart aintcha.
smaty-pants smarty-pants ra ra ra!!!

--
drei unt siebzig deG1LVN
http://www.outpimp.com/?x=481566961
---
read rfc1855.txt first and
remove .invalid to reply

981. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 01:48:27 UTC
From: Walter Raleigh <walterraleigh69@hotmail.com>
Message-ID: <M9VCf.5104$j7.161040@news.indigo.ie>
Source record: 13981
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"From the shack of G1LVN" <gareth.paley@gmail.invalid.com> wrote in message news:drh6ha$d70$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com...

> smaty-pants smarty-pants ra ra ra!!!

Eh?...

Nice to see you to see you nice.

--

vy 73 de Walter R.

982. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 01:56:45 UTC
From: From the shack of G1LVN <gareth.paley@gmail.invalid.com>
Message-ID: <drh7ct$4lv$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13982
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Walter Raleigh" <walterraleigh69@hotmail.com> wrote in message
news:M9VCf.5104$j7.161040@news.indigo.ie...
>
> "From the shack of G1LVN" <gareth.paley@gmail.invalid.com> wrote in
message
> news:drh6ha$d70$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com...
>
> > smaty-pants smarty-pants ra ra ra!!!
>
> Eh?...
>
> Nice to see you to see you nice.

Stay in te blac and out of the red. There's no prize in this game for two in
a bed.

--
drei unt siebzig deG1LVN
http://www.outpimp.com/?x=481566961
----
read rfc1855.txt first and
remove .invalid to reply

(WOT band you on ths time o'night, Walter?)

983. YM400 receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 05:30:20 UTC
From: pdrunen@aol.com
Message-ID: <1138512620.671303.55210@f14g2000cwb.googlegroups.com>
Source record: 13983

Hi there group,

I have obtained an old microwave receiver made by Yaesu called YM-400.
It also has a yaesu label and look somewhat like a yeasu cover. I have
found a little bit about it in old 80's 73 mag

Looking for an information to understand it, maybe put it up.

Looking forward to your post!

de KJ4UO

984. Cheap AM chips

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 06:12:15 UTC
From: Frank <Frank.22e2wa@news.radiobanter.com>
Message-ID: <Frank.22e2wa@news.radiobanter.com>
Source record: 13984

Hi All;

I just bought 75 LM3820 chips from B.G. Micro for 12 cents each. You have to buy tubes of 25 chips. The chips seem to work great, I'm using one yellow IF can from a pocket radio, and two 455khz ceramic filters in the IF. I used an FET detector stage, and there's enough audio level to drive the line input of a boom box that I was using for a quickie amp. I don't know what the upper limit is of the oscillator, but I had it up to 13 mhz with no trouble, at least after I figured out the scope probe was loading down the oscillator, and stopping it at 5 mhz.

The pin out in the original data sheet for the LM3820 seems incorret, or maybe just confusing. I couldn't get those configurations to work. I had an app guide for the LM1868, which was using the LM3820 for the AM side of an AM/FM system. Those connections shown were considerably different from the LM3820 data sheet, and it works! Both data sheets show a tuned RF input circuit, but I'm using just a six foot wire, and it works ok on AM.
I'm using voltage tuning, using the NTE618 as the capacitor in the AM oscillator. I haven't tried it on short wave yet, that's tomorrow's project. I mainly want the 39 to 31 bands, but may play with using it on the HF ham bands.

I can e-mail the schematic if anyone is interested, it might be easier to follow than the data sheet. It's an old chip, but the price, and ease of use attracted me to it.

Frank

--
Frank

985. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 09:17:34 UTC
From: The Sweeny <jack.regan@hotmail.co.uk>
Message-ID: <1138526254.766524.34480@g43g2000cwa.googlegroups.com>
Source record: 13985
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

G4KFK wrote:

> G1LVN (for it is he) wrote:
> > DON'T TELL ME... sweeney IS _IDI-AMIN :-)
>
> Indeed - Jack Regan has moved to Kampala and is now active as 5X5IDI
>
> G1LVN wins the fiver!
>
> 73
> Mike G4KFK

Smart lads, well done, but no cigar!

My mate 'idi' got chucked out by his wife (oh how we laughed) and has
been staying with us for a while. He's now been forgiven (but never
forgotton) and is back in his own drum getting in the ear on how he
must keep away from other birds! :))
Also he was a bit too fond of my gold watch.

I'm very impressed with you Mike, there's a job waiting for you in the
FS if you fancy it. ;)

Idi and I are both very big fans of Gareth Evans having met him some
time ago.
At the time I remember saying as we left "That blokes an absolute james
hunt and needs locking up in a bin"

Keep your noses clean everyone and remember that old Jack can read NNTP
ips plus a bit more.

And before I forget

SHUT IT EVANS.

986. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 09:46:09 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <dri2t1$48g$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13986
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Walt, you are obviously an intelligent person of high IQ with a broad background of knowledge.

But your contributions to newsgroups would be better appreciated if you refrained from the many inconsequential, shorties, which waste one's time bothering to look at. Your own valuable time is also wasted.

But please do continue, preferably without shorties, to educate us.

Reg.

987. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 10:12:37 UTC
From: G4KFK <mike@g4kfk.co.uk>
Message-ID: <1138529557.521475.32740@f14g2000cwb.googlegroups.com>
Source record: 13987
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

The Sweeny wrote:
> I'm very impressed with you Mike, there's a job waiting for you in the
> FS if you fancy it. ;)

It ain't rocket science!

On the subject of IP addresses, did anybody notice that Gareth's latest
new fan is in Holland?

73
Mike G4KFK

988. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 10:16:21 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1138529780.989758.146940@z14g2000cwz.googlegroups.com>
Source record: 13988
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

You continue to behave like a 5-year-old.

Peter wrote:
>
> What I can't understand Nick is that if anyone else other than
> yourself posts a criticism of him he comes back with the usual "stupid
> boy", "grow up" macros, yet when you post he leaves you alone!
>
> What have you got that the rest of us don't have? :-)
>
> Perhaps he fears the reception that he'll get when he finally goes
> "Below" ..
>
> Peter, G3PHO

989. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 10:34:36 UTC
From: The Sweeny <jack.regan@hotmail.co.uk>
Message-ID: <1138530876.199454.209450@z14g2000cwz.googlegroups.com>
Source record: 13989
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

SHUT IT EVANS

990. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 10:48:54 UTC
From: The Sweeny <jack.regan@hotmail.co.uk>
Message-ID: <1138531733.979157.261550@o13g2000cwo.googlegroups.com>
Source record: 13991
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

My old Dutch :))

991. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 10:50:31 UTC
From: The Sweeny <jack.regan@hotmail.co.uk>
Message-ID: <1138531830.957772.30740@g43g2000cwa.googlegroups.com>
Source record: 13992
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

That it ain't, just click the mouse!

992. Re: Emtech???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 10:59:03 UTC
From: Mike Young <boat042-spam@yahoo.com>
Message-ID: <Xd1Df.29167$PL5.13797@newssvr11.news.prodigy.com>
Source record: 13990

"Dale Parfitt" <par@parelectronics.com> wrote in message
news:wDQCf.15160$K17.8925@trnddc03...
>
> "Mike Young" <boat042-spam@yahoo.com> wrote in message
> news:9cDCf.28244$H71.9488@newssvr13.news.prodigy.com...
>> "Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
>> news:lvednRC2CYPiJEfeRVny1A@pipex.net...
>>>> I got an Emtech antenna tuner kit for Christmas, but it's the BNC
>>>> version and my shack is normal SO whatevers. >
>>> ====================================
>>> What's the problem ; just get a BNC to SO 239 adaptor or make a short
>>> lead with the appropriate connectors.
>>
>> The problem is a couple of dB of loss on each side. Not everyone cares.
>>
> I would be very interested in the measurements or documentation to support
> the statement that the UHF-->BNC adapter caues a couple of dB loss

I have none. Just the shopkeeper who sold me my first rig said so. I'm sure
I can rig up some old crusty adapters to do so. :) All the same, I would
want to keep the adapters out for other reasons.

993. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 11:13:59 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1138533239.672133.27420@o13g2000cwo.googlegroups.com>
Source record: 13993
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Who's that, then?

Walt Davidson wrote:
> On 29 Jan 2006 02:12:37 -0800, "G4KFK" <mike@g4kfk.co.uk> wrote:
> >On the subject of IP addresses, did anybody notice that Gareth's latest
> >new fan is in Holland?
> Indeed, we did. It was also noted who was away from home, working in
> Holland last week.

994. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 11:33:07 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1138534387.907093.177870@g43g2000cwa.googlegroups.com>
Source record: 13995
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Is it.....

A) Not Ham?
B) CBer?
C) Incurable CBer?
D) Rhett Butler Of Bitchiness?
E) Amin de mood for certification?
F) G7KUJ CB Mail-Order supplier?
G) All Six of the above?

Walt Davidson wrote:
> On 29 Jan 2006 03:13:59 -0800, "Orator For Decency"
> <radio.ham@lycos.co.uk> wrote:
>
> >Who's that, then?
>
> That would be telling ...
>
> ;-)
> 73 de Wlat
>
> --
> Walt Davidson Email: g3nyy @despammed.com

995. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 12:47:26 UTC
From: G4KFK <mike@g4kfk.co.uk>
Message-ID: <1138538846.222454.41060@o13g2000cwo.googlegroups.com>
Source record: 13996
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Orator For Decency wrote:
> Who's that, then?

Bet you thought you had the monopoly on posting insane drivel about The Queen to this newsgroup!

The Dutch have a constitutional monachy too!

73
Mike G4KFK

996. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 13:47:16 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1138542436.741129.256650@g49g2000cwa.googlegroups.com>
Source record: 13997
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

So, doesn't say much for him if he can't get long-term work
in this country.

Walt Davidson wrote:
> On 29 Jan 2006 03:33:07 -0800, "Orator For Decency"
> <radio.ham@lycos.co.uk> wrote:
>
> >Is it.....
> >
> >A) Not Ham?
> >B) CBer?
> >C) Incurable CBer?
> >D) Rhett Butler Of Bitchiness?
> >E) Amin de mood for certification?
> >F) G7KUJ CB Mail-Order supplier?
> >G) All Six of the above?
>
> My lips are sealed.
>
> But that was quite a good guess!
> ;-)
>
> 73 de Wlat
>
> --
> Walt Davidson Email: g3nyy @despammed.com

997. Re: Emtech???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 14:51:07 UTC
From: "John L. Sielke" <w2agnNOSPAM@w2agn.net>
Message-ID: <43DCD65B.5020708@w2agn.net>
Source record: 13898

Mike Young wrote:
> "Dale Parfitt" <par@parelectronics.com> wrote in message
> news:wDQCf.15160$K17.8925@trnddc03...
>
>>
>> "Mike Young" <boat042-spam@yahoo.com> wrote in message
>> news:9cDCf.28244$H71.9488@newssvr13.news.prodigy.com...
>>
>>> "Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
>>> news:lvednRC2CYPiJEfeRVny1A@pipex.net...
>>>
>>>>> I got an Emtech antenna tuner kit for Christmas, but it's the BNC
>>>>> version and my shack is normal SO whatevers. >
>>>>
>>>> ====================================
>>>> What's the problem ; just get a BNC to SO 239 adaptor or make a
>>>> short lead with the appropriate connectors.
>>>
>>>
>>> The problem is a couple of dB of loss on each side. Not everyone cares.
>>>
>> I would be very interested in the measurements or documentation to
>> support the statement that the UHF-->BNC adapter caues a couple of dB
>> loss
>
>
> I have none. Just the shopkeeper who sold me my first rig said so. I'm
> sure I can rig up some old crusty adapters to do so. :) All the same, I
> would want to keep the adapters out for other reasons.
>
If you had been required to pass a REAL technical exam to get your license, you
would know better.

998. Re: 21.855 or 20.945MHz Xtals - who stocks them - corrected

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 16:31:43 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1138552303.208430.59760@g44g2000cwa.googlegroups.com>
Source record: 13899

MarkAren wrote:
> Oops, not enough coffee.
>
> 21.4MHz + or - 455kHz is hopefully 21.855 and 20.945MHz
>
> Whereabouts of a supplier with them in stock appreciated.

http://www.dialelec.com/345.html

73, Leon

999. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 18:16:11 UTC
From: mcalhoun@ksu.edu
Message-ID: <drj0pb$js7@unix1.cc.ksu.edu>
Source record: 13900

>Mcalhoun must have been thinking about resistors!

Nope. Was thinking (if that word even applies here) about combining
capacitors to reach a desired working voltage instead of capacitance !-(

>>>>....[snip]....
>>>>and they didn't have any 1000uf but they did have some 470uf caps so I
>>>>put two of them in parallel to get close to see if it mattered....
>>> ^^^^^^^^
>>>I sure hope you meant "series"!-)
>> Why?

The only alibi I can give is "a senior moment".

But WOW! Umpteen follow-on responses discussing janitors, etc.!
(Now I understand why the information-transfer rate
on this newsgroup sometimes seems pretty low!)

--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

1000. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 18:49:38 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1138560578.059577.132190@g43g2000cwa.googlegroups.com>
Source record: 13901
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

So, shall we expect a drop in the number of posts from
Sweeny-Odd and Amin-de-loony-bin during the mid-week when
someone who is NOT a HAM is in Holland?

Walt Davidson wrote:
> On 29 Jan 2006 03:33:07 -0800, "Orator For Decency"
> <radio.ham@lycos.co.uk> wrote:
>
> >Is it.....
> >
> >A) Not Ham?
> >B) CBer?
> >C) Incurable CBer?
> >D) Rhett Butler Of Bitchiness?
> >E) Amin de mood for certification?
> >F) G7KUJ CB Mail-Order supplier?
> >G) All Six of the above?
>
> My lips are sealed.
>
> But that was quite a good guess!
> ;-)
>
> 73 de Wlat
>
> --
> Walt Davidson Email: g3nyy @despammed.com

1001. Re: Astron Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 18:50:09 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-BCF01A.09515329012006@netnews.worldnet.att.net>
Source record: 13902

In article <drj0pb$js7@unix1.cc.ksu.edu>, mcalhoun@ksu.edu wrote:

> >Mcalhoun must have been thinking about resistors!
>
> Nope. Was thinking (if that word even applies here) about combining
> capacitors to reach a desired working voltage instead of capacitance !-(
>
>
> >>>>....[snip]....
> >>>>and they didn't have any 1000uf but they did have some 470uf caps so I
> >>>>put two of them in parallel to get close to see if it mattered....
> >>> ^^^^^^^^
> >>>I sure hope you meant "series"!-)
> >> Why?
>
> The only alibi I can give is "a senior moment".
>
> But WOW! Umpteen follow-on responses discussing janitors, etc.!
> (Now I understand why the information-transfer rate
> on this newsgroup sometimes seems pretty low!)

Well, WE ALL have Senior Momments, So I retrack my "tuition refund"
responce.....

Me

1002. please spare us

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 18:59:18 UTC
From: an Old friend <kb9rqz@amsat.org>
Message-ID: <1138561158.035288.167440@g43g2000cwa.googlegroups.com>
Source record: 13903
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Orator For Decency wrote:
> So, shall we expect a drop in the number of posts from
> Sweeny-Odd and Amin-de-loony-bin during the mid-week when
> someone who is NOT a HAM is in Holland?
but las it seem you have no mercy

1003. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 20:25:52 UTC
From: garigue <garigue@comcast.net>
Message-ID: <-aWdnb1PBJpauUDeRVn-pg@comcast.com>
Source record: 13904

> Well I havn't heard any AM on the HF bands in a long time, but I stand
> corrected that some people still use it. Granted it's in the minority
> and on "calling frequencies". I don't think those screen grid modulators
> found in novice rigs were of much use though. They didn't have
> much punch and poor audio. If you are going to go AM, a real plate
> modulator is the only way to go. (I shudder to think what a plate
> modulation transformer would cost these days....)

Have to agree there Ken as I have had a few screen jobs in the "good old days". They weren't good for too much only to get on phone for a youngster who didn't have the bucks for a SSB or plate modulated rig. My old Globe Chief had the screen modulator but did not perform well at all .

God Bless ....Tom KI3R Belle Vernon PA

1004. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 20:35:15 UTC
From: "G1LVN (for it is he)" <gareth.paley@gmail.com>
Message-ID: <drj8u3erl1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13905
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"G4KFK" <mike@g4kfk.co.uk> wrote in message
news:1138490792.050759.222930@g47g2000cwa.googlegroups.com...
>
> G1LVN (for it is he) wrote:
>> DON'T TELL ME... sweeney IS _IDI-AMIN :-)
>
> Indeed - Jack Regan has moved to Kampala and is now active as 5X5IDI
>
> G1LVN wins the fiver!
>
I bought a new sig with it...

--
--
73 de JaitLVN
http://www.g1lvn.org.uk

1005. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 20:54:59 UTC
From: AntiSpam <"lionel.g\\@(AntiSpam)bluewin.ch">
Message-ID: <43dd2bab$1_2@news.bluewin.ch>
Source record: 13906
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

Don Bowey a ï¿½crit :
> On 1/23/06 10:08 PM, in article
> 1138082909.085752.34230@g44g2000cwa.googlegroups.com, "Too_Many_Tools"
> <too_many_tools@yahoo.com> wrote:
>
>
>>"You are clearly FOS, and lack any first hand knowledge about this.
>>Medicine
>>takes great determination, money, and effort.
>>
>>Perhaps you had trouble with engineering because you are one of those
>>not
>>suited to it."
>>
>>You are the one FOS....you are talking to someone who has done well in
>>several of the fields we are discussing.
>>
>>Medicine uses what science/engineering provides for it....and they are
>>grossly overpaid for it. Without technology, medicine would be the
>>voodoo that it was and many times still is.
>>
>>TMT
>>
>
>
> Beating your chest and repeating yourself
He have reason: "No pain, No gain" ... ;-)

1006. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 21:07:31 UTC
From: From the shack of G1LVN <gareth.paley@gmail.invalid.com>
Message-ID: <drjaqj$d9u$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13907
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Walt Davidson" <g3nyy@despammed.com> wrote in message
news:14aqt15r8j587s23cr313b4iouibm2lrbt@4ax.com...
> On Sun, 29 Jan 2006 20:35:15 +0000 (UTC), "G1LVN \(for it is he\)"
> <gareth.paley@gmail.com> wrote:
>
>
> Pity you didn't buy a new sig separator to go with it!
>
> :-)#

Bill is defo off the crimbo list this year!!

--
drei unt siebzig deG1LVN
http://www.outpimp.com/?x=481566961
----
read rfc1855.txt first and
remove .invalid to reply

1007. Re: Cheap AM chips

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-29 23:14:48 UTC
From: Bob Liesenfeld <wb0poq@visi.com>
Message-ID: <43DD4C68.545D8D9E@visi.com>
Source record: 13908

Frank wrote:

> Hi All;
>
> I just bought 75 LM3820 chips from B.G. Micro for 12 cents each. You
> have to buy tubes of 25 chips. The chips seem to work great, I'm using
> one yellow IF can from a pocket radio, and two 455khz ceramic filters
> in the IF. I used an FET detector stage, and there's enough audio level
> to drive the line input of a boom box that I was using for a quickie
> amp. I don't know what the upper limit is of the oscillator, but I had
> it up to 13 mhz with no trouble, at least after I figured out the scope
> probe was loading down the oscillator, and stopping it at 5 mhz.
>
> The pin out in the original data sheet for the LM3820 seems incorret,
> or maybe just confusing. I couldn't get those configurations to work. I
> had an app guide for the LM1868, which was using the LM3820 for the AM
> side of an AM/FM system. Those connections shown were considerably
> different from the LM3820 data sheet, and it works! Both data sheets
> show a tuned RF input circuit, but I'm using just a six foot wire, and
> it works ok on AM.
> I'm using voltage tuning, using the NTE618 as the capacitor in the AM
> oscillator. I haven't tried it on short wave yet, that's tomorrow's
> project. I mainly want the 39 to 31 bands, but may play with using it
> on the HF ham bands.
>
> I can e-mail the schematic if anyone is interested, it might be easier
> to follow than the data sheet. It's an old chip, but the price, and ease
> of use attracted me to it.

Schematic please! Thanks

Bob WB0POQ

1008. OM3CPH frequency counter doesn't work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-30 06:46:10 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <8b34$43ddb632$d135c4af$1626@MDI.CA>
Source record: 13909

I built the 4 line LCD version and the program LCD4CNTR.hex doesn't display anything on my LCD.

http://www.qsl.net/om3cph/counter/summary.html

Funny thing is my circuit works with the program from this site:

http://www.hamradioindia.org/circuits/fcountlcd.php

Anybody know whats wrong with LCD4CNTR.hex?

JJ

1009. Re: OM3CPH frequency counter doesn't work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-30 14:26:04 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <7mpDf.23$M_7.2@fe06.lga>
Source record: 13910

While I haven't built that particular one, I have built a similar design of Peter's with good success.

There are some possibilities ... Peter relies on timing for the LCD. If your crystal frequency is higher than the frequency of the hex file you downloaded, or if your LCD is a little off (common if you got the LCD from a hobbyist source) then a blank display or a display of all black squares would be a common result. Check to be sure that the version of the hex file you downloaded matches your crystal frequency.

Mag's site is incredibly slow and I haven't located the source, but he at least has the wiring to avoid being dependent on the timing. Whether he did or not I can't tell without seeing the source. Reading the LCD to tell whether it is ready, instead of waiting "long enough" is fairly uncommon because different brands of LCD seem to respond a little differently, but maybe you just got lucky.

I would try slowing down your clock a bit as a test. This will give you an incorrect frequency readout, but it would let you know whether timing is the problem. One thing about LCDs -- there is no such thing as too slow, so if the only other crystal you have lying around is a lot slower, it will be fine for the experiment. If it turns out this is the problem, simply increase the LCD delay in Peter's source.

..

"JJ" <JJ@nowhere.com> wrote in message
news:8b34$43ddb632$d135c4af$1626@MDI.CA...
>I built the 4 line LCD version and the program LCD4CNTR.hex doesn't display
> anything on my LCD.
>
> http://www.qsl.net/om3cph/counter/summary.html
>
>
> Funny thing is my circuit works with the program from this site:
>
> http://www.hamradioindia.org/circuits/fcountlcd.php
>
> Anybody know whats wrong with LCD4CNTR.hex?
>
> JJ

1010. Re: OM3CPH frequency counter doesn't work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-30 14:29:56 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <8vpDf.25$M_7.18@fe06.lga>
Source record: 13911

Oh duh!

I just looked again ... Peter and Mag wire the LCD differently. RS and LCDEN are swapped on the two circuits, so if your circuit works with Mag's code, of course it won't work with Peter's.

..

"xpyttl" <xpyttl_NOSPAM@earthling.net> wrote in message news:7mpDf.23$M_7.2@fe06.lga...
> While I haven't built that particular one, I have built a similar design
> of Peter's with good success.
>
> There are some possibilities ... Peter relies on timing for the LCD. If
> your crystal frequency is higher than the frequency of the hex file you
> downloaded, or if your LCD is a little off (common if you got the LCD from
> a hobbyist source) then a blank display or a display of all black squares
> would be a common result. Check to be sure that the version of the hex
> file you downloaded matches your crystal frequency.
>
> Mag's site is incredibly slow and I haven't located the source, but he at
> least has the wiring to avoid being dependent on the timing. Whether he
> did or not I can't tell without seeing the source. Reading the LCD to
> tell whether it is ready, instead of waiting "long enough" is fairly
> uncommon because different brands of LCD seem to respond a little
> differently, but maybe you just got lucky.
>
> I would try slowing down your clock a bit as a test. This will give you
> an incorrect frequency readout, but it would let you know whether timing
> is the problem. One thing about LCDs -- there is no such thing as too
> slow, so if the only other crystal you have lying around is a lot slower,
> it will be fine for the experiment. If it turns out this is the problem,
> simply increase the LCD delay in Peter's source.
>
> ..
>
> "JJ" <JJ@nowhere.com> wrote in message
> news:8b34$43ddb632$d135c4af$1626@MDI.CA...
>>I built the 4 line LCD version and the program LCD4CNTR.hex doesn't
>>display
>> anything on my LCD.
>>
>> http://www.qsl.net/om3cph/counter/summary.html
>>
>>

>> Funny thing is my circuit works with the program from this site:
>>
>> http://www.hamradioindia.org/circuits/fcountlcd.php
>>
>> Anybody know whats wrong with LCD4CNTR.hex?
>>
>> JJ
>
>

1011. Re: OM3CPH frequency counter doesn't work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-30 15:43:58 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <69f7f$43de343e$d135c4af$8298@MDI.CA>
Source record: 13912

Thanks for your input.

I see them wired identically and I checked a few times!
And I am using a 4MHz crystal.
Which version are you using?

My LCD is a standard 2x16 one and the Mag display is broken on 2x8 lines.

Did you compile Peter's source code yourself?

JJ

"xpyttl" <xpyttl_NOSPAM@earthling.net> wrote in
news:8vpDf.25$M_7.18@fe06.lga:

> Oh duh!
>
> I just looked again ... Peter and Mag wire the LCD differently. RS
> and LCDEN are swapped on the two circuits, so if your circuit works
> with Mag's code, of course it won't work with Peter's.
>

1012. Re: OM3CPH frequency counter doesn't work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-30 18:35:46 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <a0tDf.227$wG6.206@fe03.lga>
Source record: 13913

"JJ" <JJ@nowhere.com> wrote in message
news:69f7f$43de343e$d135c4af$8298@MDI.CA...
> Thanks for your input.
>
> I see them wired identically and I checked a few times!

Not quite. The LCD enable and Register Select lines are swapped between the two circuits. Look carefully -- it is confusing since the R/W line is the same (and it is between the two). Now, all I had to go by was Mag's schematic and Peter's source code. I didn't find either Mag's source or Peter's schematic. But Peter's source does expect LCDEN and RS to be on the opposite pins to Mag's schematic.

> And I am using a 4MHz crystal.

I am using a 10 MHz crystal, but I modified Peter's code to accomodate that

> My LCD is a standard 2x16 one and the Mag display is broken on 2x8 lines.

It's a pretty simple fix to deal with the 2x8. Most 1x16 displays are 2x8 with the two lines side by side. Mag has to add 0x40 when he gets to the ninth character. Just drop that add and you're good to go.

> Did you compile Peter's source code yourself?

Yes. Back whenever it was I first started playing I may have used his hex file, that was a long time ago. But I can't resist the urge to play mself.

..

1013. Re: OM3CPH frequency counter doesn't work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-30 19:31:03 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <45d72$43de6977$d135c4af$16517@MDI.CA>
Source record: 13914

"xpyttl" <xpyttl_NOSPAM@earthling.net> wrote in
news:a0tDf.227$wG6.206@fe03.lga:
It Works!
>
> Not quite. The LCD enable and Register Select lines are swapped
> between the two circuits. Look carefully -- it is confusing since the
> R/W line is the same (and it is between the two). Now, all I had to
> go by was Mag's schematic and Peter's source code. I didn't find
> either Mag's source or Peter's schematic. But Peter's source does
> expect LCDEN and RS to be on the opposite pins to Mag's schematic.

We must be looking at different diagrams. I have f84 pin 1 connected to
LCD 6 and f84 pin 17 connected to LCD 4 on both designs.

What I did was ground LCD 5. It worked for the Mag but not Peter's
program.

>> My LCD is a standard 2x16 one and the Mag display is broken on 2x8
>> lines.
>
> It's a pretty simple fix to deal with the 2x8. Most 1x16 displays are
> 2x8 with the two lines side by side. Mag has to add 0x40 when he gets
> to the ninth character. Just drop that add and you're good to go.
Which line or area in LCD4CNTR.ASM can I find this extra 0x40 to remove?

>> Did you compile Peter's source code yourself?
>
> Yes. Back whenever it was I first started playing I may have used his
> hex file, that was a long time ago. But I can't resist the urge to
> play mself.
>
Well I recompiled it for me and it works. I will try Peter's hex file
again to see if thats faulty.

Thanks again for the tremendous help.

JJ

1014. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-30 20:33:06 UTC
From: andy_rennison@hotmail.com
Message-ID: <1138653186.593685.292180@g44g2000cwa.googlegroups.com>
Source record: 13915
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B
licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds. "

Hold on a mo. I'm a class B licence holder - G8LIR, and have been for,
oh about 30 years I think. My main interest was in fast scan ATV on 70
Cms and 23cms, and with a small team we competed in many ATV contests,
setting new (and I think unbroken) records. All our equipment was home
built - yes I do mean ALL - including narrow band ATV receivers
utilising inline cavities and integrating receivers to subtract noise
and reveal lost images when only a weak sync pulse was available. We
also DESIGNED and built the linear amplifiers using 4cx250's in push
pull, with 2kv on the anodes and tuneable cavities (not copied
designs). And, oh yes, we designed filters using laplace transforms to
calculate the correct vaues for the inductors, wound them ourselves and
tuned then with second hand spectrum analysers.

Now to me, that level of technical expertise speaks to a certain
intellectual level over a 6 year olds.

I was considering returning to the hobby, but frankly the view in this
FAQ has put me off.

Anyone care to comment ?

Andy

1015. Re: OM3CPH frequency counter doesn't work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-30 20:52:43 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <783bb$43de7c9b$d135c4af$11295@MDI.CA>
Source record: 13916

I made a error in my post.
The program that is working is the LCD4DIEC.asm and not LCD4CNTR.asm.

Now that's a real puzzle.

JJ

1016. Re: OM3CPH frequency counter doesn't work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-30 21:10:17 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <4hvDf.35$XG2.18@fe02.lga>
Source record: 13917

"JJ" <JJ@nowhere.com> wrote in message
news:45d72$43de6977$d135c4af$16517@MDI.CA...

> Which line or area in LCD4CNTR.ASM can I find this extra 0x40 to remove?

If you look at the code:

```
movlw LINE1 ; continue at right half of display
iorlw 080h ; Function set
call PutCMD ; Position cursor leftmost on first line
```

under the label NoDot, this code moves the cursor to the second line. It looks as if all you will see on the second line is the string " MHz" (leading space). Anyway, comment out these three and the " " should get written after the last digit instead of on the second line.

Looking more closely at this code, Peter does use the busy flag -- I had looked at his initialization code where he only uses timing, but when he goes to write, he checks the busy.

Up at the top of his code, the lines:

```
E equ 2 ; LCD Enable control line RA2
R_W equ 0 ; LCD Read/Write control line RA0
RS equ 1 ; LCD Register-Select control line RA1
```

set the pins for LCD enable, R/W and Register Select. If you look at Mag's schematic, he places RS on RA0, RW on RA1, and E also on RA2. Peter's comment above those lines would lead you to suspect that they were on PORTB, but he actually uses them on PORTA. If you swap the connections to LCD pins 4 and 5 Peter's code might work.

..

1017. Re: OM3CPH frequency counter doesn't work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-30 21:25:32 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <ivvDf.36$XG2.27@fe02.lga>
Source record: 13918

OK, I finally got the Mag code (that website was amazingly slow a little earlier), and see that it is practically the same code, with the addition of the IF offset. *BUT* here is the kicker

```
125,126c132,133
< R_W equ 0 ; LCD Read/Write control line RA0
< RS equ 1 ; LCD Register-Select control line RA1
---
> R_W equ 1 ; LCD Read/Write control line RA1
> RS equ 0 ; LCD Register-Select control line RA0
```

..

"JJ" <JJ@nowhere.com> wrote in message
news:783bb$43de7c9b$d135c4af$11295@MDI.CA...
>I made a error in my post.
> The program that is working is the LCD4DIEC.asm and not LCD4CNTR.asm.
>
> Now that's a real puzzle.
>
> JJ

1018. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-30 21:29:55 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <6o0tt1dhjq1pe2nv0son4mhetp65senjq3@4ax.com>
Source record: 13919
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

andy_rennison@hotmail.com wrote:

>I was considering returning to the hobby, but frankly the view in this
>FAQ has put me off.
>
>Anyone care to comment ?

The person who wrote the so-called 'faq' was himself a B licensee for many years, before taking the morse test and getting an A. The excuse he trotted out for this - after much prompting about the more-than-a-decade gap between these two events - was 'an interest in VHF/UHF techniques'.

Unfortunately for this belated post-justification, he has never published what he accomplished in that extended period.

It is said that 'empty vessels make the most noise'.

If you want to return to the hobby, then do so and enjoy it. Do not be put off by someone who doesn't believe there is such a thing as 'slope detection', or who sold an FT-101 because the tune-up pages were missing from the manual.....don't ask......

from
Aero Spike

1019. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-30 21:37:18 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <drm0uecpn3@puck.litech.org>
Source record: 13920
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

In rec.radio.amateur.homebrew andy_rennison@hotmail.com wrote:
> "One group of people who claim to be of the standard of
> Radio Hams but who are in reality nothing more than an
> apology for the failure of a CBer are those class B
> licensees who falsely proclaimed that they were against
> the use of a Morse Test to control access to the HF
> bands, until, that is, a test was introduced at their
> intellectual level, the intellectual level of 6-year-olds. "

> Hold on a mo. I'm a class B licence holder - G8LIR, and have been for,
> oh about 30 years I think. My main interest was in fast scan ATV on 70
> Cms and 23cms, and with a small team we competed in many ATV contests,
> setting new (and I think unbroken) records. All our equipment was home
> built - yes I do mean ALL - including narrow band ATV receivers
> utilising inline cavities and integrating receivers to subtract noise
> and reveal lost images when only a weak sync pulse was available. We
> also DESIGNED and built the linear amplifiers using 4cx250's in push
> pull, with 2kv on the anodes and tuneable cavities (not copied
> designs). And, oh yes, we designed filters using laplace transforms to
> calculate the correct vaues for the inductors, wound them ourselves and
> tuned then with second hand spectrum analysers.

> Now to me, that level of technical expertise speaks to a certain
> intellectual level over a 6 year olds.

> I was considering returning to the hobby, but frankly the view in this
> FAQ has put me off.

> Anyone care to comment ?

Yes, indeed.

You can discount without loss anything the writer of that so-called
"FAQ" has written, is writing, or will ever write. He attempts to
demean people who have attained heights he can't even see, much less
comprehend. He has nothing to say, and insists on doing so at length.

Don't let him put you off anything. Jump in; the water's fine.

--
Mike Andrews W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

1020. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-30 22:10:10 UTC
From: Trevor Day <Trev@secornwall.removethis.com>
Message-ID: <6gfzIaJ46o3DFwLD@secornwall.com>
Source record: 13921
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

In message <1138653186.593685.292180@g44g2000cwa.googlegroups.com>,
andy_rennison@hotmail.com writes
>
>
>I was considering returning to the hobby, but frankly the view in this
>FAQ has put me off.
>
>Anyone care to comment ?
>
>Andy
>
With a G8L call I would have expected you to recognise an obvious troll
by now. You either want to get back to the hobby or you don't, if this
puts you off then frankly perhaps its not for you!

Trev G3ZYY
--
Trevor Day
UKSMG #217
www.uksmg.org

1021. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-30 22:13:23 UTC
From: WSQT <wsqtradio@ziplip.com>
Message-ID: <1138659203.588453.301000@g47g2000cwa.googlegroups.com>
Source record: 13923

You will probably be best off winding your own. My advice is this:
find the core size required to handle an amount of power at 60HZ equal
to the audio power needed, find an old power transformer of that core
size, and unwind it. Count the turns on the 117VAC winding to get turns
per volt, and figure the wire size from the DC input to the modulator
for the primary windings, and from the DC input to the PA(for each
side), and turns from the turns per volt for power. Do not push wire
size the the limit(small) becuase the windings also must handle the
peak currents produced by the audio power, which are higher than the DC
average.

This transformer will have more than enough iron in the core to handle
the AC power, as audio is at a higher frequency and the inductive
reactance higher. DC in the secondary will lower the inductance, but
you should still have enough. If you were trying to handle deep bass
frequencies(not needed nor wanted in a "communications" app as they eat
percentage of modulation), you would use a still larger core, figuring
audio power PLUS the power represented by a 60HZ AC current whose RMS
value is equal to the current drawn by the PA. This "overkill"
transformer would give less distortion on deep bass.

For a ham or any other communications application, frequencies below
300 HZ or so are far less important than they are to a broadcaster, but
be SURE not to allow frequencies to pass the modulator's driver that
the output transformer is not efficient at, or heavy currents will be
drawn and efficiency will suffer badly. If you design a modulation
transformer only to handle a narrowband voice range, the modulator
input transformer should also reject any frequencies lower than the
output transformer can handle, or these frequencies can be filtered out
elsewhere.

Otherwise, just speaking too close to the mike(which produces a deep
bass response) will heat up your modulator.

garigue wrote:
> > Well I havn't heard any AM on the HF bands in a long time, but I stand
> > corrected that some people still use it. Granted it's in the minority
> > and on "calling frequencies". I don't think those screen grid modulators
> > found in novice rigs were of much use though. They didn't have
> > much punch and poor audio. If you are going to go AM, a real plate
> > modulator is the only way to go. (I shudder to think what a plate
> > modulation transformer would cost these days....)
>

1022. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-30 22:16:38 UTC
From: Jimbo <jim.gm4dhj@ntlworld.com>
Message-ID: <afwDf.65504$zt1.6655@newsfe5-gui.ntli.net>
Source record: 13922
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

>
> I was considering returning to the hobby, but frankly the view in this
> FAQ has put me off.
>
> Anyone care to comment ?
>
> Andy
>
Good man....

1023. Re: OM3CPH frequency counter doesn't work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-30 23:20:36 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <98ac8$43de9f44$d135c4af$485@MDI.CA>
Source record: 13924

"xpyttl" <xpyttl_NOSPAM@earthling.net> wrote in
news:4hvDf.35$XG2.18@fe02.lga:

> "JJ" <JJ@nowhere.com> wrote in message
> news:45d72$43de6977$d135c4af$16517@MDI.CA...
>
>> Which line or area in LCD4CNTR.ASM can I find this extra 0x40 to
>> remove?
>
> If you look at the code:
>
> movlw LINE1 ; continue at right half of display
> iorlw 080h ; Function set
> call PutCMD ; Position cursor leftmost on first
> line
>
> under the label NoDot, this code moves the cursor to the second line.
> It looks as if all you will see on the second line is the string "
> MHz" (leading space). Anyway, comment out these three and the " "
> should get written after the last digit instead of on the second line.
>
> Looking more closely at this code, Peter does use the busy flag -- I
> had looked at his initialization code where he only uses timing, but
> when he goes to write, he checks the busy.
I did that, now when there is a dot the display shows the frequency twice
on the first line.
There is a bit more to it.

> Up at the top of his code, the lines:
>
> E equ 2 ; LCD Enable control line
> RA2 R_W equ 0 ; LCD Read/Write control line
> RA0 RS equ 1 ; LCD Register-Select
> control line RA1
You are correct. These modded programs really need to be commented.
I just set
R-W equ 1
RS equ 0
and Peter's code works.

BTW, why use a 10Mhz cystal. Does the counter have better actual
resolution?

Well, you are certainly a better program debugger than me!

Thanks again,

JJ

1024. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-30 23:20:43 UTC
From: G4KFK <mike@g4kfk.co.uk>
Message-ID: <1138663243.747362.79190@z14g2000cwz.googlegroups.com>
Source record: 13925
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

andy_rennison@hotmail.com wrote:
> I was considering returning to the hobby, but frankly the view in this
> FAQ has put me off.
>
> Anyone care to comment ?

The point of view posted by "Orator for Decency" is not the FAQ for this newsgroup. It is in fact the deranged rantings of one Gareth Alun Evans, ex-G8DXY, G4SDW. He posts this "FAQ" approximately every week, apparently trolling for trouble (and frequently finding it!) Those that react to his FAQ are then subjected to systematic harassment.

If G4SDW learns of the employer of the individual who reacts, he makes a nuisance of himself there:
http://groups.google.com/group/uk.radio.amateur/msg/bc717f554a1c9469?dmode=source

If G4SDW finds that the individual who reacts has a hobby outside amateur radio, he makes a nuisance of himself in newsgroups relating to that hobby:
http://groups.google.com/group/uk.radio.amateur/msg/8443401f58f6cbbf?dmode=source

When he fails to get a reaction to the harassment described above, he will start making offensive posts using ludicrous anagrams of the individuals name:
http://groups.google.com/group/uk.radio.amateur/msg/7ff9b267900f1c9e?dmode=source

But amateur radio is not Gareth's only hobbyhorse. He frequently airs his unorthodox views on....

The Royal Family:
http://groups.google.com/group/uk.radio.amateur/msg/c9e955a05e86d6fb?dmode=source&hl=en

The Scouts:
http://groups.google.com/group/uk.rec.scouting/browse_frm/thread/99daeabe9ee12509

July 7th 2005:
http://groups.google.com/group/uk.radio.amateur/msg/4bebff023c0174f6?dmode=source

The Armed Forces:
http://groups.google.com/group/uk.radio.amateur/msg/8807de8081d9796e?dmode=source

Don't let him put you off. Welcome back to the hobby!

73
Mike G4KFK
www.g4kfk.co.uk

1025. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-30 23:20:52 UTC
From: G4KFK <mike@g4kfk.co.uk>
Message-ID: <1138663252.176308.272370@g44g2000cwa.googlegroups.com>
Source record: 13926
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

andy_rennison@hotmail.com wrote:
> I was considering returning to the hobby, but frankly the view in this
> FAQ has put me off.
>
> Anyone care to comment ?

The point of view posted by "Orator for Decency" is not the FAQ for this newsgroup. It is in fact the deranged rantings of one Gareth Alun Evans, ex-G8DXY, G4SDW. He posts this "FAQ" approximately every week, apparently trolling for trouble (and frequently finding it!) Those that react to his FAQ are then subjected to systematic harassment.

If G4SDW learns of the employer of the individual who reacts, he makes a nuisance of himself there:
http://groups.google.com/group/uk.radio.amateur/msg/bc717f554a1c9469?dmode=source

If G4SDW finds that the individual who reacts has a hobby outside amateur radio, he makes a nuisance of himself in newsgroups relating to that hobby:
http://groups.google.com/group/uk.radio.amateur/msg/8443401f58f6cbbf?dmode=source

When he fails to get a reaction to the harassment described above, he will start making offensive posts using ludicrous anagrams of the individuals name:
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But amateur radio is not Gareth's only hobbyhorse. He frequently airs his unorthodox views on....

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http://groups.google.com/group/uk.radio.amateur/msg/c9e955a05e86d6fb?dmode=source&hl=en

The Scouts:
http://groups.google.com/group/uk.rec.scouting/browse_frm/thread/99daeabe9ee12509

July 7th 2005:
http://groups.google.com/group/uk.radio.amateur/msg/4bebff023c0174f6?dmode=source

The Armed Forces:
http://groups.google.com/group/uk.radio.amateur/msg/8807de8081d9796e?dmode=source

Don't let him put you off. Welcome back to the hobby!

73
Mike G4KFK
www.g4kfk.co.uk

1026. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-30 23:31:56 UTC
From: Dan/W4NTI <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <MlxDf.2882$Nv2.1769@newsread1.news.atl.earthlink.net>
Source record: 13927

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:pFTCf.5518$eY5.1511@bignews7.bellsouth.net...
> garigue wrote:
>>>>You might as well leave out the
>>>>AM modulator since it will be useless today. Back in '66-'67 there
>>>>were still some people on AM (mostly on 80 and 10 meters), but today
>>>>it's completly gone.
>>>
>>>OH, Really!?? Snert! - Sporf! - Snurt! TNX for the laugh!
>>>
>>>Jonesy
>>>--
>>> Marvin L Jones | jonz | W3DHJ | linux
>>> Pueblo, Colorado | @ | Jonesy | OS/2 __
>>> 38.24N 104.55W | config.com | DM78rf | SK
>>
>>
>> Yepper ....just like the fellow on 2 meters said ....nobody uses CW
>> anymore .....its DOA . I just like to put up my feet, lean back, and
>> open
>> an Iron City Beer and enjoy the quality of those AM signals ... and this
>> from a 99.99% CWist. My buddy built on of those rigs in 66 and it worked
>> fine with his Mor-Gain antenna ...even with the hardware cloth safety
>> mesh
>> covering the chassis. Lots 'o fun.
>>
>> God Bless and 73 all ..... KI3R Tom in Belle Vernon PA
>>
>>
> Well I havn't heard any AM on the HF bands in a long time, but I stand
> corrected that some people still use it. Granted it's in the minority
> and on "calling frequencies". I don't think those screen grid modulators
> found in novice rigs were of much use though. They didn't have
> much punch and poor audio. If you are going to go AM, a real plate
> modulator is the only way to go. (I shudder to think what a plate
> modulation transformer would cost these days....)

Ken,

You admit you have NO knowledge of present day ham usage of AM. And
apparently NO knowledge of old timey AM use. Properly designed, built and
used low level modulation works and sounds good.

I get glowing reports with my DX-60B, slightly modified to improve the bass
response. And a Bullet Astatic Mic.

And with the new rice boxes, if you adjust it right, you can get excellent audio out of them.

With the FCC reduction of power for AM full carrier, plate modulated (375watts) the big monsters are going the way of the Dinosaur.

Dan/W4NTI

1027. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-30 23:39:35 UTC
From: The Law <jack.regan@hotmail.co.uk>
Message-ID: <1138664375.079496.227430@g14g2000cwa.googlegroups.com>
Source record: 13928
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

andy_rennison@hotmail.com wrote:

> "One group of people who claim to be of the standard of
> Radio Hams but who are in reality nothing more than an
> apology for the failure of a CBer are those class B
> licensees who falsely proclaimed that they were against
> the use of a Morse Test to control access to the HF
> bands, until, that is, a test was introduced at their
> intellectual level, the intellectual level of 6-year-olds. "
>
> Hold on a mo. I'm a class B licence holder - G8LIR, and have been for,
> oh about 30 years I think. My main interest was in fast scan ATV on 70
> Cms and 23cms, and with a small team we competed in many ATV contests,
> setting new (and I think unbroken) records. All our equipment was home
> built - yes I do mean ALL - including narrow band ATV receivers
> utilising inline cavities and integrating receivers to subtract noise
> and reveal lost images when only a weak sync pulse was available. We
> also DESIGNED and built the linear amplifiers using 4cx250's in push
> pull, with 2kv on the anodes and tuneable cavities (not copied
> designs). And, oh yes, we designed filters using laplace transforms to
> calculate the correct vaues for the inductors, wound them ourselves and
> tuned then with second hand spectrum analysers.
>
> Now to me, that level of technical expertise speaks to a certain
> intellectual level over a 6 year olds.
>
> I was considering returning to the hobby, but frankly the view in this
> FAQ has put me off.
>
> Anyone care to comment ?
>
> Andy

Ignore this creep Andy.

It's people like yourself that are the lifeblood of amateur radio.

Good luck and see you on the air.

Jack

1028. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-31 03:41:24 UTC
From: Mike Young <boat042-spam@yahoo.com>
Message-ID: <E%ADf.20289$Yu.15523@newssvr27.news.prodigy.net>
Source record: 13929
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

<andy_rennison@hotmail.com> wrote in message
news:1138653186.593685.292180@g44g2000cwa.googlegroups.com...
> I was considering returning to the hobby, but frankly the view in this
> FAQ has put me off.
>
> Anyone care to comment ?

You'll find one in every crowd. He doesn't speak for me. Rebutting it only
adds to the noise level. Just add him to the kill file.

1029. Help finding suitABLE torroid core.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-31 12:02:54 UTC
From: Mike <nomtrxspam@comcast.net>
Message-ID: <rqjut1di628lpc2e9ebljusaj6qce1cneg@4ax.com>
Source record: 13930

I'm wanting to build this active antenna, but can't find the core to
wind the output coupling transformer.

http://www.elecdesign.com/Articles/Index.cfm?AD=1&ArticleID=6244

This is the authors description of the transformer.

"The toroidal transformerï¿½s primary is 36 turns of No.24 enameled wire
wound on a core from a Sony 1-421-302 line choke. Its secondary is
nine turns of No.24 telephone wire."

And this is his decsription of the performance of the amplifier.

The frequency response at low gain is very flat (ï¿½0.2 dB) from 200 kHz
to 35 MHz, and is only 0.4 dB down at 60 MHz. At standard high gain,
the response is very flat to 25 MHz and -3 dB at 50 MHz. The maximum
output level in all gain configurations is over 500 mV rms into a
75ohm load.

Does anyone have any idea what type of core that would work as well?

Thanks
Mike

1030. Software-only USB driver for AVR

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-31 12:34:42 UTC
From: avrusb <avrusb@obdev.at>
Message-ID: <1138710882.444033.34050@g14g2000cwa.googlegroups.com>
Source record: 13931

The following press release may be interesting to readers of this news group because it presents a complete solution for interfacing AVR mircrocontrollers to USB Hosts. In the minimum configuration the additional cost for USB is one resistor and a USB connector (if you choose the free Open Source software license). Sorry for the partially commercial content!

Die folgende Pressemitteilung koennte LeserInnen dieser Newsgroup interessieren: Sie stellt eine vollstaendige Loesung vor, mit der AVR Mikrocontroller an USB Hosts angeschlossen werden koennen. In der Minimalkonfiguration beschraenken sich die zusaetzlichen Kosten fuer USB auf einen Widerstand und einen USB-Stecker (bei Verwendung der Open Source Software Lizenz). Sorry fuer den teilweise kommerziellen Inhalt!

Subject: PR: Firmware-Only USB Driver for Atmel's AVR Microcontrollers

FOR IMMEDIATE RELEASE

Objective Development Announces Commercial Licenses and Bundled USB IDs for Their Free Firmware-Only USB Driver for Atmel's AVR Microcontrollers

Vienna, Austria - January 31, 2006 -- Objective Development today released a new version of their firmware-only USB driver for Atmel's AVR
microcontrollers (AVR-USB), just in time for the driver's one year anniversary. This version adds new licensing options and free USB Product IDs bundled with all license types, even with the free Open Source compliant license.

AVR-USB is targeted to small companies and hobbyists designing hardware with USB connectivity based on standard AVR microcontrollers. It implements a low speed USB device in the same way as a Software-UART implements asynchronous serial data transfer. The only hardware resources needed from the AVR microcontroller are two I/O pins, one of them must be an edge triggered interrupt.

Since RS232 ports have become rare in modern computers, USB is the method of choice for connecting various gadgets to the PC. The major drawback for small companies and hobbyists is the relatively large upfront investment which is usually required to work with USB: You need to buy a USB Vendor ID from usb.org (currently 1,500 USD) and maybe a new development system for USB capable microcontrollers. Furthermore, microcontrollers with USB are often available in SMD packages and large quantities only, making things even harder for small startup companies and hobbyists.

AVR-USB addresses all these issues. It comes with an Open Source
license, a USB Product ID which can be used for free (shared according
to the certain implementation rules), it is based on the free GNU
compiler as development environment and works with low cost AVR
microcontrollers which are available in DIP packages. The PC side
driver
can be constructed with libusb, a free USB abstraction library which is
available for Windows, Linux, Mac OS X and BSD Unix. No Microsoft SDK
or
development environment is required for Windows driver development.

Two affordable commercial license types are available for those who can
not agree to the publication requirement of the Open Source license.
The
entry level license for 199 EUR allows using AVR-USB in up to 150 units
and comes with a dedicated USB Product ID for exclusive use. The
professional license for 500 EUR has virtually no limit in the number
of
units (fair use) and comes with two dedicated USB Product IDs.

AVR-USB can be downloaded as part of an example application at the URL

http://www.obdev.at/products/avrusb/powerswitch.html

For more information about AVR-USB see

http://www.obdev.at/avrusb/

About Objective Development

Objective Development is a creative team of experienced software
engineers, specialized in developing innovative, intelligent computing
solutions. The brand "Objective Development" represents high quality
niche products for private and commercial users, filling the gaps
between large standard applications.

The company's product line includes "LaunchBar" (an award winning
search
utility and recent winner of the Macworld 2005 Editors' Choice Awards),
"Little Snitch" (an application based reverse firewall), "WebYep" (a
web
content management system) and Sharity (an SMB file system for Unix).

Press Contact

Objective Development Software GmbH
Grosse Schiffgasse 1A/7
A-1020 Vienna, Austria, Europe

Christian Starkjohann (Product Manager)
http://www.obdev.at/avrusb/

avrusb@obdev.at
Fax: +43 1 81749554000

1031. Re: Help finding suitABLE torroid core.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-31 13:10:04 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <NPWdnTXvLo04_ELenZ2dnUVZ8t2dnZ2d@pipex.net>
Source record: 13932

> The frequency response at low gain is very flat (±0.2 dB) from 200 kHz
> to 35 MHz, and is only 0.4 dB down at 60 MHz. At standard high gain,
> the response is very flat to 25 MHz and -3 dB at 50 MHz. The maximum
> output level in all gain configurations is over 500 mV rms into a
> 75ohm load.
>
> Does anyone have any idea what type of core that would work as well?
==========

Assuming the freq range intended is 1 - 30 MHz an Iron powder core made of
Mix No 2 material (permeability 10) ,colour code : RED , would be suitable.

Size T50 has outer diameter 0.5 inch and inner diameter 0.30 inch
hence T50-2
Size T68 has outer diameter 0.69 inch and inner diameter 0.37 inch
hence T68-2
Size T80 has outer diameter 0.795 inch and inner diameter 0.495 inch hence
T80-2

If the frequency range is to be from 0.02 - 30 MHz the above type of Iron
core can be combined with a same size core of Mix no 3 material ,colour
code : GREY eg the 2 types of ring glued together and wound together.

There is also a ferrite type core which covers the frequency range
0.02 -30MHz made from Mix No 61 material (permeability 125) ;colour code
: GREY ; designations FT50-61 ; FT68-61 ; FT80-61.

Frank GM0CSZ / KN6WH

1032. Re: Help finding suitABLE torroid core.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-31 14:42:51 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1138718571.112107.118510@z14g2000cwz.googlegroups.com>
Source record: 13933

Mike wrote:
> I'm wanting to build this active antenna, but can't find the core to
> wind the output coupling transformer.
>
> http://www.elecdesign.com/Articles/Index.cfm?AD=1&ArticleID=6244
>
> This is the authors description of the transformer.
>
> "The toroidal transformer's primary is 36 turns of No.24 enameled wire
> wound on a core from a Sony 1-421-302 line choke. Its secondary is
> nine turns of No.24 telephone wire."
>
> And this is his decsription of the performance of the amplifier.
>
> The frequency response at low gain is very flat (±0.2 dB) from 200 kHz
> to 35 MHz, and is only 0.4 dB down at 60 MHz. At standard high gain,
> the response is very flat to 25 MHz and -3 dB at 50 MHz. The maximum
> output level in all gain configurations is over 500 mV rms into a
> 75ohm load.
>
> Does anyone have any idea what type of core that would work as well?

It sounds like a conventional broadband transformer. The ARRL Handbook
has some guidelines on how to design the things, it's quite simple, if
you select a suitable ferrite core.

1033. Re: Help finding suitABLE torroid core.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-31 15:35:45 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <Ft6dnSRds94hH0LeRVn-qA@adelphia.com>
Source record: 13934

Mike wrote:
> I'm wanting to build this active antenna, but can't find the core to
> wind the output coupling transformer.
>
> http://www.elecdesign.com/Articles/Index.cfm?AD=1&ArticleID=6244
>
> This is the authors description of the transformer.
>
> "The toroidal transformer's primary is 36 turns of No.24 enameled wire
> wound on a core from a Sony 1-421-302 line choke. Its secondary is
> nine turns of No.24 telephone wire."

With that turns ratio, I would use a smaller wire for the primary,
probably No. 30 silver plates Kynar insulated wire wrap wire.

> And this is his decsription of the performance of the amplifier.
>
> The frequency response at low gain is very flat (±0.2 dB) from 200 kHz
> to 35 MHz, and is only 0.4 dB down at 60 MHz. At standard high gain,
> the response is very flat to 25 MHz and -3 dB at 50 MHz. The maximum
> output level in all gain configurations is over 500 mV rms into a
> 75ohm load.
>
> Does anyone have any idea what type of core that would work as well?

I would try a core ordinarily used as a medium frequency noise
suppression core, with enough window area to allow non overlapped
turns around the hole. Perhaps a Steward 28B0870-000, 22mm OD, 13.7mm
ID, 6.4mm thick. This is made of 850u material, flat permeability out
to about 2 MHz, and then rolling off with increasing loss as frequency
rises.
http://www.steward.com/web_part_no.asp?line=EMC%20/%20EMI%20Board%20Level%20and%20Cable%20
Core%20Products&family=Ferrite%20Cores%20for%20Cables%20-%20%20Wiring%20Harnesses%20-%20Co
nnectors&product=Broadband%20Solid%20Ferrite%20Cores%20for%20Round%20Cables%20and%20Wiring
%20Harnesses&progroup=1.%20Round%20and%20Cylindrical%20Cores&part=28B0870-000
There is also one twice as thick, if you want to lower the turns count
a bit. 28B0870-100.

But if the goal is to have optimum response at the low frequency end,
and to absorb the higher frequency end, a core made of the 5000u
material would be even better. Type 35 (Steward's low frequency bead
material) has flat permeability to only 300kHz. A usable example
might be LFB220140-000, 22mm OD, 14mm ID, 12.7mm thick.
http://www.steward.com/web_part_no.asp?line=EMC%20/%20EMI%20Board%20Level%20and%20Cable%20
Core%20Products&family=Ferrite%20Cores%20for%20Cables%20-%20%20Wiring%20Harnesses%20-%20Co

nnectors&product=Low%20Frequency%20Ferrite%20Cores&progroup=1.%20Round%20and%20Cylindrical%20Cores&part=LFB220140-000
This one could probably work with fewer turns, but the same ratio.

These cores go for less than a dollar each from Digikey.

The material curves are in the toroid manual:
http://www.steward.com/pdfs/ToroidCatalog-rev11-C.pdf

1034. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-31 17:32:23 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <43df9ead.66797569@news.blueyonder.co.uk>
Source record: 13935
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Mon, 30 Jan 2006 22:10:10 GMT, Trevor Day
<Trev@secornwall.removethis.com> wrote:

>With a G8L call I would have expected you to recognise an obvious troll
>by now. You either want to get back to the hobby or you don't, if this
>puts you off then frankly perhaps its not for you!

Beanie is not a troll Trevor... his writings on the Soham murders and
the monarchy confirm that he is of sick mind..

Peter, G3PHO

1035. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-31 18:18:11 UTC
From: Trevor Day <Trev@secornwall.removethis.com>
Message-ID: <wT2BUEMen63DFwI9@secornwall.com>
Source record: 13936
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

In message <43df9ead.66797569@news.blueyonder.co.uk>, Peter
<microwaves@blueyonder.co.uk> writes
>On Mon, 30 Jan 2006 22:10:10 GMT, Trevor Day
><Trev@secornwall.removethis.com> wrote:
>
>>With a G8L call I would have expected you to recognise an obvious troll
>>by now. You either want to get back to the hobby or you don't, if this
>>puts you off then frankly perhaps its not for you!
>
>
>Beanie is not a troll Trevor... his writings on the Soham murders and
>the monarchy confirm that he is of sick mind..
>
>Peter, G3PHO

Perhaps troll is the wrong word Peter; however I still feel that
Gareth's prose should not put off anyone interested in AR especially
someone with such an apparent pedigree.

Trev G3ZYY
--
Trevor Day
UKSMG #217
www.uksmg.org

1036. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-31 18:21:58 UTC
From: Ed Unsworth <edunsworth@ULTIMATEEMAIL.COM>
Message-ID: <43dfaac5$1_1@x-privat.org>
Source record: 13937
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Peter" <microwaves@blueyonder.co.uk> wrote in message
news:43df9ead.66797569@news.blueyonder.co.uk...
> On Mon, 30 Jan 2006 22:10:10 GMT, Trevor Day
> Beanie is not a troll Trevor... his writings on the Soham murders and
> the monarchy confirm that he is of sick mind..
>
> Peter, G3PHO

It is no wonder wherever he goes he is loathed, I wonder if his wife knows that he condones the murders of children, and police officers etc. The "Orator For Decency" would not know the meaning of decency, he appears to be a bitter, evil, and twisted little 'man' , if it were not for visits from the police I doubt if he would have any visitors. His inferiority complex must give him sleepless nights.

1037. Re: Help finding suitABLE torroid core.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-31 20:44:28 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11tvj1fi2b31hd2@corp.supernews.com>
Source record: 13938

Highland Ham wrote:
>
> ================================
> Assuming the freq range intended is 1 - 30 MHz an Iron powder core made of
> Mix No 2 material (permeability 10) ,colour code : RED , would be suitable.
>
> Size T50 has outer diameter 0.5 inch and inner diameter 0.30 inch
> hence T50-2
> Size T68 has outer diameter 0.69 inch and inner diameter 0.37 inch
> hence T68-2
> Size T80 has outer diameter 0.795 inch and inner diameter 0.495 inch hence
> T80-2
>
> If the frequency range is to be from 0.02 - 30 MHz the above type of Iron
> core can be combined with a same size core of Mix no 3 material ,colour
> code : GREY eg the 2 types of ring glued together and wound together.
>
> There is also a ferrite type core which covers the frequency range
> 0.02 -30MHz made from Mix No 61 material (permeability 125) ;colour code
> : GREY ; designations FT50-61 ; FT68-61 ; FT80-61.
>
> Frank GM0CSZ / KN6WH

I disagree with this advice. It would be appropriate for a narrowband, tuned transformer, but that's not what the schematic indicates. It's a broadband transformer which has different requirements for a core. What you need is high winding impedance, not the high Q and relatively low impedance provided by the cores Frank is recommending. An appropriate core is a "low frequency" ferrite such as Fair-Rite (and Amidon) type 70-series (72, 73, 77, etc), or type 43 which is very widely used for EMI filtering applications. You can easily identify "low frequency" ferrites because they're the only ones which give you any continuity (although the R might be high) when probed at two points with an ohmmeter. Type 43 can't be identified this way -- they'll show an open circuit. As for core size, the number of turns specified on the diagram will provide enough impedance with any core of size half inch diameter or so, or larger, and with normal geometry. You could probably get by with a core smaller than that if necessary.

High frequeny ferrites (which aren't suitable) like 61 are relatively rare, so if you have any ferrite cores in your junk box, they're likely to be ok. Powdered iron cores won't give you enough winding impedance.

Roy Lewallen, W7EL

1038. stripline@ 75 Ohm

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-31 21:13:32 UTC
From: pe1pme@xs4all.nl
Message-ID: <43dfd2f3$0$14730$e4fe514c@dreader25.news.xs4all.nl>
Source record: 13939

Hi OM's

I want to build an distribution amplifier for video using a MAX 4137.
Maxim advises to use stripline for the in- and output.
Can someone tell me what dimensions I should use for the stripline?
(@ 75 Ohm, 350 MHz max, standard fibreglass pcb)

Thanks in advance.

73, Wim Smeets
PE1PME

1039. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-01-31 22:54:37 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <43dfe828.85607947@news.blueyonder.co.uk>
Source record: 13940
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Tue, 31 Jan 2006 18:18:11 GMT, Trevor Day
<Trev@secornwall.removethis.com> wrote:

>I still feel that
>Gareth's prose should not put off anyone interested in AR especially
>someone with such an apparent pedigree.

Agreed!

1040. Re: Help finding suitABLE torroid core.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-01 01:37:06 UTC
From: Mike <nomtrxspam@comcast.net>
Message-ID: <tp30u15c5mc4n1s13pg9u3vkne2av48k7f@4ax.com>
Source record: 13941

On Tue, 31 Jan 2006 12:44:28 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Highland Ham wrote:
>>
>> ================================
>> Assuming the freq range intended is 1 - 30 MHz an Iron powder core made of
>> Mix No 2 material (permeability 10) ,colour code : RED , would be suitable.
>>
>> Size T50 has outer diameter 0.5 inch and inner diameter 0.30 inch
>> hence T50-2
>> Size T68 has outer diameter 0.69 inch and inner diameter 0.37 inch
>> hence T68-2
>> Size T80 has outer diameter 0.795 inch and inner diameter 0.495 inch hence
>> T80-2
>>
>> If the frequency range is to be from 0.02 - 30 MHz the above type of Iron
>> core can be combined with a same size core of Mix no 3 material ,colour
>> code : GREY eg the 2 types of ring glued together and wound together.
>>
>> There is also a ferrite type core which covers the frequency range
>> 0.02 -30MHz made from Mix No 61 material (permeability 125) ;colour code
>> : GREY ; designations FT50-61 ; FT68-61 ; FT80-61.
>>
>> Frank GM0CSZ / KN6WH
>
>I disagree with this advice. It would be appropriate for a narrowband,
>tuned transformer, but that's not what the schematic indicates. It's a
>broadband transformer which has different requirements for a core. What
>you need is high winding impedance, not the high Q and relatively low
>impedance provided by the cores Frank is recommending. An appropriate
>core is a "low frequency" ferrite such as Fair-Rite (and Amidon) type
>70-series (72, 73, 77, etc), or type 43 which is very widely used for
>EMI filtering applications. You can easily identify "low frequency"
>ferrites because they're the only ones which give you any continuity
>(although the R might be high) when probed at two points with an
>ohmmeter. Type 43 can't be identified this way -- they'll show an open
>circuit. As for core size, the number of turns specified on the diagram
>will provide enough impedance with any core of size half inch diameter
>or so, or larger, and with normal geometry. You could probably get by
>with a core smaller than that if necessary.
>
>High frequeny ferrites (which aren't suitable) like 61 are relatively
>rare, so if you have any ferrite cores in your junk box, they're likely

>to be ok. Powdered iron cores won't give you enough winding impedance.
>
>Roy Lewallen, W7EL

Well, It appears that I'm not the only one confused about core types.
I do have some FT50-43 cores, so I think I'll try that first and see
what happens.

Thanks to all for the suggestions.

Mike

1041. Re: Help finding suitABLE torroid core.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-01 02:23:01 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11u06s8dgn3chbc@corp.supernews.com>
Source record: 13942

Mike wrote:
>
> Well, It appears that I'm not the only one confused about core types.
> I do have some FT50-43 cores, so I think I'll try that first and see
> what happens.
>
> Thanks to all for the suggestions.

Those are type 43 ferrite (Fair-Rite designation), the most common kind. Your cores will be just fine for this and similar applications.

You're definitely not the only one confused about core types. Very few people seem to understand what the requirements are for cores used in various applications and therefore what cores are suitable for a given application.

Roy Lewallen, W7EL

1042. Re: stripline@ 75 Ohm

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-01 04:08:37 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11u0d4e6ga7cka9@corp.supernews.com>
Source record: 13943

<pe1pme@xs4all.nl> wrote in message
news:43dfd2f3$0$14730$e4fe514c@dreader25.news.xs4all.nl...
> I want to build an distribution amplifier for video using a MAX 4137.
> Maxim advises to use stripline for the in- and output.
> Can someone tell me what dimensions I should use for the stripline?
> (@ 75 Ohm, 350 MHz max, standard fibreglass pcb)

Only if you tell us your board stackup dimensions.

Various freeware programs such as TxLine
(http://www.taconic-add.com/en--downloads.php) can compute these dimensions
for you quite easily.

>
> Thanks in advance.
>
> 73, Wim Smeets
> PE1PME

1043. WWV receiver, CHU proposal...http://cbc.am/CHU.htm

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-01 05:24:46 UTC
From: Max Power <mikehack@u.washington.edu>
Message-ID: <drph11$1me$1@gnus01.u.washington.edu>
Source record: 13944
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

CHU Time Station : Western Canada Coverage Proposal

The CHU time station is Canada's domestic shortwave time signal station.
CHU existed long before the Internet and sattilite navigation systems like
(GPS, GLONASS, Gallaeo).
CHU provides most of the functionality of the US WWV & WWVB (Bolder,
Colorado) and WWVH (Kauai, Hawaii).

Problems with CHU's configuation that this proposal addresses

The 3.3�s per km of path that makes CHU's signals problamatic for users in
Western Canada. Even the NRC realizes this: "for all distant users of CHU,
the dominant source of time error comes from the radio wave path reflecting
off the ionosphere as the radio signal travels from the transmitter".
The poor quality of CHU reception in Western Canada and the Artic, North of
55� Latitude.
It is suggested that the 7335 kHz frequecny be reused, but it may be
advisable to find alternate frequences.
The CHU signal fomat may need to be tweaked so as to take into consideration
2 transmitter sites.
A new set of atomic clocks will be needed, as well as equipement to sync
them to NRC's atomic clocks. It may be possible to obtain secondhand atomic
clocks from UBC (Vancouver) or other universities in Western Canada.
This proposal could be replicated in Newfoundland using another existing CHU
frequency, as Eastern Canada has CHU coverage problems as well.
Universally upgrading CHU's Ottawa transmitters to 10 kw may not fix CHU
coverage problems in Western or Eastern Canada.
[...]

http://cbc.am/CHU.htm

> As a project to learn more about building radio receivers, I'd like to
> build a WWV receiver (or maybe a receiver for the Canadian station CHU,
> since it's nearby and the format sounds easier to decode). I'm looking
> for suggestions for how to design such a radio, reading material, etc.
>
> I was thinking it might be easier to design a fixed-frequency receiver
> (rather than a tunable one) because I could just select the L and C in the
> resonant circuit to give the right frequency. Or, since WWV is at such
> "round number" frequencies, maybe I could somehow use a crystal
> oscillator?
> --
> http://web.pas.rochester.edu/~tobin/

1044. Another power supply project

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-01 05:56:11 UTC
From: Kerry Miller <kmiller01at@ticnet.com>
Message-ID: <84YDf.148864$WH.136453@dukeread01>
Source record: 13945

Since I'm going to have to order a chip for that Astron PS I was working on, I dug out another old PS that died a few years back. If I have to pay shipping, I might as well order enough parts to at least make up for the shipping costs...

Does any of you guys know where to find a schematic for a Yaesu FP-757HD power supply? It has a 3-terminal regulator in it, it looks like a 317, but it has funky markings on it which say B824, then down and to the right it says Q5D. It might be an O or 0 (zero) 5D. Do you guys know if you can replace this B824 thing with an LM317? The transistors are oddballs too but I haven't gotten the number for them. If I have to, I can just start from scratch on it, there's not much to it and there were a couple of caps with the legs corroded off. I can probably just come up with my own regulator as easy as I can fix this one unless I can find a schematic.

Do you guys know where to find a schematic for this thing?

Tnx,
Kerry, WD5ABC

1045. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-01 10:39:14 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1138790354.679710.114420@g44g2000cwa.googlegroups.com>
Source record: 13946
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

you HAVE to use a crystal oscillator. due to the nature of the tuned
resonant circuits, mistuning can change the propagation delay of the
signal through the receiver by incredible amounts. soooo, you have to
be on frequency. i think I still have some where a schematic of such a
receiver from Popular Elactronics but it may take a while for me to
find it.
Saandy 4Z5KS

Tobin Fricke wrote:
> As a project to learn more about building radio receivers, I'd like to
> build a WWV receiver (or maybe a receiver for the Canadian station CHU,
> since it's nearby and the format sounds easier to decode). I'm looking
> for suggestions for how to design such a radio, reading material, etc.
>
> I was thinking it might be easier to design a fixed-frequency receiver
> (rather than a tunable one) because I could just select the L and C in the
> resonant circuit to give the right frequency. Or, since WWV is at such
> "round number" frequencies, maybe I could somehow use a crystal
> oscillator?
>
> thank you,
> Tobin
> --
> http://web.pas.rochester.edu/~tobin/

1046. Re: stripline@ 75 Ohm

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-01 10:41:54 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1138790514.862425.77530@o13g2000cwo.googlegroups.com>
Source record: 13947

1.2mm on G10 , 1,6mm thick glass epoxi board will give you a Z0 of 75
ohms from DC to daylight.
Saandy 4Z5KS

1047. Re: Another power supply project

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-01 13:42:10 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <j8e1u1pv2d02pg9s42r54l5qdfgjunncg7@4ax.com>
Source record: 13848

When dealing with Yaesu (Vertex) it is worth the effort to contact
Vertex for special parts. There is a special regulator in the power
supply for the FT-301 that is no longer available. Contacting Vertex
led to a replacement subassembly for about $6. Not bad support for a
25 year old piece of equipment.

On Tue, 31 Jan 2006 23:56:11 -0600, Kerry Miller
<kmiller01at@ticnet.com> wrote:

>Since I'm going to have to order a chip for that Astron PS I was working
>on, I dug out another old PS that died a few years back. If I have to
>pay shipping, I might as well order enough parts to at least make up for
>the shipping costs...
>
>Does any of you guys know where to find a schematic for a Yaesu FP-757HD
>power supply? It has a 3-terminal regulator in it, it looks like a 317,
>but it has funky markings on it which say B824, then down and to the
>right it says Q5D. It might be an O or 0 (zero) 5D. Do you guys know
>if you can replace this B824 thing with an LM317? The transistors are
>oddballs too but I haven't gotten the number for them. If I have to, I
>can just start from scratch on it, there's not much to it and there were
>a couple of caps with the legs corroded off. I can probably just come
>up with my own regulator as easy as I can fix this one unless I can find
>a schematic.
>
>Do you guys know where to find a schematic for this thing?
>
>Tnx,
>Kerry, WD5ABC
John Ferrell W8CCW

1048. wanted 3cx1200d7

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-01 15:12:03 UTC
From: iw1arb <vairo@rai.it>
Message-ID: <drqj42ios1@serv1.iunet.it>
Source record: 13861

```
wanted 3cx1200d7
73 de iw1arb Paolo
```

1049. clevite filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-01 15:56:06 UTC
From: pgj�nsson <pegge.j@telia.com>
Message-ID: <qS4Ef.155058$dP1.513112@newsc.telia.net>
Source record: 13849

Hello group, does someone have info or can tell me were to find info on
Clevite filters,
4 filters, all T.L. 40D55A, one called "ladder filter", two called "ceramic
filter"and one w/o
specification.

TIA / per / sm7aha

1050. Re: stripline@ 75 Ohm

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-01 16:33:42 UTC
From: pe1pme@xs4all.nl
Message-ID: <43e0e2e6$0$18604$e4fe514c@dreader30.news.xs4all.nl>
Source record: 13850

Thanks a lot Saandy

Wim pe1pme

1051. Re: Another power supply project

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-01 17:39:06 UTC
From: johan aeq <pe1aeq@amsat.og>
Message-ID: <72e73$43e0f577$52ad139c$20535@news.versatel.nl>
Source record: 13851

japanese transistors are usually marked without the two first markings...
For instance a 2sb824 will be marked as b824.
Fets are marked as 2sk or 3sk.
Diodes as 1s..., it is like the american notation 1n, diode, 2n transistor
etc....

"John Ferrell" <johnferrell@sprintmail.com> schreef in bericht
news:j8e1u1pv2d02pg9s42r54l5qdfgjunncg7@4ax.com...
> When dealing with Yaesu (Vertex) it is worth the effort to contact
> Vertex for special parts. There is a special regulator in the power
> supply for the FT-301 that is no longer available. Contacting Vertex
> led to a replacement subassembly for about $6. Not bad support for a
> 25 year old piece of equipment.
>
>
>
> On Tue, 31 Jan 2006 23:56:11 -0600, Kerry Miller
> <kmiller01at@ticnet.com> wrote:
>
> >Since I'm going to have to order a chip for that Astron PS I was working
> >on, I dug out another old PS that died a few years back. If I have to
> >pay shipping, I might as well order enough parts to at least make up for
> >the shipping costs...
> >
> >Does any of you guys know where to find a schematic for a Yaesu FP-757HD
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> >right it says Q5D. It might be an O or 0 (zero) 5D. Do you guys know
> >if you can replace this B824 thing with an LM317? The transistors are
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> >can just start from scratch on it, there's not much to it and there were
> >a couple of caps with the legs corroded off. I can probably just come
> >up with my own regulator as easy as I can fix this one unless I can find
> >a schematic.
> >
> >Do you guys know where to find a schematic for this thing?
> >
> >Tnx,
> >Kerry, WD5ABC
> John Ferrell W8CCW

1052. Re: stripline@ 75 Ohm

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-01 17:59:49 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <66ecc$43e0f714$4251d740$30196@DIALUPUSA.NET>
Source record: 13852

Not so, Saandy. He said STRIPLINE, not microstrip. Now he may not know the difference, but that is an incorrect value for stripline.

WHich is it, microstrip (open face) or stripline (sandwich)?

Jim

"Saandy , 4Z5KS" <hardware2@ift-int.com> wrote in message news:1138790514.862425.77530@o13g2000cwo.googlegroups.com...
> 1.2mm on G10 , 1,6mm thick glass epoxi board will give you a Z0 of 75
> ohms from DC to daylight.
> Saandy 4Z5KS
>

1053. Re: OM3CPH frequency counter doesn't work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-01 19:30:20 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <2e4c4$43e10c4c$d135c4af$24382@MDI.CA>
Source record: 13853

Only problem now is the first line displays the frequency twice,all 8 digits repeat.

2nd line just shows " Mhz".

JJ

1054. Re: clevite filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-01 21:37:44 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1138829864.817902.223310@g14g2000cwa.googlegroups.com>
Source record: 13854

I remember using Brush-Clevite ceramic resonators many years ago, in
simple ladder filters.

Leon

1055. Re: stripline@ 75 Ohm

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-01 22:24:24 UTC
From: pe1pme@xs4all.nl
Message-ID: <43e13517$0$18466$e4fe514c@dreader32.news.xs4all.nl>
Source record: 13855

what's the difference?
Is "open face"on a singlesided pcb and "sandwich" on a doublesided pcb?
I use a doublesided pcb with one side as a groundplane.

tnx, Wim

1056. Re: Cheap AM chips

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 00:22:15 UTC
From: Frank <Frank.22l0wi@news.radiobanter.com>
Message-ID: <Frank.22l0wi@news.radiobanter.com>
Source record: 13857

Bob Liesenfeld Wrote:
> Frank wrote:
>
> Hi All;
>
> I just bought 75 LM3820 chips from B.G. Micro for 12 cents each. You
> have to buy tubes of 25 chips. The chips seem to work great, I'm
> using
> one yellow IF can from a pocket radio, and two 455khz ceramic filters
> in the IF. I used an FET detector stage, and there's enough audio
> level
> to drive the line input of a boom box that I was using for a quickie
> amp. I don't know what the upper limit is of the oscillator, but I
> had
> it up to 13 mhz with no trouble, at least after I figured out the
> scope
> probe was loading down the oscillator, and stopping it at 5 mhz.
>
> The pin out in the original data sheet for the LM3820 seems incorret,
> or maybe just confusing. I couldn't get those configurations to work.
> I
> had an app guide for the LM1868, which was using the LM3820 for the
> AM
> side of an AM/FM system. Those connections shown were considerably
> different from the LM3820 data sheet, and it works! Both data sheets
> show a tuned RF input circuit, but I'm using just a six foot wire,
> and
> it works ok on AM.
> I'm using voltage tuning, using the NTE618 as the capacitor in the AM
> oscillator. I haven't tried it on short wave yet, that's tomorrow's
> project. I mainly want the 39 to 31 bands, but may play with using it
> on the HF ham bands.
>
> I can e-mail the schematic if anyone is interested, it might be
> easier
> to follow than the data sheet. It's an old chip, but the price, and
> ease
> of use attracted me to it.
>
> Schematic please! Thanks
>
> Bob WB0POQ

Got an address to e-mail it to? Mine's fsumption@lps.k12.co.us

--
Frank

1057. Re: Cheap AM chips

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 00:28:33 UTC
From: Frank <Frank.22l0wj@news.radiobanter.com>
Message-ID: <Frank.22l0wj@news.radiobanter.com>
Source record: 13858

Bob Liesenfeld Wrote:
> Frank wrote:
>
> Hi All;
>
> I just bought 75 LM3820 chips from B.G. Micro for 12 cents each. You
> have to buy tubes of 25 chips. The chips seem to work great, I'm
> using
> one yellow IF can from a pocket radio, and two 455khz ceramic filters
> in the IF. I used an FET detector stage, and there's enough audio
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> to drive the line input of a boom box that I was using for a quickie
> amp. I don't know what the upper limit is of the oscillator, but I
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> it up to 13 mhz with no trouble, at least after I figured out the
> scope
> probe was loading down the oscillator, and stopping it at 5 mhz.
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> The pin out in the original data sheet for the LM3820 seems incorret,
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> AM
> side of an AM/FM system. Those connections shown were considerably
> different from the LM3820 data sheet, and it works! Both data sheets
> show a tuned RF input circuit, but I'm using just a six foot wire,
> and
> it works ok on AM.
> I'm using voltage tuning, using the NTE618 as the capacitor in the AM
> oscillator. I haven't tried it on short wave yet, that's tomorrow's
> project. I mainly want the 39 to 31 bands, but may play with using it
> on the HF ham bands.
>
> I can e-mail the schematic if anyone is interested, it might be
> easier
> to follow than the data sheet. It's an old chip, but the price, and
> ease
> of use attracted me to it.
>
> Schematic please! Thanks
>
> Bob WB0POQ

I couldn't figure out how to send an E-mail off the forum, if you send amy an e-mail, I think by clicking on my nmame here, I can send a schematic.

Frank

--
Frank

1058. New program - Antenna Counterpoise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 02:06:08 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <drrpefpun1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13856

A coil-loaded counterpoise at a low height above ground is used to provide an artificial ground for an antenna when, for some reason, a true ground connection is not possible or there is not enough space to erect a full 1/4-wavelength horizontal wire.

The principal effects of low height are a loss resistance induced in the wire from the ground, and a reduction in propagation velocity along the wire.

A counterpoise can be considered to be an artificial ground. Its input resistance at resonance is equivalent to the input resistance of a true ground connection but its resistance will never be as low as a good ground.

To provide a lower input resistance three or four counterpoises can be used in parallel. Or they can be resonant on different bands.

New program C_POISE estimates the performance of a single coil-loaded counterpoise. The number of turns on a coil of given length and diameter needed to resonate a low wire to 1/4-wave resonance is calculated. The input resistance at resonance is also estimated..

All program output data is approximate due to the very low height of the wire above ground and uncertainty in the characteristics of the soil or whatever other materials may be under the wire. The wire may be allowed to rest on the ground surface but uncertainty will be at a maximum. It will nearly always be needed to prune the wire length for resonance. Or when the wire length is fixed the coil turns may need adjustment.

When wire height exceeds wire length accuracy is much improved. Input resistance at resonance will be fairly small. Working Q will be high and the counterpoise will behave as a short antenna. For precise resonance the wire will still need pruning.

Download program C_POISE in a few seconds from website below and run immediately.

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

1059. Re: Another power supply project

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 03:17:53 UTC
From: Kerry Miller <kmiller01at@ticnet.com>
Message-ID: <JReEf.149054$WH.39009@dukeread01>
Source record: 13859

John Ferrell wrote:
> When dealing with Yaesu (Vertex) it is worth the effort to contact
> Vertex for special parts. There is a special regulator in the power
> supply for the FT-301 that is no longer available. Contacting Vertex
> led to a replacement subassembly for about $6. Not bad support for a
> 25 year old piece of equipment.
>
>
>
> On Tue, 31 Jan 2006 23:56:11 -0600, Kerry Miller
> <kmiller01at@ticnet.com> wrote:
>
>
>>Since I'm going to have to order a chip for that Astron PS I was working
>>on, I dug out another old PS that died a few years back. If I have to
>>pay shipping, I might as well order enough parts to at least make up for
>>the shipping costs...
>>
>>Does any of you guys know where to find a schematic for a Yaesu FP-757HD
>>power supply? It has a 3-terminal regulator in it, it looks like a 317,
>>but it has funky markings on it which say B824, then down and to the
>>right it says Q5D. It might be an O or 0 (zero) 5D. Do you guys know
>>if you can replace this B824 thing with an LM317? The transistors are
>>oddballs too but I haven't gotten the number for them. If I have to, I
>>can just start from scratch on it, there's not much to it and there were
>>a couple of caps with the legs corroded off. I can probably just come
>>up with my own regulator as easy as I can fix this one unless I can find
>>a schematic.
>>
>>Do you guys know where to find a schematic for this thing?
>>
>>Tnx,
>>Kerry, WD5ABC
>
> John Ferrell W8CCW
Thanks, maybe I'll give them a call. If they don't have the part, maybe
they can tell me what it will cross to.

Tnx,
Kerry, WD5ABC

1060. Re: Another power supply project

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 03:29:21 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <LfOdnUn4VlgL4XzeRVn-rw@comcast.com>
Source record: 13860

"Kerry Miller" <kmiller01at@ticnet.com> wrote in message
news:84YDf.148864$WH.136453@dukeread01...
> Since I'm going to have to order a chip for that Astron PS I was working
> on, I dug out another old PS that died a few years back. If I have to pay
> shipping, I might as well order enough parts to at least make up for the
> shipping costs...
>
> Does any of you guys know where to find a schematic for a Yaesu FP-757HD
> power supply? It has a 3-terminal regulator in it, it looks like a 317,
> but it has funky markings on it which say B824, then down and to the right
> it says Q5D. It might be an O or 0 (zero) 5D. Do you guys know if you
> can replace this B824 thing with an LM317? The transistors are oddballs
> too but I haven't gotten the number for them. If I have to, I can just
> start from scratch on it, there's not much to it and there were a couple
> of caps with the legs corroded off. I can probably just come up with my
> own regulator as easy as I can fix this one unless I can find a schematic.
>
> Do you guys know where to find a schematic for this thing?
>
> Tnx,
> Kerry, WD5ABC

Manual is on the MODS.DK web site.
http://www.mods.dk/downloadmanual.php?File=FP-757HD_Manual.pdf

TO-3 or TO-220 case for regulator?

1061. Re: Another power supply project

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 03:33:03 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <Mu-dncS4ovbp4HzeRVn-rw@comcast.com>
Source record: 13862

"Kerry Miller" <kmiller01at@ticnet.com> wrote in message
news:84YDf.148864$WH.136453@dukeread01...
> Since I'm going to have to order a chip for that Astron PS I was working
> on, I dug out another old PS that died a few years back. If I have to pay
> shipping, I might as well order enough parts to at least make up for the
> shipping costs...
>
> Does any of you guys know where to find a schematic for a Yaesu FP-757HD
> power supply? It has a 3-terminal regulator in it, it looks like a 317,
> but it has funky markings on it which say B824, then down and to the right
> it says Q5D. It might be an O or 0 (zero) 5D. Do you guys know if you
> can replace this B824 thing with an LM317? The transistors are oddballs
> too but I haven't gotten the number for them. If I have to, I can just
> start from scratch on it, there's not much to it and there were a couple
> of caps with the legs corroded off. I can probably just come up with my
> own regulator as easy as I can fix this one unless I can find a schematic.
>
> Do you guys know where to find a schematic for this thing?
>
> Tnx,
> Kerry, WD5ABC

Kerry -

I have schematic, will e-mail PDF to you.

w9gb

1062. Re: Another power supply project

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 03:43:46 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <NZOdnS8vFdVr4nzeRVn-qA@comcast.com>
Source record: 13863

"Kerry Miller" <kmiller01at@ticnet.com> wrote in message
news:84YDf.148864$WH.136453@dukeread01...
> Since I'm going to have to order a chip for that Astron PS I was working
> on, I dug out another old PS that died a few years back. If I have to pay
> shipping, I might as well order enough parts to at least make up for the
> shipping costs...
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> too but I haven't gotten the number for them. If I have to, I can just
> start from scratch on it, there's not much to it and there were a couple
> of caps with the legs corroded off. I can probably just come up with my
> own regulator as easy as I can fix this one unless I can find a schematic.
>
> Do you guys know where to find a schematic for this thing?
>
> Tnx,
> Kerry, WD5ABC

Here we go:

3 - Pass (NPN) transistors Q1 - Q3: 2SD717-Y
on heat sink

These 3 should be on PC board (AVR Unit PB-2156
Q101 - 2SK192-BL (looks like FET)
Q102 - 2SA1012Y (looks like PNP bipolar)
Q103 - 2SA950Y (looks like PNP bipolar)

Q102 drives the pass transistors
Q103 Base connected to VR101 for adjustment (voltage adjust?)

w9gb

1063. Re: Another power supply project

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 05:17:15 UTC
From: Kerry Miller <kmiller01at@ticnet.com>
Message-ID: <DBgEf.149059$WH.120009@dukeread01>
Source record: 13864

gb wrote:

> "Kerry Miller" <kmiller01at@ticnet.com> wrote in message
> news:84YDf.148864$WH.136453@dukeread01...
>
>>Since I'm going to have to order a chip for that Astron PS I was working
>>on, I dug out another old PS that died a few years back. If I have to pay
>>shipping, I might as well order enough parts to at least make up for the
>>shipping costs...
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>>it says Q5D. It might be an O or 0 (zero) 5D. Do you guys know if you
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>>own regulator as easy as I can fix this one unless I can find a schematic.
>>
>>Do you guys know where to find a schematic for this thing?
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>>Tnx,
>>Kerry, WD5ABC
>
>
> Here we go:
>
> 3 - Pass (NPN) transistors Q1 - Q3: 2SD717-Y
> on heat sink
>
> These 3 should be on PC board (AVR Unit PB-2156
> Q101 - 2SK192-BL (looks like FET)
> Q102 - 2SA1012Y (looks like PNP bipolar)
> Q103 - 2SA950Y (looks like PNP bipolar)
>
> Q102 drives the pass transistors
> Q103 Base connected to VR101 for adjustment (voltage adjust?)
>
> w9gb
>
>
>
Perfect, I got the schematic, thanks! Looks like there's not too much

to it. I picked up a few parts in San Antonio today for the Astron (I thought it was fixed, but it's still not right). I'll have to think about the Yaesu and see if I can find some of those parts or at least find what they cross to.

Thanks for all your help!
Kerry

1064. Re: Another power supply project

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 05:21:53 UTC
From: Kerry Miller <kmiller01at@ticnet.com>
Message-ID: <ZFgEf.149060$WH.18572@dukeread01>
Source record: 13865

gb wrote:

> "Kerry Miller" <kmiller01at@ticnet.com> wrote in message
> news:84YDf.148864$WH.136453@dukeread01...
>
>>Since I'm going to have to order a chip for that Astron PS I was working
>>on, I dug out another old PS that died a few years back. If I have to pay
>>shipping, I might as well order enough parts to at least make up for the
>>shipping costs...
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>>Does any of you guys know where to find a schematic for a Yaesu FP-757HD
>>power supply? It has a 3-terminal regulator in it, it looks like a 317,
>>but it has funky markings on it which say B824, then down and to the right
>>it says Q5D. It might be an O or 0 (zero) 5D. Do you guys know if you
>>can replace this B824 thing with an LM317? The transistors are oddballs
>>too but I haven't gotten the number for them. If I have to, I can just
>>start from scratch on it, there's not much to it and there were a couple
>>of caps with the legs corroded off. I can probably just come up with my
>>own regulator as easy as I can fix this one unless I can find a schematic.
>>
>>Do you guys know where to find a schematic for this thing?
>>
>>Tnx,
>>Kerry, WD5ABC
>
>
> Manual is on the MODS.DK web site.
> http://www.mods.dk/downloadmanual.php?File=FP-757HD_Manual.pdf
>
> TO-3 or TO-220 case for regulator?
>
>
>
>
The one I'm looking at with that strange part number is a TO-220. I'll
have to take the schematic and see which one it is, that number doesn't
match any of the part numbers on the schematic. I picked up a few spare
723s and 317s today, maybe I'll just make my own if I have to.

73,
Kerry
PS That's a great web site, I just bookmarked it.

1065. Re: Another power supply project

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 08:27:05 UTC
From: Martyn <martyn.preston@pharm.ox.ac.uk>
Message-ID: <drsfotspd1@news.ox.ac.uk>
Source record: 13866

"Kerry Miller" <kmiller01at@ticnet.com> wrote in message
news:DBgEf.149059$WH.120009@dukeread01...
> gb wrote:
>
>> "Kerry Miller" <kmiller01at@ticnet.com> wrote in message
>> news:84YDf.148864$WH.136453@dukeread01...
>>
>>>Since I'm going to have to order a chip for that Astron PS I was working
>>>on, I dug out another old PS that died a few years back. If I have to
>>>pay shipping, I might as well order enough parts to at least make up for
>>>the shipping costs...
>>>
>>>Does any of you guys know where to find a schematic for a Yaesu FP-757HD
>>>power supply? It has a 3-terminal regulator in it, it looks like a 317,
>>>but it has funky markings on it which say B824, then down and to the
>>>right it says Q5D. It might be an O or 0 (zero) 5D. Do you guys know if
>>>you can replace this B824 thing with an LM317? The transistors are
>>>oddballs too but I haven't gotten the number for them. If I have to, I
>>>can just start from scratch on it, there's not much to it and there were
>>>a couple of caps with the legs corroded off. I can probably just come up
>>>with my own regulator as easy as I can fix this one unless I can find a
>>>schematic.
>>>
>>>Do you guys know where to find a schematic for this thing?
>>>
>>>Tnx,
>>>Kerry, WD5ABC
>>
>>
>> Here we go:
>>
>> 3 - Pass (NPN) transistors Q1 - Q3: 2SD717-Y
>> on heat sink
>>
>> These 3 should be on PC board (AVR Unit PB-2156
>> Q101 - 2SK192-BL (looks like FET)
>> Q102 - 2SA1012Y (looks like PNP bipolar)
>> Q103 - 2SA950Y (looks like PNP bipolar)
>>
>> Q102 drives the pass transistors
>> Q103 Base connected to VR101 for adjustment (voltage adjust?)
>>
>> w9gb
>>

> Perfect, I got the schematic, thanks! Looks like there's not too much to
> it. I picked up a few parts in San Antonio today for the Astron (I
> thought it was fixed, but it's still not right). I'll have to think about
> the Yaesu and see if I can find some of those parts or at least find what
> they cross to.
>
> Thanks for all your help!
> Kerry

i have a schematic for the YaesuFP757HD power supply.
in the schematic there are no regulators, there are no IC's, just 5
bipolar transistors and a fet.
this is providing that they didn't update the circuit and you have a
newer one than me.
if you email me your address i will photocopy the schematic and post
it to you.

martyn preston G0THY

1066. Re: stripline@ 75 Ohm

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 11:13:11 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1138878791.173787.184830@o13g2000cwo.googlegroups.com>
Source record: 13867

forgive him, not me would you care to hang a mosquito on a piece of
strip line. It's quite clear he's referring to a microstrip circuit.
which one of us is using strip lines, except in power amplifiers.

1067. Re: stripline@ 75 Ohm

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 11:14:42 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1138878882.132818.89090@g43g2000cwa.googlegroups.com>
Source record: 13868

i can send you a small gem of a program, very fit for amateur use. if
your interested, write me at the email directly.
Saandy 4Z5KS

1068. Re: stripline@ 75 Ohm

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 11:47:30 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <mjmEf.527780$084.246711@attbi_s22>
Source record: 13869

"Saandy , 4Z5KS" <hardware2@ift-int.com> wrote in message
news:1138878882.132818.89090@g43g2000cwa.googlegroups.com...
>i can send you a small gem of a program, very fit for amateur use. if
> your interested, write me at the email directly.
> Saandy 4Z5KS

Or download "AppCad" free from Hewlett Packard. It does both microstrip and
stripline and as they say on Madison Avenue, "So much more".

W4ZCB
>

1069. Re: I need a over voltage (crowbar) circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 12:08:04 UTC
From: Bill <bcrann@hotmail.com>
Message-ID: <yCmEf.8766$lw6.624798@news20.bellglobal.com>
Source record: 13870

Thanks!

Bill

"Mike" <nomtrxspam@comcast.net> wrote in message
news:ancht19i7pf3nfn7qkukd5ef68clteaukn@4ax.com...
> On Sun, 22 Jan 2006 01:45:59 -0330, "Bill" <bcrann@hotmail.com> wrote:
>
>>I am looking for a simple over voltage circuit for my 13.8V 20Amp power
>>supply. I have googled it and found a few using zener diodes but some
>>zeners can be off as much as 20%. I would like to have it activate at 15V
>>or less. Thanks in advance.
>>
>>Bill
>>
> Take a look at Fig 24 and Fig 25 in the data sheet for the TL431.
> http://www.onsemi.com/pub/Collateral/TL431-D.PDF
> Very accurate, cheap, and simple.
> The TL431 is available in a TO-92 pkg.
> Mike

1070. Re: stripline@ 75 Ohm

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 16:38:47 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <edfbc$43e23594$425124a0$8058@DIALUPUSA.NET>
Source record: 13871

You wanna try that again in English?

Jim

"Saandy , 4Z5KS" <hardware2@ift-int.com> wrote in message
news:1138878791.173787.184830@o13g2000cwo.googlegroups.com...
> forgive him, not me would you care to hang a mosquito on a piece of
> strip line. It's quite clear he's referring to a microstrip circuit.
> which one of us is using strip lines, except in power amplifiers.
>

1071. Re: stripline@ 75 Ohm

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 16:41:58 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <dad0$43e23654$425124a0$8090@DIALUPUSA.NET>
Source record: 13872

No. Microstrip is the transmission line on one side of a double-sided PCB
and the ground plane on the other side. Stripline is with TWO PCBs with the
transmission line sandwiched on one of the boards and ground planes on BOTH
the outside layers. It makes for a much improved shielding at the expense
of much more complex mechanical assembly.

Jim

<pe1pme@xs4all.nl> wrote in message
news:43e13517$0$18466$e4fe514c@dreader32.news.xs4all.nl...
> what's the difference?
> Is "open face"on a singlesided pcb and "sandwich" on a doublesided pcb?
> I use a doublesided pcb with one side as a groundplane.
>
> tnx, Wim

1072. Listening USA Country music from Istanbul - Turkey

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 17:03:26 UTC
From: mustafa umut sarac <mustafaumutsarac@gmail.com>
Message-ID: <1138899806.372151.187540@g44g2000cwa.googlegroups.com>
Source record: 13873

How can it be possible to me to listen us radios with a radio or satellite radio from istanbul.
I will not have a internet connection for next 6 months .
I dont know it is possible or not to listen radio from satellite but may be ? I have a new computer and I dont have hundreds for cards. May be you help me to pass this boring winter at home ? May be there is cheap kits or schematics for long range listeners .

Best ,

Mustafa Umut Sarac

1073. Re: stripline@ 75 Ohm

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 17:56:19 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1138902979.018512.67160@f14g2000cwb.googlegroups.com>
Source record: 13874

Oh, well, those of us who deal with multilayer boards regularly use stripline: lines sandwiched between ground planes on inner layers. But from the sounds of it, Wim almost certainly is using microstrip. However, if you look more carefully at it, you'll discover that your 75 ohm line is NOT 75 ohms "from DC to daylight" -- things fall apart at low frequencies (significantly so below 1MHz or so), and where the dimensions of the line are comparable to a wavelength (well below "daylight"). But again, Wim should be fine using the dimensions you originally gave him for what he wants to do.

Cheers,
Tom

1074. Re: stripline@ 75 Ohm

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 17:59:42 UTC
From: W8LNA <W8LNA@arrl.net>
Message-ID: <6KrEf.23556$wk5.6689@news02.roc.ny>
Source record: 13875

pe1pme@xs4all.nl wrote:
> what's the difference?

You should do some homework,
http://www.ansys.com/industries/mems/mems-downloads/maloratsky_micostrip.pdf

or in a shorter format

http://tinyurl.com/dxtvu

Cheers,
Galen, W8LNA

1075. Re: New program - Antenna Counterpoise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 18:04:23 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <KrKdnWHnJtcG1H_eRVnyig@pipex.net>
Source record: 13876

>A coil-loaded counterpoise at a low height above ground is used to
> provide an artificial ground for an antenna when, for some reason, a
> true ground connection is not possible or there is not enough space to
> erect a full 1/4-wavelength horizontal wire.
>
> The principal effects of low height are a loss resistance induced in
> the wire from the ground, and a reduction in propagation velocity
> along the wire.
>
> A counterpoise can be considered to be an artificial ground. Its
> input resistance at resonance is equivalent to the input resistance of
> a true ground connection but its resistance will never be as low as a
> good ground.
>
> To provide a lower input resistance three or four counterpoises can be
> used in parallel. Or they can be resonant on different bands.
>
> New program C_POISE estimates the performance of a single coil-loaded
> counterpoise. The number of turns on a coil of given length and
> diameter needed to resonate a low wire to 1/4-wave resonance is
> calculated. The input resistance at resonance is also estimated..
>
> All program output data is approximate due to the very low height of
> the wire above ground and uncertainty in the characteristics of the
> soil or whatever other materials may be under the wire. The wire may
> be allowed to rest on the ground surface but uncertainty will be at a
> maximum. It will nearly always be needed to prune the wire length for
> resonance. Or when the wire length is fixed the coil turns may need
> adjustment.
>
> When wire height exceeds wire length accuracy is much improved. Input
> resistance at resonance will be fairly small. Working Q will be high
> and the counterpoise will behave as a short antenna. For precise
> resonance the wire will still need pruning.
==========
Reg , What is your opinion about the effectiveness of (a) counter poise(s)
of any length in series with an adjustable series resonance circuit
,adjusted for maximum RF current at the operating frequency ?

Frank GM0CSZ / KN6WH

1076. Re: stripline@ 75 Ohm

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 18:14:49 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1138904089.897597.294350@o13g2000cwo.googlegroups.com>
Source record: 13877

It's a long and twisty path...

When Hewlett-Packard split off the test and measurement, life sciences, medical and semiconductor businesses in 2000 as Agilent Technologies, AppCAD went to Agilent. But last year, Agilent split off the Semiconductor Products Group, which is now a new company, Avago Technologies. Because AppCAD supports design of circuits using the semiconductors, it went to the new company. If you go to http://www.avagotech.com/ and search for appcad, you will pretty much immediately find a link to the Avago-supported version. (You can also get there by searching for appcad on the Agilent home page, but it will redirect you to Avago.)

Cheers,
Tom

Cheers,
Tom

1077. Re: Listening USA Country music from Istanbul - Turkey

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 18:24:06 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrndu4ji6.5d9.bit-bucket@shell.config.com>
Source record: 13878

On 2 Feb 2006 09:03:26 -0800, mustafa umut sarac wrote:
> How can it be possible to me to listen us radios with a radio or
> satellite radio from istanbul.
> I will not have a internet connection for next 6 months .
> I dont know it is possible or not to listen radio from satellite but
> may be ? I have a new computer and I dont have hundreds for cards. May
> be you help me to pass this boring winter at home ? May be there is
> cheap kits or schematics for long range listeners .

Shortwave? Of course, it won't be 24/7.
I'm sure there may be other choices (VOA, others), but AFRTS first came
to mind here:

The shortwave frequencies:

http://myafn.dodmedia.osd.mil/radio/shortwave/

The schedule:

http://myafn.dodmedia.osd.mil/radio/afn/schedule.asp

I fondly remember the days I listened to AFRTS -- medium and short wave
-- while stationed at Ramstein AB in (West) Germany (on a BC-348.)

Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
Pueblo, Colorado | @ | Jonesy | OS/2 __
38.24N 104.55W | config.com | DM78rf | SK

1078. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 21:41:00 UTC
From: LenAnderson@ieee.org
Message-ID: <1138916460.372791.242640@g43g2000cwa.googlegroups.com>
Source record: 13879

From: Tobin Fricke on Jan 24, 7:41 pm

>On Tue, 24 Jan 2006, xpyttl wrote:

>> Well, I suppose it depends on where OP is. Here in the middle, 10 MHz isn't
>> much of a problem but 15 is.
>
>I am in Rochester, NY.

There should be no real problem in receiving WWV in NY state unless
you want to do it with a few feet of hook-up wire dangling inside
the room. For just WWV on HF, use whatever is handy for a long-
wire OUTSIDE...some #26 or #28 coil wire would work and be near-
invisible on the outside.

The sensitivity needed by your receiver depends ENTIRELY on how
much signal arrives in your area and how much of that the antenna
intercepts.

>> *HOWEVER*, 10 has one huge advantage -- there are very low cost uP crystals
>> for 10 MHz, so building even a simple reciever with a brick wall front end
>> isn't such a big deal, if the only frequency you care about is 10 MHz.
>
>Yes, that is what I was thinking. Is there a simple way to do frequency
>multiplication (or division) to get 2.5, 5, 15, and 20 MHz additionally,
>and thus be able to switch between all of the WWV frequencies?

To make a simple superheterodyne receiver, even if just single-
conversion using a legacy 455 KHz IF, capitalize on some simple
tuning arrangements using an RF Amp, Mixer, 1 or 2 stages of IF:

1. A single set of front-end inductors, tune RF and LO with Cap.

2. Capacitor tuning using fixed+trimmers. Frequency range of
5, 10, 15 MHz selected by rotary switch has a total frequency
range of 3:1 high to low. The capacitance change ratio for
this is the square of the frequency change ratio or 9:1.

Note: In the old "communications receiver" designs, it was
typical to cover a 3:1 frequency change ratio with a "365 pFd"
variable capacitor (typically 40 to 360 pFd min. to max.).

3. If there are temperature-drift problems in the LO, just make
use of a small front-panel control to a parallel trimmer cap
on the LO tuning (added to the cap. of the LO resonant ckts).

4. In most cases, the temperature drift is negligible and one
can make do with behind-the-front-panel trimmer cap. settings

for three switch-selected frequencies. Some simple experiments
with an oven termometer and a frequency counter would let you
check out the drift versus temperature and compensate. Begin
with mostly NPO caps fixed for the LO tuning, expect a towards-
low-frequency drift, compensate with negative-temp coefficient
fixed capacitors for the NPOs. Temperature drift is highly
dependent on WHAT you build and HOW you build it.

>"Brick wall front end"?

No need. WWV time-frequency service frequency allocations have a
protected 10 KHz bandwidth, protected from other modes in other
radio services. Given a typical Q of about 40 and two tuned
stages (ant to RF amp, RF amp to Mixer), the bandwidth would be
about 80 KHz (5 MHz) to 250 KHz (15 MHz) in the front-end. With
an IF of 455 KHz, the image frequency would be 910 KHz away.

WWV is AM, not SSB, and most probably will be used to zero-beat
external CW frequency sources that are going to be calibrated.

For those who want "extreme accuracy" in time, just compare the
time-ticks to a 1 Hz (divided down from standard to be checked)
local tick. That was the way things were done with the old
General Radio primary standards equipment circa 1950-1960, good
to 1 part per million accuracy without sweat.

>> Personally, I'd go with a DC rather than a regen - a lot simpler and these
>> days, a simple SA612 will give you way more sensitivity than you can
>> possibly use on 10 MHz for a couple bucks.
>> Heck, if the local QRM isn't too strong, I bet a 10 MHz uP crystal, a
>> 612 and an audio amp (like a 386 or so) is all you would need.
>
>That sounds great.

If all that is wanted is SIMPLICITY, just use any old SW BC or
wide-tuning-range HF receiver. [suggested by another]

You can convert an old "All-American-Five" AM BC receiver to
receive 5 to 15 MHz just by substituting the "coils" (inductors
is the proper word now). Substitute an inductor for the old
loop or loopstick...with a primary link for an external antenna.
[I did this many, many years ago...it works] It won't be "top
of the line" in performance, but then a regen isn't that either.
The IF can be aligned easily and the new front-end alignment
is fairly easy.

The old Hallicrafters S-38 four-band "starter" receiver that
many used was really a simple "All-American-Five" Mixer-Single IF-
AM detector-Audio Output arrangement with an added BFO. A BFO
isn't needed to beat a local frequency standard with WWV.

Assuming an original 45 pFd, 101 pFd, 405 pFd capacitance (which
includes the stray circuit capacity) to tune 15, 10, 5 MHz, a

2.5 uHy inductance will do the job. A trimmable inductor would
be best there. The first task is to check the inductor
substitutions with the existing variable capacitor. If that works,
the variable can be substituted by a switched trimmable capacitor
to avoid the knob-twisting for three HF selections...or two, or
none at all assuming fixed tuning to 10 MHz.

An old tube AM BC receiver relegated to the basement/garage
junkpile is a good candidate for this kind of thing. Tube type
radios are a bit easier to work with if you aren't acquainted
with newer solid-state circuitry. Those are certainly cheap. :-)

A converted "All-American-Five" will NOT have great sensitivity.
But, since tubes' stage gains are essentially transconductance x
load impedance, the individual gain stages can be optimized by
going for minimum-C in resonant circuits. Not that easy with
old transistor radios having individual transistor stages...those
needing fussing about with matching input-output impedances.

>> A friend of mine did an article on a simple WWV reciever for QRP Homebrewer
>> recently, issue #5 I think. He was more interested in the frequency
>> standard than hearing the sounds, so his contribution was recognizing the
>> zero beat, but still an interesting article if you can find a copy.
>
>I don't see any articles on WWV receivers there... Does anything look
>familiar: http://www.njqrp.org/data/qrp_homebrewer.html

Depends on WHAT EXACTLY you are striving for and your own
experience-knowledge. If you are a relative beginner (we all
were once), then I'd suggest converting an old tube type BC
receiver. That avoids the construction hassle and concentrates
on individual theory areas during conversion. It's the least
expensive route if using an old BC junker receiver. Individual-
area concentration can teach more about those areas than building
a pre-designed kit or magazine article project.

LenAnderson@ieee.org

1079. Re: 21.855 or 20.945MHz Xtals - who stocks them - corrected

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-02 22:37:06 UTC
From: Risto Tiilikainen <risto.NON.tiilikainen@luukku.comMUNIST.invalid>
Message-ID: <43e288e4$0$7473$f8ea8e4c@news.gohome.fi>
Source record: 13880

MarkAren wrote:

>Oops, not enough coffee.
>
>21.4MHz + or - 455kHz is hopefully 21.855 and 20.945MHz
>
>Whereabouts of a supplier with them in stock appreciated.
>
>Thanks,
>
>Mark.
>
>
>
Hi !

Try that one
http://www.newyorksemi.com/index_cpage003525_en.phtml

73. Risto OH2BT

1080. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 03:05:51 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <AJzEf.70701$C%3.16582@bignews2.bellsouth.net>
Source record: 13881

Dan/W4NTI wrote:
> "Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
> news:pFTCf.5518$eY5.1511@bignews7.bellsouth.net...
>
>>garigue wrote:
>>
>>>>>You might as well leave out the
>>>>>AM modulator since it will be useless today. Back in '66-'67 there
>>>>>were still some people on AM (mostly on 80 and 10 meters), but today
>>>>>it's completly gone.
>>>>
>>>>OH, Really!?? Snert! - Sporf! - Snurt! TNX for the laugh!
>>>>
>>>>Jonesy
>>>>--
>>>> Marvin L Jones | jonz | W3DHJ | linux
>>>> Pueblo, Colorado | @ | Jonesy | OS/2 __
>>>> 38.24N 104.55W | config.com | DM78rf | SK
>>>
>>>
>>>Yepper ....just like the fellow on 2 meters said ....nobody uses CW
>>>anymore .....its DOA . I just like to put up my feet, lean back, and
>>>open
>>>an Iron City Beer and enjoy the quality of those AM signals ... and this
>>>from a 99.99% CWist. My buddy built on of those rigs in 66 and it worked
>>>fine with his Mor-Gain antenna ...even with the hardware cloth safety
>>>mesh
>>>covering the chassis. Lots 'o fun.
>>>
>>>God Bless and 73 all ..... KI3R Tom in Belle Vernon PA
>>>
>>>
>>
>>Well I havn't heard any AM on the HF bands in a long time, but I stand
>>corrected that some people still use it. Granted it's in the minority
>>and on "calling frequencies". I don't think those screen grid modulators
>>found in novice rigs were of much use though. They didn't have
>>much punch and poor audio. If you are going to go AM, a real plate
>>modulator is the only way to go. (I shudder to think what a plate
>>modulation transformer would cost these days....)
>
>
> Ken,
>

> You admit you have NO knowledge of present day ham usage of AM. And
> apparently NO knowledge of old timey AM use. Properly designed, built and
> used low level modulation works and sounds good.
>
> I get glowing reports with my DX-60B, slightly modified to improve the bass
> response. And a Bullet Astatic Mic.
>
> And with the new rice boxes, if you adjust it right, you can get excellent
> audio out of them.
>
> With the FCC reduction of power for AM full carrier, plate modulated
> (375watts) the big monsters are going the way of the Dinosaur.
>
> Dan/W4NTI
>
>
>
Well I have to agree with the other poster who also owned a novice rig
with a grid modulator and nobody could hear him. I had the same
experience. The DX-60B may have had a well designed modulator and you
have it adjusted just right. (also you are not trying to over drive
the final). A plate modulator for a low power rig would make sense
if you really want to operate AM and put out a good signal.
I remember in some old ARRL handbooks there were some mobile am rigs
that used a filament transformer as a modulation transformer with a
pair of DS501 transistors (from old car radios) in the modulator.

1081. Re: Anyone built the 6146 cw/am transmitter in the 1966 Handbook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 03:14:49 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <ZRzEf.70705$C%3.57640@bignews2.bellsouth.net>
Source record: 13882

WSQT wrote:
>
> You will probably be best off winding your own. My advice is this:
> find the core size required to handle an amount of power at 60HZ equal
> to the audio power needed, find an old power transformer of that core
> size, and unwind it. Count the turns on the 117VAC winding to get turns
> per volt, and figure the wire size from the DC input to the modulator
> for the primary windings, and from the DC input to the PA(for each
> side), and turns from the turns per volt for power. Do not push wire
> size the the limit(small) becuase the windings also must handle the
> peak currents produced by the audio power, which are higher than the DC
> average.
>
> This transformer will have more than enough iron in the core to handle
> the AC power, as audio is at a higher frequency and the inductive
> reactance higher. DC in the secondary will lower the inductance, but
> you should still have enough. If you were trying to handle deep bass
> frequencies(not needed nor wanted in a "communications" app as they eat
> percentage of modulation), you would use a still larger core, figuring
> audio power PLUS the power represented by a 60HZ AC current whose RMS
> value is equal to the current drawn by the PA. This "overkill"
> transformer would give less distortion on deep bass.
>
> For a ham or any other communications application, frequencies below
> 300 HZ or so are far less important than they are to a broadcaster, but
> be SURE not to allow frequencies to pass the modulator's driver that
> the output transformer is not efficient at, or heavy currents will be
> drawn and efficiency will suffer badly. If you design a modulation
> transformer only to handle a narrowband voice range, the modulator
> input transformer should also reject any frequencies lower than the
> output transformer can handle, or these frequencies can be filtered out
> elsewhere.
>
> Otherwise, just speaking too close to the mike(which produces a deep
> bass response) will heat up your modulator.
>
>
A hint on rewinding transformers. When you disassemble a power transformer
you will note that the laminations alternate (IE: open end of even numbered "E"s
point left, odd numbered ones right). If you took apart a filter choke you
would find that ALL the laminations were oriented the same way. For an
audio transformer, arrange the laminations in groups, and alternate the
groups. Divide the total laminations into 3-10 groups.

Why? In the case of the choke, which must carry DC, we don't want the magnetic flux to saturate or the inductance will start to drop at some current. Having all the laminations go in one way leaves a nice air gap in the core which prevents core saturation. In the case of a power transformer which carries only AC we want the magnetic flux to be tight to keep efficiency up. For an audio transformer which must carry some dc (tube plate current), and ac (audio), a mix of these works out best. Note that in the case of a push pull primary (modulation or output transformer) the balanced dc current cancels out and we don't get much saturation of the core. A single ended output transformer WILL have this problem, as will the secondary winding of the modulation transformer.

A swinging filter choke should have some core saturation, probably it uses two or three groups of laminations.

1082. Re: New program - Antenna Counterpoise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 09:49:23 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <drv8v2res1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13883

> Reg , What is your opinion about the effectiveness of (a) counter
poise(s)
> of any length in series with an adjustable series resonance circuit
> ,adjusted for maximum RF current at the operating frequency ?

> Frank GM0CSZ / KN6WH
==========

Frank, the effectiveness of a counterpoise depends on its input resistance. The lower this resistance better it is. It is the 'ground' connection for the antenna. (And the transmitter).

But there's no point in making it longer than 1/4-wave. This increases coupling with the ground, increases loss resistance and also undesirably increases radiation resistance. The counterpoise then behaves more like a very low antenna.

When it is 1/2-wavelength long it has a very high input resistance and is entirely non-effective. It may just as well not be there.

At some lengths the loading coil would have to be replaced with a loading capacitor.

Remember, the antenna wire plus counterpoise is behaving as an off-centre fed, bent, dipole with the lower section being very near to the lossy ground. (Whatever the ground is). We don't want the lower section to be TOO long. The current into the counterpoise is the same current as is entering the antenna. If there is an antenna tuning unit it will tune up the counterpoise simultaneously with the antenna. They behave together as one thing!

So there is no point in having a separate tuner just for the counterpoise. Maximum current flows into the counterpoise at the same time as it flows into the antenna proper.

The purpose of the loading coil in the counterpoise is to provide a low impedance connection to the braid of the coaxial feedline. If there is no feedline then it provides an artificial 'ground' for the transmitter plus tuner.

And all the foregoing arises because it is difficult or impossible for the station owner to provide a set of buried ground radials.

Reg, G4FGQ

1083. Re: Another power supply project

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 18:19:40 UTC
From: Kerry Miller <kmiller01at@ticnet.com>
Message-ID: <99NEf.149906$WH.8515@dukeread01>
Source record: 13884

Martyn wrote:
> "Kerry Miller" <kmiller01at@ticnet.com> wrote in message
> news:DBgEf.149059$WH.120009@dukeread01...
>
>>gb wrote:
>>
>>
>>>"Kerry Miller" <kmiller01at@ticnet.com> wrote in message
>>>news:84YDf.148864$WH.136453@dukeread01...
>>>
>>>
>>>>Since I'm going to have to order a chip for that Astron PS I was working
>>>>on, I dug out another old PS that died a few years back. If I have to
>>>>pay shipping, I might as well order enough parts to at least make up for
>>>>the shipping costs...
>>>>
>>>>Does any of you guys know where to find a schematic for a Yaesu FP-757HD
>>>>power supply? It has a 3-terminal regulator in it, it looks like a 317,
>>>>but it has funky markings on it which say B824, then down and to the
>>>>right it says Q5D. It might be an O or 0 (zero) 5D. Do you guys know if
>>>>you can replace this B824 thing with an LM317? The transistors are
>>>>oddballs too but I haven't gotten the number for them. If I have to, I
>>>>can just start from scratch on it, there's not much to it and there were
>>>>a couple of caps with the legs corroded off. I can probably just come up
>>>>with my own regulator as easy as I can fix this one unless I can find a
>>>>schematic.
>>>>
>>>>Do you guys know where to find a schematic for this thing?
>>>>
>>>>Tnx,
>>>>Kerry, WD5ABC
>>>
>>>
>>>Here we go:
>>>
>>>3 - Pass (NPN) transistors Q1 - Q3: 2SD717-Y
>>>on heat sink
>>>
>>>These 3 should be on PC board (AVR Unit PB-2156
>>>Q101 - 2SK192-BL (looks like FET)
>>>Q102 - 2SA1012Y (looks like PNP bipolar)
>>>Q103 - 2SA950Y (looks like PNP bipolar)
>>>
>>>Q102 drives the pass transistors

>>>Q103 Base connected to VR101 for adjustment (voltage adjust?)
>>>
>>>w9gb
>>>
>>
>>Perfect, I got the schematic, thanks! Looks like there's not too much to
>>it. I picked up a few parts in San Antonio today for the Astron (I
>>thought it was fixed, but it's still not right). I'll have to think about
>>the Yaesu and see if I can find some of those parts or at least find what
>>they cross to.
>>
>>Thanks for all your help!
>>Kerry
>
>
> i have a schematic for the YaesuFP757HD power supply.
> in the schematic there are no regulators, there are no IC's, just 5
> bipolar transistors and a fet.
> this is providing that they didn't update the circuit and you have a
> newer one than me.
> if you email me your address i will photocopy the schematic and post
> it to you.
>
> martyn preston G0THY
>
>
Martyn,

You're right, no regulators! W9GB sent me a schematic, but thanks for
the offer.

Thanks,
Kerry, WD5ABC

1084. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 18:46:33 UTC
From: andy_rennison@hotmail.com
Message-ID: <1138992393.047828.75770@g44g2000cwa.googlegroups.com>
Source record: 13885
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Hi Trevor

Well, I was surprised by the animosity. If I were to regularly meet that within on air conversations I would be quite bothered I think. I remembered the hobby as being very gentlemanly and was therefore qute suprised. I think I may just lurk about an some of the HF / VHF bands and see what actually happens before deciding to get my iron out again.

I'm seeing my old mate G4GCO tonight for a few beers, no doubt we will discuss this as well.

Thanks for the comments

73

Andy - G8LIR

1085. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 18:49:24 UTC
From: andy_rennison@hotmail.com
Message-ID: <1138992564.908062.90360@f14g2000cwb.googlegroups.com>
Source record: 13886
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Thanks to everyone who commented

It seems that maybe this is not the general view of class B after all.
I'm going to lurk about on HF/VHF for a while listening and see how it
goes down, maybe I'll get my iron out then and do some stuff.

Thanks for the advice all

Andy G8LIR

1086. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 19:57:47 UTC
From: B S Expert <jim.gm4dhj@ntlworld.com>
Message-ID: <%AOEf.36433$Rw6.19973@newsfe7-gui.ntli.net>
Source record: 13887
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

> Well, I was surprised by the animosity. If I were to regularly meet
> that within on air conversations I would be quite bothered I think. I
> remembered the hobby as being very gentlemanly and was therefore qute
> suprised. I think I may just lurk about an some of the HF / VHF bands
> and see what actually happens before deciding to get my iron out again.

Big changes for the worse......

1087. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 19:58:23 UTC
From: B S Expert <jim.gm4dhj@ntlworld.com>
Message-ID: <zBOEf.36434$Rw6.32602@newsfe7-gui.ntli.net>
Source record: 13888
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

<andy_rennison@hotmail.com> wrote in message
news:1138992564.908062.90360@f14g2000cwb.googlegroups.com...
> Thanks to everyone who commented
>
> It seems that maybe this is not the general view of class B after all.
> I'm going to lurk about on HF/VHF for a while listening and see how it
> goes down, maybe I'll get my iron out then and do some stuff.
>
> Thanks for the advice all
>
> Andy G8LIR
>

just think you can now go on HF.....

1088. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 20:16:27 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1138997787.655433.73070@g47g2000cwa.googlegroups.com>
Source record: 13889
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

>From what you write below, you would seem to qualify as
a _REAL_ Radio Ham, the essence of Radio Hammery,
and pursuing activities that the FAQ praises.

To get as far as the bit you quote below, you must have
read the opening paragraphs which speak in support of
the style of Radio Hammery which you say is you, and so
it is difficult to understand why you should seem to take offence
at remarks which clearly are not directed at you. As you say below,
you have been "out of it" for a number of years, so it is unlikely
that you were aware of the gangrenous degeneration that is
the M3/CB Fools' Licence scheme or that you availed yourself
of the facility.

The groups which are criticised by the FAQ are those who
have featured in this NG in the years gone by, and any
animosity has, indeed, been originated by the criticised groups.
For me, Radio Hammery has always had traditions of international
gentlemanliness and these criticised groups do not have those
traditions.

So, you would appear to come from the traditional seed-corn of
Radio Hammery, where it is a technical pursuit with jealously
guarded privileges and yet you seem to take offence at criticsm
of those who are not in your league.

I offer no apologies for maintaining a stance to uphold the
technical and gentlemanly traditions of Ham Radio; nor do
I apologise for setting ourselves apart from CBers.

andy_rennison@hotmail.com wrote:
> "One group of people who claim to be of the standard of
> Radio Hams but who are in reality nothing more than an
> apology for the failure of a CBer are those class B
> licensees who falsely proclaimed that they were against
> the use of a Morse Test to control access to the HF
> bands, until, that is, a test was introduced at their
> intellectual level, the intellectual level of 6-year-olds. "
> Hold on a mo. I'm a class B licence holder - G8LIR, and have been for,
> oh about 30 years I think. My main interest was in fast scan ATV on 70
> Cms and 23cms, and with a small team we competed in many ATV contests,
> setting new (and I think unbroken) records. All our equipment was home
> built - yes I do mean ALL - including narrow band ATV receivers
> utilising inline cavities and integrating receivers to subtract noise
> and reveal lost images when only a weak sync pulse was available. We

> also DESIGNED and built the linear amplifiers using 4cx250's in push
> pull, with 2kv on the anodes and tuneable cavities (not copied
> designs). And, oh yes, we designed filters using laplace transforms to
> calculate the correct vaues for the inductors, wound them ourselves and
> tuned then with second hand spectrum analysers.
> Now to me, that level of technical expertise speaks to a certain
> intellectual level over a 6 year olds.
> I was considering returning to the hobby, but frankly the view in this
> FAQ has put me off.

1089. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 20:17:22 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1138997842.277005.227140@g49g2000cwa.googlegroups.com>
Source record: 13890
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

You continue to behave like a 5-year-old.

Peter wrote:
> On Mon, 30 Jan 2006 22:10:10 GMT, Trevor Day
> <Trev@secornwall.removethis.com> wrote:
>
> >With a G8L call I would have expected you to recognise an obvious troll
> >by now. You either want to get back to the hobby or you don't, if this
> >puts you off then frankly perhaps its not for you!
>
>
> Beanie is not a troll Trevor... his writings on the Soham murders and
> the monarchy confirm that he is of sick mind..
>
> Peter, G3PHO

1090. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 20:19:13 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1138997953.649517.21520@g14g2000cwa.googlegroups.com>
Source record: 13891
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

No-one who is a _REAL_ Radio Ham will be put off in the
slightest by a stance of maintaining the technical and gentlemanly
traditions.

CBers and their ilk might be put off, and if they are so put off,
then I say, "Good!".

Trevor Day wrote:
> In message <43df9ead.66797569@news.blueyonder.co.uk>, Peter
> <microwaves@blueyonder.co.uk> writes
> >On Mon, 30 Jan 2006 22:10:10 GMT, Trevor Day
> ><Trev@secornwall.removethis.com> wrote:
> >
> >>With a G8L call I would have expected you to recognise an obvious troll
> >>by now. You either want to get back to the hobby or you don't, if this
> >>puts you off then frankly perhaps its not for you!
> >
> >
> >Beanie is not a troll Trevor... his writings on the Soham murders and
> >the monarchy confirm that he is of sick mind..
> >
> >Peter, G3PHO
>
> Perhaps troll is the wrong word Peter; however I still feel that
> Gareth's prose should not put off anyone interested in AR especially
> someone with such an apparent pedigree.
>
> Trev G3ZYY
> --
> Trevor Day
> UKSMG #217
> www.uksmg.org

1091. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 20:21:16 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1138998076.559757.29770@g14g2000cwa.googlegroups.com>
Source record: 13892
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

There is no animosity expressed by urging those of a technical
bent to join us; neither is there any animosity in standing apart
from those who are not our fellows by any stretch of the
imagination.

Where there has been animosity, it has been on the part of those
who make up the groups criticised.

andy_rennison@hotmail.com wrote:
> Hi Trevor
>
> Well, I was surprised by the animosity. If I were to regularly meet
> that within on air conversations I would be quite bothered I think. I
> remembered the hobby as being very gentlemanly and was therefore qute
> suprised. I think I may just lurk about an some of the HF / VHF bands
> and see what actually happens before deciding to get my iron out again.
>
>
> I'm seeing my old mate G4GCO tonight for a few beers, no doubt we will
> discuss this as well.
>
> Thanks for the comments
>
> 73
>
> Andy - G8LIR

1092. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 20:23:33 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1138998213.190204.38090@g14g2000cwa.googlegroups.com>
Source record: 13893
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

It would seem to be certain that you have taken a critique
of those Class Bers who took out a licence under the
gangrenous degeneration that is the M3/CB Fools'
Licence scheme to be a critique of all Class Bers, which it was not.

I suggest that you re-rea the FAQ, when you will actually find
yourself to be praised and not criticised.

andy_rennison@hotmail.com wrote:
> Thanks to everyone who commented
>
> It seems that maybe this is not the general view of class B after all.
> I'm going to lurk about on HF/VHF for a while listening and see how it
> goes down, maybe I'll get my iron out then and do some stuff.
>
> Thanks for the advice all
>
> Andy G8LIR

1093. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 20:26:58 UTC
From: The Sweeny <jack.regan@hotmail.co.uk>
Message-ID: <1138998418.507748.19260@z14g2000cwz.googlegroups.com>
Source record: 13894
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

```
Orator For Decency wrote:
> There is no animosity expressed by urging those of a technical
> bent to join us; neither is there any animosity in standing apart
> from those who are not our fellows by any stretch of the
> imagination.
>
> Where there has been animosity, it has been on the part of those
> who make up the groups criticised.
>

SHUT IT EVANS
```

1094. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 20:27:26 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1138998446.301394.80400@o13g2000cwo.googlegroups.com>
Source record: 13895
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

The personal and insulting remarks below are very much those
that are typical of CBers - Childish Broadcasters - the very
people whom the FAQ criticises. Such remarks do not
fit in the gentlemanly traditions of _REAL_ Ham Radio.

I am not familiar with the Yankland licensing schemes.

Is "W5EGO" perhaps some for of CB licence - the abusive
personal style quoted below would seem to suggest so.

There is no attempt to demean anybody by a taxonomy of those
who are _REAL_ Radio Hams and those who are CBers of one
sort or another.

Mike Andrews wrote:
> Yes, indeed.
> You can discount without loss anything the writer of that so-called
> "FAQ" has written, is writing, or will ever write. He attempts to
> demean people who have attained heights he can't even see, much less
> comprehend. He has nothing to say, and insists on doing so at length.
>
> Don't let him put you off anything. Jump in; the water's fine.
> --
> Mike Andrews W5EGO
> mikea@mikea.ath.cx
> Tired old sysadmin

1095. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 20:31:13 UTC
From: The Sweeny <jack.regan@hotmail.co.uk>
Message-ID: <1138998673.065040.144390@g44g2000cwa.googlegroups.com>
Source record: 13896
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Orator For Decency wrote:
> The personal and insulting remarks below are very much those
> that are typical of CBers - Childish Broadcasters - the very
> people whom the FAQ criticises. Such remarks do not
> fit in the gentlemanly traditions of _REAL_ Ham Radio.
>
> I am not familiar with the Yankland licensing schemes.
>
> Is "W5EGO" perhaps some for of CB licence - the abusive
> personal style quoted below would seem to suggest so.
>
> There is no attempt to demean anybody by a taxonomy of those
> who are _REAL_ Radio Hams and those who are CBers of one
> sort or another.
>
> Mike Andrews wrote:
> > Yes, indeed.
> > You can discount without loss anything the writer of that so-called
> > "FAQ" has written, is writing, or will ever write. He attempts to
> > demean people who have attained heights he can't even see, much less
> > comprehend. He has nothing to say, and insists on doing so at length.
> >
> > Don't let him put you off anything. Jump in; the water's fine.
> > --
> > Mike Andrews W5EGO
> > mikea@mikea.ath.cx
> > Tired old sysadmin

EVANS IS YOUR BLOODY RECORD STUCK, OR ARE YOUR BRAINCELLS LOOPING DUE
TO YOUR DRUG ABUSE?

1096. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 20:46:42 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1138999602.419665.207880@f14g2000cwb.googlegroups.com>
Source record: 13897
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

There is no troll in expressing a serious concern about what
is happening in Radio Hammery and in seeking that the
technical and gentlemanly traditions be maintained.

If you think it is a troll, then perhaps you are one
of the CBers-Masquerading-As-A-Radio-Ham that
the FAQ warns against?

Trevor Day wrote:
> In message <1138653186.593685.292180@g44g2000cwa.googlegroups.com>,
> andy_rennison@hotmail.com writes
> >I was considering returning to the hobby, but frankly the view in this
> >FAQ has put me off.
> >Anyone care to comment ?
> With a G8L call I would have expected you to recognise an obvious troll
> by now. You either want to get back to the hobby or you don't, if this
> puts you off then frankly perhaps its not for you!
> Trev G3ZYY

1097. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 21:06:58 UTC
From: The Sweeny <jack.regan@hotmail.co.uk>
Message-ID: <1139000818.452167.206750@g14g2000cwa.googlegroups.com>
Source record: 13748
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Orator For Decency wrote:
> There is no troll in expressing a serious concern about what
> is happening in Radio Hammery and in seeking that the
> technical and gentlemanly traditions be maintained.
>
> If you think it is a troll, then perhaps you are one
> of the CBers-Masquerading-As-A-Radio-Ham that
> the FAQ warns against?
>
> Trevor Day wrote:
> > In message <1138653186.593685.292180@g44g2000cwa.googlegroups.com>,
> > andy_rennison@hotmail.com writes
> > >I was considering returning to the hobby, but frankly the view in this
> > >FAQ has put me off.
> > >Anyone care to comment ?
> > With a G8L call I would have expected you to recognise an obvious troll
> > by now. You either want to get back to the hobby or you don't, if this
> > puts you off then frankly perhaps its not for you!
> > Trev G3ZYY

THE'RE COMING TO TAKE YOU AWAY HA HA!

1098. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 21:11:05 UTC
From: G4KFK <mike@g4kfk.co.uk>
Message-ID: <1139001065.730377.287260@g47g2000cwa.googlegroups.com>
Source record: 13750
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Orator For Decency wrote:
> There is no animosity expressed by urging those of a technical
> bent to join us; neither is there any animosity in standing apart
> from those who are not our fellows by any stretch of the
> imagination.

You are the very model of a newsgroup personality.
You intersperse stupidity with tedious banality.
Psudonyms you've plenty of; both genuine and ghosted, too,
On all the countless newsgroups that your drivel is cross-posted to.
Our bandwidth you will fritter with your whining and your snivelling,
And we're the ones who pay the bills, downloading all your drivelling.
Your enemies are numerous, and no-one would be blaming us
For cracking your head open after you've been rudely flaming us.
You hate to lose an argument (by now you should be used to it).
You wouldn't know a valid point if you were introduced to it.
Your learning is extensive but consists of mindless trivia,
Designed to fan your ego, which is larger than Bolivia.
The comments that you vomit forth, disguised as jest and drollery,
Are really just an exercise in unremitting trollery.
You say you're frank and forthright, but that's merely lies and vanity,

The gibberings of one who's on the limits of his sanity.

With apologies to Gilbert and Sullivan :-)

73
Mike G4KFK

1099. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 21:17:50 UTC
From: W8LNA <W8LNA@arrl.net>
Message-ID: <YKPEf.13363$qg.11849@news01.roc.ny>
Source record: 13751
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

G4KFK wrote:
> Orator For Decency wrote:

Oral eater for desense EE?

>
> You are the very model of a newsgroup personality.
> You intersperse stupidity with tedious banality.
> Psudonyms you've plenty of; both genuine and ghosted, too,
> On all the countless newsgroups that your drivel is cross-posted to.
> Our bandwidth you will fritter with your whining and your snivelling,
> And we're the ones who pay the bills, downloading all your drivelling.
> Your enemies are numerous, and no-one would be blaming us
> For cracking your head open after you've been rudely flaming us.
> You hate to lose an argument (by now you should be used to it).
> You wouldn't know a valid point if you were introduced to it.
> Your learning is extensive but consists of mindless trivia,
> Designed to fan your ego, which is larger than Bolivia.
> The comments that you vomit forth, disguised as jest and drollery,
> Are really just an exercise in unremitting trollery.
> You say you're frank and forthright, but that's merely lies and vanity,
>
> The gibberings of one who's on the limits of his sanity.
>
> With apologies to Gilbert and Sullivan :-)

I rather think they'd like it, it certainly brings on a few chuckles.

Behaving like a stupid boy,
W8LNA

1100. Re: clevite filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 21:19:06 UTC
From: Frank <Frank.22o9kj@news.radiobanter.com>
Message-ID: <Frank.22o9kj@news.radiobanter.com>
Source record: 13749

B.G. Micro caries the 455 khz ceraminc filters. I don't know if those are what you're looking for. I was just looking for the ceraminc IF filters for a receiver project.

Frank

--
Frank

1101. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 21:32:23 UTC
From: DieSea <DieSea.NoSpamPlease@ntlworldd.ccom>
Message-ID: <43e3cbdf$0$5012$db0fefd9@news.zen.co.uk>
Source record: 13752
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"W8LNA" <W8LNA@arrl.net> wrote in message
news:YKPEf.13363$qg.11849@news01.roc.ny...
> G4KFK wrote:
>> Orator For Decency wrote:
>
> Oral eater for desense EE?
>
>>
>> You are the very model of a newsgroup personality.
>> You intersperse stupidity with tedious banality.
>> Psudonyms you've plenty of; both genuine and ghosted, too,
>> On all the countless newsgroups that your drivel is cross-posted to.
>> Our bandwidth you will fritter with your whining and your snivelling,
>> And we're the ones who pay the bills, downloading all your drivelling.
>> Your enemies are numerous, and no-one would be blaming us
>> For cracking your head open after you've been rudely flaming us.
>> You hate to lose an argument (by now you should be used to it).
>> You wouldn't know a valid point if you were introduced to it.
>> Your learning is extensive but consists of mindless trivia,
>> Designed to fan your ego, which is larger than Bolivia.
>> The comments that you vomit forth, disguised as jest and drollery,
>> Are really just an exercise in unremitting trollery.
>> You say you're frank and forthright, but that's merely lies and vanity,
>>
>> The gibberings of one who's on the limits of his sanity.
>>
>> With apologies to Gilbert and Sullivan :-)
>
> I rather think they'd like it, it certainly brings on a few chuckles.
>
> Behaving like a stupid boy,
> W8LNA

So some ones an IR8 King then

DieSea

1102. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 21:53:56 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <U8ydnWdj3_BpTX7eRVn-qA@web-ster.com>
Source record: 13753
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

W8LNA wrote:

> G4KFK wrote:
>
>> Orator For Decency wrote:
>
>
> Oral eater for desense EE?
>
>>
>> You are the very model of a newsgroup personality.
>> You intersperse stupidity with tedious banality.
>> Psudonyms you've plenty of; both genuine and ghosted, too,
>> On all the countless newsgroups that your drivel is cross-posted to.
>> Our bandwidth you will fritter with your whining and your snivelling,
>> And we're the ones who pay the bills, downloading all your drivelling.
>> Your enemies are numerous, and no-one would be blaming us
>> For cracking your head open after you've been rudely flaming us.
>> You hate to lose an argument (by now you should be used to it).
>> You wouldn't know a valid point if you were introduced to it.
>> Your learning is extensive but consists of mindless trivia,
>> Designed to fan your ego, which is larger than Bolivia.
>> The comments that you vomit forth, disguised as jest and drollery,
>> Are really just an exercise in unremitting trollery.
>> You say you're frank and forthright, but that's merely lies and vanity,
>>
>> The gibberings of one who's on the limits of his sanity.
>>
>> With apologies to Gilbert and Sullivan :-)
>
>
> I rather think they'd like it, it certainly brings on a few chuckles.
>
> Behaving like a stupid boy,
> W8LNA

It's even more impressive if you sing it to the tune of "Modern Major
General" -- the penultimate line has to be forced to scan, but the rest
flows nicely.

--

Tim Wescott
Wescott Design Services

http://www.wescottdesign.com

1103. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 21:54:31 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <U8ydnWZj3_CKTH7eRVn-qA@web-ster.com>
Source record: 13754
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

G4KFK wrote:

> Orator For Decency wrote:
>
>>There is no animosity expressed by urging those of a technical
>>bent to join us; neither is there any animosity in standing apart
>>from those who are not our fellows by any stretch of the
>>imagination.
>
>
>
> You are the very model of a newsgroup personality.
> You intersperse stupidity with tedious banality.
> Psudonyms you've plenty of; both genuine and ghosted, too,
> On all the countless newsgroups that your drivel is cross-posted to.
> Our bandwidth you will fritter with your whining and your snivelling,
> And we're the ones who pay the bills, downloading all your drivelling.
> Your enemies are numerous, and no-one would be blaming us
> For cracking your head open after you've been rudely flaming us.
> You hate to lose an argument (by now you should be used to it).
> You wouldn't know a valid point if you were introduced to it.
> Your learning is extensive but consists of mindless trivia,
> Designed to fan your ego, which is larger than Bolivia.
> The comments that you vomit forth, disguised as jest and drollery,
> Are really just an exercise in unremitting trollery.
> You say you're frank and forthright, but that's merely lies and vanity,
>
> The gibberings of one who's on the limits of his sanity.
>
> With apologies to Gilbert and Sullivan :-)
>
> 73
> Mike G4KFK
>

Your work, or did you find it?

How long did it take, for crying out loud?

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

1104. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 21:57:00 UTC
From: G4KFK <mike@g4kfk.co.uk>
Message-ID: <1139003820.534412.74760@g14g2000cwa.googlegroups.com>
Source record: 13755
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Tim Wescott wrote:
> Your work, or did you find it?
>
> How long did it take, for crying out loud?

Google the first line ... the truth is out there :-)

73
Mike G4KFK

1105. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 21:59:03 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1139003943.475314.53230@z14g2000cwz.googlegroups.com>
Source record: 13756
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

There now appears to be a chorus of rather silly
and childish individuals who are taking delight in the
abusive remarks put about by each other.

Such Childish Behaviour (CB) does nothing for
the public's perception of Radio Hammery, and,
indeed, may well serve to dismay those who
are potential candidates to become _REAL_
Radio Hams.

Shame on all those who exhibit such infantile glee.

Orator For Decency wrote:
> There is no troll in expressing a serious concern about what
> is happening in Radio Hammery and in seeking that the
> technical and gentlemanly traditions be maintained.
>

1106. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 22:00:07 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1139004007.912247.155450@g47g2000cwa.googlegroups.com>
Source record: 13757
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

G4KFK wrote:
> Tim Wescott wrote:
> > Your work, or did you find it?
> >
> > How long did it take, for crying out loud?
>
> Google the first line ... the truth is out there :-)

indeed parody of the model of a modern major general

Pnezance Ithink but i am a real student of G&S
>
> 73
> Mike G4KFK

1107. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 22:02:27 UTC
From: The-Sweeny <jack.regan@hotmail.co.uk>
Message-ID: <1139004147.458252.173220@g44g2000cwa.googlegroups.com>
Source record: 13758
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

```
Orator For Decency wrote:
> There now appears to be a chorus of rather silly
> and childish individuals who are taking delight in the
> abusive remarks put about by each other.
>
> Such Childish Behaviour (CB) does nothing for
> the public's perception of Radio Hammery, and,
> indeed, may well serve to dismay those who
> are potential candidates to become _REAL_
> Radio Hams.
>
> Shame on all those who exhibit such infantile glee.
>
> Orator For Decency wrote:
> > There is no troll in expressing a serious concern about what
> > is happening in Radio Hammery and in seeking that the
> > technical and gentlemanly traditions be maintained.
> >

PUT A SOCK IN IT YOU TWAT
```

1108. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 22:06:20 UTC
From: G4KFK <mike@g4kfk.co.uk>
Message-ID: <1139004380.908920.112620@g14g2000cwa.googlegroups.com>
Source record: 13759
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Gareth Alun Evans (G4SDW) wrote:
> There now appears to be a chorus of rather silly
> and childish individuals who are taking delight in the
> abusive remarks put about by each other.

So where've you been for the last week Gareth? We've all missed your
incisive wit and répartis.

73
Mike G4KFK

1109. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 22:17:06 UTC
From: huLLy <s2f@f2s.com>
Message-ID: <0_OdnYlBl7v-S37eRVnytQ@giganews.com>
Source record: 13760
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Orator For Decency wrote:
> There now appears to be a chorus of rather silly
> and childish individuals who are taking delight in the
> abusive remarks put about by each other.
>
> Such Childish Behaviour (CB) does nothing for
> the public's perception of Radio Hammery, and,
> indeed, may well serve to dismay those who
> are potential candidates to become _REAL_
> Radio Hams.
>
> Shame on all those who exhibit such infantile glee.
>
> Orator For Decency wrote:
>> There is no troll in expressing a serious concern about what
>> is happening in Radio Hammery and in seeking that the
>> technical and gentlemanly traditions be maintained.

But NONE have them have been ARRESTED!!!

--
huLLy
Tel: 07976 123278
ICQ 136-987-925

1110. FS: Plate transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 22:17:34 UTC
From: Eugene Rippen <soundval@foothill.net>
Message-ID: <1139005045_225@sp6iad.superfeed.net>
Source record: 13761

Prices do not include shipping.
Used, unless stated otherwise.

FRANKLIN TP-2. 110vac primary. Secondary is: 2000-1500-0-1500-200vac My
estimaye is 300ma, about 600watts, I will use 39 pounds to cakculate
shipping. $30
http://www.muchstuff.com/pics/FRKLIN/FRKLIN-1.JPG
http://www.muchstuff.com/pics/FRKLIN/FRKLIN-2.JPG
http://www.muchstuff.com/pics/FRKLIN/FRKLIN-3.JPG

OSBORNE. NEW. 1980va. 110/22/vac primary. secondary is:
2825-2000-0-2000-2825vac. Vented on 2 sides. I will use 55 pounds to
calculate shipping. $175 (That's about half of what Peter Dahl charges.)
http://www.muchstuff.com/pics/OSBRN/OSBRN-1.JPG
http://www.muchstuff.com/pics/OSBRN/OSBRN-2.JPG
http://www.muchstuff.com/pics/OSBRN/OSBRN-3.JPG

THORDARSON T16P03 865va. 115vac primary. 4360-3520-0-3520-4360VAC
secondary. I will use 33 pounds to calculate bshipping.
http://www.muchstuff.com/pics/TH16P0/TH16P0-A.JPG
http://www.muchstuff.com/pics/TH16P0/TH16P0-B.JPG
http://www.muchstuff.com/pics/TH16P0/TH16P0-C.JPG

WESTERN ELECTRIC 110/115/120vac primary. 3140-1570-0-2570-3140vac
secondary. 1.66Kva primary. 2.36Kva secondary.
This is 113 pounds naked. Pick up only, and after I have received the full
price. $45
http://www.muchstuff.com/pics/WEPLATE/WEPLATE3.JPG
http://www.muchstuff.com/pics/WEPLATE/WEPLATE2.JPG
http://www.muchstuff.com/pics/WEPLATE/WEPLATE1.JPG

Eugene Rippen, WB6SZS
105 Donnington
Auburn, CA 95603

-----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

1111. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 22:20:04 UTC
From: G4KFK <mike@g4kfk.co.uk>
Message-ID: <1139005204.458653.227800@o13g2000cwo.googlegroups.com>
Source record: 13762
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Orator For Decency wrote:
> There now appears to be a chorus of rather silly
> and childish individuals who are taking delight in the
> abusive remarks put about by each other.

** ENCORE **

Your technical experience, although you claim to know it all
Could barely serve to run the installation disk from AOL;
But still, in matters meaningless and tediously trivial,
You are the very model of a Usenet individual.

Chorus: But still, in matters meaningless and tediously trivial,
Beanie is the very model of a Usenet individual.

1112. Re: stripline@ 75 Ohm

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 22:23:37 UTC
From: pe1pme@xs4all.nl
Message-ID: <43e3d7e6$0$5025$e4fe514c@dreader18.news.xs4all.nl>
Source record: 13763

Thank you all for your input and help!
Now i can live on :)

73, Wim PE1PME

1113. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 22:39:03 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <43e3db20.18937220@news.blueyonder.co.uk>
Source record: 13764
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On 3 Feb 2006 13:11:05 -0800, "G4KFK" <mike@g4kfk.co.uk> wrote:

>
>Orator For Decency wrote:
>> There is no animosity expressed by urging those of a technical
>> bent to join us; neither is there any animosity in standing apart
>> from those who are not our fellows by any stretch of the
>> imagination.

>Mike G4KFK
<snip>

Superb Mike... I didn't know you had such music talent!

I reckon we could sell a few copies at various rallies if it were put
to music :-)

Any suggestions for a suitable title?

Peter, G3PHO

1114. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 22:40:30 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <43e4dba0.19065154@news.blueyonder.co.uk>
Source record: 13765
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On 3 Feb 2006 14:00:07 -0800, "an_old_friend" <konstans@hotmail.com>
wrote:

>> > How long did it take, for crying out loud?
>>
>> Google the first line ... the truth is out there :-)
>
>indeed parody of the model of a modern major general
>
>Pnezance Ithink but i am a real student of G&S

You are correct ... the Pirates of Penzance. We could call this new
one the Chimp of Chippenham !

Peter, G3PHO

1115. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 22:45:22 UTC
From: Gerard Lynch <gerrylynch@freenetname.co.uk>
Message-ID: <ta-dnTIh-OuYQH7eRVnyrg@brightview.com>
Source record: 13766
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

----- Original Message -----
From: "Tim Wescott" <tim@seemywebsite.com>

> It's even more impressive if you sing it to the tune of "Modern Major
> General" -- the penultimate line has to be forced to scan, but the rest
> flows nicely.

We are the very model of the modern radio amateur
We like to speak to countries strange while sitting in our arm-a-chair,
Our QSOs with digimodes and microphone are hard earned
(Of course we don't use rubbish like that old morse code we haven't
learned).

We have a whizzy handheld 'coz it makes us look much neater -
Of course we don't use it to talk, just key up the repeater
Except of course when 'breakers' from two streets away give us a shout,
Then we tie it up for hours, forgetting 'bout the time out.

(Then we tie it up for hours, fogetting 'bout the time out.)

We don't know what a dipole is so can't get ourselves on the air
But Echolink and E-QueSo means that we really couldn't care
With every cheaper foreign calls you'd wonder why we bother -
The answer to that mystery still hasn't been discovered.

I think this could be better - but it's Friday night, so time for even me to
go and get a life!

--
73

Gerry G0RTN
Vanity Page at http://www.gerrylynch.co.uk
"In days of old, when ops were bold, and sidebands not invented,
The word would pass, by pounding brass, and all were well contented."

1116. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 22:47:07 UTC
From: Gerard Lynch <gerrylynch@freenetname.co.uk>
Message-ID: <rsudndXtf6DwQH7eRVnyiQ@brightview.com>
Source record: 13767
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Orator For Decency" <radio.ham@lycos.co.uk> wrote in message
news:1138998446.301394.80400@o13g2000cwo.googlegroups.com...

> Is "W5EGO" perhaps some for of CB licence - the abusive
> personal style quoted below would seem to suggest so.

Please ignore this man. He is derganged.

And he calls everybody a CBer.

--
73

Gerry G0RTN
Vanity Page at http://www.gerrylynch.co.uk
"In days of old, when ops were bold, and sidebands not invented,
The word would pass, by pounding brass, and all were well contented."

1117. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 22:50:43 UTC
From: huLLy <s2f@f2s.com>
Message-ID: <z_ednYapgczZQ37eRVny0A@giganews.com>
Source record: 13768
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Gerard Lynch wrote:
> "Orator For Decency" <radio.ham@lycos.co.uk> wrote in message
> news:1138998446.301394.80400@o13g2000cwo.googlegroups.com...
>
>> Is "W5EGO" perhaps some for of CB licence - the abusive
>> personal style quoted below would seem to suggest so.
>
> Please ignore this man. He is derganged.
>
> And he calls everybody a CBer.

Strange, since he is a self confessed CBer... I wonder if he whips himself
with flails before he goes to bed..?

--
huLLy
Tel: 07976 123278
ICQ 136-987-925

1118. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 23:05:49 UTC
From: G4KFK <mike@g4kfk.co.uk>
Message-ID: <1139007949.737958.91010@g44g2000cwa.googlegroups.com>
Source record: 13769
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Peter wrote:
> Superb Mike... I didn't know you had such music talent!

Wasn't me guv, honest. Google the first line.

> I reckon we could sell a few copies at various rallies if it were put
> to music :-)
>
> Any suggestions for a suitable title?

"Abbey Road" worked for the Beatles, so let's call it "Hardens Close"

73
Mike G4KFK

1119. Re: 21.855 or 20.945MHz Xtals - who stocks them - corrected

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 23:30:21 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1139009421.432138.185610@f14g2000cwb.googlegroups.com>
Source record: 13770

Thanks guys.

Dial didn't have the parts in stock that are on their web site(!) and
will only search by manufacturers part number.

I have sent NYS an RFQ for 25 pcs.

Many thanks for all of your help.

Mark.

1120. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 23:39:17 UTC
From: G4KFK <mike@g4kfk.co.uk>
Message-ID: <1139009957.031664.142230@g14g2000cwa.googlegroups.com>
Source record: 13771
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Peter wrote:
> I reckon we could sell a few copies at various rallies if it were put
> to music :-)

We'd need a few more tracks. Maybe:
"You gotta troll with it" by Oasis
"Rant music" by Adam and The Ants
"You won't work another fool M3" by The New Seekers
"I gotta brand new M3 licence" by Melanie
"Milk and methylated spirit" by Dr Feelgood
"Meths in the jar" by Thin Lizzy
"I go to sheep" by The Pretenders
"R.S.C.B" by The Village People

73
Mike G4KFK

1121. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 23:44:22 UTC
From: G4KFK <mike@g4kfk.co.uk>
Message-ID: <1139010262.954581.235050@g47g2000cwa.googlegroups.com>
Source record: 13772
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

G4KFK wrote:
> We'd need a few more tracks. Maybe:
> "You gotta troll with it" by Oasis
> "Rant music" by Adam and The Ants
> "You won't work another fool M3" by The New Seekers
> "I gotta brand new M3 licence" by Melanie
> "Milk and methylated spirit" by Dr Feelgood
> "Meths in the jar" by Thin Lizzy
> "I go to sheep" by The Pretenders
> "R.S.C.B" by The Village People

I forgot one....

"Every little thing he does is mental" by The (Wiltshire) Police

1122. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 23:49:29 UTC
From: class-a-licensee-pkearn-zaapk@didnt-run-away-from-a-morse-test.es.eircom.com.net
Message-ID: <43e3ebe3.1822748@news.iol.ie>
Source record: 13773
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"G4KFK" <mike@g4kfk.co.uk> wrote:

>
> Peter wrote:
> > I reckon we could sell a few copies at various rallies if it were put
> > to music :-)
>
> We'd need a few more tracks. Maybe:
> "You gotta troll with it" by Oasis

"The Fool('s Licence) on the hill" by ???????????

1123. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-03 23:51:32 UTC
From: G4KFK <mike@g4kfk.co.uk>
Message-ID: <1139010692.556522.325730@g43g2000cwa.googlegroups.com>
Source record: 13774
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

zAAPK wrote:
> "The Fool('s Licence) on the hill" by ???????????

The Beatles :-)

1124. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 02:50:52 UTC
From: fmmck@aol.com
Message-ID: <fmmck-0302062150520001@ac8782b9.ipt.aol.com>
Source record: 13787
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

Tobin Fricke wrote:

> As a project to learn more about building radio receivers, I'd like to
> build a WWV receiver (or maybe a receiver for the Canadian station CHU,
> since it's nearby and the format sounds easier to decode). I'm looking
> for suggestions for how to design such a radio, reading material, etc.
>
> I was thinking it might be easier to design a fixed-frequency receiver
> (rather than a tunable one) because I could just select the L and C in the
> resonant circuit to give the right frequency. Or, since WWV is at such
> "round number" frequencies, maybe I could somehow use a crystal
> oscillator?

Tobin-

A couple other ideas:

1. Try your hand at building a crystal set! Just an antenna, a tuned circuit, a diode and earphones. There could be more sophistication such as using an amplified speaker and higher-Q tuned circuits.

2. Try a direct-conversion receiver. It may be just a more sophisticated crystal set with RF preamplifier and on-frequency crystal filter. A product detector could be included to convert to audio, but a diode detector should work and wouldn't change the audio tone frequencies.

I considered using this direct-conversion approach to obtain an accurate 10 MHz signal. I wanted to use it to synchronize my oscilloscope so I could adjust a counter's timebase (or vice-versa). However, I never built it after finding a Rubidium controlled oscillator on eBay.

Fred

1125. Cushman CE50 help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 03:40:25 UTC
From: RoDnSuE <sad.tip@verizon.net>
Message-ID: <1139024425.435393.181360@g44g2000cwa.googlegroups.com>
Source record: 13775

Hi,
I have a slightly sick Cushman CE50-TG-1 service monitor and was
wondering if anyone has taken any voltage readings from a working unit
they would be willing to share.
I need to check the voltages at test points 3 & 4 on the 29000 board
with the frequency set between 9.9999mhz and 100khz. That should give
me the normal range for both the A & B VCO's control voltage's.
(referenced to chassis ground) Any other voltages would be helpful so I
can note them for future reference.
Sure would have been nice if Cushman would have provided some basic
voltage readings on the schematics.

Any help would be appreciated,
Thanks,
RoD

1126. EZ Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 04:45:59 UTC
From: Ivan <left@rogers.com>
Message-ID: <1139028359.930276.122290@f14g2000cwb.googlegroups.com>
Source record: 13776

Hi, All
offering a set of boards and stepper motors for building a legal limit
EZ-Tuner. Check my web page and scroll down to the bottom.

http://www.makarov.ca/eztuner.htm

Thanks everybody,
Ivan
VE3IVM

1127. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 06:59:25 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1139036364.976463.315010@g47g2000cwa.googlegroups.com>
Source record: 13777
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

You continue to behave like a 5-year-old

Peter wrote:
> On 3 Feb 2006 13:11:05 -0800, "G4KFK" <mike@g4kfk.co.uk> wrote:
>
> >
> >Orator For Decency wrote:
> >> There is no animosity expressed by urging those of a technical
> >> bent to join us; neither is there any animosity in standing apart
> >> from those who are not our fellows by any stretch of the
> >> imagination.
>
> >Mike G4KFK
> <snip>
>
>
> Superb Mike... I didn't know you had such music talent!
>
> I reckon we could sell a few copies at various rallies if it were put
> to music :-)
>
> Any suggestions for a suitable title?
>
>
> Peter, G3PHO

1128. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 07:00:42 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1139036442.519326.222960@g14g2000cwa.googlegroups.com>
Source record: 13778
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

You continue to behave like a 5-year-old.

Peter wrote:
> On 3 Feb 2006 14:00:07 -0800, "an_old_friend" <konstans@hotmail.com>
> wrote:
>
> >> > How long did it take, for crying out loud?
> >>
> >> Google the first line ... the truth is out there :-)
> > >
> > >indeed parody of the model of a modern major general
> > >
> > >Pnezance Ithink but i am a real student of G&S
> >
> >
> > You are correct ... the Pirates of Penzance. We could call this new
> > one the Chimp of Chippenham !
> >
> > Peter, G3PHO

1129. Re: ?Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 08:05:44 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1139040344.670488.20930@o13g2000cwo.googlegroups.com>
Source record: 13779
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Sorry, omitted the international exhortations.....

Orator For Decency wrote:
> What is Ham Radio?
>
> (Preface)
> It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery. Even
> the Usenet newsgroups dedicated to the cause have degenerated
> into a hotbed of abusive onslaughts by those who ought to know better.
> However, there still exists the fundamental basis on which Ham
> Radio is based, and that will never die. This FAQ ("What Is
> Ham Radio?") will be regularly published and will not be
> shouted or bullied down. It is important that those of a
> technical bent, who are the natural seed-corn of Radio Hammery
> and who gravitate towards us to be the real novitiate, can
> still find us, (and know that we are still here), their fellows.
>
> -----ooooo-----
>
> Please remember that this FAQ is a _POSITIVE EXHORTATION_
> to you to exert yourselves to join our fraternity! (If you find
> otherwise, then perhaps you are already classing yourself in the
> mediocre groups of those who are criticised in the FAQ and from
> whom we _MUST_ dissociate? If so - it's never too late for
> a re-taxonomisation on your part - there's nothing elitist about
> us, and we welcome all those who are prepared to put themselves
> out in order to join our ranks!)
>
> -----ooooo-----
> (Article)
> So,.....What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>
> Ham Radio awakens in its aficionados a whole-life
> fascination with all things technical and gives
> an all-abiding curiosity to improve one's scientific

> knowledge. It's a great swimming pool, please dive in!
>
> This excitement causes a wish to share the experience
> with ones fellow man, and shows itself in the
> gentlemanly traditions of Ham Radio.
>
> Radio Hams are in a unique privileged position in that
> they can construct and operate their own equipment! No-one
> else has this privilege. Users, such as broadcasters,
> the po lice and armed farces, CBers and mobile phone
> users have to purchase ready-made gear. Manufacturers
> are not licensed to operate their gear. Radio Hams
> are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment. This is a privilege well worth the effort
> to gain, and one to be jealously guarded.
>
> The excitement that drives a Radio Ham starts with
> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to
> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.
>
> -----OOOOO----
>
> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;
> they are free with rather silly personal insults;
> they have not satisfied any technical qualification
> and their licences prevent the use of

> self-designed-and-built equipment.
>
> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.
>
> No _REAL_ Radio Hams are deceived by such people!
>
> -----ooooo-----
>
> One such CB type is the so-called "Not-Ham". Otherwise
> known as the CBer-Masquerading-As-A-Radio-Ham, this type
> had their background in the hobby that is CB Radio and not
> in the technical pursuits that lead up to a coveted Ham licence.
> Easily recognised by their boasts of the criminal activity of
> 11 metre SSB operation, one wonders why they don't go back to
> the CB Bands if such bands are dearer in their hearts than are the Ham
> Bands? No _REAL Radio Hams associate with those who made an
> illegal installation of transmitting equipment before being
> in possession of an appropriate licence.
>
> -----ooooo-----
>
> One infallible way to disambiguate the CB Radio Hobbyist
> from the _REAL_ Radio Ham is to solicit their view of the
> difference between CB Radio and Ham Radio. A Radio Ham will
> perceive Ham Radio to be a technical pursuit and will
> perceive CB Radio to be a social communications facility
> no different in essence to a land-line telephone or a
> GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
> could also hold a CB licence safe in the knowledge that
> such a licence says no more about him than having a land-line
> telephone, whilst continuing to regard Ham Radio as a separate
> technical pursuit.
>
> A CB Radio hobbyist, on the other hand, sees no difference between
> a Ham Radio licence and a CB Radio licence. To him, they are
> sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
> tries to classify himself as the equal of the Radio
> Ham when, in fact, he is nothing of the kind. A sure sign of
> a CB Radio hobbyist is if he holds, or has ever held, a licence
> issued under the gangrenous degeneration that is the
> M3/CB Fools' Licence scheme.
>
> -----ooooo-----
>
> One group of people who claim to be of the standard of
> Radio Hams but who are in reality nothing more than an
> apology for the failure of a CBer are those class B
> licensees who falsely proclaimed that they were against

> the use of a Morse Test to control access to the HF
> bands, until, that is, a test was introduced at their
> intellectual level, the intellectual level of 6-year-olds.
>
> 6 year-olds simply lack the mathematical tool kit to
> enable them to handle even the simplest algebraic manipulation
> for Ohm's Law and thus, the disgraceful Class Ber's in
> the aforementioned category are not Radio Hams by any stretch
> of the imagination!
>
> Remember - A sure sign of a CB Radio hobbyist is if he holds,
> or has ever held, a licence issued under the gangrenous
> degeneration that is the M3/CB Fools' Licence scheme!

1130. Re: ?Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 08:19:37 UTC
From: G4KFK <mike@g4kfk.co.uk>
Message-ID: <1139041177.269936.259450@f14g2000cwb.googlegroups.com>
Source record: 13780
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Gareth Alun Evans (G4SDW) wrote:
> Sorry, omitted the international exhortations.....

So did I.

You are the very model of a newsgroup personality.
You intersperse stupidity with tedious banality.
Psudonyms you've plenty of; both genuine and ghosted, too,
On all the countless newsgroups that your drivel is cross-posted to.
Our bandwidth you will fritter with your whining and your snivelling,
And we're the ones who pay the bills, downloading all your drivelling.
Your enemies are numerous, and no-one would be blaming us
For cracking your head open after you've been rudely flaming us.
You hate to lose an argument (by now you should be used to it).
You wouldn't know a valid point if you were introduced to it.
Your learning is extensive but consists of mindless trivia,
Designed to fan your ego, which is larger than Bolivia.
The comments that you vomit forth, disguised as jest and drollery,
Are really just an exercise in unremitting trollery.
You say you're frank and forthright, but that's merely lies and vanity,

The gibberings of a loonie on the limits of his sanity.

With apologies to Gilbert and Sullivan :-)

73
Mike G4KFK

1131. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 09:27:03 UTC
From: B S Expert <jim.gm4dhj@ntlworld.com>
Message-ID: <Hr_Ef.6843$Fy4.969@newsfe4-win.ntli.net>
Source record: 13781
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

> Strange, since he is a self confessed CBer... I wonder if he whips himself
> with flails before he goes to bed..?
>
> --
> huLLy

http://video.google.com/videoplay?docid=-4446981554735098778

1132. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 11:28:25 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1139052505.282372.17780@g47g2000cwa.googlegroups.com>
Source record: 13782
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Indeed, in consideration that the FAQ is maintaining a
stance for the traditions of _REAL_ Ham Radio, the
traditions of technical motivation and gentlemanly
conduct, against the influx of the Mongolian Hordes
of CBers of one sort or another, it would be reasonable
to assume that the chorus of abusive and infantile
objectors are all from the CB camp, and therefore
providing graphic illustration of why it is necessary to
take this stance now.

It would seem that the CBer-Masquerading-As-A-Radio-Ham
is no recent phenomena - there are some hoilding licences
issued in the G4K-- series.

Irrespective of when such licences were issued, public
outbursts of Childish Behaviour (CB) do the cause of
Radio Hammery no good at all.

Orator For Decency wrote:
> There now appears to be a chorus of rather silly
> and childish individuals who are taking delight in the
> abusive remarks put about by each other.
>
> Such Childish Behaviour (CB) does nothing for
> the public's perception of Radio Hammery, and,
> indeed, may well serve to dismay those who
> are potential candidates to become _REAL_
> Radio Hams.
>
> Shame on all those who exhibit such infantile glee.

1133. FREE HAM Tips & Software

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 11:32:17 UTC
From: "Jerry L. Withers" <jwithers6@cox.net>
Message-ID: <6m0Ff.12518$eR.7998@fed1read03>
Source record: 13783

Visit my web site at http://www.nvham.net for details on how to get FREE
Amatuer Radio related tips, information, event updates, software, and more!

1134. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 11:47:31 UTC
From: Old Bill <jack.regan@hotmail.co.uk>
Message-ID: <1139053651.224293.92870@g47g2000cwa.googlegroups.com>
Source record: 13784
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Orator For Decency wrote:
> Indeed, in consideration that the FAQ is maintaining a
> stance for the traditions of _REAL_ Ham Radio, the
> traditions of technical motivation and gentlemanly
> conduct, against the influx of the Mongolian Hordes
> of CBers of one sort or another, it would be reasonable
> to assume that the chorus of abusive and infantile
> objectors are all from the CB camp, and therefore
> providing graphic illustration of why it is necessary to
> take this stance now.
>
> It would seem that the CBer-Masquerading-As-A-Radio-Ham
> is no recent phenomena - there are some hoilding licences
> issued in the G4K-- series.
>
> Irrespective of when such licences were issued, public
> outbursts of Childish Behaviour (CB) do the cause of
> Radio Hammery no good at all.
>
> Orator For Decency wrote:
> > There now appears to be a chorus of rather silly
> > and childish individuals who are taking delight in the
> > abusive remarks put about by each other.
> >
> > Such Childish Behaviour (CB) does nothing for
> > the public's perception of Radio Hammery, and,
> > indeed, may well serve to dismay those who
> > are potential candidates to become _REAL_
> > Radio Hams.
> >
> > Shame on all those who exhibit such infantile glee.

Look who's talking, or should that be stalking?

Come to think of it, you would make a fine dung beetle, rolling along a
huge ball a crap, the crap being your over inflated opinion of yourself.

1135. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 12:25:49 UTC
From: G4KFK <mike@g4kfk.co.uk>
Message-ID: <1139055948.981541.241090@g47g2000cwa.googlegroups.com>
Source record: 13785
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Orator For Decency wrote:
> Indeed, in consideration that the FAQ is maintaining a
> stance for the traditions of _REAL_ Ham Radio, the
> traditions of technical motivation and gentlemanly
> conduct, against the influx of the Mongolian Hordes
> of CBers of one sort or another, it would be reasonable

"Mongolian Hordes of CBers...."???

Have you had a CAT scan lately?

73
Mike G4KFK

1136. Re: clevite filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 13:30:05 UTC
From: pgj&#65533;nsson <pegge.j@telia.com>
Message-ID: <x%1Ff.155255$dP1.513419@newsc.telia.net>
Source record: 13786

Tnx for answering, gentlemen, the problem is that I already have the filters
and would like to see where I can use them

73 / per / sm7aha

"pgj&#65533;nsson" <pegge.j@telia.com> skrev i meddelandet
news:qS4Ef.155058$dP1.513112@newsc.telia.net...
> Hello group, does someone have info or can tell me were to find info on
> Clevite filters,
> 4 filters, all T.L. 40D55A, one called &#65533;ladder filter&#65533;, two called
> &#65533;ceramic filter&#65533;and one w/o
> specification.
>
> TIA / per / sm7aha
>

1137. FA:EXCELLENT TEN TEC OMNI VI+/MIC/TT PS

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 15:21:27 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <XD3Ff.6893$fM1.2582@bgtnsc04-news.ops.worldnet.att.net>
Source record: 13788
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Very nice TT Omni VI+ with mic and TT PS included! PSE NOTE RESTRICTIONS on SHIPPING/INSURANCE and required amateur call sign. Currently in use. See at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking: more stuff coming: air variables, parts, transformers, chokes. Check back often,73 heytubeguy

1138. Re: clevite filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 15:21:51 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1139066511.678851.29660@g43g2000cwa.googlegroups.com>
Source record: 13789

pgjönsson wrote:
> Tnx for answering, gentlemen, the problem is that I already have the filters
> and would like to see where I can use them

You could make up a simple crystal tester and find out their
parameters. The same techniques should work OK.

Leon

1139. Re: FREE HAM Tips & Software

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 15:37:04 UTC
From: Dan Richardson <k6mhe@mailinator.com>
Message-ID: <j9i9u1pqgt3mt0d00dqps5oae46o15eo53@4ax.com>
Source record: 13790

On Sat, 4 Feb 2006 03:32:17 -0800, "Jerry L. Withers"
<jwithers6@cox.net> wrote:

>Visit my web site at http://www.nvham.net for details on how to get FREE
>Amatuer Radio related tips, information, event updates, software, and more!
>

Free* for $19.95 per year?

*free
Definition: Costing nothing: requiring no money to be paid

email: k6mhe<at>arrl<dot>net
http://www.k6mhe.com/

1140. Re: ?Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 17:11:28 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <fjn9u1l9t0kjhj9utifae8816tsb8hjbot@4ax.com>
Source record: 13791
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

G4KFK wrote:

>
>Gareth Alun Evans (G4SDW) wrote:
>
>> Sorry, omitted the international exhortations.....
>
>So did I.
>
>You are the very model of a newsgroup personality.
>You intersperse stupidity with tedious banality.
>Psudonyms you've plenty of; both genuine and ghosted, too,
>On all the countless newsgroups that your drivel is cross-posted to.
<snip>
>With apologies to Gilbert and Sullivan :-)

Has this chappy got as far as upgrading the so-called 'faq' (which might be frequent but has little else to recommend it) to include the warning that 'repairing with gusto' only applies to transistorised PAs with low power output and not compact valve PAs with 600V on the anodes?

If not, why did he introduce that caveat elsewhere?

Still, let us not forget this was the same chappy who sold an FT-101 because the tune-up pages were missing from the manual.

from
Aero Spike

1141. Software Defined Radios anyone?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 17:50:24 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <f3fa6$43e4e960$d135c4af$13580@MDI.CA>
Source record: 13792

I like to build a simple SDR. Anyone used a simple DSP chip to do this?
Maybe the PICDsp?

JJ

1142. Re: ?Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 17:54:04 UTC
From: G4KFK <mike@g4kfk.co.uk>
Message-ID: <1139075644.829952.185040@f14g2000cwb.googlegroups.com>
Source record: 13793
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Spike wrote:
> Has this chappy got as far as upgrading the so-called 'faq' (which
> might be frequent but has little else to recommend it) to include the
> warning that 'repairing with gusto' only applies to transistorised PAs
> with low power output and not compact valve PAs with 600V on the
> anodes?

No, it's the same old drivel.

> If not, why did he introduce that caveat elsewhere?

His medication had worn off that day.

> Still, let us not forget this was the same chappy who sold an FT-101
> because the tune-up pages were missing from the manual.

We'll keep reminding him ... with gusto!

73
Mike G4KFK

1143. Re: FREE HAM Tips & Software

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 18:23:47 UTC
From: Andy Axnot <Andy1@nope.invalid>
Message-ID: <pan.2006.02.04.18.23.58.609689@nope.invalid>
Source record: 13794

On Sat, 04 Feb 2006 03:32:17 -0800, Jerry L. Withers wrote:

> Visit my web site at for details on how to get FREE
> Amatuer Radio related tips, information, event updates, software, and more!

Spam, not ham.

Andy

1144. Re: ?Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 20:07:42 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1139083662.448418.121800@g47g2000cwa.googlegroups.com>
Source record: 13795
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

If Mrs.Nugatory cannot deal with the simple electrical
and mechanical attributes of a tuning capacitor, it
really shows up her habituation for sneering for what it is -
the green eyes of jealousy!

Welcome back, Mr.Nedlar.

Nedlar wrote:
> On Sat, 04 Feb 2006 17:11:28 +0000, Spike <Aero.Spike@S&T.invalid>
> wrote:
> e?
> >Still, let us not forget this was the same chappy who sold an FT-101
> >because the tune-up pages were missing from the manual.
> >
>
> Let us not forget that it was you that posted this gem while you tried
> to repair something above your skill level........
> > spike spluttered
> >I've checked for tuning capacitor plates not rubbing each other, and
> >correct earthing for the tuning capacitor main shaft wipers. I can't
> >think of anything else.

1145. FA: GLASS HI VOLTAGE CAPS

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 20:26:02 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <u58Ff.7687$fM1.7262@bgtnsc04-news.ops.worldnet.att.net>
Source record: 13796
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Just added hi voltage glass capacitors by Sprague, Gudeman; 4-10 KV DC; see at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

more air variables to be added soon, tnx for looking, heytubeguy

1146. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 20:29:08 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <43e50e7a.97619469@news.blueyonder.co.uk>
Source record: 13797
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On 3 Feb 2006 15:39:17 -0800, "G4KFK" <mike@g4kfk.co.uk> wrote:

>
>Peter wrote:
>> I reckon we could sell a few copies at various rallies if it were put
>> to music :-)
>
>We'd need a few more tracks. Maybe:
>"You gotta troll with it" by Oasis
>"Rant music" by Adam and The Ants
>"You won't work another fool M3" by The New Seekers
>"I gotta brand new M3 licence" by Melanie
>"Milk and methylated spirit" by Dr Feelgood
>"Meths in the jar" by Thin Lizzy
>"I go to sheep" by The Pretenders
>"R.S.C.B" by The Village People

It's getting better each hour!

1147. Re: ?Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 20:36:10 UTC
From: Toxic Waste <renting-a-room@nicks-place.com>
Message-ID: <_e8Ff.39433$0N1.628@newsfe5-win.ntli.net>
Source record: 13798
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Nedlar" <Sam@techno.invalid> wrote in message
news:76v9u1lls0nmv9ogaclri6ti2i52m9c70b@4ax.com...
>
> Let us not forget that it was you that posted this gem while you tried
> to repair something above your skill level........
>

Try repairing M3SDW's brain, that's beyond anyone's skill level :-(

tox

1148. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 21:21:22 UTC
From: From the shack of G1LVN <gareth.paley@gmail.invalid.com>
Message-ID: <ds35si$686$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13799
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Peter" <microwaves@blueyonder.co.uk> wrote in message
news:43e50e7a.97619469@news.blueyonder.co.uk...
> On 3 Feb 2006 15:39:17 -0800, "G4KFK" <mike@g4kfk.co.uk> wrote:
>
> >
> >Peter wrote:
> >> I reckon we could sell a few copies at various rallies if it were put
> >> to music :-)
> >
> >We'd need a few more tracks. Maybe:
> >"You gotta troll with it" by Oasis
> >"Rant music" by Adam and The Ants
> >"You won't work another fool M3" by The New Seekers
> >"I gotta brand new M3 licence" by Melanie
> >"Milk and methylated spirit" by Dr Feelgood
> >"Meths in the jar" by Thin Lizzy
> >"I go to sheep" by The Pretenders
> >"R.S.C.B" by The Village People
>
>
> It's getting better each hour!

Can we rename this group to UK.80.METRES ?

--
drei unt siebzig de G1LVN
http://www.outpimp.com/?x=481566961
---
read rfc1855.txt first and
remove .invalid to reply

1149. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 21:46:58 UTC
From: G4KFK <mike@g4kfk.co.uk>
Message-ID: <1139089618.553034.30040@g14g2000cwa.googlegroups.com>
Source record: 13800
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

>From the shack of G1LVN wrote:
> Can we rename this group to UK.80.METRES ?

No - there aren't enough Germans here.

1150. Re: ?Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 21:51:05 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1139089865.410997.116880@g44g2000cwa.googlegroups.com>
Source record: 13801
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Are there any other snippets about Mrs.Nugatory?

The only things I know about her is her habit of cowering
behind twitching curtains, her watching of the film, "The
Bitches of Toko-Roko", and being able to prove in
20-page obsessive (and irrelevant) dissertations that I
know nothing about certain topics based purely on my
use of a comma in place of a semi-colon.

Orator For Decency wrote:
> If Mrs.Nugatory cannot deal with the simple electrical
> and mechanical attributes of a tuning capacitor, it
> really shows up her habituation for sneering for what it is -
> the green eyes of jealousy!
>
> Welcome back, Mr.Nedlar.
>
> Nedlar wrote:
> > On Sat, 04 Feb 2006 17:11:28 +0000, Spike <Aero.Spike@S&T.invalid>
> > wrote:
> > e?
> > >Still, let us not forget this was the same chappy who sold an FT-101
> > >because the tune-up pages were missing from the manual.
> > >
> >
> > Let us not forget that it was you that posted this gem while you tried
> > to repair something above your skill level........
> > > spike spluttered
> > >I've checked for tuning capacitor plates not rubbing each other, and
> > >correct earthing for the tuning capacitor main shaft wipers. I can't
> > >think of anything else.

1151. Re: ?Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-04 22:13:05 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1139091185.685767.241700@o13g2000cwo.googlegroups.com>
Source record: 13802
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Orator For Decency wrote:
> Are there any other snippets about Mrs.Nugatory?
>
when will the orator for deceny accualy find some .

1152. FA: NOS Fivre 3D6 old electronic tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-05 00:14:00 UTC
From: Rightrik <gaggiorNOSPAM@tin.itNOSPAM>
Message-ID: <ds3g06tuh1@nnrp.ngi.it>
Source record: 13803

http://cgi.ebay.it/ws/eBayISAPI.dll?ViewItem&item=5859580158&rd=1&sspagename=STRK%3AMESE%3AIT&rd=1

1153. Re: FA:EXCELLENT TEN TEC OMNI VI+/MIC/TT PS

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-05 02:18:52 UTC
From: Phil Witt <w4imm@charter.net>
Message-ID: <l3oau1dghp9hgrlg9li1rhnbq131046l46@4ax.com>
Source record: 13804
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Sat, 04 Feb 2006 15:21:27 GMT, "Heytubeguy"
<heytubeguy@worldnet.att.net> wrote:

>Very nice TT Omni VI+ with mic and TT PS included! PSE NOTE RESTRICTIONS on
>SHIPPING/INSURANCE and required amateur call sign. Currently in use. See at:
>
>http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy
>

Nice. BidPay is out of business, BTW.

1154. Re: Software Defined Radios anyone?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-05 03:10:07 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1e4f0c6890445f61989694@192.168.42.131>
Source record: 13805

In article <f3fa6$43e4e960$d135c4af$13580@MDI.CA>, JJ@nowhere.com (known to some as JJ) scribed...

> I like to build a simple SDR. Anyone used a simple DSP chip to do this?
> Maybe the PICDsp?

"Simple," "SDR," and "DSP" do not belong together in the same sentence. Anything you do with that kind of hardware is going to be inherently complex. Be prepared to write a lot of code.

Good luck.

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute
(Known to some as Bruce Lane, KC7GR)
http://www.bluefeathertech.com -- kyrrin a/t bluefeathertech d-o=t calm
"Salvadore Dali's computer has surreal ports..."

1155. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-05 03:12:18 UTC
From: running dogg <run@ning.dog>
Message-ID: <icKdnb6CTvSR8HjenZ2dnUVZ_t2dnZ2d@comcast.com>
Source record: 13806
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

Fred McKenzie wrote:

> Tobin Fricke wrote:
>
> > As a project to learn more about building radio receivers, I'd like to
> > build a WWV receiver (or maybe a receiver for the Canadian station CHU,
> > since it's nearby and the format sounds easier to decode). I'm looking
> > for suggestions for how to design such a radio, reading material, etc.
> >
> > I was thinking it might be easier to design a fixed-frequency receiver
> > (rather than a tunable one) because I could just select the L and C in the
> > resonant circuit to give the right frequency. Or, since WWV is at such
> > "round number" frequencies, maybe I could somehow use a crystal
> > oscillator?
>
> Tobin-
>
> A couple other ideas:
>
> 1. Try your hand at building a crystal set! Just an antenna, a tuned
> circuit, a diode and earphones. There could be more sophistication such
> as using an amplified speaker and higher-Q tuned circuits.
>
> 2. Try a direct-conversion receiver. It may be just a more sophisticated
> crystal set with RF preamplifier and on-frequency crystal filter. A
> product detector could be included to convert to audio, but a diode
> detector should work and wouldn't change the audio tone frequencies.
>
> I considered using this direct-conversion approach to obtain an accurate
> 10 MHz signal. I wanted to use it to synchronize my oscilloscope so I
> could adjust a counter's timebase (or vice-versa). However, I never built
> it after finding a Rubidium controlled oscillator on eBay.
>
> Fred

I know that there are several plans on the internet for building a radio controlled clock. These involve building a fixed frequency rx and then hooking it up to a clock. How feasible would it be to hook the same circuit up to an amp and speaker instead of a clock? I suspect that the clock radios listen in on 60khz, but it should be simple to insert a crystal or change it to get 10Mhz. Also, you could build a radio with three frequencies-5Mhz, 10Mhz, and 15Mhz in order to take advantage of day vs night propagation.

1156. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-05 05:34:40 UTC
From: Peter Bennett <peterbb@somewhere.invalid>
Message-ID: <o93bu1d5u216v95l4tca3ga09r5avc4ra4@news.supernews.com>
Source record: 13807
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

On Sat, 04 Feb 2006 19:12:18 -0800, running dogg <run@ning.dog> wrote:

>
>I know that there are several plans on the internet for building a radio
>controlled clock. These involve building a fixed frequency rx and then
>hooking it up to a clock. How feasible would it be to hook the same
>circuit up to an amp and speaker instead of a clock?

I haven't looked at any of these circuits, but I'd expect it to be
quire easy to connect and audio amplifier and speaker to the output of
the detector.

>I suspect that the
>clock radios listen in on 60khz, but it should be simple to insert a
>crystal or change it to get 10Mhz. Also, you could build a radio with
>three frequencies-5Mhz, 10Mhz, and 15Mhz in order to take advantage of
>day vs night propagation.
>
Converting a 60 KHz receiver to 10 MHz is likely impossible -
construction techniques and tuned circuits will be quite different -
you can almost use audio techniques and iron-core coils at 60 KHz, but
are well into RF territory at 10 MHz, and will likely have to use
air-core coils in the tuned circuits.

--
Peter Bennett, VE7CEI
peterbb4 (at) interchange.ubc.ca
new newsgroup users info : http://vancouver-webpages.com/nnq
GPS and NMEA info: http://vancouver-webpages.com/peter
Vancouver Power Squadron: http://vancouver.powersquadron.ca

1157. Re: EZ Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-05 08:19:27 UTC
From: Butch Magee <lynyrd@cableone.net>
Message-ID: <11ubd8itjlj0pd5@corp.supernews.com>
Source record: 13808

Nice photography Ivan. Wish everybody could could do this.

Ivan wrote:
> Hi, All
> offering a set of boards and stepper motors for building a legal limit
> EZ-Tuner. Check my web page and scroll down to the bottom.
>
> http://www.makarov.ca/eztuner.htm
>
> Thanks everybody,
> Ivan
> VE3IVM
>

1158. Re: Software Defined Radios anyone?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-05 12:07:39 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1139141259.172961.139740@z14g2000cwz.googlegroups.com>
Source record: 13809

JJ wrote:
> I like to build a simple SDR. Anyone used a simple DSP chip to do this?
> Maybe the PICDsp?

The SoftRock uses the PC to do the DSP:

http://groups.yahoo.com/group/softrock40/

Leon

1159. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-05 12:50:59 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <TwmFf.27179$F_3.15248@newssvr29.news.prodigy.net>
Source record: 13810
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

Hello Peter,

> Converting a 60 KHz receiver to 10 MHz is likely impossible -
> construction techniques and tuned circuits will be quite different -
> you can almost use audio techniques and iron-core coils at 60 KHz, but
> are well into RF territory at 10 MHz, and will likely have to use
> air-core coils in the tuned circuits.

Not just that. The transmitted code is also different.

Regards, Joerg

http://www.analogconsultants.com

1160. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-05 15:00:20 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <bqoFf.6$LI6.3@fe06.lga>
Source record: 13811
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

"Peter Bennett" <peterbb@somewhere.invalid> wrote in message

> are well into RF territory at 10 MHz, and will likely have to use
> air-core coils in the tuned circuits.

Huh? Yes, he is well into RF and construction techniques will be different.
But while there are advantages to air-coil cores, their use in recievers
went out with hollow state detectors. Even in transmitters they tend to be
only used in the KW neighborhood anymore. I can't imagine that even in the
wilds of BC people are winding air coils and building on heavy steel
chassis.

..

1161. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-05 15:02:07 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <wxoFf.10$LI6.4@fe06.lga>
Source record: 13813
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

"Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
news:TwmFf.27179

> Not just that. The transmitted code is also different.

He wants to listen, and at least at 10 MHz there's something to listen TO.
The 60Khz signal is pretty strange.

..

1162. Re: Software Defined Radios anyone?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-05 15:08:10 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <wxoFf.11$LI6.3@fe06.lga>
Source record: 13812

"Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null> wrote in message

> "Simple," "SDR," and "DSP" do not belong together in the same
> sentence. Anything you do with that kind of hardware is going to be
> inherently complex. Be prepared to write a lot of code.

Almost by definition the hardware is simple. And experimentation in
software is a lot easier and less painful than hardware experimentation.
But you are correct that there will probably be quite a bit of code,
although not all of it needs to be written from scratch.

If you graze the Microchip dsPIC forum, a British ham talked about such a
project a few months ago, sorry I can't recall his name. I think he may
have posted some stuff on the PIClist, too. He did use some sort of codec,
along with the dsPIC. I picked up the codec and dsPIC with the intent to go
down that path, but those round tuit thingies are hard to come by around
here.

..

1163. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-05 15:44:11 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43E61D05.2974B9A7@earthlink.net>
Source record: 13814
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

xpyttl wrote:
>
> "Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
> news:TwmFf.27179
>
> > Not just that. The transmitted code is also different.
>
> He wants to listen, and at least at 10 MHz there's something to listen TO.
> The 60Khz signal is pretty strange.
>
> ..

No, its not. It was never intended to be listened to. It has a 1 BPS
data rate encoded time signal that has always been used to carry time
code.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

1164. Re: Software Defined Radios anyone?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-05 17:39:47 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1e4fd83febb63a76989696@192.168.42.131>
Source record: 13815

In article <wxoFf.11$LI6.3@fe06.lga>, xpyttl_NOSPAM@earthling.net (known
to some as xpyttl) scribed...
> "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null> wrote in message
>
> > "Simple," "SDR," and "DSP" do not belong together in the same
> > sentence. Anything you do with that kind of hardware is going to be
> > inherently complex. Be prepared to write a lot of code.

<snippety>

> If you graze the Microchip dsPIC forum, a British ham talked about such a
> project a few months ago, sorry I can't recall his name. I think he may
> have posted some stuff on the PIClist, too. He did use some sort of codec,
> along with the dsPIC. I picked up the codec and dsPIC with the intent to go
> down that path, but those round tuit thingies are hard to come by around
> here.

Ah... This is what I get for not grazing said forum.

Round tuits are hard to find here as well. Thanks for a more
expansive reply, though. I may go have a look myself.

Keep the peace(es).

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute
(Known to some as Bruce Lane, KC7GR)
http://www.bluefeathertech.com -- kyrrin a/t bluefeathertech d-o=t calm
"Salvadore Dali's computer has surreal ports..."

1165. SM Inductors As BP Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-05 20:41:59 UTC
From: Bill Powell <whp@att.net>
Message-ID: <igocu15bhga5v72k09atrpbbkjbd3qp0or@4ax.com>
Source record: 13816

I'm seeking information about using 2 or more closely spaced SM
inductors (unshielded - not torid or shielded) in a bandpass circuit.

The application I'm thinking of would use two closely spaced SM
inductors and varicaps to tune both the center frequency and bandpass
and allow simple and repeatable construction without the need to
locate and wind torids or find specialty inductors.

Please - experiences and not pure speculation.

Thanks,
Bill - WB1GOT

1166. Re: SM Inductors As BP Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-05 21:51:26 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <XvuFf.231$CO7.210@fe02.lga>
Source record: 13817

The FAR circuits 9850 VFO board uses SM parts for the filter - elliptical
not bandpass, but it seems to work fairly well. The inductors aren't right
against each other, but they are pretty close and in the same orientation
(not my idea of a good plan). There is a picture of the arrangement at
http://www.qsl.net/wb8rcr/AD9850.html

..

"Bill Powell" <whp@att.net> wrote in message
news:igocu15bhga5v72k09atrpbbkjbd3qp0or@4ax.com...
> I'm seeking information about using 2 or more closely spaced SM
> inductors (unshielded - not torid or shielded) in a bandpass circuit.
>
> The application I'm thinking of would use two closely spaced SM
> inductors and varicaps to tune both the center frequency and bandpass
> and allow simple and repeatable construction without the need to
> locate and wind torids or find specialty inductors.
>
> Please - experiences and not pure speculation.
>
> Thanks,
> Bill - WB1GOT
>

1167. Re: SM Inductors As BP Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-05 23:04:08 UTC
From: dlharmon <harmon.darrell@gmail.com>
Message-ID: <1139180648.427269.49600@g14g2000cwa.googlegroups.com>
Source record: 13818

Bill Powell wrote:
> I'm seeking information about using 2 or more closely spaced SM
> inductors (unshielded - not torid or shielded) in a bandpass circuit.
>
> The application I'm thinking of would use two closely spaced SM
> inductors and varicaps to tune both the center frequency and bandpass
> and allow simple and repeatable construction without the need to
> locate and wind torids or find specialty inductors.
>
> Please - experiences and not pure speculation.
>
> Thanks,
> Bill - WB1GOT

I have gotten 80 dB rejection from 80 MHz to 500 MHz (the limit of the
network analyzer) in a 23 MHz 7th order butterworth filter I built
using 4 surface mount inductors in a 20 mm line. I would give it a try.

--
Darrell Harmon
http://dlharmon.com

1168. Re: Software Defined Radios anyone?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-06 08:47:36 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1139215656.623009.298410@z14g2000cwz.googlegroups.com>
Source record: 13819

...join the picastar group. it's the most amazing group of hams i had
the honour to attend!
you'll find averything you'll need on SDR's!
Saandy 4Z5KS

1169. Re: Software Defined Radios anyone?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-06 08:50:12 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1139215812.119309.309330@z14g2000cwz.googlegroups.com>
Source record: 13820

>>>the Britton in question is Peter Rhodes G3JXP, the high priest of the SDR. they also have the code for the DSP and its amazing. You can take it as is and it works!
Saandy 4Z5KS

1170. Re: SM Inductors As BP Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-06 09:00:38 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1139216438.540308.75390@g44g2000cwa.googlegroups.com>
Source record: 13821

Yes, it can be done. Murata especially has a family of wire wound coils
size 1002 , unshielded, which are quite good at that. i designed
bandpass filters around 434 MHz with losses of about 1dB per dual
sections filters. point is that you can't calculate the coupling with
areasonable degree of accuracy, so you have to experiment with it. But,
once found, they are very repeatable. in this design the inductors were
22nH.
the long axes of the inductors are supposed to be parallel, since you
are interested in the magnetic coupling between them.
Saandy 4Z5KS

1171. Re: Software Defined Radios anyone?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-06 12:44:20 UTC
From: John DeGood <nu3e@arrl.net>
Message-ID: <43E744A4.2050502@arrl.net>
Source record: 13822

Saandy , 4Z5KS wrote:
>>>>the Britton in question is Peter Rhodes G3JXP, the high priest of the SDR.

...should be "G3XJP".

1172. Re: SM Inductors As BP Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-06 17:39:50 UTC
From: LenAnderson@ieee.org
Message-ID: <1139247590.419434.247530@o13g2000cwo.googlegroups.com>
Source record: 13823

From: Bill Powell on Feb 5, 12:41 pm

>I'm seeking information about using 2 or more closely spaced SM
>inductors (unshielded - not torid or shielded) in a bandpass circuit.
>
>The application I'm thinking of would use two closely spaced SM
>inductors and varicaps to tune both the center frequency and bandpass
>and allow simple and repeatable construction without the need to
>locate and wind torids or find specialty inductors.
>
>Please - experiences and not pure speculation.

Experience with filters here indicates that EVERY filter design
BEGINS with speculation. :-)

Bandpass filters can be designed for specific bandpass without
using inductive coupling. Those with percentage bandwidths
less than 5% can be tuned around the bandcenter without much
change in bandwidth. What bandcenter and bandwidth were you
considering?

From a scan of several different manufacturers of SMD inductors,
they don't specify any coupling so it would be experiment time
to find it out as one has already observed in here. I've found
that trying to determine coefficient of coupling by experiment
is more difficult than designing and tweaking a non-coupling
filter. Mileage varies.

If you want a small program that does passive (non-inductive
coupling) L-C filters (low, high, band, reject) synthesis and
analysis (with ability to set individual component values and
simulate Q), ask me in e-mail for LCie4. Ain't flashy but it
works. Freeware.

Small-quantity toroid forms are available at reasonable prices
quickly from www.kitsandparts.com. For home use, I like Neil
Hecht's (www.aade.com) little L-C Meter for much-easier
zeroing-in on inductance values when winding toroids along
with checking out fixed, small-value capacitors.

LenAnderson@ieee.org

1173. Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-06 17:43:33 UTC
From: mrhaney <w4pqw@cox.net>
Message-ID: <1139247813.245486.129660@z14g2000cwz.googlegroups.com>
Source record: 13824

I have about 60 military crystals ..they are marked Channel 277 thru CH 347 .Anyone know if they are overtone ,and, know of a good way to check them.. My grid dipper will not oscillate with them like it does with basic fundamental crystals ,like 7193 KHZ. etc..THEY ARE FOR SALE TOO..W4PQW

1174. Re: Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-06 17:56:27 UTC
From: user@private-mail-domain.invalid
Message-ID: <b7fkb3-51l.ln1@chris.org>
Source record: 13825
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

In uk.radio.amateur G4KFK <mike@g4kfk.co.uk> wrote:
: With apologies to Gilbert and Sullivan :-)

Bravo!
--
73 Chris Cox N0UK, G4JEC, ex-AB0CN

1175. Re: ?Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-06 18:26:43 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1139250403.196915.131690@o13g2000cwo.googlegroups.com>
Source record: 13826
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Actually, right on cue, Mrs.Nugatory has continued with
her stalking of me, with another sock puppet that provides
a graphic illustration of the critique below!

Go to uk.rec.models.engineering, and google for
author, "Novae Artes"; the modus operandi is
unmistakeable!

She demonstrates so well her neurotic obsession coupled
with her desperate need to make insulting remarks in a
long and vitriolic diatribe that once again, seizes on some
trivial and irrelevant point. (The Yanks almost certainly will
not have heard of Araldite)

Not only that, but by having to go to the web to find some
material to quote from somebody else, she demonstrates so
well that not only does she know nothing about the simple
mechanical and electrical properties of tuning condensers,
she knows nothing about anything and is incapable of
enjoining discussion off the top of her head. It is no
wonder that in an interest that is calimed to have lasted
for 50 years, she has not achieved any licence, not even
an M3/CB Fools' Licence promoted by the gangrenous
degeneration that is the RSCB council and all its members.

What a silly, silly girl is she!

Orator For Decency wrote:
> Are there any other snippets about Mrs.Nugatory?
>
> The only things I know about her is her habit of cowering
> behind twitching curtains, her watching of the film, "The
> Bitches of Toko-Roko", and being able to prove in
> 20-page obsessive (and irrelevant) dissertations that I
> know nothing about certain topics based purely on my
> use of a comma in place of a semi-colon.
>
> Orator For Decency wrote:
> > If Mrs.Nugatory cannot deal with the simple electrical
> > and mechanical attributes of a tuning capacitor, it
> > really shows up her habituation for sneering for what it is -
> > the green eyes of jealousy!

1176. Re: ?Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-06 18:43:57 UTC
From: Beowolf <beowulf.linux@spamstopgooglemail.com>
Message-ID: <ds85b6$20q$2@domitilla.aioe.org>
Source record: 13827
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Orator For Decency" <radio.ham@lycos.co.uk> wrote in message
news:1139250403.196915.131690@o13g2000cwo.googlegroups.com...
> Actually, right on cue, Mrs.Nugatory has continued with
> her stalking of me, with another sock puppet that provides
> a graphic illustration of the critique below!
>
> Go to uk.rec.models.engineering, and google for
> author, "Novae Artes"; the modus operandi is
> unmistakeable!
>

You mean someone ELSE has proved you wrong. This is a common modus operandi

Beowulf

1177. Re: ?Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-06 19:11:13 UTC
From: The Sweeny Psychiatrist <jack.regan@hotmail.co.uk>
Message-ID: <1139253072.958263.10010@o13g2000cwo.googlegroups.com>
Source record: 13828
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Orator For Decency wrote:
> Actually, right on cue, Mrs.Nugatory has continued with
> her stalking of me, with another sock puppet that provides
> a graphic illustration of the critique below!
>
> Go to uk.rec.models.engineering, and google for
> author, "Novae Artes"; the modus operandi is
> unmistakeable!
>
> She demonstrates so well her neurotic obsession coupled
> with her desperate need to make insulting remarks in a
> long and vitriolic diatribe that once again, seizes on some
> trivial and irrelevant point. (The Yanks almost certainly will
> not have heard of Araldite)
>
> Not only that, but by having to go to the web to find some
> material to quote from somebody else, she demonstrates so
> well that not only does she know nothing about the simple
> mechanical and electrical properties of tuning condensers,
> she knows nothing about anything and is incapable of
> enjoining discussion off the top of her head. It is no
> wonder that in an interest that is calimed to have lasted
> for 50 years, she has not achieved any licence, not even
> an M3/CB Fools' Licence promoted by the gangrenous
> degeneration that is the RSCB council and all its members.
>
> What a silly, silly girl is she!
>
> Orator For Decency wrote:
> > Are there any other snippets about Mrs.Nugatory?
> >
> > The only things I know about her is her habit of cowering
> > behind twitching curtains, her watching of the film, "The
> > Bitches of Toko-Roko", and being able to prove in
> > 20-page obsessive (and irrelevant) dissertations that I
> > know nothing about certain topics based purely on my
> > use of a comma in place of a semi-colon.
> >
> > Orator For Decency wrote:
> > > If Mrs.Nugatory cannot deal with the simple electrical
> > > and mechanical attributes of a tuning capacitor, it
> > > really shows up her habituation for sneering for what it is -
> > > the green eyes of jealousy!

The Psychiatrists report:

When the orator for decency aka Gareth Evans is challenged, criticised, or just ridiculed,
He refers to the other person(s) as she.

So it seems in order to denigrate them he changes their gender to female in his postings.

This is extremely interesting, and points to a hatred of females, followed by their subjugation by him.
It could also be coupled to a deep loathing of his mother who possibly failed him some way in his eyes.

Such problems are not uncommon in males who have a problem with normal life.
Also it is quite common in sexually dysfunctional subjects.

I would warn females not to approach an individual with such a profile

His wife has a lot to endure with the obsessive nature of her husband, and we should feel sorry for her.

This is a case that we will have to study more closely.

1178. Re: ?Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-06 19:26:44 UTC
From: Wiggy <mines.a.gin@tonic>
Message-ID: <UpNFf.15792$wl.13329@text.news.blueyonder.co.uk>
Source record: 13829
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Orator For Decency wrote:
> Actually, right on cue, Mrs.Nugatory has continued with
> her stalking of me, with another sock puppet that provides
> a graphic illustration of the critique below!
>
> Go to uk.rec.models.engineering, and google for
> author, "Novae Artes"; the modus operandi is
> unmistakeable!
>
> She demonstrates so well her neurotic obsession coupled
> with her desperate need to make insulting remarks in a
> long and vitriolic diatribe that once again, seizes on some
> trivial and irrelevant point. (The Yanks almost certainly will
> not have heard of Araldite)
>
> Not only that, but by having to go to the web to find some
> material to quote from somebody else, she demonstrates so
> well that not only does she know nothing about the simple
> mechanical and electrical properties of tuning condensers,
> she knows nothing about anything and is incapable of
> enjoining discussion off the top of her head. It is no
> wonder that in an interest that is calimed to have lasted
> for 50 years, she has not achieved any licence, not even
> an M3/CB Fools' Licence promoted by the gangrenous
> degeneration that is the RSCB council and all its members.
>
> What a silly, silly girl is she!
>

Hello Gazza, would you like me to drag up some more dirt from your past?
You know you wanna. Gowan, gowan, gowan.

1000 sov's to keep quite, OK?

Wiggy

1179. Re: ?Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-06 19:36:13 UTC
From: Wiggy <mines.a.gin@tonic>
Message-ID: <NyNFf.15803$wl.12620@text.news.blueyonder.co.uk>
Source record: 13830
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Wiggy wrote:
> Orator For Decency wrote:
>
>> Actually, right on cue, Mrs.Nugatory has continued with
>> her stalking of me, with another sock puppet that provides
>> a graphic illustration of the critique below!
>>
>> Go to uk.rec.models.engineering, and google for
>> author, "Novae Artes"; the modus operandi is
>> unmistakeable!
>>
>> She demonstrates so well her neurotic obsession coupled
>> with her desperate need to make insulting remarks in a
>> long and vitriolic diatribe that once again, seizes on some
>> trivial and irrelevant point. (The Yanks almost certainly will
>> not have heard of Araldite)
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>> Not only that, but by having to go to the web to find some
>> material to quote from somebody else, she demonstrates so
>> well that not only does she know nothing about the simple
>> mechanical and electrical properties of tuning condensers,
>> she knows nothing about anything and is incapable of
>> enjoining discussion off the top of her head. It is no
>> wonder that in an interest that is calimed to have lasted
>> for 50 years, she has not achieved any licence, not even
>> an M3/CB Fools' Licence promoted by the gangrenous
>> degeneration that is the RSCB council and all its members.
>>
>> What a silly, silly girl is she!
>>
>
> Hello Gazza, would you like me to drag up some more dirt from your past?
> You know you wanna. Gowan, gowan, gowan.
>
> 1000 sov's to keep quite, OK?

I know, QUIET OK! It's still 1000 sov's.

Wiggy

1180. Re: ?Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-06 19:49:31 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1139255371.133214.180610@o13g2000cwo.googlegroups.com>
Source record: 13831
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Not-Ham throws an infantile temper tantrum at having
been outed as R-F-R, and invokes another of his many
deranged aliases in a desperate attempt to divert
attention away from him.....

The Sweeny Psychiatrist wrote:
> Orator For Decency wrote:
> > Actually, right on cue, Mrs.Nugatory has continued with
> > her stalking of me, with another sock puppet that provides
> > a graphic illustration of the critique below!
> >
> > Go to uk.rec.models.engineering, and google for
> > author, "Novae Artes"; the modus operandi is
> > unmistakeable!
> >
> > She demonstrates so well her neurotic obsession coupled
> > with her desperate need to make insulting remarks in a
> > long and vitriolic diatribe that once again, seizes on some
> > trivial and irrelevant point. (The Yanks almost certainly will
> > not have heard of Araldite)
> >
> > Not only that, but by having to go to the web to find some
> > material to quote from somebody else, she demonstrates so
> > well that not only does she know nothing about the simple
> > mechanical and electrical properties of tuning condensers,
> > she knows nothing about anything and is incapable of
> > enjoining discussion off the top of her head. It is no
> > wonder that in an interest that is calimed to have lasted
> > for 50 years, she has not achieved any licence, not even
> > an M3/CB Fools' Licence promoted by the gangrenous
> > degeneration that is the RSCB council and all its members.
> >
> > What a silly, silly girl is she!
> >
> > Orator For Decency wrote:
> > > Are there any other snippets about Mrs.Nugatory?
> > >
> > > The only things I know about her is her habit of cowering
> > > behind twitching curtains, her watching of the film, "The
> > > Bitches of Toko-Roko", and being able to prove in
> > > 20-page obsessive (and irrelevant) dissertations that I
> > > know nothing about certain topics based purely on my
> > > use of a comma in place of a semi-colon.

> > >
> > > Orator For Decency wrote:
> > > > If Mrs.Nugatory cannot deal with the simple electrical
> > > > and mechanical attributes of a tuning capacitor, it
> > > > really shows up her habituation for sneering for what it is -
> > > > the green eyes of jealousy!
>
> The Psychiatrists report:
>
> When the orator for decency aka Gareth Evans is challenged, criticised,
> or just ridiculed,
> He refers to the other person(s) as she.
>
> So it seems in order to denigrate them he changes their gender to
> female in his postings.
>
> This is extremely interesting, and points to a hatred of females,
> followed by their subjugation by him.
> It could also be coupled to a deep loathing of his mother who possibly
> failed him some way in his eyes.
>
> Such problems are not uncommon in males who have a problem with normal
> life.
> Also it is quite common in sexually dysfunctional subjects.
>
> I would warn females not to approach an individual with such a profile
>
> His wife has a lot to endure with the obsessive nature of her husband,
> and we should feel sorry for her.
>
> This is a case that we will have to study more closely.

1181. Coax Cable & Connector Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-06 19:56:58 UTC
From: AAA RF Products <sales@aaarfproducts.com>
Message-ID: <iSNFf.22080$sA3.8954@fed1read02>
Source record: 13832
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

For your free copy of our new catalog,

Please email sales@AAARFProducts.com

or see www.aaarfproducts.com

or call 949 481 3154 (San Clemente, CA, USA)

No minimum order.

No handling charges.

1182. Re: ?Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-06 20:03:02 UTC
From: The Sweeny Psychiatrist <jack.regan@hotmail.co.uk>
Message-ID: <1139256182.101713.32880@g47g2000cwa.googlegroups.com>
Source record: 13833
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

The Psychiatrists report:

When the orator for decency aka Gareth Evans is challenged, criticised,
or just ridiculed,
He refers to the other person(s) as she.

So it seems in order to denigrate them he changes their gender to
female in his postings.

This is extremely interesting, and points to a hatred of females,
followed by their subjugation by him.
It could also be coupled to a deep loathing of his mother who possibly
failed him some way in his eyes.

Such problems are not uncommon in males who have a problem with normal
life.
Also it is quite common in sexually dysfunctional subjects.

I would warn females not to approach an individual with such a profile

His wife has a lot to endure with the obsessive nature of her husband,
and we should feel sorry for her.

This is a case that we will have to study more closely.

1183. Re: SM Inductors As BP Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-06 20:19:41 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <KbOFf.415$U35.148@fe02.lga>
Source record: 13834

<LenAnderson@ieee.org> wrote in message
news:1139247590.419434.247530@o13g2000cwo.googlegroups.com...

> Bandpass filters can be designed for specific bandpass without
> using inductive coupling.

hmmm ... I had lept to the conclusion that OP was concerned about undesired coupling, rather than desired coupling.

I think SMD inductors are typically designed so as to not maximize their susceptibility to objects in their vicinity, although not necessarily minimize it.

Another issue of concern is self-resonance. Some SMD inductors have rather surprisingly low self-resonant frequencies. Obviously, some designed for cell phone service typically won't, but it is yet another parameter to fret over.

..

1184. Re: ?Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-06 22:02:20 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <g0hfu1dvb9s4c6qhpnevmqf4nfjm7al7qq@4ax.com>
Source record: 13835
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Beowolf wrote:

>
>"Orator For Decency" <radio.ham@lycos.co.uk> wrote in message
>news:1139250403.196915.131690@o13g2000cwo.googlegroups.com...
>> Actually, right on cue, Mrs.Nugatory has continued with
>> her stalking of me, with another sock puppet that provides
>> a graphic illustration of the critique below!
>>
>> Go to uk.rec.models.engineering, and google for
>> author, "Novae Artes"; the modus operandi is
>> unmistakeable!
>>
>
>You mean someone ELSE has proved you wrong. This is a common modus operandi
>
>Beowulf
>

I see from the interesting thread on uk.rec.models.engineering, and a posting in this thread, that the OP has now gone into his 'deflect attention' mode.

in this case he has chosen the mechanism - which he can name but doubtless will not do so - of mentioning something irrelevant to support what passes for his argument (if it can be graced with such a name). He said that "The Yanks almost certainly will not have heard of Araldite", completely missing the point that the original development of the precursors to the Araldite range were German and Swiss, and the product marketed internationally!

What a narrow outlook, slim technical base, and thin skin this chap has.

BTW, what happened to his situation that has made his plea ("Sorry - no Internet access during the week.") nugatory? Some sort of ISP failure? A 'high moral stance' in relation to a professional concern? One wonders - for a microsecond or so.

from
Aero Spike

1185. Re: SM Inductors As BP Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-06 22:12:28 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ds8hkc$3vf$1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13837

A bandpass filter can be designed as two coupled L and C tuned
circuits.

The two circuits are coupled together via the mutual inductance
between the two spaced-apart coils. As in a 455 KHz interstage
transformer in a screening can.

The degree of coupling is approximately 1/Sqrt(Q1*Q2), where Q1 and Q2
are the tuned-circuit Q's which are determined by the filter's
terminating resistances.

Closer coupling increases the bandwidth.

For details see Terman.

Reg.

1186. Re: ?Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-06 22:15:26 UTC
From: huLLy <s2f@f2s.com>
Message-ID: <Yu-dnXd1GdjhV3reRVnyrw@giganews.com>
Source record: 13836
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Orator For Decency wrote:
> Not-Ham throws an infantile temper tantrum at having
> been outed as R-F-R, and invokes another of his many
> deranged aliases in a desperate attempt to divert
> attention away from him.....
>

Who?
--
huLLy
Tel: 07976 123278
ICQ 136-987-925

1187. Re: ?Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-06 22:20:42 UTC
From: Beowulf <beowulf.linux@spamstopgooglemail.com>
Message-ID: <ds8i1dfdv1@domitilla.aioe.org>
Source record: 13838
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Spike" <Aero.Spike@S&T.invalid> wrote in message
news:g0hfu1dvb9s4c6qhpnevmqf4nfjm7al7qq@4ax.com...
>
> Beowolf wrote:
>
>>
>>"Orator For Decency" <radio.ham@lycos.co.uk> wrote in message
>>news:1139250403.196915.131690@o13g2000cwo.googlegroups.com...
>>> Actually, right on cue, Mrs.Nugatory has continued with
>>> her stalking of me, with another sock puppet that provides
>>> a graphic illustration of the critique below!
>>>
>>> Go to uk.rec.models.engineering, and google for
>>> author, "Novae Artes"; the modus operandi is
>>> unmistakeable!
>>>
>>
>>You mean someone ELSE has proved you wrong. This is a common modus
>>operandi
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>>Beowulf
>>
>
> I see from the interesting thread on uk.rec.models.engineering, and a
> posting in this thread, that the OP has now gone into his 'deflect
> attention' mode.
>
> in this case he has chosen the mechanism - which he can name but
> doubtless will not do so - of mentioning something irrelevant to
> support what passes for his argument (if it can be graced with such a
> name). He said that "The Yanks almost certainly will
> not have heard of Araldite", completely missing the point that the
> original development of the precursors to the Araldite range were
> German and Swiss, and the product marketed internationally!
>
> What a narrow outlook, slim technical base, and thin skin this chap
> has.
>
> BTW, what happened to his situation that has made his plea ("Sorry -
> no Internet access during the week.") nugatory? Some sort of ISP
> failure? A 'high moral stance' in relation to a professional concern?
> One wonders - for a microsecond or so.

Araldite is well known in he USA.

Check out:

http://www.gluguru.com/Araldite2012.htm

http://www.isaadhesives.com/

Beowulf

1188. Re: ?Interested? Start here with the weekly FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-06 22:39:24 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <sqjfu1tsdje9934qviv9u16v9k0gnf7e1u@4ax.com>
Source record: 13839
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Beowulf wrote:

>
>"Spike" <Aero.Spike@S&T.invalid> wrote in message
>news:g0hfu1dvb9s4c6qhpnevmqf4nfjm7al7qq@4ax.com...
>>
>> What a narrow outlook, slim technical base, and thin skin this chap
>> has.
>>
>> BTW, what happened to his situation that has made his plea ("Sorry -
>> no Internet access during the week.") nugatory? Some sort of ISP
>> failure? A 'high moral stance' in relation to a professional concern?
>> One wonders - for a microsecond or so.
>
>Araldite is well known in he USA.
>
>Check out:
>
>http://www.gluguru.com/Araldite2012.htm
>
>http://www.isaadhesives.com/
>

What a pity this chap doesn't follow web links. One wonders quite why
he chooses to remain in ignorance, condemned to repeating the same
mistakes over and over.....

from
Aero Spike

1189. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-07 02:56:32 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11ug36c5pbsq891@corp.supernews.com>
Source record: 13840
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

"xpyttl" <xpyttl_NOSPAM@earthling.net> wrote in message
news:bqoFf.6$LI6.3@fe06.lga...
> Huh? Yes, he is well into RF and construction techniques will be different.
> But while there are advantages to air-coil cores, their use in recievers
> went out with hollow state detectors.

I think that Coilcraft, API-Delavan, Pulse, etc. would be surprised to hear them. Although I'd grant you that you don't typically find many air coils in mass-market consumer electronics anymore, they're still used all over the place in industrial and military design... where I work we buy tens of thousands of the things every year for radio receivers!

Plenty of articles appearing in QEX and on-line also use air-core coils, since it's a pretty fast and you can, of course, get whatever value you want with no "minimum purchase" quantities.

---Joel Kolstad

1190. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-07 09:03:07 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <fnZFf.18527$_S7.7396@newssvr14.news.prodigy.com>
Source record: 13841
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

xpyttl wrote:

>
>>Not just that. The transmitted code is also different.
>
> He wants to listen, and at least at 10 MHz there's something to listen TO.
> The 60Khz signal is pretty strange.
>

Tobin wrote "... easier to decode". So I guess he is after decoding and
not so much after listening.

Regards, Joerg

http://www.analogconsultants.com

1191. Re: WWV receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-07 09:08:25 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <dsZFf.18531$_S7.928@newssvr14.news.prodigy.com>
Source record: 13842
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew,sci.electronics.design

Hello Joel,

> I think that Coilcraft, API-Delavan, Pulse, etc. would be surprised to hear
> them. Although I'd grant you that you don't typically find many air coils in
> mass-market consumer electronics anymore, they're still used all over the
> place in industrial and military design... where I work we buy tens of
> thousands of the things every year for radio receivers!
>

To imitate an old Volkswagen ad: Air doesn't saturate. Well, I guess it does at some point but that's way past where ferrites and iron powders do. Today many inductors in receivers are designed around iron powder cores but when it comes to heavy-duty stuff air cores are the ticket. Same for really high-Q tuning circuits.

Regards, Joerg

http://www.analogconsultants.com

1192. Charger for field day lead acid batteries ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-07 19:12:01 UTC
From: "tucker@conninc.com" <tucker@conninc.com>
Message-ID: <1139339521.853220.235180@g44g2000cwa.googlegroups.com>
Source record: 13843

Need to charge some SLAs and other lead acid batteries for field day Im
trying to make
something work without buying a new battery charger, so here goes.
I need to charge a alot of different voltage lead acid batterys
6,8,10,12, ect. I have a
old charger that only puts out 12-14vdc, I have a 10amp 120vac
powerstat (variac) im thinking
of adding to the input of the transformer to reduce output . Will this
work?
Im not sure about the inductance & operating a transformer @ 1/2 or
2/3 the normal 120 vac
input voltage, im wandering if this will effect efficiency or if it
will work at all.

1193. Re: Charger for field day lead acid batteries ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-07 19:47:14 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1139341634.063929.20240@g14g2000cwa.googlegroups.com>
Source record: 13844

There should never be a problem operating a transformer on lower voltage than it was designed for. The problem comes from operating on too high a voltage (and usually that problem is core saturation at line frequencies--or core overheating for high frequency transformers).

As for charging the batteries, you can find lots of info on "doing it right" on the web. I've found http://www.batteryuniversity.com/partone-13.htm to be pretty good. It saves a lot of work if you have a circuit do the monitoring for you, but you can do it yourself with voltage and current meters. If you get tired of looking at the meters, check out TI's UC3906 and related ap note.

Cheers,
Tom

1194. Re: Charger for field day lead acid batteries ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-07 20:21:12 UTC
From: dplatt@radagast.org
Message-ID: <11ui09obsrgc08@corp.supernews.com>
Source record: 13845

In article <1139339521.853220.235180@g44g2000cwa.googlegroups.com>,
tucker@conninc.com <tucker@conninc.com> wrote:

>Need to charge some SLAs and other lead acid batteries for field day Im
>trying to make
>something work without buying a new battery charger, so here goes.

> I need to charge a alot of different voltage lead acid batterys
>6,8,10,12, ect. I have a
>old charger that only puts out 12-14vdc, I have a 10amp 120vac
>powerstat (variac) im thinking
>of adding to the input of the transformer to reduce output . Will this
>work?

> Im not sure about the inductance & operating a transformer @ 1/2 or
>2/3 the normal 120 vac
>input voltage, im wandering if this will effect efficiency or if it
>will work at all.

The transformer in your existing charger will probably function as you
expect if you reduce its input voltage with a Variac.

However, there's no assurance at all that your charger's DC output
voltage will behave. If the charger has a linear voltage regulator of
some sort inside, the regulator's not going to want to track the
reduced input voltage. It'll probably run "wide open", which means
that the charger's output voltage is going to be very critically
dependent on the Variac setting. Unless you are very careful in
setting the Variac, you'll either undercharge the battery, or hit it
with too high a voltage and end up gassing away much of the electrolyte.

You might be able to alter the DC regulation circuitry in the charger,
so that it would regulate down to a lower (switch-selectable) voltage.
You might need to do both in order to charge a lower-voltage battery
without overheating the charger - reduce the input AC voltage by about
half (to cut the raw, unregulated DC voltage) and then change the
voltage-regulator setting to produce the correct fast-charge or
float-charge voltage.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1195. Re: Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-07 21:03:45 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dsb1vh$78u$1@engnntp2.cig.mot.com>
Source record: 13846

"mrhaney" <w4pqw@cox.net> wrote in message
news:1139247813.245486.129660@z14g2000cwz.googlegroups.com...
> I have about 60 military crystals ..they are marked Channel 277 thru CH
> 347 .Anyone know if they are overtone ,and, know of a good way to
> check them.. My grid dipper will not oscillate with them like it does
> with basic fundamental crystals ,like 7193 KHZ. etc..THEY ARE FOR
> SALE TOO..W4PQW
>

Mr. Haney,

All crystals will operate on their fundamental as well as the overtone modes. Too bad they aren't working in your g-dipper. What holder are they in? Is it the old standard FT 243 (if I recall the number correctly). Channel numbers could be for anything. A simple Colpitts osc could be built to see where the fundamental is.

Use the SECOND circuit here:
http://hem.passagen.se/communication/txo.html
Use both 150 Pf. The total of C3 and VC1 can be around 50-100 pf and it should oscillate so you can measure / count the freq. R3 = 2.2K should get it going.
73, Steve, K9DCI

1196. Re: Charger for field day lead acid batteries ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-07 21:56:18 UTC
From: john graesser <graesser@tca.net>
Message-ID: <11ui5e0an83qaec@corp.supernews.com>
Source record: 13847

<tucker@conninc.com> wrote in message
news:1139339521.853220.235180@g44g2000cwa.googlegroups.com...
> Need to charge some SLAs and other lead acid batteries for field day Im
> trying to make
> something work without buying a new battery charger, so here goes.
> I need to charge a alot of different voltage lead acid batterys
> 6,8,10,12, ect. I have a
> old charger that only puts out 12-14vdc, I have a 10amp 120vac
> powerstat (variac) im thinking
> of adding to the input of the transformer to reduce output . Will this
> work?
> Im not sure about the inductance & operating a transformer @ 1/2 or
> 2/3 the normal 120 vac
> input voltage, im wandering if this will effect efficiency or if it
> will work at all.

To get battery credit, didn't the batteries need to be charged by something other than power line current? I thought they had to be solar, wind, water etc charged so that you couldn't just plug in a battery charger into a wall and charge them the easy way.
Not to put a damper on your using batteries for field day, but you might want to check the rules. Here we use a big diesel generator for the radios, but some wanted their logging laptops plugged into the wall instead of the generator and a spirited argument broke out whether that negated the credit for not using lines power.
thanks, John.
KC5DWD

1197. Re: Charger for field day lead acid batteries ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 00:03:17 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dsbcg6$f2g$1@engnntp2.cig.mot.com>
Source record: 13698

SLAs will be Tricky. If the supply you have is regulated, the variac is not a very good idea. The transformer operation and efficiency is not an issue. It will work just fine on the variac.

However, you really need a well regulated supply and accurate voltmeter and to float them for full charge. I have two little SLAs sitting at 13.75 all the time.

Read the lead-Acid sections of this first, then decide.
http://www.batteryuniversity.com/partone.htm

Having a good background in Lead-Acid basics, you can do some things, one being:
For one battery at a time:
1- Measure voltage at start to determine charge state.
2- Calculate amp-hours to full charge (knowing the charge replacement efficiency of YOUR battery).
3- Charge with known current (like a ni-cad charger) to somewhere under 90%.
4- Measure the open ckt voltage periodically, but after the required rest period.
5- Stop before disaster happens.

OR

Just wing it. (:-)

73, Steve, K9DCI

Just kidding with the wing it thing.

<tucker@conninc.com> wrote in message
news:1139339521.853220.235180@g44g2000cwa.googlegroups.com...
> Need to charge some SLAs and other lead acid batteries for field day Im
> trying to make
> something work without buying a new battery charger, so here goes.
> I need to charge a alot of different voltage lead acid batterys
> 6,8,10,12, ect. I have a
> old charger that only puts out 12-14vdc, I have a 10amp 120vac
> powerstat (variac) im thinking
> of adding to the input of the transformer to reduce output . Will this
> work?
> Im not sure about the inductance & operating a transformer @ 1/2 or
> 2/3 the normal 120 vac
> input voltage, im wandering if this will effect efficiency or if it
> will work at all.
>

1198. Re: Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 00:55:21 UTC
From: Henry <wa0goz@arrl.net>
Message-ID: <N4Odnd8o99Lu3HTenZ2dnUVZ_tydnZ2d@comcast.com>
Source record: 13699

If the crystals are the old WW2 crystals that are about an inch
square, the frequency is determined as follows:

If the Channel is a 2 digit number, divide the marked frequency by 54
to obtain the fundamental frequency:

Channel 32
Marked Frequency 32.2 Mc
Fundamental Frequency 32.2/54 = 429.630 MHz

If the Channel is a 3 digit number, divide the marked frequency by 72
to obtain the fundamental frequency:

Chhannel 381
Marked Frequency 38.1 Mc
Fundamental Frequency 38.1/72 = 529.166 MHz

Hope this helps and 73,

Henry WA0GOZ

1199. Re: Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 01:03:19 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <43E94359.8040308@nettally.com>
Source record: 13700

Don't you mean KHz??

Henry wrote:

> If the crystals are the old WW2 crystals that are about an inch
> square, the frequency is determined as follows:
>
> If the Channel is a 2 digit number, divide the marked frequency by 54
> to obtain the fundamental frequency:
>
> Channel 32
> Marked Frequency 32.2 Mc
> Fundamental Frequency 32.2/54 = 429.630 MHz
>
> If the Channel is a 3 digit number, divide the marked frequency by 72
> to obtain the fundamental frequency:
>
> Chhannel 381
> Marked Frequency 38.1 Mc
> Fundamental Frequency 38.1/72 = 529.166 MHz
>
> Hope this helps and 73,
>
> Henry WA0GOZ

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

1200. Re: Charger for field day lead acid batteries ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 01:21:06 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <cvbiu1llarohfkamg3lp9p7v769b67v55b@4ax.com>
Source record: 13701

On Tue, 7 Feb 2006 15:56:18 -0600, "john graesser" <graesser@tca.net>
wrote:

>
><tucker@conninc.com> wrote in message
>news:1139339521.853220.235180@g44g2000cwa.googlegroups.com...
>> Need to charge some SLAs and other lead acid batteries for field day Im
>> trying to make
>> something work without buying a new battery charger, so here goes.
>> I need to charge a alot of different voltage lead acid batterys
>> 6,8,10,12, ect. I have a
>> old charger that only puts out 12-14vdc, I have a 10amp 120vac
>> powerstat (variac) im thinking
>> of adding to the input of the transformer to reduce output . Will this
>> work?
>> Im not sure about the inductance & operating a transformer @ 1/2 or
>> 2/3 the normal 120 vac
>> input voltage, im wandering if this will effect efficiency or if it
>> will work at all.
>
>To get battery credit, didn't the batteries need to be charged by something
>other than power line current? I thought they had to be solar, wind, water
>etc charged so that you couldn't just plug in a battery charger into a wall
>and charge them the easy way.
>Not to put a damper on your using batteries for field day, but you might
>want to check the rules. Here we use a big diesel generator for the radios,
>but some wanted their logging laptops plugged into the wall instead of the
>generator and a spirited argument broke out whether that negated the credit
>for not using lines power.

If he's using batteries and not recharging them with a motor generator
or the power line, then he's running battery power and gets a
multiplier of 5. Where they were previously charged isn't an issue.

He can still charge them:

6.9. Batteries may be charged while in use. Except for Class D
stations, the batteries must be charged from a power source other than
commercial power mains. To claim the power multiplier of five, the
batteries must be charged from something other than a motor driven
generator or commercial mains.

But doesn't get the multiplier.

The spirit of the thing is that the contest is a test of emergency
preparedness. If he had the foresight to have a bank of batteries

charged when the power failed, then he is "prepared."

Considering that it's a bit warm at the end of June in Tucson and half the mountains in the state were on fire (wait till this year, 110 days without rain and counting), I stayed home and ran 1E. I could actually (and did) run for quite a while on just battery power but I periodically ran the Honda generator to charge it.

Still didn't do to badly. One man, one band and only 17 hrs on the air and still third highest number of QSOs in my category in the nation.

1201. Re: Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 01:31:50 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <aSbGf.759979$_o.370955@attbi_s71>
Source record: 13702

"Henry" <wa0goz@arrl.net> wrote in message
news:N4Odnd8o99Lu3HTenZ2dnUVZ_tydnZ2d@comcast.com...
> If the crystals are the old WW2 crystals that are about an inch square,
> the frequency is determined as follows:
>
> If the Channel is a 2 digit number, divide the marked frequency by 54 to
> obtain the fundamental frequency:
>
> Channel 32
> Marked Frequency 32.2 Mc
> Fundamental Frequency 32.2/54 = 429.630 MHz
>
> If the Channel is a 3 digit number, divide the marked frequency by 72 to
> obtain the fundamental frequency:
>
> Chhannel 381
> Marked Frequency 38.1 Mc
> Fundamental Frequency 38.1/72 = 529.166 MHz
>
> Hope this helps and 73,
>
> Henry WA0GOZ

It would help more if you separated your MHz from KHz. Those are all WW2 tank transmitter frequencies and were for 54 X and 72 X multiplications so that it could be FM'd. The Army must have loved old Armstrong, they always used FM even when the well understood capture effect kept killing off their guys. Same reason the Air Force still can't talk to the ground pounder unless they stick an AF guy with an AM rig with them on the ground. Sigh

W4ZCB

1202. Re: Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 01:41:00 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <lliiu15flg14vtk16k4qlh7feg03ip1edb@4ax.com>
Source record: 13703

On Wed, 08 Feb 2006 01:03:19 GMT, **THE-RFI-EMI-GUY**
<rhyolite@nettally.com> wrote:

>Don't you mean KHz??

Nope. He meant Kc. These are WWII rocks that were marked in Mc.

Ah the good old days when when we had kilomegacycles per second.

>
>Henry wrote:
>
>> If the crystals are the old WW2 crystals that are about an inch
>> square, the frequency is determined as follows:
>>
>> If the Channel is a 2 digit number, divide the marked frequency by 54
>> to obtain the fundamental frequency:
>>
>> Channel 32
>> Marked Frequency 32.2 Mc
>> Fundamental Frequency 32.2/54 = 429.630 MHz
>>
>> If the Channel is a 3 digit number, divide the marked frequency by 72
>> to obtain the fundamental frequency:
>>
>> Chhannel 381
>> Marked Frequency 38.1 Mc
>> Fundamental Frequency 38.1/72 = 529.166 MHz
>>
>> Hope this helps and 73,
>>
>> Henry WA0GOZ

1203. Re: Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 02:20:50 UTC
From: Henry <wa0goz@arrl.net>
Message-ID: <FcudnWAqKobmyHTenZ2dnUVZ_vmdnZ2d@comcast.com>
Source record: 13704

I whoopsed. The resulting fundamental frequency I quoted should have
been in KHz or Kc back in those days. 38.1/72 = 0.5291666 Mc or
529.1666 Kc. and 23.2/54 = 0.4296296. In the first example, my
dyslexia got me so the numbers are wrong. Sorry.

Henry

Henry wrote:

> If the crystals are the old WW2 crystals that are about an inch square,
> the frequency is determined as follows:
>
> If the Channel is a 2 digit number, divide the marked frequency by 54 to
> obtain the fundamental frequency:
>
> Channel 32
> Marked Frequency 32.2 Mc
> Fundamental Frequency 32.2/54 = 429.630 MHz
>
> If the Channel is a 3 digit number, divide the marked frequency by 72 to
> obtain the fundamental frequency:
>
> Chhannel 381
> Marked Frequency 38.1 Mc
> Fundamental Frequency 38.1/72 = 529.166 MHz
>
> Hope this helps and 73,
>
> Henry WA0GOZ

1204. Re: Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 02:42:37 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <qajiu1d74f5mdhfj3ig9aa59he37h7majl@4ax.com>
Source record: 13705

On Wed, 08 Feb 2006 01:31:50 GMT, "Harold E. Johnson"
<W4ZCB@mchsi.com> wrote:

[snip]

>Same reason the Air Force still can't talk to the ground pounder
>unless they stick an AF guy with an AM rig with them on the ground. Sigh

Nah. We had a surplus outfit here in Tucson that cut up old Air Force
planes at DMAFB (The Boneyard).

I bought a Collins KWM-1 from them that came out of a B-47. They were
using SSB a long time ago. I wish I had kept that radio as it might
have been very widely traveled.

Some of those planes were "special"... RB-47s. They were overflying
the Soviet Union before the U2s were.

I used to be a member of the Association of Old Crows. For more on
that see: (http://www.55srwa.org/55_crowstory.html). The author, Col.
Bruce Bailey also discussed some of these missions (and mischief) in
his book, "We See All", a Pictorial History of the 55th Strategic
Reconnaissance Wing. I happen to have an inscribed copy (no. 1474 of
1500) of the book.

Bruce has a lot more tales at http://www.55srwa.org/55_fhr1.html

Caution: Do not read any of his stuff with liquid in your mouth. It
will wind up all over your monitor.

1205. Re: Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 03:56:44 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <0_dGf.783420$xm3.74105@attbi_s21>
Source record: 13706

>>Same reason the Air Force still can't talk to the ground pounder
>>unless they stick an AF guy with an AM rig with them on the ground. Sigh
>
> Nah. We had a surplus outfit here in Tucson that cut up old Air Force
> planes at DMAFB (The Boneyard).
>
> I bought a Collins KWM-1 from them that came out of a B-47. They were
> using SSB a long time ago. I wish I had kept that radio as it might
> have been very widely traveled.

Yes Wes, and SSB IS AM. If you were an Old Crow, you still are. By any chance know Duke Knief?

Was out to Davis Monthan last year, all those single flight C-141's was sickening. From the factory to the boneyard just to protect some congressmans turf.

W4ZCB

1206. HP8553B mixer diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 05:10:22 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <l8viu1tcjk6igge174vrnobdr6u88q51kk@4ax.com>
Source record: 13707

I have an HP 8553B RF section for the 141T spectrum analyzer with bad first mixer diodes I think.

The old HP part number is 08553-6002 CR3, CR4, CR5, CR6.

I found a place that says the replacement is HP 10514-8454. This is a matched quad set of diodes.

Does anyone know what a generic diode part would be for this?

Thanks

Gary K4FMX

1207. Re: SM Inductors As BP Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 06:02:39 UTC
From: LenAnderson@ieee.org
Message-ID: <1139376297.172552.152790@z14g2000cwz.googlegroups.com>
Source record: 13708

From: xpyttl on Feb 6, 12:19 pm

><LenAnder...@ieee.org> wrote in message

>> Bandpass filters can be designed for specific bandpass without
>> using inductive coupling.
>
>hmmm ... I had lept to the conclusion that OP was concerned about undesired
>coupling, rather than desired coupling.

To make an inductively-coupled BPF one IS concerned about DESIRED coupling. That's how all those "IF cans" have been designed for about the last 65 years (give or take). EXACT desired magnetic field coupling.

Two-resonator bandpass filters (narrow bandwidth relative to center frequency) can be done with "inductive" (magnetic field coupling), capacitive coupling in two ways, or inductor coupling (without magnetic field coupling) in two ways. Kind of old hat. I prefer the non-mag-field approach since I LIKE using toroid inductors and do NOT want any magnetic field coupling in there. Makes the packaging more flexible; i.e., no sweat.

>I think SMD inductors are typically designed so as to not maximize their
>susceptibility to objects in their vicinity, although not necessarily
>minimize it.

I've never done a mind-meld with any SMDs but I have looked in a lot of databooks, seen a lot of datasheets. SMD inductors are designed for inductance, Q, and current-carrying capacity. Unless they are SPECIALS, shielded, or some other thing stated, no one knows what their magnetic field is unless they try it out. Or discuss it with the SMD makers.

If you want to find out the magnetic field coupling, the setups have been described in the better texts for decades. It is a lot of trouble to do but that time can be amortized nicely if one is making thousands of identical IF cans (narrow percentage bandwidth bandpass filters).

>Another issue of concern is self-resonance.

NS? :-) That's a built-in concern every time one designs filters of any kind. Try a highpass filter and see where inductor (or capacitor) self-resonance messes up response.

A two-resonator type of narrow bandwidth bandpass filter
DEPENDS on resonance. Self-resonance implies a parallel
capacitance component equivalent on the inductor. That, in
turn, dictates the exact choice of fixed or trimmable
capacitor one adds across the inductor.

>Some SMD inductors have rather
>surprisingly low self-resonant frequencies.

Quantitatively define "surprisingly," sir. That is
a null statement. Show some examples of SMD inductors'
self-resonance versus other types of inductors not SMT.
Crib from existing data if you like, some does exist.

>Obviously, some designed for
>cell phone service typically won't, but it is yet another parameter to fret
>over.

Are you designing cellular telephones? There is PLENTY of OTHER
applications at UHF where some small, two-resonator BPFs can be
used. Or at VHF. Or at HF. Even at MF and LF.

"Designed for cell phone service" implies SMT, obviously. Cell
phones DEMAND smallness in the market. HOW they eventually get
so small doesn't depend solely on physical package sizes or the
other factors you allude to. I like jumping but not doing so
on conclusions.

I've been sharp and nasty in this reply. I've also skim-read a
lot of inane and time-wasting blather on the "FAQs" cross-
posted to a bunch of newsgroups...that should not have been.
I'm tired of a bunch of self-righteous arguers busy, busy
arguing for the love of arguing. :-(

In HOMEBREW the replies ought to concern themselves with more
factual responses, not cut-and-paste generalities nor inability
to understand the original question. That's the best help for
anyone who asks questions.

LenAnderson@ieee.org

1208. Heathkit Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 11:23:39 UTC
From: OTR <>
Message-ID: <n1lju1594ovdb18m7glcun3h35a9sgvo3a@4ax.com>
Source record: 13709
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap

Is it possible to determine the year of production for a Heathkit HW-8
by the serial number?

1209. Re: Charger for field day lead acid batteries ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 12:03:51 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <6_2dnfn2G_W6Q3TeRVn-gA@bright.net>
Source record: 13710

Doesn't that rule only apply to batteries being charged DURING the
event? If this is to charge BEFORE the event, it would (obviously) be OK...

>
>
> To get battery credit, didn't the batteries need to be charged by something
> other than power line current? I thought they had to be solar, wind, water
> etc charged so that you couldn't just plug in a battery charger into a wall
> and charge them the easy way.

1210. Re: Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 13:05:42 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <47pju1db73a2oj5mlomqs1m6schg21ov4b@4ax.com>
Source record: 13711

On Wed, 08 Feb 2006 03:56:44 GMT, "Harold E. Johnson"
<W4ZCB@mchsi.com> wrote:

>>>Same reason the Air Force still can't talk to the ground pounder
>>>unless they stick an AF guy with an AM rig with them on the ground. Sigh
>>
>> Nah. We had a surplus outfit here in Tucson that cut up old Air Force
>> planes at DMAFB (The Boneyard).
>>
>> I bought a Collins KWM-1 from them that came out of a B-47. They were
>> using SSB a long time ago. I wish I had kept that radio as it might
>> have been very widely traveled.
>
>Yes Wes, and SSB IS AM.

Technically, yes; so is on-off keyed CW by that definition. I was
thinking of SCR-522s on two-meters. [g]

>If you were an Old Crow, you still are. By any
>chance know Duke Knief?

No, don't know him. I was an "industry" Crow. To my regret I was
never in the military although I would have been had a Navy recruiter
not lied to me about my enlistment. But I guess that's a redundancy.

Most of the AOC meetings were lunchtime affairs and I felt guilty
leaving work for hours to go out to D-M for them so I quit paying my
dues and participating.

We did have one memorable dinner meeting where I met Col. Hambleton,
who was the guest speaker and protagonist in the book and movie, "Bat
21."
>
>Was out to Davis Monthan last year, all those single flight C-141's was
>sickening. From the factory to the boneyard just to protect some
>congressmans turf.

Just think of it as a jobs program for engineers.

1211. Re: Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 13:07:37 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <m8rju11elmk8huvqu25ssrul042qs2dj5c@4ax.com>
Source record: 13712

On Wed, 08 Feb 2006 03:56:44 GMT, "Harold E. Johnson"
<W4ZCB@mchsi.com> wrote:

>>>Same reason the Air Force still can't talk to the ground pounder
>>>unless they stick an AF guy with an AM rig with them on the ground. Sigh
>>
>> Nah. We had a surplus outfit here in Tucson that cut up old Air Force
>> planes at DMAFB (The Boneyard).
>>
>> I bought a Collins KWM-1 from them that came out of a B-47. They were
>> using SSB a long time ago. I wish I had kept that radio as it might
>> have been very widely traveled.
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>Yes Wes, and SSB IS AM.

Technically, yes; so is on-off keyed CW by that definition. I was
thinking of SCR-522s on two-meters. [g]

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>chance know Duke Knief?

No, don't know him. I was an "industry" Crow. To my regret I was
never in the military although I would have been had a Navy recruiter
not lied to me about my enlistment. But I guess that's a redundancy.

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leaving work for hours to go out to D-M for them so I quit paying my
dues and participating.

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who was the guest speaker and protagonist in the book and movie, "Bat
21."
>
>Was out to Davis Monthan last year, all those single flight C-141's was
>sickening. From the factory to the boneyard just to protect some
>congressmans turf.

Just think of it as a jobs program for engineers.

1212. Re: Charger for field day lead acid batteries ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 13:38:56 UTC
From: Allison-nospam@nouce.bellatlantic.net
Message-ID: <24sju11kuq0ijk5vbor0608gi9qp2o4crc@4ax.com>
Source record: 13713

On Tue, 7 Feb 2006 15:56:18 -0600, "john graesser" <graesser@tca.net>
wrote:

>
><tucker@conninc.com> wrote in message
>news:1139339521.853220.235180@g44g2000cwa.googlegroups.com...
>> Need to charge some SLAs and other lead acid batteries for field day Im
>> trying to make
>> something work without buying a new battery charger, so here goes.
>> I need to charge a alot of different voltage lead acid batterys
>> 6,8,10,12, ect. I have a
>> old charger that only puts out 12-14vdc, I have a 10amp 120vac
>> powerstat (variac) im thinking
>> of adding to the input of the transformer to reduce output . Will this
>> work?
>> Im not sure about the inductance & operating a transformer @ 1/2 or
>> 2/3 the normal 120 vac
>> input voltage, im wandering if this will effect efficiency or if it
>> will work at all.
>
>To get battery credit, didn't the batteries need to be charged by something
>other than power line current? I thought they had to be solar, wind, water
>etc charged so that you couldn't just plug in a battery charger into a wall
>and charge them the easy way.
>Not to put a damper on your using batteries for field day, but you might
>want to check the rules. Here we use a big diesel generator for the radios,
>but some wanted their logging laptops plugged into the wall instead of the
>generator and a spirited argument broke out whether that negated the credit
>for not using lines power.
>thanks, John.
>KC5DWD
>

There are two different multipliers at work.

If it's battery then how they were charged is unimportant. All that
counts is your running on battery. If you charge them while on the
air then how you charge them counts. If off generator its differnt
than off the mains. There is a special class if you charge them using
neither generator(gas/diesel power) or mains for that see alternative
power.

If your going for the alternative power source multiplier then how the
batteries are charged counts. I think the rule says non-petropower
(gas oil or pertro byproducts) IE: Solar, unless you have a really

big solar array it's diffictult to run a radio directly from the sun (it's possible) but the rules do allow you to charge batteries from the sun and run from them. I believe you get both solar power and battery scores for that. Other sources are allowed such as water power, wind, someone peddling a genny, a old military handcrank gen would be valid examples. I was told steam powered genny running off wood or waste and a internal combustion engine running off a wood gassifier also qualifies. I suspect a diesel gen running of greasoline (used cooking grease or vegetable oil) may also qualify.

Running aux equipment like fans, lights and computers(not connected to radios) do not negate the battery or alternate energy credit/nultipliers.

Allison
KB!gmx

1213. Re: SM Inductors As BP Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 13:41:50 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <43e9f51e$0$3659$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 13714

I have done a 70 MHz LPF with SM inductors, though the physical spacing
wasnt close. Performance agreed roughly with theoretical, though I must
admit I did not test rigorously.
Closer coupling will widen bandwidth/lower Q.
You could use a small capacitor between parallel tuned sections as
coupling, and capacitive dividers as impedance matching
Richard

Reg Edwards wrote:
> A bandpass filter can be designed as two coupled L and C tuned
> circuits.
>
> The two circuits are coupled together via the mutual inductance
> between the two spaced-apart coils. As in a 455 KHz interstage
> transformer in a screening can.
>
> The degree of coupling is approximately 1/Sqrt(Q1*Q2), where Q1 and Q2
> are the tuned-circuit Q's which are determined by the filter's
> terminating resistances.
>
> Closer coupling increases the bandwidth.
>
> For details see Terman.
> ----
> Reg.
>
>

1214. Re: HP8553B mixer diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 14:08:50 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1139407730.920154.35150@g44g2000cwa.googlegroups.com>
Source record: 13715

There is a Tek repair group on Yahoo.

Leon

1215. Re: HP8553B mixer diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 14:35:23 UTC
From: John Brock <john_brock@telkomsa.net>
Message-ID: <dscvjhinp1@ctb-nnrp2.saix.net>
Source record: 13716

The manual for the HP8553B is on bama.sbc.edu in pdf form.
The diodes are nothing special but are matched.

73
John (ZS6BZF)

1216. Re: Charger for field day lead acid batteries ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 16:53:01 UTC
From: "tucker@conninc.com" <tucker@conninc.com>
Message-ID: <1139417581.158013.67370@g44g2000cwa.googlegroups.com>
Source record: 13717

Field day is along way off, I just wanted to keep them alive until
then. After it starts i have a large array of solar cells & Im sure
the
sun will be out, hope so anyway.

N4aeq

1217. Re: Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 19:04:37 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dsdfc6$1cn$1@engnntp2.cig.mot.com>
Source record: 13718

"Henry" <wa0goz@arrl.net> wrote in message
news:N4Odnd8o99Lu3HTenZ2dnUVZ_tydnZ2d@comcast.com...
> If the crystals are the old WW2 crystals that are about an inch
> square, the frequency is determined as follows:
>
> If the Channel is a 2 digit number, divide the marked frequency by 54
> to obtain the fundamental frequency:
>
> Channel 32
> Marked Frequency 32.2 Mc
> Fundamental Frequency 32.2/54 = 429.630 MHz

The new math??? Perhaps 596.296 Kc

>
> If the Channel is a 3 digit number, divide the marked frequency by 72
> to obtain the fundamental frequency:
>
> Chhannel 381
> Marked Frequency 38.1 Mc
> Fundamental Frequency 38.1/72 = 529.166 MHz

Ditto, but Kc
73, Steve, K9DCI

>
> Hope this helps and 73,
>
> Henry WA0GOZ

1218. Re: Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-08 22:45:14 UTC
From: Risto Tiilikainen <risto.NON.tiilikainen@luukku.comMUNIST.invalid>
Message-ID: <43ea73bd$0$25359$39db0f71@news.song.fi>
Source record: 13719

mrhaney wrote:

>I have about 60 military crystals ..they are marked Channel 277 thru CH
>347 .Anyone know if they are overtone ,and, know of a good way to
>check them.. My grid dipper will not oscillate with them like it does
>with basic fundamental crystals ,like 7193 KHZ. etc..THEY ARE FOR
>SALE TOO..W4PQW
>
>
>
Hi !

You are raising nostagig memories.
In 60 tales those FT241 xtals were used for home brew 455 kc xtal
lattice filters for SSB transmitters and home brew receivers.

Bought some 100 pcs of them from "Jan Xtals" surplus shop in USA.
Oscillator circuit for those FT241 xtals was not so trivial as for ham
band xtals (as you experience with your dipper)
Used BC-221 to select individual xtals for lattice filters.
You can check them by measuring series resonance.
You can also make a simple J-fet oscillator

Oh those surplus times
A school boy had to consult a couple of hotel porters to change
Finmarks to USD to buy surplus xtals from USA to make lattice filter to
contruct SSB transmitter.

73 de Risto OH2BT

1219. Re: Heathkit Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-09 15:47:51 UTC
From: Mr Fed UP <mrfedup@bellsouth.net>
Message-ID: <jsJGf.1028$pM6.101@bignews4.bellsouth.net>
Source record: 13720
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap

http://www.qsl.net/kb7rgg/heath/heathkit.html
has lots of info on heathkits. Nothing specific on a particular serial
number for models
but it does have many dates for model runs.i.e. the HW-8 was made from
1976 - 1983.
Very nice heathkit site.

Good luck
73 K4TWO Gary

<OTR> wrote in message news:n1lju1594ovdb18m7glcun3h35a9sgvo3a@4ax.com...
> Is it possible to determine the year of production for a Heathkit HW-8
> by the serial number?

1220. The Weekly FAQ - it's more important than ever to stand up for what is right

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-09 17:05:24 UTC
From: Orator For Decency <radio.ham@lycos.co.uk>
Message-ID: <1139504724.862317.108790@g43g2000cwa.googlegroups.com>
Source record: 13721
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

What is Ham Radio?

(Preface)
It is becoming increasingly difficult to fly the flag for
decency and for civilised behaviour in Radio Hammery. Even
the Usenet newsgroups dedicated to the cause have degenerated
into a hotbed of abusive onslaughts by those who ought to know better.
However, there still exists the fundamental basis on which Ham
Radio is based, and that will never die. This FAQ ("What Is
Ham Radio?") will be regularly published and will not be
shouted or bullied down. It is important that those of a
technical bent, who are the natural seed-corn of Radio Hammery
and who gravitate towards us to be the real novitiate, can
still find us, (and know that we are still here), their fellows.

-----ooooo-----

Please remember that this FAQ is a _POSITIVE EXHORTATION_
to you to exert yourselves to join our fraternity! (If you find
otherwise, then perhaps you are already classing yourself in the
mediocre groups of those who are criticised in the FAQ and from
whom we _MUST_ dissociate? If so - it's never too late for
a re-taxonomisation on your part - there's nothing elitist about
us, and we welcome all those who are prepared to put themselves
out in order to join our ranks!)

-----ooooo-----
(Article)
So,.....What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One such CB type is the so-called "Not-Ham". Otherwise
known as the CBer-Masquerading-As-A-Radio-Ham, this type
had their background in the hobby that is CB Radio and not
in the technical pursuits that lead up to a coveted Ham licence.
Easily recognised by their boasts of the criminal activity of
11 metre SSB operation, one wonders why they don't go back to
the CB Bands if such bands are dearer in their hearts than are the Ham
Bands? No _REAL Radio Hams associate with those who made an
illegal installation of transmitting equipment before being
in possession of an appropriate licence.

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B
licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

1221. bs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-09 18:01:16 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1139508076.329561.46190@f14g2000cwb.googlegroups.com>
Source record: 13722
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Orator For Decency wrote:The Weekly FAQ - it's more important than ever
to stand up for what is right
so when do you plan to start

1222. Re: bs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-09 18:29:44 UTC
From: Gordon Hudson <gordon@usenet3.hostroute.co.uk>
Message-ID: <43eb8a1a$0$1169$5a6aecb4@news.aaisp.net.uk>
Source record: 13723
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"an old friend" <kb9rqz@yahoo.com> wrote in message
news:1139508076.329561.46190@f14g2000cwb.googlegroups.com...
>
> Orator For Decency wrote:The Weekly FAQ - it's more important than ever
> to stand up for what is right
> so when do you plan to start
>

Don't worry, he is setting himself up as the next Maurice Kellett.

1223. Re: Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-09 19:46:33 UTC
From: LenAnderson@ieee.org
Message-ID: <1139514393.951581.104310@g43g2000cwa.googlegroups.com>
Source record: 13724

From: "Harold E. Johnson" on Wed, Feb 8 2006 1:31 am

>"Henry" <wa0goz@arrl.net> wrote in message

>It would help more if you separated your MHz from KHz. Those are all WW2
>tank transmitter frequencies and were for 54 X and 72 X multiplications so
>that it could be FM'd.

Both Rx and Tx were crystal-controlled. Those were mostly MOBILE radio sets (not restricted to armored vehicles or "tanks"). The modulation was PM, not FM, using "reactance tube" modulators prior to frequency multiplication; makes little difference to receivers at the other end since FM and PM used the same limiters-discriminators for demodulation.

Omitted from ham lore are some of the other radio sets of bygone military days, those having "crystal boxes:" The AN/TRC-1, -3, -4 VHF Radio Relay terminals and repeaters (70 to 90 MHz, design beginning around 1941-1942)...lots made but sold to other militaries after WW2, not many to surplus distributors; the original HF handie-talkie and its companion, the ill-fated "Pogo Stick" HF transceiver (both AM but the contract for the Pogo Stick was let AFTER the Army disbanded horse-mounted cavalry). Motorola (then Galvin Mfg) in Chicago made both of them.

>The Army must have loved old Armstrong, they always
>used FM even when the well understood capture effect kept killing off their
>guys.

I disagree on the "killing off their guys." Both the handie-talkie and early 1943 beginning walkie-talkie replaced an abominable three-sack four-tube high-HF/low-VHF kluge used just prior to WW2. Those two models were unsuited for ground military communications. Some invited civilians from Motorola told the Army that in 1940. The SCR-300 walkie-talkie, though cumbersome at roughly 40 pounds of single backpack, used only one crystal and that one for tuning dial calibration. The SCR-300's Tx and Rx were VFO-tuned! [marvelous design job in my estimation considering the enormous range of temperatures they underwent and the physical beating they took]

FM in mobile/portable radios was proven much more useable in 1939 to 1940 trials of police radios in various departments around the USA, principally by those sets made by Link. Galvin (later re-named Motorola after WW2) picked up on that to design the SCR-300 which was a communications success for ground-pounders. Since the SCR-300 was tunable, and in the frequency range of those "tank"

radios, ground units could communicate together as the situation demanded. The basic SCR-300 design was licensed out to several foreign militaries right after WW2 and served past the 1950s even after the replacement of the '300 by the AN/PRC-8, -9, -10 manpack high-HF/low-VHF FM transceivers (I wore a -9 a few times in 1955). It was half the weight of the older SCR-300.

In varying terrain over relatively short distances (under about 10 miles) and in the chaos of active combat, the constant-audio-level of FM and reduction of electrical noise effects worked out better than the AM radios of those days. The task was to coordinate and communicate in combat situations, not to play with gain controls or radio knobs. Consider that the "channelization" right up to the push-button channel selection on the "tank" radios made it much easier to USE in an extremely-busy-with-other-things combat situation. Playing with radios was a no-no when there are bad guys out there determined to snuff you out; attention can NOT be disturbed in such conditions.

I'll disagree that the "capture effect" was either a buzzword at the time or responsible for some alleged disturbance to vital communications. Even with the crude AVC (what is now AGC) of AM receivers back then, a stronger AM signal on the same frequency could blot out a weaker AM signal every bit as much as any FM limiter action doing the same. "Capture effect" buzzphrases were popularized after WW2 and after the Korean War of '50-'53.

The migration to VHF for relatively short-distance comms had begun DURING WW2. The "three-band" system of overlapping frequency bands for infantry-artillery-armor in high-HF/low-VHF was planned for post-WW2 military land forces use as a result of lessons learned during WW2 by the USA and USMC. That plan was in use for two decades, including the beginning of the Vietnam War. The many-made AN/PRC-25 (later -77) of later Vietnam War fame was VHF as a result of long experience in what worked and what didn't.

>Same reason the Air Force still can't talk to the ground pounder
>unless they stick an AF guy with an AM rig with them on the ground. Sigh

Way untrue now. Airborne radios went VHF and AM for different reasons beginning in later WW2 years. Airborne short-distance (up to about 50 miles) can use relatively low-power Tx and with tube architecture an AM Tx is less complex and weighed much less. Weight in earlier aviation was still a driving factor in what was bolted on an airframe. [still is, but a moot point considering the marvels of solid-state miniaturization]

ICAO (International Civil Aviation Organization) rules specified VHF AM at 108 to 137 MHz in 1955 on the basis of WW2 designs and experience. Around the same time, the USAF (now a separate U.S. military branch) standardized on 225-400 MHz UHF, AM, for

airborne communications. [see the ubiquitous old AN/ARC-27 for a good example of airborne "push-button" channelization reducing the need for playing with knobs in cockpits] None of those were sharing any bands with folks on the ground. In actual use, it was preferred to have air comms on DIFFERENT bands than surface comms to avoid radio congestion.

A former neighbor was both a B-26 pilot and a Forward Air Controller in Korea of the early 50s. Not the glamorous roles shown in the movies but a decided advantage to have "an AF guy" as the FAC because they KNEW how to talk to and direct the flyboys whereas ground-pounders weren't familiar with their needs, even to help out the guys on the ground needing support.

A lot of that began changing in the later 1960s with specific ground equipment that could communicate with airborne radios being procured. The SINCGARS family of VHF radios has four specific models, 1 manpack, 2 vehicle/transportable, 1 airborne to get everyone involved in coordination of nasty-business action. [there's as much Army aviation used for land forces support as there are USAF for the same role] A quarter-million SINCGARS R/Ts have been produced and made operational since 1989 and the successor is about to debut (see Harris Corporation detailed PR). Frequency-synthesized as are all military radios now, no boxes of crystals to lug around.

The new generations of military radios appearing now cover frequencies from 30 MHz on up to the top of the airborne military comm band...and any mode-modulation as needed, the emphasis on digital (for encryption) and frequency-hopping (to make RDF extremely hard for the "other side").

Nobody can hope for cheap, easy-to-convert for ham use "surplus" radios now. :-(There haven't been any "surplus" quartz crystals from the military for decades...although there might be some from the 2nd and 3rd generation of VHF "tank" radios when those are taken out of storage. During the last three years of WW2, the USA produced an average of a MILLION quartz crystal units a month! No wonder there were surplus crystal units made available later.

LenAnderson@ieee.org

ex-RA16408336

1224. Re: Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-09 22:17:52 UTC
From: mrhaney <w4pqw@cox.net>
Message-ID: <1139523472.601881.312160@g47g2000cwa.googlegroups.com>
Source record: 13725

Thanks Risto, exactly what I needed to know..I do recall something
about using them in a lattice filter.. I may try that.. W4PQW

1225. Re: FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-10 00:40:18 UTC
From: James Douglas <james.douglas@genesis-software.com>
Message-ID: <EK2dnXFQSMHaQnbenZ2dnUVZ_sOdnZ2d@comcast.com>
Source record: 13726
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

John Miles wrote:
> I'm looking to clear out some clean, working equipment at the end of a
> couple of long-term personal projects. This shortened URL will take you
> to eBay's "View Seller's Items" page for my account:
>
> http://snipurl.com/ls89
>
> Highlights include the nicest HP 8566B spectrum analyzer out of several
> that I've owned; an HP 8662A with OEM manuals and brand-new PS filter
> caps; and an HP 5345A counter with enough spares and accessories to
> satisfy any ECL computing buff.
>
> Most of these items include manuals, and all of them will be sold with
> 3-day buyer inspection periods. Local pickup in Seattle OK. Even if
> you're not in the market, several of the listings include some
> interesting HP Journal .PDFs and other literature. Check 'em out!
>
> -- jm
>
> --
> http://www.qsl.net/ke5fx
> Note: My E-mail address has been altered to avoid spam
> --
As a relative novice electronic nerd what type of work did you
do with this equipment, as a hobby?

1226. Re: The Weekly FAQ - it's more important than ever to stand up for what is right

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-10 03:03:10 UTC
From: "Dr. Anton Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1e55a24cbab5aa5898968e@192.168.42.131>
Source record: 13727
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

In article <1139504724.862317.108790@g43g2000cwa.googlegroups.com>,
radio.ham@lycos.co.uk says...

> What is Ham Radio?
>
> (Preface)
> It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery. Even

Yes, and you are most definitely a prime example of how difficult
it truly is.

If you hate what the hobby has become so much, Beany-boi, then
turn in your license.

PLONK!

1227. Re: FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-10 03:05:25 UTC
From: hill@rowland.org
Message-ID: <1139538591.400945.45840@g43g2000cwa.googlegroups.com>
Source record: 13728
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

I can't vouchesafe John's decision to give up his treasured gear,
but I can say John's loss is my gain. John's 8566B is a beautiful
machine and several of us are having lots of fun with it. My tech
is making a new rack for it (and several other machines, together
far too big to fit on a bench), then I'll add an ethernet-to-GPIB
network connection, software, and it'll be ready for prime time.

1228. bs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-10 03:30:53 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1139542253.810562.190710@g47g2000cwa.googlegroups.com>
Source record: 13729
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Dr. Anton Squeegee wrote:
> In article <1139504724.862317.108790@g43g2000cwa.googlegroups.com>,
> radio.ham@lycos.co.uk says...
>
> > What is Ham Radio?
> >
> > (Preface)
> > It is becoming increasingly difficult to fly the flag for
> > decency and for civilised behaviour in Radio Hammery. Even
>
> Yes, and you are most definitely a prime example of how difficult
> it truly is.
>
> If you hate what the hobby has become so much, Beany-boi, then
> turn in your license.

do we have any evidence that he even has a current license to turn in?
>
> *PLONK!*

1229. Re: bs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-10 14:23:42 UTC
From: "Dr. Anton Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1e5641c99da1f1b6989690@192.168.42.131>
Source record: 13730
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

In article <1139542253.810562.190710@g47g2000cwa.googlegroups.com>,
kb9rqz@yahoo.com says...
>
> Dr. Anton Squeegee wrote:

<snippety-one>

> > If you hate what the hobby has become so much, Beany-boi, then
> > turn in your license.
>
> do we have any evidence that he even has a current license to turn in?

<snippety-two>

Wow... Good point! I hadn't even thought of that.

Still... If those silly "FAQ" posts are coming from who I think
they're from (a morphed Airy R. Bean), then yes, I'm pretty sure
s/h/e/it is, in fact, licensed.

As to what, exactly, said license is for, well, that's another
subject for debate. ;-)

73 de KC7GR (formerly WD6EOS)

1230. Re: Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-10 18:02:47 UTC
From: Risto Tiilikainen <risto.NON.tiilikainen@luukku.comMUNIST.invalid>
Message-ID: <43ecd486$0$7484$39db0f71@news.song.fi>
Source record: 13731

mrhaney wrote:

>Thanks Risto, exactly what I needed to know..I do recall something
>about using them in a lattice filter.. I may try that.. W4PQW
>
>
>
Hi !

Go to library and borrow an old ARRL Single Side Hanbook (fourth edition
is very good) from 60 tales.
Maybe some of your friends is having it or it already stands in your own
bookshelf.

73 , Risto OH2BT

1231. static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-10 21:01:07 UTC
From: dances_with_barkadas@yahoo.com
Message-ID: <1139605267.419899.135370@g44g2000cwa.googlegroups.com>
Source record: 13732
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

how to effectively put an analog-meter's clear plastic cover at dc
ground, to prevent buildup of static charge?

1232. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-10 21:13:59 UTC
From: Ken Weitzel <kweitzel@shaw.ca>
Message-ID: <rm7Hf.370519$tl.266943@pd7tw3no>
Source record: 13733
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

dances_with_barkadas@yahoo.com wrote:
> how to effectively put an analog-meter's clear plastic cover at dc
> ground, to prevent buildup of static charge?

Hi...

Wipe it down with a clean cloth moistened with just a bit of
dilute liquid fabrid softener occasionally :)

Take care.

Ken

1233. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-10 21:41:44 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <4u1qu19ll43g3rlnh7rfuc1fcfi52b9442@4ax.com>
Source record: 13734
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

On 10 Feb 2006 13:01:07 -0800, the renowned
dances_with_barkadas@yahoo.com wrote:

>how to effectively put an analog-meter's clear plastic cover at dc
>ground, to prevent buildup of static charge?

Ha, that's a good one. Try an anti-static liquid or spray. You can buy
(expensive) stuff for electronics or try a consumer anti-static spray
compatible with the plastic (probably acrylic). Test before spraying
it all over the cover.

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

1234. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-10 21:55:11 UTC
From: Frank Bemelman <f.bemelmanq@xs4all.invalid.nl>
Message-ID: <43ed0b8a$0$4985$e4fe514c@dreader18.news.xs4all.nl>
Source record: 13735
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

<dances_with_barkadas@yahoo.com> schreef in bericht
news:1139605267.419899.135370@g44g2000cwa.googlegroups.com...
> how to effectively put an analog-meter's clear plastic cover at dc
> ground, to prevent buildup of static charge?

Replace the movement with a digital readout.

--
Thanks, Frank.
(remove 'q' and '.invalid' when replying by email)

1235. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-10 22:36:43 UTC
From: Jerry Avins <jya@ieee.org>
Message-ID: <CI6dncaYhJjhiHDeRVn-qg@rcn.net>
Source record: 13736
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

```
Frank Bemelman wrote:
> <dances_with_barkadas@yahoo.com> schreef in bericht
> news:1139605267.419899.135370@g44g2000cwa.googlegroups.com...
>
>>how to effectively put an analog-meter's clear plastic cover at dc
>>ground, to prevent buildup of static charge?
>
>
> Replace the movement with a digital readout.

How will that help?

Jerry
--
Engineering is the art of making what you want from things you can get.
ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½
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ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½
```

1236. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-10 23:46:28 UTC
From: Frank Bemelman <f.bemelmanq@xs4all.invalid.nl>
Message-ID: <43ed25a1$0$26621$e4fe514c@dreader17.news.xs4all.nl>
Source record: 13737
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

"Jerry Avins" <jya@ieee.org> schreef in bericht
news:CI6dncaYhJjhiHDeRVn-qg@rcn.net...
> Frank Bemelman wrote:
> > <dances_with_barkadas@yahoo.com> schreef in bericht
> > news:1139605267.419899.135370@g44g2000cwa.googlegroups.com...
> >
> >>how to effectively put an analog-meter's clear plastic cover at dc
> >>ground, to prevent buildup of static charge?
> >
> >
> > Replace the movement with a digital readout.
>
> How will that help?

I assumed the problem was false readings caused by static charge.

--
Thanks, Frank.
(remove 'q' and '.invalid' when replying by email)

1237. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-10 23:46:43 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <ee9qu19vsur6outvbqvc3t9bm3fmeo0p82@4ax.com>
Source record: 13738
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

On Fri, 10 Feb 2006 17:36:43 -0500, Jerry Avins <jya@ieee.org>
wrote:

>Frank Bemelman wrote:
>> <dances_with_barkadas@yahoo.com> schreef in bericht
>> news:1139605267.419899.135370@g44g2000cwa.googlegroups.com...
>>
>>>how to effectively put an analog-meter's clear plastic cover at dc
>>>ground, to prevent buildup of static charge?
>>
>>
>> Replace the movement with a digital readout.
>
>How will that help?

No needle.

--
John Fields
Professional Circuit Designer

1238. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-11 01:34:56 UTC
From: jerry wass <wassbiplane@tds.net>
Message-ID: <43ed3af9$1_2@newspeer2.tds.net>
Source record: 13739
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

dances_with_barkadas@yahoo.com wrote:
> how to effectively put an analog-meter's clear plastic cover at dc
> ground, to prevent buildup of static charge?
>
In Lieu of sprays & wet stuff--get one of those fabric-softner paper
rags ya throw in the drier to stop static kling. get a string anywhere
from 24 to 37 inches long, tie one end of it to the paper towel, & the
other end to a place you can reach in the cockpit.

wipe meter occasionally..

Jerry

1239. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-11 02:00:07 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <h6hqu1ltggrkihpq80tvr0sv2t15et8thm@4ax.com>
Source record: 13740
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

On 10 Feb 2006 13:01:07 -0800, dances_with_barkadas@yahoo.com wrote:

>how to effectively put an analog-meter's clear plastic cover at dc
>ground, to prevent buildup of static charge?

Commercially this is done with a very thin metallic film over the
plastic... so thin that it's not visible.

I don't know if there's a DIY way to do it.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

It's what you learn, after you know it all, that counts.

1240. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-11 02:01:33 UTC
From: Dasha Grant <ryanmorrisisahomosexual@yahoo.com>
Message-ID: <1139623293.288186.181420@z14g2000cwz.googlegroups.com>
Source record: 13741
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

ONLY A HOMOSEXUAL WOULD WORRY ABOUT BUILD UP OF STATIC CHARGE

1241. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-11 02:05:12 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <fhhqu1d90d610ui0o8b7t7ugjso04d58r1@4ax.com>
Source record: 13742
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

On 10 Feb 2006 18:01:33 -0800, "Dasha Grant"
<ryanmorrisisahomosexual@yahoo.com> wrote:

>ONLY A HOMOSEXUAL WOULD WORRY ABOUT BUILD UP OF STATIC CHARGE

What a scumbag. Bye.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

It's what you learn, after you know it all, that counts.

1242. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-11 02:11:40 UTC
From: Dasha Grant <ryanmorrisisahomosexual@yahoo.com>
Message-ID: <1139623900.523500.222860@z14g2000cwz.googlegroups.com>
Source record: 13743
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

Jim Thompson wrote:
> On 10 Feb 2006 18:01:33 -0800, "Dasha Grant"
> <ryanmorrisisahomosexual@yahoo.com> wrote:
>
> >ONLY A HOMOSEXUAL WOULD WORRY ABOUT BUILD UP OF STATIC CHARGE
>
> What a scumbag. Bye.
DON'T LET THE DOOR HIT YOUR ASS ON THE WAY OUT NOT THAT YOU WOULDN'T
LIKE THAT
>
> ...Jim Thompson
> --
> | James E.Thompson, P.E. | mens |
> | Analog Innovations, Inc. | et |
> | Analog/Mixed-Signal ASIC's and Discrete Systems | manus |
> | Phoenix, Arizona Voice:(480)460-2350 | |
> | E-mail Address at Website Fax:(480)460-2142 | Brass Rat |
> | http://www.analog-innovations.com | 1962 |
>
> It's what you learn, after you know it all, that counts.

1243. NEW WEBSITE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-11 02:23:42 UTC
From: VK4FACT <vk4fact@bigpond.com>
Message-ID: <OUbHf.4974$yK1.154@news-server.bigpond.net.au>
Source record: 13744

http://www.vkcorner.com

1244. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-11 05:01:57 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_43ed6b2c@fidonet.org>
Source record: 13745

"Jim Thompson" bravely wrote to "All" (10 Feb 06 19:00:07)
--- on the heady topic of "Re: static-grounding of meter movements?"

JT> From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
JT> Xref: core-easynews sci.electronics.repair:358021
JT> sci.electronics.design:548681 rec.radio.amateur.homebrew:91833
JT> rec.aviation.homebuilt:253291 sci.engr.control:38467

JT> On 10 Feb 2006 13:01:07 -0800, dances_with_barkadas@yahoo.com wrote:

>how to effectively put an analog-meter's clear plastic cover at dc
>ground, to prevent buildup of static charge?

JT> Commercially this is done with a very thin metallic film over the
JT> plastic... so thin that it's not visible.

JT> I don't know if there's a DIY way to do it.

Is it Indium based paint like in LCD display conductors?

A*s*i*m*o*v

1245. Re: steve talking shit again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-11 13:56:44 UTC
From: Jim Stewart <jim.gm4dhj@ntlworld.com>
Message-ID: <w2mHf.27761$Fy4.1261@newsfe4-win.ntli.net>
Source record: 13746
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

hi

--
http://jimstewart.net/
"an_old_friend" <konstans@hotmail.com> wrote in message
news:1137353789.349967.122950@f14g2000cwb.googlegroups.com...
>
> K4YZ wrote:
>> Dave Heil wrote:
>> > an_old_friend wrote:
>> > > Dave Heil wrote:
>> > >> an_old_friend wrote:
>> > >>> K4YZ wrote:
>> > >>>> Dear Chaps in the UK:
>> > >>>>
>> > >>>> The hate and discontent just spewed upon you per the nickname
>> > >>>> of
>> > >>>> "an_old_friend" is none other than Mark C. Morgan, KB9RQZ.
>> > >>>
>> > >>> no hate spewed stve just caling ##### #####
>> > >>
>> > >> If you're referring to your original post, you are quite correct.
>> > >> It
>> > >> was and is.
>> > >
>> > > indeed and that means Steve lied in calling it something else
>> >
>> > No, I don't think he did. You just summed up your post very
>> > succinctly.
>> > Steve was much too kind.
>
> yes he lied in calling ti hate
>
> it was shit
>>
>> He'll never understand what he did to himself there, Dave...
>
> I sur e did
>
> I took that ponderous bog shit that the idoit reopsts so often buried
> one of the read in a mire of shit
>
>>

>> Just sit back and enjoy the show!
>>
>> I am!
>>
>> 73
>>
>> Steve, K4YZ
>

1246. Query on phase shift in Network Analyzer Interconnects...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-11 14:11:40 UTC
From: Paul Burridge <pb@shove.your.spam.up.your.arse.atlanticstar.co.uk>
Message-ID: <p2qru1580isfoq1odbpolgg4m1s39q23td@4ax.com>
Source record: 13598
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

The RG-214 cable I ordered from Germany to make up some patch leads for my VNA has finally arrived. It was advertised as "high-end audio cable" which is what it's commonly sold as over there (those wacky Germans!) but it *is* the real deal low-loss 50 ohm UHF cable, nevertheless (just as well since it took 3 months to arrive).

Now I have to make up these leads with N-type connectors to replace the stock leads that didn't come with the analyzer. These hook up the VNA to the Transmission/Reflection Test Set (which I do have). I see from HP's tech spec that the interconnects I need to copy comprise what was originally sold as the "11851A RF cable kit" and it consists of four cables. Now here's the tricky bit:

"Kit includes three 24" 50 ohm cables, phase-matched to 4 degrees @ 1300Mhz and one 34" cable. The 34" cable is used to phase balance the transmission path of the Transmission/Reflection Test Set."

So does this mean the cable lengths are critical and if so, how best to go about making them up?

thanks,
p.

--

"What is now proved was once only imagin'd" - William Blake

1247. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-11 14:36:26 UTC
From: Richard Lamb <cavelamb@Xearthlink.net>
Message-ID: <KDmHf.13868$rH5.426@newsread2.news.atl.earthlink.net>
Source record: 13747
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

Jim Thompson wrote:
> On 10 Feb 2006 18:01:33 -0800, "Dasha Grant"
> <ryanmorrisisahomosexual@yahoo.com> wrote:
>
>
>>>ONLY A HOMOSEXUAL WOULD WORRY ABOUT BUILD UP OF STATIC CHARGE
>
>
> What a scumbag. Bye.
>
> ...Jim Thompson

I realize that this kind of behavior is common on most of the net,
but it is NOT welcome at RAH.

Please take your ugly attitude (and language) and go away until
you can display some maturity and a bit of self control.

Richard

1248. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-11 16:02:41 UTC
From: SQLit <sqlit@qwest.net>
Message-ID: <8VnHf.13$vE1.7327@news.uswest.net>
Source record: 13599
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

<dances_with_barkadas@yahoo.com> wrote in message
news:1139605267.419899.135370@g44g2000cwa.googlegroups.com...
> how to effectively put an analog-meter's clear plastic cover at dc
> ground, to prevent buildup of static charge?

I had this problem with a Simpson 260 years ago. Some uninformed person used
something to wipe the plastic screen/cover with something that imparted
static. Drove the needle crazy.
I ended up replacing the screen/cover and the problem when away.

I do not think that grounding the screen, non conductive to the dc ground is
going to help.
but I have been wrong before.

1249. Re: Query on phase shift in Network Analyzer Interconnects...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-11 17:38:25 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2006.02.11.17.39.11.954866@example.net>
Source record: 13600
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Sat, 11 Feb 2006 15:11:40 +0100, Paul Burridge wrote:

> The RG-214 cable I ordered from Germany to make up some patch leads for my
> VNA has finally arrived. It was advertised as "high-end audio cable" which
> is what it's commonly sold as over there (those wacky Germans!) but it
> *is* the real deal low-loss 50 ohm UHF cable, nevertheless (just as well
> since it took 3 months to arrive).
>
> Now I have to make up these leads with N-type connectors to replace the
> stock leads that didn't come with the analyzer. These hook up the VNA to
> the Transmission/Reflection Test Set (which I do have). I see from HP's
> tech spec that the interconnects I need to copy comprise what was
> originally sold as the "11851A RF cable kit" and it consists of four
> cables. Now here's the tricky bit:
>
> "Kit includes three 24" 50 ohm cables, phase-matched to 4 degrees @
> 1300Mhz and one 34" cable. The 34" cable is used to phase balance the
> transmission path of the Transmission/Reflection Test Set."
>
> So does this mean the cable lengths are critical and if so, how best to go
> about making them up?

I'd brush up on my N connector soldering, so I can get it in a consistent
place relative to the end of the cable, and just measure four cables of 24"
minus 2X whatever the length of the rest of the N connector is, and
possibly put them in some kind of jig.

It doesn't sound like it's the _length_ that's critical, but the _matching_
of those lengths.

About the 34" cable, I have no idea what the rest of that sentence means. ;-)

Cheers!
Rich

1250. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-11 18:33:33 UTC
From: ELIPPSE <elippse@sbcglobal.net>
Message-ID: <1139682812.988784.285320@g44g2000cwa.googlegroups.com>
Source record: 13601
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

With a little practice, you can get the needle to point just about
anywhere you want! 'Comes in handy when you are trying to impress
someone with a good reading about some quantity! By the way, not
limited to plastic. Glass faces hold the charge well, too!

1251. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-11 18:38:40 UTC
From: Jerry Avins <jya@ieee.org>
Message-ID: <5Iidnd_R5eKssnPeRVn-sQ@rcn.net>
Source record: 13602
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

SQLit wrote:

...

> I do not think that grounding the screen, non conductive to the dc ground is
> going to help.
> but I have been wrong before.

Use what's at hand. On one occasion, I used fine wire cloth inside the
cover (grounded, of course). In RF transmitters, we used wire cloth not
to prevent static build-up, but to prevent RF leakage from the rack.

Jerry
--
Engineering is the art of making what you want from things you can get.
ï¿½
ï¿½
ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½

1252. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-11 19:19:06 UTC
From: Risto Tiilikainen <risto.NON.tiilikainen@luukku.comMUNIST.invalid>
Message-ID: <43ee37e8$0$25337$39db0f71@news.song.fi>
Source record: 13603
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

dances_with_barkadas@yahoo.com wrote:

>how to effectively put an analog-meter's clear plastic cover at dc
>ground, to prevent buildup of static charge?
>
>
>
Hi !

Visit the nearest university where is an electron microscope.
They have sputter devices to cover EM samples with a thin gold, silver
or carbon layer.

Maybe you can motivate them to sputter your meter front plate with a
thin and practically invisible gold layer .
Ask them to sputter the inside of the plate.
They have also silver paint for SEM samples
You need to paint a narrow conductor outside from this sputtered inner
surface to ground the sputtered area.
Best to paint a conductor to all 4 corners

Once I sputtered a table tennisball with gold.
The idea was to make a very light corona hat for a low band wire
vertical lifted by helium balloon

73, Risto OH2BT

1253. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-11 21:06:55 UTC
From: Keith <krw@att.bizzzz>
Message-ID: <pan.2006.02.11.21.06.53.896680@att.bizzzz>
Source record: 13605
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

On Fri, 10 Feb 2006 19:00:07 -0700, Jim Thompson wrote:

> On 10 Feb 2006 13:01:07 -0800, dances_with_barkadas@yahoo.com wrote:
>
>>how to effectively put an analog-meter's clear plastic cover at dc
>>ground, to prevent buildup of static charge?
>
> Commercially this is done with a very thin metallic film over the
> plastic... so thin that it's not visible.
>
> I don't know if there's a DIY way to do it.

Dish washing soap? IIRC, something similar is used in anti-stat baggies.

--
Keith

1254. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-11 21:08:53 UTC
From: "Paul E. Schoen" <pstech@smart.net>
Message-ID: <11uskcs1rj958ec@corp.supernews.com>
Source record: 13604
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

"Jim Thompson" <To-Email-Use-The-Envelope-Icon@My-Web-Site.com> wrote in
message news:h6hqu1ltggrkihpq80tvr0sv2t15et8thm@4ax.com...
> On 10 Feb 2006 13:01:07 -0800, dances_with_barkadas@yahoo.com wrote:
>
> >how to effectively put an analog-meter's clear plastic cover at dc
> >ground, to prevent buildup of static charge?
>
> Commercially this is done with a very thin metallic film over the
> plastic... so thin that it's not visible.
>
> I don't know if there's a DIY way to do it.
>
> ...Jim Thompson

When I worked at EIL many years ago as a meter technician, we had antistatic spray that we applied both inside and outside the plastic meter covers. It was probably very similar to a detergent or fabric softener. I think such sprays are still available from Tech-Spray or similar suppliers, and also places that cater to electronics repair, like MCM. I think antistatic sprays are also used on drive belts in VCRs and tape players.

Some meters I worked on had a metal plate on the lower part of the inside cover, and it was connected to the frame of the movement with a small leaf spring.

I have seen some sensitive meters where the pointer could be dragged to half scale, and would stay there for a while, by rubbing the outside of the plastic cover. This is certainly a concern for accuracy. The older glass cover windows did not have such problems with static.

--
Paul E. Schoen, President
P S Technology, Inc.
Cockeysville, MD
www.pstech-inc.com

1255. Re: Query on phase shift in Network Analyzer Interconnects...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-11 22:40:10 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1139697610.475039.121590@o13g2000cwo.googlegroups.com>
Source record: 13606
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Yes, you probably do want the cables to be the same length electrically, especially if you don't have an automatic way to apply a calibration correction, just for convenience if nothing else. 4 degrees at 1300MHz is about 1.5mm, assuming solid polyethylene dielectric. You may be able to achieve that sort of matching if you are really careful in your construction. What sort of connectors are you using? If they are they type where you solder or crimp the pin to the center conductor and put the line into the body of the connector until the dielectric hits the dielectric of the connector, you should be able to come close to that sort of match in physical length by very accurately matching the length of the dielectric, and cutting it very cleanly perpendicular to the axis of the coax. If you're using good coax, the variation in velocity factor from piece to piece should be small, and so as long as you don't try to make really long cables, you should do well.

Note that you can calibrate out lead length differences. A difference leads presumably to a phase error that ramps linearly with frequency. Does your VNA have a way to remove/add a time or at least a constant phase to the readout? And you can perhaps arrange to measure the electrical length differences. If you can do that, then you can make up, say, four of the 24" (nom) cables, and pick two matching ones to go to the two receiver inputs. Note that the length from the source to the coupler (T/R test set) is NOT CRITICAL at all. So make some cables as close to the same as you can, and pick the best-matched two for the receiver cables. That should let you make good reflection measurements. Then you can either adjust the length of the longer cable, or calibrate out its length error, for transmission measurements, assuming you care about phase. Often you'd have to account for the length of connectors and other cables to your DUT anyway.

I've made some measurements on some rather expensive test cables and found the electrical length to vary more than I'd have expected, though they weren't matched sets. I'd hate to have to select a matched set from such cables, though, as it would take quite a few cables to assure that I'd get two that matched close enough! For several hundred dollars per cable, I'd have expected they'd hold them closer to the nominal length.

Cheers,
Tom

(Note that some extra care is taken in the design and construction of the coupler to get accurately matched paths to the two receiver outputs!)

1256. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-11 23:39:49 UTC
From: Yukio YANO <yano@shaw.ca>
Message-ID: <9BuHf.601131$ki.435296@pd7tw2no>
Source record: 13607
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

Risto Tiilikainen wrote:
> dances_with_barkadas@yahoo.com wrote:
>
>> how to effectively put an analog-meter's clear plastic cover at dc
>> ground, to prevent buildup of static charge?
>>
>>
>>
> Hi !
>
> Visit the nearest university where is an electron microscope.
> They have sputter devices to cover EM samples with a thin gold, silver
> or carbon layer.
>
> Maybe you can motivate them to sputter your meter front plate with a
> thin and practically invisible gold layer .
> Ask them to sputter the inside of the plate.
> They have also silver paint for SEM samples
> You need to paint a narrow conductor outside from this sputtered inner
> surface to ground the sputtered area.
> Best to paint a conductor to all 4 corners
>
> Once I sputtered a table tennisball with gold. The idea was to make a
> very light corona hat for a low band wire vertical lifted by helium
> balloon
>
> 73, Risto OH2BT
>
>
>
Carbon works best for this particular problem but can't be Sputtered
ie. You need to use the High Vaccumn set-up to Evaporate a Carbon Film.
I think the Fabric Softener is the more practical way for most people.
The Carbon film is used to reduce charging problems with the Electron
beam ! And the fabric softener is incompatible with the Ultra High
Vacuumn systems used .

RE Sputter coated Tennis ball, Talk about taking the phrase "Gilding the
Lily" to new heights !! A small sheet of aluminum foil would have done
as well, but would not look as impressive.

Been there done that.

BTW a modification of the Carbon Coating Process is used to produce a Diamond Coating on high-tech surfaces.

Yukio YANO
VE5YS

1257. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-12 03:03:12 UTC
From: Jerry Avins <jya@ieee.org>
Message-ID: <7aednWDqALDtOHPeRVn-vg@rcn.net>
Source record: 13608
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

```
Yukio YANO wrote:

...

> RE Sputter coated Tennis ball, Talk about taking the phrase "Gilding the
> Lily" to new heights !! A small sheet of aluminum foil would have done
> as well, but would not look as impressive.
>
> Been there done that.
>
> BTW a modification of the Carbon Coating Process is used to produce a
> Diamond Coating on high-tech surfaces.

Tin oxide has been an industry standard evaporated conductive film since
at least the late 50s. It is used today as wiring for TFT displays.
http://www.google.com/search?q=+conductive+film%22tin+oxide%22

Jerry
--
Engineering is the art of making what you want from things you can get.
ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½
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1258. Re: FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-12 06:53:22 UTC
From: jmiles@gmail.com
Message-ID: <1139727202.050144.259860@z14g2000cwz.googlegroups.com>
Source record: 13609
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

Quite a few of the projects at http://www.qsl.net/ke5fx -- plus some
smaller fry that I haven't had time to document yet.

1259. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-12 13:00:23 UTC
From: ".Blueskies." <nospamblueskies@ameritech.net>
Message-ID: <HjGHf.29433$F_3.27461@newssvr29.news.prodigy.net>
Source record: 13610
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

"Paul E. Schoen" <pstech@smart.net> wrote in message
news:11uskcs1rj958ec@corp.supernews.com...
>
...> I have seen some sensitive meters where the pointer could be dragged to half
> scale, and would stay there for a while, by rubbing the outside of the
> plastic cover. This is certainly a concern for accuracy. The older glass
> cover windows did not have such problems with static.
>
>
> --
> Paul E. Schoen, President
> P S Technology, Inc.
> Cockeysville, MD
> www.pstech-inc.com
>
>

Need to get the calibration just right...One swipe or two?

;-)

1260. FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-12 19:16:02 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <dso1hiqtv1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13611
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Has anyone any info on servicing one of these?

The power control is out of alignment (about 3/4 of the way up it suddenly jumps into TX at full power, with it being very sensitive to get any control between full and no power).

Possibly a bias problem on the PA?

And the power meter needs re-aligning.

And the FM deviation is too high.

Can anyone point me towards the internal pots?

Thanks,

Sam
M1FJB

1261. Re: FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-12 19:40:02 UTC
From: G4ZWI <fred.c@ntlworld.com>
Message-ID: <1139773202.922039.264310@g44g2000cwa.googlegroups.com>
Source record: 13612
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Hiya Sam, I had one of these, I am sure the FM pot is on the 'local' board, which is the one with the patch/ptt/CAT sockets on. VR02 I am sure, and it feeds the fm af amp transistor, q2008. As for the power control, they are very 'jumpy', all on or off, and very narrow over the operating range, sure yours is just as they are. I also still have the mobile mount for it in the loft, I think!!!!!!!!
Cheers, Fred G4ZWI

1262. Re: FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-12 19:44:57 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <dso37p$5bk$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13613
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Hi Fred...

Ah, never mind then, I'll have to live with it (well not me, I'm asking on behalf of a friend).

Any ideas about the meter though, that needs re-calibrating.

Sam

"G4ZWI" <fred.c@ntlworld.com> wrote in message news:1139773202.922039.264310@g44g2000cwa.googlegroups.com...
> Hiya Sam, I had one of these, I am sure the FM pot is on the 'local'
> board, which is the one with the patch/ptt/CAT sockets on. VR02 I am
> sure, and it feeds the fm af amp transistor, q2008. As for the power
> control, they are very 'jumpy', all on or off, and very narrow over the
> operating range, sure yours is just as they are. I also still have the
> mobile mount for it in the loft, I think!!!!!!!!
> Cheers, Fred G4ZWI
>

1263. Re: FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-12 20:03:59 UTC
From: G4ZWI <fred.c@ntlworld.com>
Message-ID: <1139774639.585975.20540@g14g2000cwa.googlegroups.com>
Source record: 13614
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Never had to tweak that one Sam. There is a preset near the meter
driver circuit, (An6552, Q51, on the R.F. board.) That may be the one.
There is a 'pot' to set the FSD of the meter on Tx (for SWR forward
reading, obviously you set it to full scale, then set the swr switch to
reverse.) It is not that this control has been set too far up?? (Its on
the back of the unit, under the antenna socket, marked 'fwd set'?)
Best of luck, mate, I have got a few bits of cct diagrams if you are
really stuck, and may help....
Fred

1264. 'Radio Spares' High Power Voltage Regulator spec ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-12 20:20:34 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <kuednfA3-soDBXLeRVny1Q@pipex.net>
Source record: 13615

Recently I acquired a DC PSU with a RS High Power Voltage Regulator RS stock nr 30-541-2. Embossed is the code : D7140
The device integrated on a substantial heat sink is probably 20 + yrs old . It was made in the UK
I can't find any reference in any RS catalogue or on their web site.
The device has 5 pins :
pin 1 + DC input
pin2 - DC input

pin3 and 4 are wire-connected

pin3,4 + output
pin 5 - output

A varying input voltage gives a lower varying output voltage .

The associated transformer (also a RS component) has the following (centre-tapped) secondary 13.5 - 0 - 13,5 V @ 3A with bridge rectifier and the 4 electrolytic capacitors (all in parallel) are having a working voltage of 25 V , so it highly likely was a 20to24 V-DC PSU Any spec. info regarding the heat-sinked device will be much appreciated.

Frank GM0CSZ / KN6WH

1265. Re: 'Radio Spares' High Power Voltage Regulator spec ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-12 22:53:15 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1139784795.482831.294660@o13g2000cwo.googlegroups.com>
Source record: 13616

I vaguely remember them. It sounds as though it is faulty, I'd replace
it with something like a modern 3A regulator.

Leon

1266. Russian GU-46 tube for KW amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-12 23:53:53 UTC
From: DOUGLAS SNOWDEN <snowden@peoplepc.com>
Message-ID: <IUPHf.10456$Nv2.5484@newsread1.news.atl.earthlink.net>
Source record: 13617

Has anyone used one of these for a linear? I think they are pentodes and have 8.3v filament.

Doug N4IJ

1267. Re: FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-13 02:10:47 UTC
From: mikeFNB <mikefnb@moc.dlrowltn>
Message-ID: <HURHf.6278$gB4.801@newsfe4-gui.ntli.net>
Source record: 13618
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

the full ervice manual is on mod.dk site
the power variable on the front panel always was 'iffy' though a squirt of cleaner (not WD40) might help.
dont forget as the other gent says, the SWR pot on the back will effect the meter PO scale.
also it is caled into 50R so will not read correct of an aerial or ATU. as such.

if you wish help
pse ask

done loads and own one since 1985

mike

"Samuel Hunt" <shunt010@hotmail.com> wrote in message news:dso1hiqtv1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com...
> Has anyone any info on servicing one of these?
>
> The power control is out of alignment (about 3/4 of the way up it suddenly
> jumps into TX at full power, with it being very sensitive to get any
> control between full and no power).
>
> Possibly a bias problem on the PA?
>
> And the power meter needs re-aligning.
>
> And the FM deviation is too high.
>
> Can anyone point me towards the internal pots?
>
>
> Thanks,
>
> Sam
> M1FJB
>

1268. Re: static-grounding of meter movements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-13 02:34:49 UTC
From: GBrown <gkbrown@gwi.net>
Message-ID: <4NidnS1fyZRhc3LeRVn-sg@gwi.net>
Source record: 13619
Cross-posted to: sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.aviation.homebuilt,sci.engr.control

I had similar problem, went to tool box and came back with 16 oz. Estwing
hammer. Never had any more problems with the meter.

--
Regards,
Gary..
<dances_with_barkadas@yahoo.com> wrote in message
news:1139605267.419899.135370@g44g2000cwa.googlegroups.com...
> how to effectively put an analog-meter's clear plastic cover at dc
> ground, to prevent buildup of static charge?
>

1269. Re: Homebrew in north Seattle/Everett area? Or a FAQ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-13 07:31:45 UTC
From: charlesh3@msn.com
Message-ID: <Ea6dnXwmTcRDqG3enZ2dnUVZ_tadnZ2d@giganews.com>
Source record: 13620

Bad news.... The Old Technology Shop has gone to the Old Technology Home In The Sky. They closed up shop about 6 months ago. Thefellow who ran it intends to keep selling from his basement, but I haven't heard anything from him.

Sorry,

Chuck
(happy owner of Tom Bruhn's downsized QST's)

1270. Re: FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-13 08:55:27 UTC
From: g0mjy@blueyonder.co.uk
Message-ID: <1139820926.953412.54470@z14g2000cwz.googlegroups.com>
Source record: 13621
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Samuel Hunt wrote:
> Has anyone any info on servicing one of these?
>
> The power control is out of alignment (about 3/4 of the way up it suddenly
> jumps into TX at full power, with it being very sensitive to get any control
> between full and no power).
>
> Possibly a bias problem on the PA?
>
> And the power meter needs re-aligning.
>
> And the FM deviation is too high.
>
> Can anyone point me towards the internal pots?
>
>
> Thanks,
>
> Sam
> M1FJB

Have a look on this url, the full workshop manual can be downloaded for
free

http://foxtango.ham-radio-op.net/Eighties/Eighties.htm

regards

Dave

1271. Re: FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-13 09:07:58 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <O%XHf.40475$494.10242@newsfe2-gui.ntli.net>
Source record: 13622
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

<g0mjy@blueyonder.co.uk> wrote in message
news:1139820926.953412.54470@z14g2000cwz.googlegroups.com...

>
> Have a look on this url, the full workshop manual can be downloaded for
> free
>
> http://foxtango.ham-radio-op.net/Eighties/Eighties.htm
>

That is a useful link.

I see they have manuals for the FT101 as well:

http://foxtango.ham-radio-op.net/FT101/FT101.htm

Wasn't there someone who couldn't tune the PA on one of these as some pages
were missing from his manual?

--
73
Brian
www.g8osn.org.uk

1272. Re: FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-13 09:40:35 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <8qk0v1d8g3i31omni7henj7qhe03v2ecmj@4ax.com>
Source record: 13623
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Brian Reay wrote:

>
>I see they have manuals for the FT101 as well:
>
>http://foxtango.ham-radio-op.net/FT101/FT101.htm
>
>Wasn't there someone who couldn't tune the PA on one of these as some pages
>were missing from his manual?
>

Isn't that the same chappy who's radio scheme enjoins potential
candidates to 'repair their rigs with gusto' (or some such claptrap
phrase) but neglects to mention that he only advises they do so to
low-powered transistorised rigs, and avoids compact valve PAs with
600VDC on the anodes?

from
Aero Spike

1273. FS: 0-60V/0-20A DC pwr supply with constV & constI regulation

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-13 10:57:06 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <6CZHf.79828$tK4.1536@tornado.ohiordc.rr.com>
Source record: 13624

FS: 0-60V/0-20A DC pwr supply with constV & constI regulation

Good working order (and good appearance fwiw)
Commercially-made by Mid-Eastern Electronics, Inc., Springfield, NJ
19" rack-mt, perf cover
chrome frt-pnl carrying handles,
11" front-panel height, 15" deep
4-1/2" GE V-A meters,
off/on bat-handle toggle sw,
current-limit pot,
V-coarse & fine pots,
red panel lamp,
frt-pnl banana-socket out, remote-sense and gnd terminals,
rear-drop barrier-strip connections same as front,
120VAC-only input, 30A, has pwr cord & plug.

Weight: 70 lb., figure ~100lb. ship wgt. Will hold the card-table down ;o)

Will ship in wood crate from 45251, or u-pick-up.

$200 obo + u-ship-insure. May be able to ship UPS if you pick it up at
depot near you.

73, Dave, N3HE

1274. stud sizes of terminal boards, matching spade lugs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-13 16:34:48 UTC
From: dances_with_barkadas@yahoo.com
Message-ID: <1139848488.726195.326880@g14g2000cwa.googlegroups.com>
Source record: 13625
Cross-posted to: sci.electronics.design,sci.electronics.equipment,rec.radio.amateur.homebrew

seek information regarding stud sizes of connectors on terminal boards,
and which spade lugs are spec'd to fit each.

by the way, how are spade lugs sized?

1275. Re: Russian GU-46 tube for KW amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-13 16:50:16 UTC
From: Risto Tiilikainen <risto.NON.tiilikainen@luukku.comMUNIST.invalid>
Message-ID: <43f0b801$0$23137$39db0f71@news.song.fi>
Source record: 13626

DOUGLAS SNOWDEN wrote:

>Has anyone used one of these for a linear? I think they are pentodes and
>have 8.3v filament.
>
>Doug N4IJ
>
>
>
>
Hi

Seems really to be a pentode

Here is one links found by Google
http://cgi.ebay.co.uk/GU-46-4-1000A-QB5-1750-1000-W-Glass-Amplifier-Pentod_W0QQitemZ5860722528QQcategoryZ48710QQcmdZViewItem
There is be a mistake in the link European symbol QB means tetrode
Pentode is typed as QE
Here is a russian link
http://www.tubes.ru/techinfo/Broadcast/gu-46.html

As in linear amplifiers I remember them beeing used in grounded grid
circuit (all grids bound together and RF earthed and zener biased for
correct AB class)
Drive to filament where ferrite rod chokes are used.

I have used above mentioned tetrode QB 5/1750 successfully in
GG-linear amplifier.

73 , Risto OH2BT

1276. Re: stud sizes of terminal boards, matching spade lugs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-13 17:13:32 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1139850812.815518.125710@f14g2000cwb.googlegroups.com>
Source record: 13627
Cross-posted to: sci.electronics.design,sci.electronics.equipment,rec.radio.amateur.homebrew

Suggest you go to the web sites of the manufacturers of the particular terminal boards you're interested in and download specifications (usually pdf documents) that should give you such info; same with the spade lugs. But generally both would be spec'd for standard screw sizes: numbers (4, 5, 6, 8, ...) in the US and metric (millimeters) pretty much everywhere else. Those of us in the US that manufacture for the international market really are using metric wherever possible, and some day someone with some real leadership will wake up and get us really converted over to metric. Sigh. BTW, you can (or at least used to be able to) get rows of spade lugs on an insulating strip to match particular barrier terminal blocks, both from the same manufacturer.

1277. Re: stud sizes of terminal boards, matching spade lugs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-13 17:48:06 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1139852886.208117.215570@g47g2000cwa.googlegroups.com>
Source record: 13628
Cross-posted to: sci.electronics.design,sci.electronics.equipment,rec.radio.amateur.homebrew

dances_with_barkadas@yahoo.com wrote:
> seek information regarding stud sizes of connectors on terminal boards,
> and which spade lugs are spec'd to fit each.

I think you might benefit from looking through the Keystone Electronics
catalog, they have some dimensional drawings.

> by the way, how are spade lugs sized?

In the US, #5 or #6 screws are the most common on small barrier
terminal strips. Spade lugs are available in #2, #4, #6, #8, #10, 1/4"
etc. screw sizes.

Tim.

1278. Re: 'Radio Spares' High Power Voltage Regulator spec ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-13 19:17:30 UTC
From: "John Jardine." <john@jjdesigns.fsnet.co.uk>
Message-ID: <dsqm0bcfl1@news6.svr.pol.co.uk>
Source record: 13629

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:kuednfA3-soDBXLeRVny1Q@pipex.net...
> Recently I acquired a DC PSU with a RS High Power Voltage Regulator RS
> stock nr 30-541-2. Embossed is the code : D7140
> The device integrated on a substantial heat sink is probably 20 + yrs old
> . It was made in the UK
> I can't find any reference in any RS catalogue or on their web site.
> The device has 5 pins :
> pin 1 + DC input
> pin2 - DC input
>
> pin3 and 4 are wire-connected
>
> pin3,4 + output
> pin 5 - output
>
> A varying input voltage gives a lower varying output voltage .
>
> The associated transformer (also a RS component) has the following
> (centre-tapped) secondary 13.5 - 0 - 13,5 V @ 3A with bridge
rectifier
> and the 4 electrolytic capacitors (all in parallel) are having a working
> voltage of 25 V , so it highly likely was a 20to24 V-DC PSU Any spec.
> info regarding the heat-sinked device will be much appreciated.
>
> Frank GM0CSZ / KN6WH
>
>
There's a 2-35V, 2A, adjustable, high power PSU, RS stock #308-152, in the
1985 catalogue (£23.28!). Has same pinouts and on a big square finned
heatsink, maybe similar item?.
john

1279. TEN TEC KIT 1253

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-13 22:54:36 UTC
From: Daniele <dastREMOVE@tuberadio.it>
Message-ID: <M68If.92818$eD5.1554510@twister2.libero.it>
Source record: 13630

Hi all,
i've recently acquired this funny box, assembled by the previous owner.
I'd like to add a digital frequency counter (i've a couple waiting on the
bench)
and a tuning indicator, anyone tried this before and having schematics or
hints
of where to take the correct signal?
Thanks in advance,

--

Daniele ^___^
http://www.tuberadio.it

1280. Re: TEN TEC KIT 1253

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-14 01:35:45 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <RtaIf.5863$3V4.947@trnddc06>
Source record: 13631

"Daniele" <dastREMOVE@tuberadio.it> wrote in message
news:M68If.92818$eD5.1554510@twister2.libero.it...
> Hi all,
> i've recently acquired this funny box, assembled by the previous owner.
> I'd like to add a digital frequency counter (i've a couple waiting on the
> bench)
> and a tuning indicator, anyone tried this before and having schematics or
> hints
> of where to take the correct signal?
> Thanks in advance,
>
> --
>
> Daniele ^___^
> http://www.tuberadio.it
>
>
Isn't that a regen receiver- don't think you'll be adding a counter to that.

Dale W4OP

1281. Re: Radio Shack Electronic Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-14 02:10:48 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1e55761b80ddef259896db@news-server.socal.rr.com>
Source record: 13632
Cross-posted to:
sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.repair,comp.robotics.misc

In article <1137287851.160900.117570@z14g2000cwz.googlegroups.com>,
too_many_tools@yahoo.com says...
> I like many of you had my first experience with electronics through the
> electronic kits that Radio Shack has had over the years. The versions
> that spanned the 50, 100, 200 electronic experiments all come to mind.
>
> My question is...how many versions and types of these kits have they
> had over the years?
>
> I would be interested in hearing which ones you recall.

I don't know how many they've had, but I remember being overjoyed one Christmas when I got the 50-in-1 kit. It was the one with the wooden case, and all the components were on the main board with spring connections.

I just bought one for my grandson for last Christmas. This one was 200-in-1 and had several ICs for mounting on a breadboard system. Some components were mounted on the main board with spring connections, like the various potentiometers, LEDs and such. VERY nice system. We spent several hours going through some of the projects. He's having a great time with it!

Thank you, RS!

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net

1282. linex fm transmitter mods

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-14 08:05:41 UTC
From: cheezecorn <XL3381@AOL.COM>
Message-ID: <1139904341.943718.278730@f14g2000cwb.googlegroups.com>
Source record: 13633

Hi- I just purchased the non-USB Linex fm transmitter. I was wondering
if there are any mods that can be made to this guy that would increase
the signal distance. Sign me- dumb girl
Thanks

1283. NEW WEBSITE UPDATE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-14 08:33:49 UTC
From: 2greedy <vk4fact@bigpond.com>
Message-ID: <NBgIf.7814$yK1.2237@news-server.bigpond.net.au>
Source record: 13634

For those that cant access via flash page http://www.vkcorner.com the alternate url is http://www.vkcorner.com/forum/index.php.

1284. Dead bugs!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-14 21:32:07 UTC
From: Frank <Frank.2393l1@news.radiobanter.com>
Message-ID: <Frank.2393l1@news.radiobanter.com>
Source record: 13636

I'm going to attempt to build one of my ghost receievers dead bug style. The goal being to take something that I usually mount in an old PC case, and fit it into a cigar box. I've never tried dead bug, or ugly construction, but figure it should be the most spacerous mehtod, and I cany use both side of a board for seperate functions.

As far as my ghost receivers, just remember those proclaiming something is impossible are interupted by someone doing it. Believe it or not, like it or not, the dead talk! This IS the next frontier in electronics!

http://franksumption.tripod.com/

I still haven't quite gotten the LNM3820 to work the way I want it to. It works on the bread board, but not on a PCB.

Frank

--
Frank

1285. Test

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-14 21:54:31 UTC
From: Emanuela <emanuelap_pe@libero.it>
Message-ID: <43f25113$0$29097$5fc30a8@news.tiscali.it>
Source record: 13635

Do not disturb
W l' Italia

1286. Re: Dead bugs!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-15 06:30:36 UTC
From: Ed <none@this.time>
Message-ID: <gUzIf.56845$PL5.9763@newssvr11.news.prodigy.com>
Source record: 13637

The next frontier? Hell Frank, I built my first Doug DeMaw preamp 30 years ago "dead bug style"!
"Frank" <Frank.2393l1@news.radiobanter.com> wrote in message news:Frank.2393l1@news.radiobanter.com...
>
> I'm going to attempt to build one of my ghost receievers dead bug style.
> The goal being to take something that I usually mount in an old PC case,
> and fit it into a cigar box. I've never tried dead bug, or ugly
> construction, but figure it should be the most spacerous mehtod, and I
> cany use both side of a board for seperate functions.
>
> As far as my ghost receivers, just remember those proclaiming
> something is impossible are interupted by someone doing it. Believe
> it or not, like it or not, the dead talk! This IS the next frontier in
> electronics!
>
> http://franksumption.tripod.com/
>
> I still haven't quite gotten the LNM3820 to work the way I want it to.
> It works on the bread board, but not on a PCB.
>
> Frank
>
>
> --
> Frank

1287. Re: Dead bugs!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-15 09:03:39 UTC
From: John A <e455gkf@yahoo.co.uk>
Message-ID: <dsuqpg$nj8$1@newsg1.svr.pol.co.uk>
Source record: 13638

Gosh, you must have been in short trousers then, Ed!

"Ed" <none@this.time> wrote in message
news:gUzIf.56845$PL5.9763@newssvr11.news.prodigy.com...
> The next frontier? Hell Frank, I built my first Doug DeMaw preamp 30 years
> ago "dead bug style"!
> "Frank" <Frank.2393l1@news.radiobanter.com> wrote in message
> news:Frank.2393l1@news.radiobanter.com...
> >
> > I'm going to attempt to build one of my ghost receievers dead bug style.
> > The goal being to take something that I usually mount in an old PC case,
> > and fit it into a cigar box. I've never tried dead bug, or ugly
> > construction, but figure it should be the most spacerous mehtod, and I
> > cany use both side of a board for seperate functions.
> >
> > As far as my ghost receivers, just remember those proclaiming
> > something is impossible are interupted by someone doing it. Believe
> > it or not, like it or not, the dead talk! This IS the next frontier in
> > electronics!
> >
> > http://franksumption.tripod.com/
> >
> > I still haven't quite gotten the LNM3820 to work the way I want it to.
> > It works on the bread board, but not on a PCB.
> >
> > Frank
> >
> >
> > --
> > Frank
>
>

1288. Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-15 17:35:14 UTC
From: Skipp <skippNOSPAMPLEASE025@yahoo.com>
Message-ID: <dsvooiamc1@skeeter.ucdavis.edu>
Source record: 13639

Hello there,

I'm looking for you old tired stack of 73 and Ham Radio Magazines just to read at my pleasure. I'll be scanning some of the better articles into pdf files and making them available to others for free. Many of you have already seen the www.radiowrench.com/sonic web page.

If you'd like to donate or sell cheap your old mags, I'd like to have them. Where practical, I'll pay the shipping/postage and a bit for your time.

Please take the NOSPAMPLEASE from my email address below and drop me a line if you'd like to part with some old magazines...

73's
skipp

skipp025 at yahoo.com

skippNOSPAMPLEASE025@yahoo.com

1289. New Program : OP_ANGLE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-15 17:51:34 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <dsvpn6$629$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13640

New Program - OP_ANGLE.exe

This program assists with understanding, choosing and setting the
operating angles of Class-B and Class-C RF power amplifiers.

The operating angle underlies all performance characteristics.

Although RF operating conditions for tubes can be set up using
manufacturers' data sheets, the program refers to use of a tube's
Operating Characteristic Curves.

Download program OP_ANGLE in a few seconds from website below. Not
zipped up. Run immediately. File size = 39 kilobytes.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

1290. Re: Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-15 18:40:42 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11v6tdf5irev054@corp.supernews.com>
Source record: 13641

Skipp wrote:
> Hello there,
>
> I'm looking for you old tired stack of 73 and Ham Radio Magazines just to
> read at my pleasure. I'll be scanning some of the better articles into pdf
> files and making them available to others for free. Many of you have
> already seen the www.radiowrench.com/sonic web page.
> . . .

Have you obtained permission from the copyright owners to do this?

Roy Lewallen, W7EL

1291. Re: Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-16 02:46:08 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <ZERIf.524$jo5.218@bignews1.bellsouth.net>
Source record: 13642

Skipp wrote:
> Hello there,
>
> I'm looking for you old tired stack of 73 and Ham Radio Magazines just to
> read at my pleasure. I'll be scanning some of the better articles into pdf
> files and making them available to others for free. Many of you have
> already seen the www.radiowrench.com/sonic web page.
>
> If you'd like to donate or sell cheap your old mags, I'd like to have
> them. Where practical, I'll pay the shipping/postage and a bit for your
> time.
>
> Please take the NOSPAMPLEASE from my email address below and drop me a
> line if you'd like to part with some old magazines...
>
> 73's
> skipp
>
> skipp025 at yahoo.com
>
> skippNOSPAMPLEASE025@yahoo.com
>
>
I have an old 1950 Radio Experiment magazine with all sorts of tube
projects. It's yellowed and falling apart. I'm trying to scan it
and wanted to post the scans someplace. I started posting on the
alt.binaries.photo.radio and rec.antique.radio+phono newsgroups
and got lots of good ideas on how to adjust my scanner and what
format to save it in. When I have the time to scan all 160 pages
I'd like to make this available (I don't have the web space and
the binaries news groups only have a life time of a few days).

I have lots of old (1966-1973) pop'tronics magazines and some
1970-1980 CQ and assorted 73's someplace. I know I have
the very first 2 73 magazines hidden someplace. Also late 60's
electronics illustrated magazines. Eventually, I'd like to scan
all of them and make them available.

1292. Re: Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-16 02:49:02 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <HHRIf.536$jo5.147@bignews1.bellsouth.net>
Source record: 13643

Roy Lewallen wrote:
> Skipp wrote:
>
>> Hello there,
>> I'm looking for you old tired stack of 73 and Ham Radio Magazines just
>> to read at my pleasure. I'll be scanning some of the better articles
>> into pdf files and making them available to others for free. Many of
>> you have already seen the www.radiowrench.com/sonic web page. . . .
>
>
> Have you obtained permission from the copyright owners to do this?
>
> Roy Lewallen, W7EL
I think the ARRL now has the rights to Ham Radio and you can buy
CD's from them. I don't know who has the rights to 73, but I suspect
Wayne never gave that up. Pop'tronics was part of Gensback up to a few
years ago (maybe he only got the right to the NAME and not the original
magazine contents.) Of the other electronics magazines which are
long out of bussiness .... who knows?

1293. Re: Dead bugs!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-16 02:52:08 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <BKRIf.549$jo5.514@bignews1.bellsouth.net>
Source record: 13644

Frank wrote:
> I'm going to attempt to build one of my ghost receievers dead bug style.
> The goal being to take something that I usually mount in an old PC case,
> and fit it into a cigar box. I've never tried dead bug, or ugly
> construction, but figure it should be the most spacerous mehtod, and I
> cany use both side of a board for seperate functions.
>
> As far as my ghost receivers, just remember those proclaiming
> something is impossible are interupted by someone doing it. Believe
> it or not, like it or not, the dead talk! This IS the next frontier in
> electronics!
>
Well you are in good company, along with Houdini, A.C.Doyle, and Tesla.

1294. Re: Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-16 09:09:29 UTC
From: David Harmon <source@netcom.com>
Message-ID: <44802bae.342258421@news.west.earthlink.net>
Source record: 13645

On Wed, 15 Feb 2006 21:46:08 -0500 in rec.radio.amateur.homebrew,
Ken Scharf <wa2mzeNOTTHIS@bellsouth.net> wrote,
>I have an old 1950 Radio Experiment magazine with all sorts of tube
>projects. It's yellowed and falling apart. I'm trying to scan it
>and wanted to post the scans someplace. I started posting on the
>alt.binaries.photo.radio and rec.antique.radio+phono newsgroups
>and got lots of good ideas on how to adjust my scanner and what

May I suggest also alt.binaries.schematics.electronic

1295. Re: New Program : OP_ANGLE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-16 15:40:04 UTC
From: MadEngineer <glenn.b.dixon@gmail.com>
Message-ID: <1140104403.990112.161140@g43g2000cwa.googlegroups.com>
Source record: 13646

Hi Reg,

Thanks for your program. Can you or anyone else point me to a
reference that comprehensively and authoritatively lists the
characteristics of the different transmitter classes (class AB, C , D,
etc.). I have references that give partial lists, and are not in
agreement.

73,

Glenn AC7ZN

1296. Re: New Program : OP_ANGLE / Transmitter Classes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-16 15:48:39 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <r7ydnc6GUa1BA2neRVny2g@pipex.net>
Source record: 13647

"MadEngineer" <glenn.b.dixon@gmail.com> wrote in message
news:1140104403.990112.161140@g43g2000cwa.googlegroups.com...
> Hi Reg,
>
> Thanks for your program. Can you or anyone else point me to a
> reference that comprehensively and authoritatively lists the
> characteristics of the different transmitter classes (class AB, C , D,
> etc.). I have references that give partial lists, and are not in
> agreement.
==========
Ref ARRL Handbook , My old copy 1995 , pages 13.1 - 13.2 etc.

Frank GM0CSZ / KN6WH

1297. Re: New Program : OP_ANGLE / Transmitter Classes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-16 16:13:30 UTC
From: MadEngineer <glenn.b.dixon@gmail.com>
Message-ID: <1140106410.725158.134530@g47g2000cwa.googlegroups.com>
Source record: 13648

Thanks. My 2005 copy has a list that's probably identical, which
glosses over classes D-H (and there are probably more now). Any other
references out there?
73,
Glenn AC7ZN

1298. rozbuczał mi się thomson tv

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-16 17:15:50 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <dt2c0h$595$1@news.onet.pl>
Source record: 13649

Rozbuczaďż˝ siďż˝ okrutnie po zaniku prďż˝du. buczy na czerwone, niebieskie i
ďż˝ďż˝te - ewidentnie wyglďż˝da na terkot rďż˝nicowy. Trzeba by to jakoďż˝ w
menu serwizowym poustawiaďż˝, tylko ktďż˝ra to pozycja w menu i jakďż˝ wartoďż˝ďż˝
powinna przyjďż˝ďż˝ - bo podejrzewam, ďż˝e jak zacznďż˝ ustawiaďż˝, to zďż˝oďż˝liwie w
treďż˝ci obrazu nic upie..iwego nie bďż˝dzie ďż˝eby spokojnie poregulowaďż˝.

MAc

1299. Re: New Program : OP_ANGLE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-16 19:27:27 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <dt2jmv$7tb$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13650

I would classify as follows -

Class A: Operating angle = 360 degrees.
Class AB: Operating angle = 180-200 degrees.
Class B: Operating angle = 180 degrees.
Class C: Operating angle = less than 180 degrees but usually between
150 and 110 degrees.

I don't know about the others but they are probably not defined by
operating angles.

Reg, G4FGQ.

1300. Re: Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-16 19:58:29 UTC
From: Skipp <spammenot@yahoo.com>
Message-ID: <dt2lh5$2qq$1@skeeter.ucdavis.edu>
Source record: 13651

Yes, where possible and practical I have. I always try to ask the
original authors direct for permission to repost articles and text
and we never sell anything. See you at Dayton Roy...

cheers,
skipp

: Roy Lewallen <w7el@eznec.com> wrote:
: Skipp wrote:
:> Hello there,
:>
:> I'm looking for you old tired stack of 73 and Ham Radio Magazines just to
:> read at my pleasure. I'll be scanning some of the better articles into pdf
:> files and making them available to others for free. Many of you have
:> already seen the www.radiowrench.com/sonic web page.
:> . . .
: Have you obtained permission from the copyright owners to do this?
: Roy Lewallen, W7EL

1301. Re: Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-17 00:41:38 UTC
From: DRGrok@munged.net
Message-ID: <BLKdnVrHUtkMh2jenZ2dnUVZ_sadnZ2d@rcn.net>
Source record: 13652

In article <ZERIf.524$jo5.218@bignews1.bellsouth.net>, Ken Scharf
<wa2mzeNOTTHIS@bellsouth.net> wrote:
>Skipp wrote:
>> Hello there,
>>
>> I'm looking for you old tired stack of 73 and Ham Radio Magazines just to
>> read at my pleasure. I'll be scanning some of the better articles into pdf
>> files and making them available to others for free. Many of you have
>> already seen the www.radiowrench.com/sonic web page.
>>
>> If you'd like to donate or sell cheap your old mags, I'd like to have
>> them. Where practical, I'll pay the shipping/postage and a bit for your
>> time.
>>
>> Please take the NOSPAMPLEASE from my email address below and drop me a
>> line if you'd like to part with some old magazines...
>>
>> 73's
>> skipp
>>
>> skipp025 at yahoo.com
>>
>> skippNOSPAMPLEASE025@yahoo.com
>>
>>
>I have an old 1950 Radio Experiment magazine with all sorts of tube
>projects. It's yellowed and falling apart. I'm trying to scan it
>and wanted to post the scans someplace. I started posting on the
>alt.binaries.photo.radio and rec.antique.radio+phono newsgroups
>and got lots of good ideas on how to adjust my scanner and what
>format to save it in. When I have the time to scan all 160 pages
>I'd like to make this available (I don't have the web space and
>the binaries news groups only have a life time of a few days).
>
>I have lots of old (1966-1973) pop'tronics magazines and some
>1970-1980 CQ and assorted 73's someplace. I know I have
>the very first 2 73 magazines hidden someplace. Also late 60's
>electronics illustrated magazines. Eventually, I'd like to scan
>all of them and make them available.

Somewhere around I have several old Pop'tronics mags from the 50's --
including the very first from Oct. 1954.

Dr. G.

1302. Re: Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-17 04:47:02 UTC
From: LenAnderson@ieee.org
Message-ID: <1140151622.010055.231040@o13g2000cwo.googlegroups.com>
Source record: 13653

From: Ken Scharf on Wed, Feb 15 2006 9:49 pm

>Roy Lewallen wrote:
>> Skipp wrote:
>>
>>> Hello there,
>>> I'm looking for you old tired stack of 73 and Ham Radio Magazines just
>>> to read at my pleasure. I'll be scanning some of the better articles
>>> into pdf files and making them available to others for free. Many of
>>> you have already seen the www.radiowrench.com/sonic web page. . . .
>>
>> Have you obtained permission from the copyright owners to do this?
>>
>> Roy Lewallen, W7EL

>I think the ARRL now has the rights to Ham Radio and you can buy
>CD's from them.

Not quite. Communications Technology, Inc. (parent to Ham Radio
Magazine) was sold to CQ in 1990. CQ scanned and produced the
3-volume set of CDs containing all 22 years of HR's articles.
ARRL resells a lot of products. That doesn't mean they "own"
the copyright. ARRL resells a lot of RSGB publications but
doesn't own the copyrights of the Radio Society of Great Britain.

> I don't know who has the rights to 73, but I suspect
>Wayne never gave that up. Pop'tronics was part of Gensback up to a few
>years ago (maybe he only got the right to the NAME and not the original
>magazine contents.) Of the other electronics magazines which are
>long out of bussiness .... who knows?

Copyrights are valid from the first publication until 50 years
after the death of the copyright holder. [death of a corporation
presumably is the same as total quitting of it] "Publication" is
almost any form of media that is visible to the "public," and
that includes anything written on the Internet as an example.

One doesn't have to "file papers" to establish a copyright
although that is most convenient if some civil court dispute
comes to trial. Copyright suits are almost always held in
a civil court, not a criminal court; the federal government
can bring suit in a federal court for flagrant violations of
the copyright law.

The "copyright law" is in Title 17, United States Code. One of
the big revisions of United States copyright law was Public Law

94-553, 17 October 1976. In the USA, Congress maintains the Copyright Office. Congress has a rather large website which includes much information on copyrights (you can search under "copyright law" to get the URL...nice FAQ on copyrights there).

Depending on the terms of a "work" sold to a publisher, the publisher usually has first rights (as in copyrights) to that work. The author may, depending on the contract (the monetary compensation) may have the right to publish/distribute that work AFTER the first-rights holder has published it. In my case, I can repro and distribute any article that I authored in HR as I wish...the conditions of my compensation contract. I cannot do the same with any article I edited for them; such is not considered "original work."

In short, you just can't willy-nilly repro any work from a private/civilian-business publisher without their permission. You CAN repro any work done by the United States government; the US government is forbidden by law to hold copyrights. Note: The US government CAN hold a patent, but patents are a different category and handled by a different agency.

A grey area is the "fair use" part of the copyright law. A "fair use" item is PART of the original work which can be used by itself as a reference or partial reproduction in a news article or textbook. Almost all textbooks contain such items and it is politely customary to refer to the original if that is done.

LenAnderson@ieee.org

former Associate Editor at Ham Radio and sometime contributor

1303. Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-17 05:37:41 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <a38ae$43f56125$d135c4af$17974@MDI.CA>
Source record: 13654

I am fimilar with Colpitts, Harley, Clapps, Bulter, Piece oscillators?

Which configuration with JFET or BJT would yield the highest performance
and least jitter?

JJ

1304. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-17 05:58:23 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <fPidnSRcdK1s-GjenZ2dnUVZ_tCdnZ2d@web-ster.com>
Source record: 13655

JJ wrote:
> I am fimilar with Colpitts, Harley, Clapps, Bulter, Piece oscillators?
>
> Which configuration with JFET or BJT would yield the highest performance
> and least jitter?
>
> JJ

AFAIK a well-designed Butler oscillator will have the lowest jitter, but I doubt that you could do the "well designed" part without a lot of bench work.

Any of the rest (considering a "Clapp" oscillator to mean a crystal oscillator with rubbering) are good enough for communications work.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

1305. Re: Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-17 06:34:43 UTC
From: - exray - <exray@coqui.net>
Message-ID: <11vark21ahop255@corp.supernews.com>
Source record: 13656

LenAnderson@ieee.org wrote:

> From: Ken Scharf on Wed, Feb 15 2006 9:49 pm
>
>
>>Roy Lewallen wrote:
>>
>>>Skipp wrote:

>>>Have you obtained permission from the copyright owners to do this?
>>>

Every instance I've had at contacting original writers has said yes and publishers have simply not responded, or responded with unintelligible legalise CYA BS.
As has been explained to me that published articles become the domain of the publisher and the original writer has no legal say. Who knows what their 'contributing writer' contract says.
Given the small niche of reproduction as compared to 'the law'...just do the drill and if someone says stop, then stop. Keep about $3 in a legal escrow for the one asshole guy who would make a case out of it.

1306. Re: Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-17 09:34:31 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11vb658r3p40s5c@corp.supernews.com>
Source record: 13657

- exray - wrote:
>
> Every instance I've had at contacting original writers has said yes and
> publishers have simply not responded, or responded with unintelligible
> legalise CYA BS.
> As has been explained to me that published articles become the domain of
> the publisher and the original writer has no legal say. Who knows what
> their 'contributing writer' contract says.
> Given the small niche of reproduction as compared to 'the law'...just do
> the drill and if someone says stop, then stop. Keep about $3 in a legal
> escrow for the one asshole guy who would make a case out of it.

I suggest keeping more like $20,000. The last time I checked with my lawyer, that was the maximum penalty for willful copyright infringement, in addition to any monetary damages which could be proved. All that's necessary to get the $20k, I was told, is to prove that the infringement was willful, not that any financial damage occurred. But that was quite a number of years ago, and in any case this shouldn't be taken as legal advice or fact. Anyone contemplating willful infringement would be well advised to check with his own lawyer. Tangling with that "one asshole guy" could be an experience to remember.

People seem to have less and less compunction against stealing intellectual property, I suppose because it keeps getting easier to do. Rationalizations are as diverse and original as fertile minds can create. The ultimate result will be that eventually, nobody will bother creating anything original.

Incidentally, I was told by the ARRL that authors of articles in all their publications are given blanket permission to put a copy of articles they've written on their own web site, with appropriate acknowledgment that the ARRL owns the copyright and reproduction is by permission. That's generous of them.

Roy Lewallen, W7EL

1307. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-17 10:21:19 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <zshJf.42531$CZ4.21597@trnddc05>
Source record: 13658

As a generalization, I think that any circuit that excites the crystal's series resonant mode will probably outperform a circuit that excites the parallel resonant mode, because the series resonance is higher Q and is less affected by external influences.

Joe
W3JDR

"Tim Wescott" <tim@seemywebsite.com> wrote in message news:fPidnSRcdK1s-GjenZ2dnUVZ_tCdnZ2d@web-ster.com...
> JJ wrote:
>> I am fimilar with Colpitts, Harley, Clapps, Bulter, Piece oscillators?
>>
>> Which configuration with JFET or BJT would yield the highest performance
>> and least jitter?
>>
>> JJ
>
> AFAIK a well-designed Butler oscillator will have the lowest jitter, but I
> doubt that you could do the "well designed" part without a lot of bench
> work.
>
> Any of the rest (considering a "Clapp" oscillator to mean a crystal
> oscillator with rubbering) are good enough for communications work.
>
> --
>
> Tim Wescott
> Wescott Design Services
> http://www.wescottdesign.com
>
> Posting from Google? See http://cfaj.freeshell.org/google/

1308. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-17 11:10:57 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1140174657.059970.271530@g14g2000cwa.googlegroups.com>
Source record: 13659

Tim Wescott wrote:
> JJ wrote:
> > I am fimilar with Colpitts, Harley, Clapps, Bulter, Piece oscillators?
> >
> > Which configuration with JFET or BJT would yield the highest performance
> > and least jitter?
> >
> > JJ
>
> AFAIK a well-designed Butler oscillator will have the lowest jitter, but
> I doubt that you could do the "well designed" part without a lot of
> bench work.
>
> Any of the rest (considering a "Clapp" oscillator to mean a crystal
> oscillator with rubbering) are good enough for communications work.

> http://www.wescottdesign.com
>
> Posting from Google? See http://cfaj.freeshell.org/google/

FWIW, ADI recommends a Butler oscillator for use with their DDS chips,
for minimum jitter.

Leon

1309. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-17 15:45:50 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1140191150.483865.272120@g47g2000cwa.googlegroups.com>
Source record: 13660

JJ wrote:
> I am fimilar with Colpitts, Harley, Clapps, Bulter, Piece oscillators?
>
> Which configuration with JFET or BJT would yield the highest performance
> and least jitter?

"Highest performance"? Is that output amplitude? Or minimum startup time? Or startup reliability? Or lowest power requirement? Or what?

Jitter, that's a little easier to define but it's usually not the most relevant parameter in radio. It is related to sideband and phase noise and in fact cannot be completely decoupled from either.

All the simgle-transistor oscillators start with gain > 1 for low signal levels, and then as the signal builds up so do the nonlinearities (saturation of the active device mostly, but there are other kinds) the gain drops to 1.

If you only have a single transistor, the nonlinearities can be minimized by using a nice high-Q tuned tank circuit.

If you really care about jitter/phase/sideband noise, you probably do not run the active device into the nonlinear region but have an AGC loop that keeps the amplitude at a nice lowish level. This adds a few active devices.

To go a little further you get into a Meacham-bridge type circuit. These are lots of fun to play with.

Google "Sulzer Oscillator" while you're at it, there are schematics out there.

Be sure to hit www.karlquist.com and www.leapsecond.com when you see them come up in Google searches to see the pinnacles of technology.

Realistically in most homebrew radios just having your oscillator start up reliably all the time is the biggest factor :-)

Tim KA0BTD

1310. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-17 16:49:06 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <c46c1$43f5fe82$d135c4af$18309@MDI.CA>
Source record: 13661

> "Highest performance"? Is that output amplitude? Or minimum startup
> time? Or startup reliability? Or lowest power requirement? Or what?
>
> Jitter, that's a little easier to define but it's usually not the most
> relevant parameter in radio. It is related to sideband and phase noise
> and in fact cannot be completely decoupled from either.
tor :-)
>
> Tim KA0BTD
>
>

Its not for a radio. I want to minimize the cycle to cycle variations in timing and it should be simple enough to make with 1 or 2 transitors. So not looking for NASA spec stuff, just reliable so it starts every time.

JJ

1311. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-17 17:18:57 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1140196737.452657.279500@z14g2000cwz.googlegroups.com>
Source record: 13662

JJ wrote:
> Its not for a radio. I want to minimize the cycle to cycle variations in
> timing and it should be simple enough to make with 1 or 2 transitors. So
> not looking for NASA spec stuff, just reliable so it starts every time.

Most reliable to start up you will find are the
crystal-oscillator-in-a-can. They also often spec some numbers with
respect to jitter.

The TCXO-in-a-can or VCTCXO-in-a-can made for telecom use are
particularly good bang-for-the-buck if you also want low jitter.

Tim.

1312. Re: Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-17 17:32:52 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11vc2883qmd7245@corp.supernews.com>
Source record: 13663

Hi Roy,

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:11vb658r3p40s5c@corp.supernews.com...
> I suggest keeping more like $20,000. The last time I checked with my lawyer,
> that was the maximum penalty for willful copyright infringement, in addition
> to any monetary damages which could be proved. All that's necessary to get
> the $20k, I was told, is to prove that the infringement was willful, not
> that any financial damage occurred.

This might be better posted at college libraries in the copy rooms where students routinely Xerox entire books ostensibly because they can't afford the real thing (which I suspect is rarely true, and it's usually more a case of wanting to spend the money on an Xbox rather than a book)... rather than at some ham who's scanning old magazines as a form of public service when the originals are difficult to obtain for an audience that generally would pay for them if they were.

> People seem to have less and less compunction against stealing intellectual
> property, I suppose because it keeps getting easier to do.

I agree with you in general, although I think that scanning old magazines and books falls into a gray area where one is -- in all likelihood -- breaking the letter of the law but generally not its spirit. I accept rationalizations along those lines, just as I can't really fault someone who decided so travel 100Mph through some utterly uninhabited random road in Eastern Oregon. :-) Still, anyone who is hauled into court can't really complain, but personally I'd hope that some lawyer hoping to make an example would choose someone posting to alt.binaries.e-book.technical (where 99% of the posts are clear violations of the letter and spirit of copyright law) rather than the OP.

> Rationalizations are as diverse and original as fertile minds can create.
> The ultimate result will be that eventually, nobody will bother creating
> anything original.

Only in some sort of idealist world. In the real world, original creations will be generated so long as doing so puts bread on the table. Would you rather sell 1,000 copies of a 99% copy-proof program at $10,000 each or 1,000,000 copies of a pretty-readily-copyable program at $100 each? Bill Gates clearly prefers the later.

As you're probably aware, Don Lancaster makes a good point that the oft-heralded intellectual property protection device of the patent really doesn't do you much good in the real world, at least until you're a very large company. Tektronix seemed to be using this approach decades back when the comprehensive use of T-coils to obtain wider frequency respones was a

well-protected inside secret, no?

> Incidentally, I was told by the ARRL that authors of articles in all their
> publications are given blanket permission to put a copy of articles they've
> written on their own web site, with appropriate acknowledgment that the ARRL
> owns the copyright and reproduction is by permission. That's generous of
> them.

I suppose it is, but these days you can't make any decent money writing for the ARRL or the magazines, and as such publications have to be pretty generous in what they offer because they're effectively asking for significant donations of intellectual property by their authors.

---Joel Kolstad

1313. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-17 19:12:33 UTC
From: Risto Tiilikainen <risto.NON.tiilikainen@luukku.comMUNIST.invalid>
Message-ID: <43f61f51$0$7485$39db0f71@news.song.fi>
Source record: 13664

JJ wrote:

>>"Highest performance"? Is that output amplitude? Or minimum startup
>>time? Or startup reliability? Or lowest power requirement? Or what?
>>
>>Jitter, that's a little easier to define but it's usually not the most
>>relevant parameter in radio. It is related to sideband and phase noise
>>and in fact cannot be completely decoupled from either.
>>
>>
>tor :-)
>
>
>>Tim KA0BTD
>>
>>
>>
>>
>
>Its not for a radio. I want to minimize the cycle to cycle variations in
>timing and it should be simple enough to make with 1 or 2 transitors. So
>not looking for NASA spec stuff, just reliable so it starts every time.
>
>JJ
>
>
Hi !

Any of those oscillators is OK if resonance circuit Q is kept high and
oscillation power in average low level.
High Q will guarantee easy and fast starting every time
Average low level keeps components cool and cycle to cycle variations
are reduced
Third important question is loading the oscillator.
High impedance FET buffer which is not galvanic ally connected to
oscillator is very good solution.
The gate of buffer FET can be provided with an "antenna" wire
collecting tiny energy from the oscillator resonance circuit.
This kind of loose coupling guarantees that effects of external
variations are minimized.

These principles also guarantee that buffer will amplify 1st order and
upper harmonics are powerfully reduced (in oscillator and in first buffer)
I have experienced superior results with these guidelines when
constructing LC oscillators

73, Risto OH2BT

1314. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-17 19:17:23 UTC
From: Risto Tiilikainen <risto.NON.tiilikainen@luukku.comMUNIST.invalid>
Message-ID: <43f62074$0$7474$39db0f71@news.song.fi>
Source record: 13665

Risto Tiilikainen wrote:

> JJ wrote:
>
>>> "Highest performance"? Is that output amplitude? Or minimum startup
>>> time? Or startup reliability? Or lowest power requirement? Or what?
>>>
>>> Jitter, that's a little easier to define but it's usually not the most
>>> relevant parameter in radio. It is related to sideband and phase noise
>>> and in fact cannot be completely decoupled from either.
>>>
>>
>> tor :-)
>>
>>
>>> Tim KA0BTD
>>>
>>>
>>>
>>
>>
>> Its not for a radio. I want to minimize the cycle to cycle variations
>> in timing and it should be simple enough to make with 1 or 2
>> transitors. So not looking for NASA spec stuff, just reliable so it
>> starts every time.
>>
>> JJ
>>
>>
> Hi !
>
> Any of those oscillators is OK if resonance circuit Q is kept high and
> oscillation power in average low level.
> High Q will guarantee easy and fast starting every time
> Average low level keeps components cool and cycle to cycle variations
> are reduced
> Third important question is loading the oscillator.
> High impedance FET buffer which is not galvanic ally connected to
> oscillator is very good solution.
> The gate of buffer FET can be provided with an "antenna" wire
> collecting tiny energy from the oscillator resonance circuit.
> This kind of loose coupling guarantees that effects of external
> variations are minimized.
>

> These principles also guarantee that buffer will amplify 1st order and
> upper harmonics are powerfully reduced (in oscillator and in first
> buffer)
> I have experienced superior results with these guidelines when
> constructing LC oscillators
>
> 73, Risto OH2BT

HI !
Sorry . I read again your subject.
You were asking from crystal oscillators and I began to explain LC
oscillators
Risto

1315. Re: Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-17 19:47:24 UTC
From: Dan Richardson <k6mhe@mailinator.com>
Message-ID: <20acv1p2ep0rf272hgl5oaefj6a974o3h0@4ax.com>
Source record: 13666

On Fri, 17 Feb 2006 09:32:52 -0800, "Joel Kolstad"
<JKolstad71HatesSpam@yahoo.com> wrote:

>This might be better posted at college libraries in the copy rooms where
>students routinely Xerox entire books ostensibly because they can't afford the
>real thing (which I suspect is rarely true, and it's usually more a case of
>wanting to spend the money on an Xbox rather than a book)... rather than at
>some ham who's scanning old magazines as a form of public service when the
>originals are difficult to obtain for an audience that generally would pay for
>them if they were.

Just to add some fuel to the fire.

Section 107 of the Copyright Act of 1976. Limitations on exclusive
rights: Fair Use
"Notwithstanding the provisions of sections 106 and 106A, the fair use
of a copyrighted work, including such use by reproduction in copies or
phonorecords or by any other means specified in that section, for
purposes such as criticism, comment, news reporting, teaching
(including multiple copies for classroom use), scholarship, or
research, is not an infringement of copyright."

73,
Danny, KMHE

email: k6mhe<at>arrl<dot>net
http://www.k6mhe.com/

1316. Re: Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-17 20:23:12 UTC
From: LenAnderson@ieee.org
Message-ID: <1140207792.006271.92960@g47g2000cwa.googlegroups.com>
Source record: 13667

From: Joel Kolstad on Fri, Feb 17 2006 9:32 am

>"Roy Lewallen" <w...@eznec.com> wrote in message
>
>> I suggest keeping more like $20,000. The last time I checked with my lawyer,
>> that was the maximum penalty for willful copyright infringement, in addition
>> to any monetary damages which could be proved. All that's necessary to get
>> the $20k, I was told, is to prove that the infringement was willful, not
>> that any financial damage occurred.
>
>> People seem to have less and less compunction against stealing intellectual
>> property, I suppose because it keeps getting easier to do.
>
>I agree with you in general, although I think that scanning old magazines and
>books falls into a gray area where one is -- in all likelihood -- breaking the
>letter of the law but generally not its spirit. I accept rationalizations
>along those lines, just as I can't really fault someone who decided so travel
>100Mph through some utterly uninhabited random road in Eastern Oregon. :-)

Unrelated "rationalizations." Breaking a law or rules or other
directives is still BREAKING something, purloining someone's
original work. Stealing.

In the exact words of THE LAW (copyright law in this case), it is
okay to make a copy FOR A VERY LIMITED USE such as a personal
reference or to help a friend. Where it becomes a BREAKING is if
it is done TO MAKE MONEY IN COPYING or gain something that
"belonged" to the original author (such as gain a reputation
without working for that "rep").

In Roy's case on EZNEC, he put in a lot of work in translation
of (totally copyable by law) U.S. government work into a useful
program of antenna analysis. Roy gets return on his investment of
time and uniqueness of result presentation on a computer by
selling copies of his work for money. There SHOULD be some
protection for such work by anyone in order to foster and preserve
original work...else there wouldn't be any point in doing original
work other than uncompensated personal pleasure in doing so.

>Still, anyone who is hauled into court can't really complain, but personally
>I'd hope that some lawyer hoping to make an example would choose someone
>posting to alt.binaries.e-book.technical (where 99% of the posts are clear
>violations of the letter and spirit of copyright law) rather than the OP.

No, such copyright-specialist attorneys wouldn't bother with such
small potatoes. They would go after the BIG violators...DVD

and CD copiers and those manufacturing firms making knock-off
copies of goods, the stealing of imagery (in graphics or words)
and trying to imply they are "as good" as a well-known brand.

>> Rationalizations are as diverse and original as fertile minds can create.
>> The ultimate result will be that eventually, nobody will bother creating
>> anything original.

ABSOLUTELY TRUE!

>Only in some sort of idealist world. In the real world, original creations
>will be generated so long as doing so puts bread on the table.

THIS is the real world. There's no "special case" that justifies
that idealistic rationalization you made...it is circular logic in
itself...in the real world.

"Originality" may occur in humans for a variety of reasons, usually
done to improve a personal situation, a way of doing things easier,
doing it better, so forth. However, the "originality" does NOT, by
itself, "put bread on the table." To do that requires much more
personal investment and effort to make the money that buys the
bread that is put on the table.

EZNEC is an example that applies here. The work that Roy did on
translation of (free) code, cleaning it up, making it presentable
in a meaningful manner to users, was considerable, much more so
than just getting the original program code to work. Why should
Roy give away such effort? To perform such a service "for the
good of hobbyists?" Hardly worth it to Roy. So, who else would
do so? Other than someone wanting a return on their investment
of time and effort?

Anyone can get a copy of the Methods of Moments computer program
written for the U.S. government. For free (discounting cost of
on-line charges for accessing the few sites having it). I have
an older copy. BIG it is! HUGE. My old copy is written in
FORTRAN (which I happen to speak). What it does NOT have for free
is a way of showing the results in anything but tabular form, no
graphics to instantly show the antenna patterns, VSWR of feed
point, RF currents, etc. If you don't speak tabular, the original
becomes WORK in trying to "see" the results. WORK, mind-sweat,
slogging through numbers that are seldom intuitive to everyone
without the graphic presentation. Roy MADE the graphical
presentation possible through his efforts. So did others in their
different adaptations of Method of Moments analysis programs.

>Would you
>rather sell 1,000 copies of a 99% copy-proof program at $10,000 each or
>1,000,000 copies of a pretty-readily-copyable program at $100 each? Bill
>Gates clearly prefers the later.

Bill Gates, Paul Allen, Microsoft are IRRELEVANT here. There's
NO SUCH THING as a "copy-proof program." If it is a useable
program, then it CAN - eventually - be copied; the only true
"copy-proof program" is something that no one can use.

Microsoft became a software giant through lots and lots of OTHER
kinds of time/effort investment plus savvy in salesmanship...not
to overlook their Big Break in selling their operating system
(with THEM still owning the copyrights) to IBM for the IBM PC.

Without the protection of the copyright law, Microsoft could
never have made that Big Break that started their humongous
incoming cash flow.

>As you're probably aware, Don Lancaster makes a good point that the
>oft-heralded intellectual property protection device of the patent really
>doesn't do you much good in the real world, at least until you're a very large
>company.

Don Lancaster is a clever writer and marketer of himself, not a
guru of electronics. Patent Law is a separate issue from
copyright law. The protection of original work is the same in
principle.

> Tektronix seemed to be using this approach decades back when the
>comprehensive use of T-coils to obtain wider frequency respones was a
>well-protected inside secret, no?

"T-coils?" Wide bandwidth video amplifiers were no big secret
in the later 1940s when Vollum got Tektronix started with the
first accurate, reproducible oscilloscopes...accurate in their
sweep timing as well as vertical volts per division scaling.
Note: I began electronics using a Tektronix 511AD after trying
to get a Dumont 'scope kluge to yield meaningful results. Not
the same animal. Lots and lots of OTHER innovations inside the
Tektronix 'scopes that made their reputation in later years.

>> Incidentally, I was told by the ARRL that authors of articles in all their
>> publications are given blanket permission to put a copy of articles they've
>> written on their own web site, with appropriate acknowledgment that the ARRL
>> owns the copyright and reproduction is by permission. That's generous of
>> them.

[no, NOT "generous"...see following]

>I suppose it is, but these days you can't make any decent money writing for
>the ARRL or the magazines, and as such publications have to be pretty generous
>in what they offer because they're effectively asking for significant
>donations of intellectual property by their authors.

ARRL is primarily a publishing house in order to make the rest of
their organization viable. As such, ALL work for them is on a
"first rights" basis. That is, they get first crack at publishing
a contracted work...AND the continued publishing of such work for

years without ANY extra compensation to authors. It's essentially
the same as the "ego press" (private publishers who are just
preparer-printers where the author pays for that printing service).

The only ones who make any money in hobby publications are the
publishers themselves. Look at the author's compensation statements
on the ARRL website to see how little money authors receive.
Authors
get mainly the ego-trip of Being Published. For some that is
compensation enough, but ego money doesn't put bread on the table.

Been there, done that, got the table and the bread.

LenAnderson@ieee.org

1317. Making up coax connections

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-17 21:42:53 UTC
From: Paul Burridge <pb@shove.your.spam.up.your.arse.atlanticstar.co.uk>
Message-ID: <gcgcv1tqjupb85olto9upu6sq4o2h5j7mt@4ax.com>
Source record: 13668

Hi all,

I have to make up some highly accurate length RG-214 coax patch leads
for network analyzer interconnects up to 1.3Ghz. I have the cable and
the male N-type plugs to terminate them with.
So how best to trim this cable to maintain its 50 ohm impedance as
the plugs are joined to the cable? The plugs' center pins are
solder-type; the shielding Otoh is clamped in place. Are there any
fool-proof cutting dimensions to get the result right every time?
THanks,
Paul

1318. Re: Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-17 23:41:16 UTC
From: laura halliday <marsgal42@hotmail.com>
Message-ID: <1140219676.405349.37750@g14g2000cwa.googlegroups.com>
Source record: 13669

Skipp <skippNOSPAMPLEASE...@yahoo.com wrote:

> Hello there, I'm looking for you old tired stack of 73 and
> Ham Radio Magazines just to read at my pleasure.

Ham Radio is available by the boxload at every ham radio
flea market I've ever been to. It's also available on CDROM
from the ARRL. Handy, because it's better-indexed than
the paper magazine ever was.

"Because I'm a cheap screw" has never been an excuse for
copyright infringement.

Laura Halliday VE7LDH "Que les nuages soient notre
Grid: CN89mg pied a terre..."
ICBM: 49 16.05 N 122 56.92 W - Hospital/Shafte

1319. Re: Making up coax connections

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-18 01:35:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11vcufknb2092a2@corp.supernews.com>
Source record: 13670

There are quite a number of styles of N connector, and each is a bit different. Cable stripping dimensions for a couple of the more common ones are shown in the ARRL Handbook, and you might be able to find instructions for your particular connector on the manufacturer's web site. I'd say the most important thing is to make sure the center conductor pin protrudes the correct distance, and make sure the cable end of the center conductor pin is against the insulation. That is, there shouldn't be any place where air is the only dielectric between inner and outer conductors except along the large diameter portion of the center pin.

My advice is based more on extensive experience with time domain reflectometry than on a great deal of experience making precision cables with N connectors. Hopefully someone with more actual connector experience will comment further.

Roy Lewallen, W7EL

Paul Burridge wrote:
> Hi all,
>
> I have to make up some highly accurate length RG-214 coax patch leads
> for network analyzer interconnects up to 1.3Ghz. I have the cable and
> the male N-type plugs to terminate them with.
> So how best to trim this cable to maintain its 50 ohm impedance as
> the plugs are joined to the cable? The plugs' center pins are
> solder-type; the shielding Otoh is clamped in place. Are there any
> fool-proof cutting dimensions to get the result right every time?
> THanks,
> Paul

1320. Re: FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-18 06:01:39 UTC
From: jmiles@gmail.com
Message-ID: <1140240731.474865.35500@o13g2000cwo.googlegroups.com>
Source record: 13671
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

Glad to hear it's working well. Agreed, its size and weight is a real problem, and not just for shipping. I'll definitely own another of those beasts at some point, when I have more room than I do now. The important thing is that it's in appreciative hands. :-)

If you plan to use my GPIB software with it, be sure to download a recent copy. I hosed the phase-noise app pretty badly in my last "slipstream" update a few weeks ago, and only heard about it last week. The version that's up there now is fine.

1321. Re: Making up coax connections

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-18 11:17:22 UTC
From: Paul Burridge <pb@shove.your.spam.up.your.arse.atlanticstar.co.uk>
Message-ID: <430ev1h9qf3s7dovcj3ngiecdc8hvgoa1j@4ax.com>
Source record: 13672

On Fri, 17 Feb 2006 17:35:47 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>There are quite a number of styles of N connector, and each is a bit
>different. Cable stripping dimensions for a couple of the more common
>ones are shown in the ARRL Handbook, and you might be able to find
>instructions for your particular connector on the manufacturer's web
>site. I'd say the most important thing is to make sure the center
>conductor pin protrudes the correct distance, and make sure the cable
>end of the center conductor pin is against the insulation. That is,
>there shouldn't be any place where air is the only dielectric between
>inner and outer conductors except along the large diameter portion of
>the center pin.
>
>My advice is based more on extensive experience with time domain
>reflectometry than on a great deal of experience making precision cables
>with N connectors. Hopefully someone with more actual connector
>experience will comment further.

Thanks, Roy. This is *totally* uncharted territory for me so any
advice is welcome.
I guess even if I can't get any cross sectional drawings of the
N-types off the net I could perhaps measure the required cut from
probing the connectors themselves with a dial caliper depth gauge -
which I happen to have. That ought to be the most accurate way of
going about it, I guess.
Is the amount of braid one clamps up into the plug important? Does it
matter if it gets twisted slightly (where it's doubled back down over
the outside of the outer insulation)?
Thanks,
p.

1322. Re: Making up coax connections

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-18 14:48:05 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11vect87gu10p98@corp.supernews.com>
Source record: 13673

Paul Burridge wrote:
>
> Thanks, Roy. This is *totally* uncharted territory for me so any
> advice is welcome.
> I guess even if I can't get any cross sectional drawings of the
> N-types off the net I could perhaps measure the required cut from
> probing the connectors themselves with a dial caliper depth gauge -
> which I happen to have. That ought to be the most accurate way of
> going about it, I guess.
> Is the amount of braid one clamps up into the plug important? Does it
> matter if it gets twisted slightly (where it's doubled back down over
> the outside of the outer insulation)?
> Thanks,
> p.

Details of how the braid is clamped will affect the physical ruggedness of the assembly, but it shouldn't affect the electrical characteristics. I don't understand about doubling it back over the insulation, though.

Remember that virtually all the current is flowing on the outside of the inner conductor and the inside of the outer conductor. What you're trying to do is maintain a constant impedance as the signal goes through the connector. This means that at places where the dielectric is absent, as in the mating area, the inner conductor has to become larger and closer to the outer conductor. If the dielectric is absent at any point where it should be present, you'll have a high impedance in that region. Any place where the center conductor changes diameter, there has to be a corresponding change in the spacing to the outer conductor and/or a change in the dielectric. The connector is carefully designed to do all this, but as you're well aware, it'll only work out as designed if it's assembled correctly.

Roy Lewallen, W7EL

1323. Re: Making up coax connections

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-18 16:16:57 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <behev1p68am8ub6uh2ek28bu182g40odbv@4ax.com>
Source record: 13674

On Fri, 17 Feb 2006 17:35:47 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>There are quite a number of styles of N connector, and each is a bit
>different. Cable stripping dimensions for a couple of the more common
>ones are shown in the ARRL Handbook, and you might be able to find
>instructions for your particular connector on the manufacturer's web
>site. I'd say the most important thing is to make sure the center
>conductor pin protrudes the correct distance, and make sure the cable
>end of the center conductor pin is against the insulation. That is,
>there shouldn't be any place where air is the only dielectric between
>inner and outer conductors except along the large diameter portion of
>the center pin.
>
>My advice is based more on extensive experience with time domain
>reflectometry than on a great deal of experience making precision cables
>with N connectors. Hopefully someone with more actual connector
>experience will comment further.
>
>Roy Lewallen, W7EL

Roy makes some good points. However, for this application, I think
what is also important is that the cables be identical.

If you make the same mistake on all of them then they are still
"identical".

Lay them out and cut them all at the same time. To reinforce what Roy
said, one thing you absolutely -do not- want to happen is to have the
center pin protrude too far. If it bottoms in the mating connector on
your analyzer and damages it you will not be a happy camper.

>
>Paul Burridge wrote:
>> Hi all,
>>
>> I have to make up some highly accurate length RG-214 coax patch leads
>> for network analyzer interconnects up to 1.3Ghz. I have the cable and
>> the male N-type plugs to terminate them with.
>> So how best to trim this cable to maintain its 50 ohm impedance as
>> the plugs are joined to the cable? The plugs' center pins are
>> solder-type; the shielding Otoh is clamped in place. Are there any
>> fool-proof cutting dimensions to get the result right every time?
>> THanks,
>> Paul

1324. Re: Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-18 16:50:53 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <ebd80$43f7506d$d135c4af$21755@MDI.CA>
Source record: 13675

Interesting stuff. What are some series resonant oscillators besides the Butler?

JJ

1325. Re: FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-18 18:39:42 UTC
From: K <K@spam.net>
Message-ID: <ORJJf.12554$Ou1.2126@tornado.socal.rr.com>
Source record: 13676
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

Would you be so kind as to post the url for your website? I would like to get a copy of your software.

Thanks, K

<jmiles@gmail.com> wrote in message news:1140240731.474865.35500@o13g2000cwo.googlegroups.com...
> Glad to hear it's working well. Agreed, its size and weight is a real
> problem, and not just for shipping. I'll definitely own another of
> those beasts at some point, when I have more room than I do now. The
> important thing is that it's in appreciative hands. :-)
>
> If you plan to use my GPIB software with it, be sure to download a
> recent copy. I hosed the phase-noise app pretty badly in my last
> "slipstream" update a few weeks ago, and only heard about it last week.
> The version that's up there now is fine.
>

1326. Re: FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-18 18:54:15 UTC
From: jmiles@gmail.com
Message-ID: <1140288855.606502.5460@f14g2000cwb.googlegroups.com>
Source record: 13677
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

>Would you be so kind as to post the url for your website?
>I would like to get a copy of your software.

See the first link at http://www.qsl.net/ke5fx/ (or download the setup program directly at http://www.speakeasy.org/~jmiles1/ke5fx/gpib/setup.exe).

1327. Re: Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-18 21:09:18 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <7%LJf.16885$jo5.2479@bignews1.bellsouth.net>
Source record: 13678

laura halliday wrote:
> Ham Radio is available by the boxload at every ham radio
> flea market I've ever been to. It's also available on CDROM
> from the ARRL. Handy, because it's better-indexed than
> the paper magazine ever was.
>
> "Because I'm a cheap screw" has never been an excuse for
> copyright infringement.
>
I would agree with that. Making copies of available magazines
for posting on download sites is a clear violation of copyright.
HOWEVER, making copies of out of print, rare, un-obtainable
magazines that have a value to collectors might be viewed
by some in another light. One could even say we are saving
a valuable resource from becoming lost forever.

1328. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-18 21:18:30 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <79b09$43f78f26$d135c4af$14797@MDI.CA>
Source record: 13679

Risto Tiilikainen <risto.NON.tiilikainen@luukku.comMUNIST.invalid> wrote in news:43f62074$0$7474$39db0f71@news.song.fi:

>>>
>> Hi !
>>
>> Any of those oscillators is OK if resonance circuit Q is kept high and
>> oscillation power in average low level.
>> High Q will guarantee easy and fast starting every time
>> Average low level keeps components cool and cycle to cycle variations
>> are reduced
>> Third important question is loading the oscillator.
>
>> 73, Risto OH2BT
Good info thanks. What are other crystal series oscillators besides Butler type?

JJ

1329. Re: Making up coax connections

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-18 21:21:22 UTC
From: Paul Burridge <pb@shove.your.spam.up.your.arse.atlanticstar.co.uk>
Message-ID: <4r3fv1d3salttjcd3e5e5c7p0cub0v0kov@4ax.com>
Source record: 13681

On Sat, 18 Feb 2006 09:16:57 -0700, Wes Stewart <n7ws*@*yahoo.com>
wrote:

>Roy makes some good points.

He invariably does!

> However, for this application, I think
>what is also important is that the cables be identical.
>
>If you make the same mistake on all of them then they are still
>"identical".
>
>Lay them out and cut them all at the same time. To reinforce what Roy
>said, one thing you absolutely -do not- want to happen is to have the
>center pin protrude too far. If it bottoms in the mating connector on
>your analyzer and damages it you will not be a happy camper.

Okay, thanks, guys. I'm taking everything on board. If there's
anything else that comes to mind, I'd be keen to hear it.

1330. seek LED's in "T-5 telephone slide" base

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-18 21:32:10 UTC
From: dances_with_barkadas@yahoo.com
Message-ID: <1140298330.429517.292930@o13g2000cwo.googlegroups.com>
Source record: 13680
Cross-posted to: sci.electronics.repair,sci.electronics.components,rec.radio.amateur.homebrew

seek LEDs in above-styled base, for replacement of PSB-120 indicator lamps.

a vendor whose product has been assigned a NSN for ordering through the Federal Supply System would be optimal....

1331. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-18 23:19:34 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <dt8a26$hs7$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13682

If it oscillates it doesn't matter about the type of oscillator
circuit.

There's no need to worry yourself.

Performance all depends on the cut of the crystal which you have
already decided upon without giving it much thought.

Just connect it up in the most simple circuit and away you go.

Reg.

==========

1332. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-18 23:36:39 UTC
From: Dan Andersson <dan@andersson.co.uk>
Message-ID: <TZ-dnTeWkOwfMmreSa8jmw@karoo.co.uk>
Source record: 13683

JJ wrote:

> I am fimilar with Colpitts, Harley, Clapps, Bulter, Piece oscillators?
>
> Which configuration with JFET or BJT would yield the highest performance
> and least jitter?
>
> JJ

Go get a commercial oscillator. They cost 3 to 10 US $...
Yeahhh, sure, square wave... Fixoit it and you know what you can exoect...
No more but no less!

cheers

Dan / M0DFI

1333. Re: Making up coax connections

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 01:40:14 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43F7CC09.4A34C8F8@earthlink.net>
Source record: 13684

Paul Burridge wrote:
>
> Hi all,
>
> I have to make up some highly accurate length RG-214 coax patch leads
> for network analyzer interconnects up to 1.3Ghz. I have the cable and
> the male N-type plugs to terminate them with.
> So how best to trim this cable to maintain its 50 ohm impedance as
> the plugs are joined to the cable? The plugs' center pins are
> solder-type; the shielding Otoh is clamped in place. Are there any
> fool-proof cutting dimensions to get the result right every time?
> THanks,
> Paul

See if you can find the datasheet for the connectors you have. they
will give you the information needed to assemble the connectors
properly.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

1334. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 01:41:55 UTC
From: me@where.com
Message-ID: <44jfv1pbkogi1rpcn3gh5cv92dtuae9jlu@4ax.com>
Source record: 13685

On Fri, 17 Feb 2006 11:49:06 -0500, JJ <JJ@nowhere.com> wrote:

>
>> "Highest performance"? Is that output amplitude? Or minimum startup
>> time? Or startup reliability? Or lowest power requirement? Or what?
>>
>> Jitter, that's a little easier to define but it's usually not the most
>> relevant parameter in radio. It is related to sideband and phase noise
>> and in fact cannot be completely decoupled from either.
>tor :-)
>>
>> Tim KA0BTD
>>
>>
>
>Its not for a radio. I want to minimize the cycle to cycle variations in
>timing and it should be simple enough to make with 1 or 2 transitors. So
>not looking for NASA spec stuff, just reliable so it starts every time.
>
>JJ
Epson makes a low jitter TTL osc. ~3pSec RMS jitter. ~$5 each. 100
MHz.

1335. Re: seek LED's in "T-5 telephone slide" base

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 01:52:18 UTC
From: mroberds@worldnet.att.net
Message-ID: <mbQJf.35729$Dh.25671@dukeread04>
Source record: 13686
Cross-posted to: sci.electronics.repair,sci.electronics.components,rec.radio.amateur.homebrew

Followups set to sci.electronics.components.

In sci.electronics.components dances_with_barkadas@yahoo.com wrote:
>seek LEDs in above-styled base, for replacement of PSB-120 indicator
>lamps. a vendor whose product has been assigned a NSN for ordering
>through the Federal Supply System would be optimal....

Using an advanced search technique known as
http://www.google.com/search?q=t-5+telephone+slide+led ,
I found
http://www.ledtronics.com/datasheets/Pages/fsn_nsn_qualified_based_leds/67b.htm
from the first hit.

Matt Roberds

1336. Interested? Don't get sidetracked by the Cry Babies (CB) - a FAQ for you, the intending _REAL_ Radio Ham!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 09:27:11 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1140341231.717822.298540@g44g2000cwa.googlegroups.com>
Source record: 13687
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

What is Ham Radio?

(Preface)
It is becoming increasingly difficult to fly the flag for
decency and for civilised behaviour in Radio Hammery. Even
the Usenet newsgroups dedicated to the cause have degenerated
into a hotbed of abusive onslaughts by those who ought to know better.
However, there still exists the fundamental basis on which Ham
Radio is based, and that will never die. This FAQ ("What Is
Ham Radio?") will be regularly published and will not be
shouted or bullied down. It is important that those of a
technical bent, who are the natural seed-corn of Radio Hammery
and who gravitate towards us to be the real novitiate, can
still find us, (and know that we are still here), their fellows.

-----ooooo-----

Please remember that this FAQ is a _POSITIVE EXHORTATION_
to you to exert yourselves to join our fraternity! (If you find
otherwise, then perhaps you are already classing yourself in the
mediocre groups of those who are criticised in the FAQ and from
whom we _MUST_ dissociate? If so - it's never too late for
a re-taxonomisation on your part - there's nothing elitist about
us, and we welcome all those who are prepared to put themselves
out in order to join our ranks!)

-----ooooo-----
(Article)
So,.....What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the

gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One such CB type is the so-called "Not-Ham". Otherwise
known as the CBer-Masquerading-As-A-Radio-Ham, this type
had their background in the hobby that is CB Radio and not
in the technical pursuits that lead up to a coveted Ham licence.
Easily recognised by their boasts of the criminal activity of
11 metre SSB operation, one wonders why they don't go back to
the CB Bands if such bands are dearer in their hearts than are the Ham
Bands? No _REAL Radio Hams associate with those who made an
illegal installation of transmitting equipment before being
in possession of an appropriate licence.

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B
licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

1337. Re: FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 12:44:27 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1140353067.017993.92590@g47g2000cwa.googlegroups.com>
Source record: 13688
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Wasn't there someone who couldn't work out the trivially simple
task of how to thread a wire through the tubes of a roof rack?

Brian Reay wrote:
> Wasn't there someone who couldn't tune the PA on one of these as some pages
> were missing from his manual?

1338. Re: FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 13:07:05 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1140354425.386222.70870@g14g2000cwa.googlegroups.com>
Source record: 13689
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Wasn't there someone who couldn't achieve the trivially simple
task of differentiating between the male and female version
of Anderson "Power Pole" connectors?

ISTR it was the same fool who couldn't tell one end of the
resistor colour codes from the other and hence posited that
resistors were polarised?

What a silly boy!

Brian Reay wrote:
>
> Wasn't there someone who couldn't tune the PA on one of these as some pages
> were missing from his manual?
>

1339. Re: FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 13:08:58 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1140354538.496708.292930@f14g2000cwb.googlegroups.com>
Source record: 13690
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Not so much "avoided", more a case of being too lazy or too
stupid, or both, to be able to tackle and pass a test targetted
at 14-year-olds and which 14-year-olds were taking in their stride?

Nedlar wrote:
> On 19 Feb 2006 04:44:27 -0800, "Plod's Conscience"
> <radio.ham@lycos.co.uk> wrote:
>
> >Wasn't there someone who couldn't work out the trivially simple
> >task of how to thread a wire through the tubes of a roof rack?
> >
>
> Wasn't that the same person who avoided taking a trivially simple
> Morse test for 20-odd years and then used the farcical M3 route in
> order to get on HF?

1340. Re: FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 13:19:50 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <Wf_Jf.41565$K42.33454@newsfe7-win.ntli.net>
Source record: 13691
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

on 19/02/2006 13:08 Chippenham Breaker (CB) said the following:
> Not so much "avoided", more a case of being too lazy or too
> stupid, or both, to be able to tackle and pass a test targetted
> at 14-year-olds and which 14-year-olds were taking in their stride?
>
and how old were _YOU_ when you passed?
...(_!_)...

1341. Re: FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 13:42:56 UTC
From: huLLy <s2f@f2s.com>
Message-ID: <oLGdnVPHK-N96GXeRVnysQ@giganews.com>
Source record: 13692
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Nedlar wrote:
> On 19 Feb 2006 04:44:27 -0800, "Plod's Conscience"
> <radio.ham@lycos.co.uk> wrote:
>
>> Wasn't there someone who couldn't work out the trivially simple
>> task of how to thread a wire through the tubes of a roof rack?
>>
>
> Wasn't that the same person who avoided taking a trivially simple
> Morse test for 20-odd years and then used the farcical M3 route in
> order to get on HF?

Who was it that avoided it for 14 years?

--
huLLy
Tel: 07976 123278
ICQ 136-987-925

1342. grow up

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 15:10:19 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1140361819.750141.126900@f14g2000cwb.googlegroups.com>
Source record: 13693
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Plod's Conscience wrote:
> What is Ham Radio?
>
> (Preface)
> It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery. Even
could you at least come up with some orginal bile to spew?

1343. Re: FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 15:30:34 UTC
From: Three Cheers for PC Fuller! <s2f@f2s.com>
Message-ID: <M7SdnZHXy6-5EmXeRVnysA@giganews.com>
Source record: 13694
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Nedlar wrote:
> On Sun, 19 Feb 2006 13:42:56 -0000, "huLLy" <s2f@f2s.com> wrote:
>
>
>> Who was it that avoided it for 14 years?
>
> No idea. It can't have been you because you remain a 2nd-Class G7.

Thank you for reminding me. Whatever would I do without you?

--
huLLy
Tel: 07976 123278
ICQ 136-987-925

1344. Re: seek LED's in "T-5 telephone slide" base

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 16:16:58 UTC
From: Travis Jordan <no.one@no.net>
Message-ID: <_R0Kf.52123$AL5.36194@fe01.news.easynews.com>
Source record: 13695
Cross-posted to: sci.electronics.repair,sci.electronics.components,rec.radio.amateur.homebrew

mroberds@worldnet.att.net wrote:
> Followups set to sci.electronics.components.
>
> In sci.electronics.components dances_with_barkadas@yahoo.com wrote:
> > seek LEDs in above-styled base, for replacement of PSB-120 indicator
> > lamps. a vendor whose product has been assigned a NSN for ordering
> > through the Federal Supply System would be optimal....
>
> Using an advanced search technique known as
> http://www.google.com/search?q=t-5+telephone+slide+led ,
> I found
>
http://www.ledtronics.com/datasheets/Pages/fsn_nsn_qualified_based_leds/67b.htm
> from the first hit.
>
> Matt Roberds

The frightening thing is that the OP posted from the DoD Information
Center.

Sleep well tonight, Americans.

1345. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 16:36:58 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <S51Kf.48647$697.212@bignews3.bellsouth.net>
Source record: 13696

JJ wrote:
> Risto Tiilikainen <risto.NON.tiilikainen@luukku.comMUNIST.invalid> wrote in
> news:43f62074$0$7474$39db0f71@news.song.fi:
>
>
>>>Hi !
>>>
>>>Any of those oscillators is OK if resonance circuit Q is kept high and
>>>oscillation power in average low level.
>>>High Q will guarantee easy and fast starting every time
>>>Average low level keeps components cool and cycle to cycle variations
>>>are reduced
>>>Third important question is loading the oscillator.
>>
>>>73, Risto OH2BT
>
> Good info thanks. What are other crystal series oscillators besides Butler
> type?
>
> JJ
>
One type not mentioned is the Franklyn, which IIRC is a cross coupled
multivibrator with one feedback path through the rock.

1346. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 17:26:53 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <e81f8$43f8aa5d$d135c4af$16711@MDI.CA>
Source record: 13697

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in news:dt8a26$hs7$1
@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com:

> If it oscillates it doesn't matter about the type of oscillator
> circuit.
>
> There's no need to worry yourself.
> ----
> Reg.
>
> ====================================
There is a drop in freq for Pierce and Colpitt after 1 min of startup. Can
be 100Hz.
Serious enough.

JJ

1347. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 17:38:31 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <r22Kf.3734$HU.2754@trnddc04>
Source record: 13548

>There is a drop in freq for Pierce and Colpitt after 1 min of startup. Can
> be 100Hz.
> Serious enough.

Not true.

100 Hz is a huge variation by crystal standards, especially in the lower frequency ranges. If a crystal oscillator drifts substantially during warmup, it usually implies two things:

1) The oscillator is driving the "so-called" parallel resonance of the crystal, which is very dependent on circuit capacitance. I said "so-called" because the parallel resonance isn't really a true resonance of the quartz, it's a frequency where the crystal appears inductive enough to resonate the combinationo fo the holder capacitance and the circuit capacitance.

2) The circuit is poorly designed.

BTW, some here have suggested just purchasing a 'can' oscillator. Be very careful of these, and check the specs carefully. Many 'can' oscillators have an internal programmable RC VCO that is PLL locked to a low frequency crystal. The up-side is that the manufacturer will make any frequency you want (some are even user-programmable). The down side is that RC VCO's have horrible jitter ('phase noise') that isn't corrected by the PLL

Joe
W3JDR

1348. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 17:39:24 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <ec9df$43f8ad4c$d135c4af$11242@MDI.CA>
Source record: 13549

> Epson makes a low jitter TTL osc. ~3pSec RMS jitter. ~$5 each. 100
> MHz.

Nice specs. Too bad the freqs. are not suitable for me.

JJ

1349. Re: Interested? Don't get sidetracked by the Cry Babies (CB) - a FAQ for you, the intending _REAL_ Radio Ham!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 19:09:39 UTC
From: JIMBO <jim.gm4dhj@ntlworld.com>
Message-ID: <Tn3Kf.32194$Fy4.26753@newsfe4-win.ntli.net>
Source record: 13550
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

>
> Away and "fling shite at the moon" !
>
>
> --
> <(.&#65533;.)> PK

```
Naw naw...it's pap peas at the moon.........
```

1350. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 19:20:27 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <dtagdr02ogh@enews2.newsguy.com>
Source record: 13552

ORIGINAL MESSAGE:

JJ wrote:

> There is a drop in freq for Pierce and Colpitt after 1 min of
> startup. Can be 100Hz.
> Serious enough.
>
> JJ

~~~~~~
Sounds like you're driving the crystal too hard and it's heating up.
When something heats it expands and a larger crystal has a lower
frequency. If you want best stability, reduce the drive until the
circuit barely oscillates and make up the lower output with a stage of
amplification.

73, Bill W6WRT
~~~~~~

1351. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 19:25:19 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <1mghv1lqat0du6q56t5j70498he8gvnqtr@4ax.com>
Source record: 13551

On Fri, 17 Feb 2006 10:21:19 GMT, "W3JDR" <joe@roccis.com> wrote:

>As a generalization, I think that any circuit that excites the crystal's
>series resonant mode will probably outperform a circuit that excites the
>parallel resonant mode, because the series resonance is higher Q and is less
>affected by external influences.

Joe, a minor issue.

Frerking,"Crystal Oscillator Design and Temperature Compensation" (and
a lot of other folks) says the Q of the crystal is: Q = Xl / R,
where Xl is the motional inductance and R is the ESR. Thus the Q of
the -crystal- is not a function of the mode of operation. Short of
drastically changing R, the crystal Q is unaffected by external
circuitry.

If we speak of overall -circuit- Q then that is a different can of
worms.

>
>Joe
>W3JDR
>
>
>"Tim Wescott" <tim@seemywebsite.com> wrote in message
>news:fPidnSRcdK1s-GjenZ2dnUVZ_tCdnZ2d@web-ster.com...
>> JJ wrote:
>>> I am fimilar with Colpitts, Harley, Clapps, Bulter, Piece oscillators?
>>>
>>> Which configuration with JFET or BJT would yield the highest performance
>>> and least jitter?
>>>
>>> JJ
>>
>> AFAIK a well-designed Butler oscillator will have the lowest jitter, but I
>> doubt that you could do the "well designed" part without a lot of bench
>> work.
>>
>> Any of the rest (considering a "Clapp" oscillator to mean a crystal
>> oscillator with rubbering) are good enough for communications work.
>>
>> --
>>
>> Tim Wescott
>> Wescott Design Services
>> http://www.wescottdesign.com

>>
>> Posting from Google? See http://cfaj.freeshell.org/google/
>

1352. Re: Interested? Don't get sidetracked by the Cry Babies (CB) - a FAQ for you, the intending _REAL_ Radio Ham!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 20:57:23 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1140382643.259565.43130@g43g2000cwa.googlegroups.com>
Source record: 13553
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Plod's Conscience wrote:
> knowledge. It's a great swimming pool, please dive in!

I wish you'd dive in - don't forget your concrete wellies!

1353. Re: Interested? Don't get sidetracked by the Cry Babies (CB) - a FAQ for you, the intending _REAL_ Radio Ham!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 21:01:51 UTC
From: Three Cheers for PC Fuller! <s2f@f2s.com>
Message-ID: <ycadnQ9VMZdfQWXenZ2dnUVZ8qGdnZ2d@giganews.com>
Source record: 13554
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Mike G4KFK wrote:
> Plod's Conscience wrote:
>> knowledge. It's a great swimming pool, please dive in!
>
> I wish you'd dive in - don't forget your concrete wellies!

Head first after the water was drained out!

--
huLLy
Tel: 07976 123278
ICQ 136-987-925

1354. Re: FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 21:11:01 UTC
From: class-a-licensee-pkearn-zBBpk@didnt-run-away-from-a-morse-test.es.eircom.com.net
Message-ID: <43f8ded7.93153565@news.iol.ie>
Source record: 13555
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"huLLy" <s2f@f2s.com> wrote:

>
> Who was it that avoided it for 14 years?

g7--- was issued when ???

1355. Re: Interested? Don't get sidetracked by the Cry Babies (CB) - a FAQ for you, the intending _REAL_ Radio Ham!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 21:23:52 UTC
From: PC Fuller for Prime Minister <Volcano@nicks-place.com>
Message-ID: <Il5Kf.34586$Dn4.3677@newsfe3-gui.ntli.net>
Source record: 13556
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Three Cheers for PC Fuller!" <s2f@f2s.com> wrote in message
news:ycadnQ9VMZdfQWXenZ2dnUVZ8qGdnZ2d@giganews.com...
> Mike G4KFK wrote:
>> Plod's Conscience wrote:
>>> knowledge. It's a great swimming pool, please dive in!
>>
>> I wish you'd dive in - don't forget your concrete wellies!
>
> Head first after the water was drained out!
>
If only, Hully, If only...

tox

1356. Re: FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 21:29:06 UTC
From: Three Cheers for PC Fuller! <s2f@f2s.com>
Message-ID: <c_adnegUpou4fmXeRVnyvw@giganews.com>
Source record: 13557
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

zBBPK wrote:
> "huLLy" <s2f@f2s.com> wrote:
>
>>
>> Who was it that avoided it for 14 years?
>
>
> g7--- was issued when ???

1987 but I never avoided it ;)

--
huLLy
Tel: 07976 123278
ICQ 136-987-925

1357. Re: Interested? Don't get sidetracked by the Cry Babies (CB) - a FAQ for you, the intending _REAL_ Radio Ham!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 21:29:47 UTC
From: Three Cheers for PC Fuller! <s2f@f2s.com>
Message-ID: <SKydnQPQAezSfmXeRVnytQ@giganews.com>
Source record: 13558
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

PC Fuller for Prime Minister wrote:
> "Three Cheers for PC Fuller!" <s2f@f2s.com> wrote in message
> news:ycadnQ9VMZdfQWXenZ2dnUVZ8qGdnZ2d@giganews.com...
>> Mike G4KFK wrote:
>>> Plod's Conscience wrote:
>>>> knowledge. It's a great swimming pool, please dive in!
>>>
>>> I wish you'd dive in - don't forget your concrete wellies!
>>
>> Head first after the water was drained out!
>>
> If only, Hully, If only...
>
> tox

well if the pool was full, i'd pay for a few million batteries to chuck in,
Tox ;)

--
huLLy
Tel: 07976 123278
ICQ 136-987-925

1358. New program OPANGLE3

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 21:51:21 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <dtap8p$a0n$1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13559

NOW AVAILABLE ** New Program "OPANGLE3.exe"

Choose and set plate current operating angle for Class-B and Class-C
RF power amplifiers.

Input data includes control-grid plate-current cut-off volts, DC
negative grid bias, and peak grid drive volts.

Advice on how to use Tube Operating Characteristic Curves is included.
For interest the plate current harmonic content is computed up to the
21st harmonic.

For given DC plate supply volts and peak plate signal volts, the DC
power input, tuned load resistance, RF power output, plate dissipation
and efficiency are computed.

This is a repeat of program Op_Angle (now withdrawn) with the addition
of an analysis of conditions in the plate circuit.

Program size = 50 kilo-bytes.
Download OPANGLE3 from website below.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

1359. Re: Interested? Don't get sidetracked by the Cry Babies (CB) - a FAQ for you, the intending _REAL_ Radio Ham!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 21:57:53 UTC
From: PC Fuller for President <know_code@wanadoo.nl>
Message-ID: <43f8e9e1$0$21831$dbd41001@news.wanadoo.nl>
Source record: 13561
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

```
Three Cheers for PC Fuller! wrote:
> PC Fuller for Prime Minister wrote:
>> "Three Cheers for PC Fuller!" <s2f@f2s.com> wrote in message
>> news:ycadnQ9VMZdfQWXenZ2dnUVZ8qGdnZ2d@giganews.com...
>>> Mike G4KFK wrote:
>>>> Plod's Conscience wrote:
>>>>> knowledge. It's a great swimming pool, please dive in!
>>>> I wish you'd dive in - don't forget your concrete wellies!
>>> Head first after the water was drained out!
>>>
>> If only, Hully, If only...
>>
>> tox
>
> well if the pool was full, i'd pay for a few million batteries to chuck in,
> Tox ;)

An acid bath.... that's mean :)

--
```

1360. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 21:58:49 UTC
From: Risto Tiilikainen <risto.NON.tiilikainen@luukku.comMUNIST.invalid>
Message-ID: <43f8e946$0$25334$39db0f71@news.song.fi>
Source record: 13560

JJ wrote:

>>Epson makes a low jitter TTL osc. ~3pSec RMS jitter. ~$5 each. 100
>>MHz.
>>
>>
>
>Nice specs. Too bad the freqs. are not suitable for me.
>
>JJ
>
>
Hi !

Why do you like to key the oscillator ?
Let it run all the time and key the later stage !

73 , Risto OH2BT

1361. Re: Interested? Don't get sidetracked by the Cry Babies (CB) - a FAQ for you, the intending _REAL_ Radio Ham!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-19 22:11:01 UTC
From: Me <Me@msn.com>
Message-ID: <43f8ecf5_1@x-privat.org>
Source record: 13562
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"PC Fuller for President" <know_code@wanadoo.nl> wrote in message
news:43f8e9e1$0$21831$dbd41001@news.wanadoo.nl...
> Three Cheers for PC Fuller! wrote:
>> PC Fuller for Prime Minister wrote:
>>> "Three Cheers for PC Fuller!" <s2f@f2s.com> wrote in message

> An acid bath.... that's mean :)
>
I think the guys already on acid going on his behaviour.

1362. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-20 00:23:22 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <_Z7Kf.3781$HU.3295@trnddc04>
Source record: 13563

"Thus the Q of
> the -crystal- is not a function of the mode of operation."

Wes,

If you're speaking of the Q of the crystal's inherent series resonance, then you're right. However, most crystal oscillator circuits that we typically see in common use operate in the parallel resonant mode, which isn't a crystal resonance at all. It's the frequency at which the crystal's net inductive reactance resonates the parallel combination of holder capacitance and circuit capacitance. As such, it's quite affected by the circuit around the crystal. When the crystal is operated in a parallel resonant mode as described, the Q of the overall resonant circuit is much lower than the crystal's resonant Q.

Joe
W3JDR

1363. Re: FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-20 07:22:33 UTC
From: JIMBO <jim.gm4dhj@ntlworld.com>
Message-ID: <Z6eKf.55822$mf2.7094@newsfe6-win.ntli.net>
Source record: 13564
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

> You avoided a trivially simple Morse test. I suppose you had no
> interest in HF eh? (apart from freebanding ?)...

Tee hee !.......nice one.....

1364. Re: Interested? Don't get sidetracked by the Cry Babies (CB) - a FAQ for you, the intending _REAL_ Radio Ham!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-20 10:31:46 UTC
From: dave <dave@127.0.0.1>
Message-ID: <dtc595$g7s$1@newsg1.svr.pol.co.uk>
Source record: 13565
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

On Sun, 19 Feb 2006 01:27:11 -0800, Plod's Conscience wrote:

You're dafter than the people you rail against.

On Sun, 19 Feb 2006 01:27:11 -0800, Plod's Conscience whined:

<snip drivel>

1365. Re: FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-20 17:43:45 UTC
From: G4ZWI <fred.c@ntlworld.com>
Message-ID: <1140457425.650442.74330@g14g2000cwa.googlegroups.com>
Source record: 13566
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Must admit, I tended to loose the thread {!} after body, tip,
spot......

1366. 4 ginnplexers 10Gig

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-20 19:10:07 UTC
From: Tracy <n1rkt@dtccom.net>
Message-ID: <8837a$43fa150b$c6bf6ab$24032@API-DIGITAL.COM>
Source record: 13567

Hi,
I would not post this as a rule but thought with this one maybe I should. I have 4 gunnplexers up for auction at the big E site. Great to play with for linking or just microwave fun. Sorry if I offend anyone here with an auction post.

'73 Tracy N1RKT

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5868838884&rd=1&sspagename=STRK%3AMESE%3AIT&rd=1

1367. Re: Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-20 22:36:01 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11vkh4ls839udd1@corp.supernews.com>
Source record: 13568

Hi Len,

<LenAnderson@ieee.org> wrote in message
news:1140207792.006271.92960@g47g2000cwa.googlegroups.com...
> Unrelated "rationalizations." Breaking a law or rules or other
> directives is still BREAKING something, purloining someone's
> original work. Stealing.

I agree, I'm just saying that -- being human -- I'm willing to turn a blind-eye towards some violations of various laws, just as real law enforcement officers do every single day. Now if my job is to enforce, e.g., copyright law and somebody makes me _aware_ of a particular violation, clearly I have to go ahead and prosecute, regardless of what my "blind eye" might do otherwise. (Similarly, I don't in any way buy the excuse of the current crop of phramecists who'll refuse to dispense, e.g., "day after" pills because doing so goes against their moral convictions!)

> In Roy's case on EZNEC, he put in a lot of work in translation
> of (totally copyable by law) U.S. government work into a useful
> program of antenna analysis.

Given that Roy is alive and well (I saw him walking around in Rickreal on Saturday!) and supporting/selling his product, I can think of no rationalization whatsoever whereby pirating EZNEC could be considered "acceptable." Now, 40 years from now when the situation has changed, I may feel quite differently.

>>> Rationalizations are as diverse and original as fertile minds can create.
>>> The ultimate result will be that eventually, nobody will bother creating
>>> anything original.
>
> ABSOLUTELY TRUE!
>
>>Only in some sort of idealist world. In the real world, original creations
>>will be generated so long as doing so puts bread on the table.
>
> THIS is the real world. There's no "special case" that justifies
> that idealistic rationalization you made...it is circular logic in
> itself...in the real world.

Huh? My point was only that -- regardless of what I or others may rationalize and therefore use to relieve our consciouses while we break some law -- original works will continue to be generated so long as there's some sort of income to be derived in doing so. I do agree that there's less and less income to be derived if more and more people go around rationalizing piracy/stealing/etc. in general, and I personally find it a very distrubing

trend that so many people today don't think twice about copying software/music/movies/etc.

> EZNEC is an example that applies here. The work that Roy did on
> translation of (free) code, cleaning it up, making it presentable
> in a meaningful manner to users, was considerable, much more so
> than just getting the original program code to work. Why should
> Roy give away such effort?

I don't see any reason he should, unless he chooses too. Although it's interesting to contemplate that EZNEC probably wouldn't exist if it weren't for the NEC core that was developed with taxpayer dollars... perhaps the ultimate outcome of piracy running rampant will be that software development will then only be performed by government-employed programmers? Or hobbyists with no expectation whatsoever of monetary gain from their efforts? I think that'd be a horrible situation, although there are plenty of people out there who firmly believe that most all software should be produced under such a model. :-(

> What it does NOT have for free
> is a way of showing the results in anything but tabular form, no
> graphics to instantly show the antenna patterns, VSWR of feed
> point, RF currents, etc.

Not to discount Roy's work -- since, again, he's a talented programmer and his software is clearly worth paying for -- but I do find it disappointing that (in stark constrast to the anecdote in the preceeding paragraph) very little new software comes out of the government today. Why is it that software like OpenOffice has to be developed by 100% volunteers rather than by our government? If you look at universities today, most of the EDA software they use is commercial in nature (donated or provided at a substantially reduced price by the manufacturer) rather than anything written in-house. Heck, back when Roy worked at Tektronix, my understanding was that TekSPICE was the simulation program of the day, whereas now Tek has also switched to commercial SPICE simulators and is very close to completely phasing out the usage of TekSPICE... kinda sad, in a way.

> Without the protection of the copyright law, Microsoft could
> never have made that Big Break that started their humongous
> incoming cash flow.

I think that's somewhat speculative. :-) ...but I don't really know enough of Microsoft's history to say for certain.

Thanks for your input, Len!

---Joel

1368. Re: Paid for-against Free Software ; was :Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-20 23:35:17 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <ZaCdnSz4Q6yzz2feRVnyug@pipex.net>
Source record: 13569

An interesting thread.
While following it , my thoughts are with Richard Stallman and his Free Software Foundation and subsequent development of the Linux Operating System under the GPL = General Public Licence.....and the many software developers (world wide), who continue with providing Society with a ever improving free Operating System with umpteen excellent free applications.
I am currently using one ,typing/sending this message : SeaMonkey (Mozilla Foundation)

Frank GM0CSZ / KN6WH

==========

Joel Kolstad wrote:
> Hi Len,
>
> <LenAnderson@ieee.org> wrote in message

>> Unrelated "rationalizations." Breaking a law or rules or other
>> directives is still BREAKING something, purloining someone's
>> original work. Stealing.
>
> I agree, I'm just saying that -- being human -- I'm willing to turn a
> blind-eye towards some violations of various laws, just as real law
> enforcement officers do every single day. Now if my job is to enforce, e.g.,
> copyright law and somebody makes me _aware_ of a particular violation, clearly
> I have to go ahead and prosecute, regardless of what my "blind eye" might do
> otherwise. (Similarly, I don't in any way buy the excuse of the current crop
> of phramecists who'll refuse to dispense, e.g., "day after" pills because
> doing so goes against their moral convictions!)
>
>> In Roy's case on EZNEC, he put in a lot of work in translation
>> of (totally copyable by law) U.S. government work into a useful
>> program of antenna analysis.
>
> Given that Roy is alive and well (I saw him walking around in Rickreal on
> Saturday!) and supporting/selling his product, I can think of no
> rationalization whatsoever whereby pirating EZNEC could be considered
> "acceptable." Now, 40 years from now when the situation has changed, I may
> feel quite differently.
>
>>>> Rationalizations are as diverse and original as fertile minds can create.
>>>> The ultimate result will be that eventually, nobody will bother creating
>>>> anything original.

>> ABSOLUTELY TRUE!
>>
>>> Only in some sort of idealist world. In the real world, original creations
>>> will be generated so long as doing so puts bread on the table.
>> THIS is the real world. There's no "special case" that justifies
>> that idealistic rationalization you made...it is circular logic in
>> itself...in the real world.
>
> Huh? My point was only that -- regardless of what I or others may rationalize
> and therefore use to relieve our consciouses while we break some law --
> original works will continue to be generated so long as there's some sort of
> income to be derived in doing so. I do agree that there's less and less
> income to be derived if more and more people go around rationalizing
> piracy/stealing/etc. in general, and I personally find it a very distrubing
> trend that so many people today don't think twice about copying
> software/music/movies/etc.
>
>> EZNEC is an example that applies here. The work that Roy did on
>> translation of (free) code, cleaning it up, making it presentable
>> in a meaningful manner to users, was considerable, much more so
>> than just getting the original program code to work. Why should
>> Roy give away such effort?
>
> I don't see any reason he should, unless he chooses too. Although it's
> interesting to contemplate that EZNEC probably wouldn't exist if it weren't
> for the NEC core that was developed with taxpayer dollars... perhaps the
> ultimate outcome of piracy running rampant will be that software development
> will then only be performed by government-employed programmers? Or hobbyists
> with no expectation whatsoever of monetary gain from their efforts? I think
> that'd be a horrible situation, although there are plenty of people out there
> who firmly believe that most all software should be produced under such a
> model. :-(
>
>> What it does NOT have for free
>> is a way of showing the results in anything but tabular form, no
>> graphics to instantly show the antenna patterns, VSWR of feed
>> point, RF currents, etc.
>
> Not to discount Roy's work -- since, again, he's a talented programmer and his
> software is clearly worth paying for -- but I do find it disappointing that
> (in stark constrast to the anecdote in the preceeding paragraph) very little
> new software comes out of the government today. Why is it that software like
> OpenOffice has to be developed by 100% volunteers rather than by our
> government? If you look at universities today, most of the EDA software they
> use is commercial in nature (donated or provided at a substantially reduced
> price by the manufacturer) rather than anything written in-house. Heck, back
> when Roy worked at Tektronix, my understanding was that TekSPICE was the
> simulation program of the day, whereas now Tek has also switched to commercial
> SPICE simulators and is very close to completely phasing out the usage of
> TekSPICE... kinda sad, in a way.

>
>> Without the protection of the copyright law, Microsoft could
>> never have made that Big Break that started their humongous
>> incoming cash flow.
>
> I think that's somewhat speculative. :-) ...but I don't really know enough of
> Microsoft's history to say for certain.
>
> Thanks for your input, Len!
>
> ---Joel

1369. Re: Paid for-against Free Software ; was :Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-21 00:39:53 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11vkod89mu87bb8@corp.supernews.com>
Source record: 13570

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:ZaCdnSz4Q6yzz2feRVnyug@pipex.net...
> An interesting thread.
> While following it , my thoughts are with Richard Stallman and his Free
> Software Foundation and subsequent development of the Linux Operating System
> under the GPL = General Public Licence.....and the many software
> developers (world wide), who continue with providing Society with a ever
> improving free Operating System with umpteen excellent free applications.

Linux and all the other GPL projects are a great service to the community at large and have clearly provided products that otherwise either would have cost much more or simply been out of reach of many people. That being said, Stallman and his associates clearly have an agenda as well -- there's a _huge_ difference between true "public domain" software (such as what the government produces and what the original versions of SPICE and NEC are) vs. GPL'd software. This agenda had led to numerous "me too" licenses (e.g., the lesser GPL license) where people tend to pick and choose which pieces of the GPL they like and even occasionally tack on bits of their own agendas (e.g., they restrict their software from usage by those in the military, the government, even just anyone using it for fiduciary gain, etc.).

Not that there's anything inherently wrong with this -- commercial software licenses are even more convoluted and variegated! -- but people should be aware of the difference.

Ubdoubtedly a poor analogy: Just as when one chooses a religion, there's usually a savior associated with it who performs miracles, promises peace on Earth, etc... but you only get to receive all of those goodies if you buy into the entire package, which sometimes contains all sorts of ideas you oppose! Richard Stallman is then perhaps our modern-day software Jesus/Joeseph Smith/Buddha/etc...

---Joel Kolstad
(who, on occasion, has used plenty of GPL software and thinks OpenOffice is very good and would probably serve the purposes of 90+% of all MS Office users just as well... oh... and GNURadio is pretty cool too...)

1370. Re: 4 ginnplexers 10Gig

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-21 01:13:06 UTC
From: stargatesg1 <me@verizon.net>
Message-ID: <COtKf.2626$0z.2485@trnddc01>
Source record: 13571

I wonder if you bought them from me at the Dayton hamfest? I bought about
90+ of them from a security company for $2-$3 each.
I took a bunch there and sold them all for 30-35 each. They were all sold in
less than half of the first day.
Sounds like a good deal to me if someone wants to set up a 10ghz link. They
have quite a bit of range just with the small stock horn.
Lots of fun on long trips to set off radar detectors :-) :-)

Good Luck with the auction,
RoD

"Tracy" <n1rkt@dtccom.net> wrote in message
news:8837a$43fa150b$c6bf6ab$24032@API-DIGITAL.COM...
> Hi,
> I would not post this as a rule but thought with this one maybe I should.
I
> have 4 gunnplexers up for auction at the big E site. Great to play with
for
> linking or just microwave fun. Sorry if I offend anyone here with an
auction
> post.
>
> '73 Tracy N1RKT
>
>
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5868838884&rd=1&sspagenam
> e=STRK%3AMESE%3AIT&rd=1
>
>

1371. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-21 13:29:52 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1140528592.488365.59210@z14g2000cwz.googlegroups.com>
Source record: 13572

JJ wrote:
> There is a drop in freq for Pierce and Colpitt after 1 min of startup. Can
> be 100Hz.
> Serious enough.

That sounds like crystal heating. All of these oscillators can drive the crystal at various drive levels (depending on resistor and capacitor values and/or tank circuit tapping) and different crystals like different drive levels.

A tuning-fork type crystal (e.g. 32kHz watch crystal) is being overdriven if the levels are as high as a microwatt.

Most HF-range crystals will take hundreds of microwatts to a few milliwatts of drive.

Lots of the oscillator circuits in old handbooks are designed around FT-243 crystals, which can take substantially higher drive levels (sometimes the tube oscillator was putting out several watts) than "modern" crystals. And even then those handbook circuits overdrove the crystals to get more power out of the oscillator! By 1950's standards 100Hz of chirp/drift was not a big deal (was probably better than average for most equipment.)

Tim.

1372. Re: FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-21 15:08:32 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dtfadg02bqo@drn.newsguy.com>
Source record: 13573
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

jmiles@gmail.com wrote...
>
> If you plan to use my GPIB software with it, be sure to download a
> recent copy. I hosed the phase-noise app pretty badly in my last
> "slipstream" update a few weeks ago, and only heard about it last
> week. The version that's up there now is fine.

http://www.qsl.net/ke5fx/ Thanks for the heads-up. That's v1.05,
the Jan 14, 2006 edition? Which program was updated to fix the
phase-noise problem? The pn program's source code says 13-Jul-05,
although the pn.cpp file date is 12-Feb-06.

I like the part where you get the "number of 1000-ns intervals
since 1-Jan-1601 UTC" :-)

--
Thanks,
- Win

1373. APRSPoint president's day sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-21 17:23:25 UTC
From: "hxc98@yahoo.com" <hxc98@yahoo.com>
Message-ID: <1140542605.284629.101900@g44g2000cwa.googlegroups.com>
Source record: 13574

APRSPoint is a complete APRS package with integrated street-level maps.
We are offerring a president's day special. Now you can APRSPoint plus
MapPoint 2004 for $69.95 instead of $89.95. Please visit
http://www.aprspoint.com/ for details. Thanks.

1374. WARNING: hackarmy trojan (was: Moms Dildo Lesson To Sister)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-21 17:48:03 UTC
From: Lloyd <lloyd@no.spammmmm>
Message-ID: <HA87017833.2458F8789@tarrnews.net>
Source record: 13575
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Tue, 21 Feb 2006 15:47:37 GMT, qqhrwz@shaw.ca wrote:
[Illegal post snipped]

The old hackarmy trojan is contained in the binary. Someone wants
to take over your machine.

1375. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-21 19:12:31 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1140549151.252807.60000@z14g2000cwz.googlegroups.com>
Source record: 13576

I haven't read all the replies in this thread, so this may have been brought up before... Wenzel Associates make some of the lowest phase noise oscillators commonly available, and on their web site you will find information about keeping things low jitter/low phase noise. You will find some simple, practical low noise circuits there, including crystal oscillator circuits.

Cheers,
Tom

1376. Re: WARNING: hackarmy trojan (was: Moms Dildo Lesson To Sister)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-21 19:26:10 UTC
From: whinyslit_lloydie@yahoo.com
Message-ID: <1140549970.267419.214020@f14g2000cwb.googlegroups.com>
Source record: 13577
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

AS if you'd know, loser.

1377. Re: FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-21 20:29:13 UTC
From: class-a-licensee-pkearn-zBBpk@didnt-run-away-from-a-morse-test.es.eircom.com.net
Message-ID: <43fb77cd.653869@news.iol.ie>
Source record: 13578
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Three Cheers for PC Fuller!" <s2f@f2s.com> wrote:

> zBBPK wrote:
> > "huLLy" <s2f@f2s.com> wrote:
> >
> >>
> >> Who was it that avoided it for 14 years?
> >
> >
> > g7--- was issued when ???
>
> 1987 but I never avoided it ;)
>

bbbbbbbbbwwwwwwwwwwwwaaaaaaaaaaaaaahhhhhhhhhhhhh

next thing you'll claim is that you had no interest in hf !!

1378. Re: FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-21 20:29:14 UTC
From: class-a-licensee-pkearn-zBBpk@didnt-run-away-from-a-morse-test.es.eircom.com.net
Message-ID: <43fb77ef.688100@news.iol.ie>
Source record: 13579
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Nedlar <Sam@techno.invalid> wrote:

> >> "huLLy" <s2f@f2s.com> wrote:
> >1987 but I never avoided it ;)
>
> You avoided a trivially simple Morse test. I suppose you had no
> interest in HF eh? (apart from freebanding ?)...

snap!

1379. Re: FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-21 20:53:25 UTC
From: Three Cheers for PC Fuller! <s2f@f2s.com>
Message-ID: <lc6dnbPaKq9Y4GbeRVnytA@giganews.com>
Source record: 13580
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

zBBPK wrote:
>
>
> next thing you'll claim is that you had no interest in hf !!

Correct, and I still don't.
--
huLLy
Tel: 07976 123278
ICQ 136-987-925

1380. Re: FT-757 GXII alignment....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 00:36:05 UTC
From: Mr Fed UP <mrfedup@bellsouth.net>
Message-ID: <pjOKf.5142$Pv1.2034@bignews6.bellsouth.net>
Source record: 13581
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

I had one of these and worked 10m DXCC in 90s... later had to sell it and
just now have a used one from ebay. I took apart the dial that was
stuck and repaired the optical tuner mechanism. Now I don't know
if I have a large SWR or if the rig is sick. It jumps freq' when the
RF output power is turned up.
I was hoping to see some more tips and helps but the thread seems to
have been taken over by some sand pile kids with no help other than
flaming any post.

Any ideas why the rig jumps freq? Restarting from scratch. No
Bird or Freq meters yet.

Odd this was run on homebrew LOL

Thanks 73 Gary K4TWO

"Samuel Hunt" <shunt010@hotmail.com> wrote in message
news:dso1hiqtv1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com...
> Has anyone any info on servicing one of these?
>
> The power control is out of alignment (about 3/4 of the way up it suddenly
> jumps into TX at full power, with it being very sensitive to get any
> control between full and no power).
>
> Possibly a bias problem on the PA?
>
> And the power meter needs re-aligning.
>
> And the FM deviation is too high.
>
> Can anyone point me towards the internal pots?
>
>
> Thanks,
>
> Sam
> M1FJB
>

1381. Crystals wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 02:59:28 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <nqknv1ps3298rbssb9thjjm5fcgtopb5di@4ax.com>
Source record: 13582

I have a homebrew project that I need some crystals for. Need the
following:

3.300 mhz

3.500 mhz

10.5 mhz

17.5 mhz

24.5 mhz

Prefer HC6 holders if you have them. Any help out there?

Thanks!

Gary K4FMX

Please reply to garyschafer@comcast.net

1382. The Great Strip-X Substitute Hunt, Part 2

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 05:38:33 UTC
From: LenAnderson@ieee.org
Message-ID: <1140586713.373458.313610@o13g2000cwo.googlegroups.com>
Source record: 13583

Not too long ago, I inquired about a substitute for General Cement "Strip-X", an old stand-by on quick removal of the enamel of "coil wire." It was a smelly, blackish gel, came in a small bottle, and wonderful for stripping off coil wire enamel in a minute or two. It isn't made for the electronics hobby trade anymore, but there IS a reasonable substitute: Jasco 0201 Premium Paint Stripper, available at most Lowe's, Home Depot, OSH, True Value chain stores, about $4.75 for a pint.

I have some toroid coils under construction, all using #32 and #34 AWG enameled coil wire. A #$%^!!! to strip those with either single-edge razor blades or fine-grit finishing paper. With the Jasco stripper gel, two dips and a WAIT of about 15 minutes will allow a wiping cloth to remove the enamel without damaging the wire. A lot longer wait than with Strip-X, but it is better than nothing.

The same Jasco paint stripper will also loosen the lithographic designs/labels on small tin cans. [see other post] The newer can paints are tougher than those of 30+ years ago so it might be necessary to use some steel wool to help remove the paint (with the gel still on it). Doesn't appear to affect the steel wool.

The product contains methylene chloride (said to be a toxic substance, especially to Californians and their overly-strict hazardous materials rules). Another brand and product at Do-It Centers had that plus formic acid; didn't get that, a bigger can and it cost about $18. Whatever was in old Strip-X must have been stronger and nastier. [my last bottle dissolved the bristles of the bottle cap brush after sitting for a few years]

So far, the hobby room's production line has been humming along without breaking any fine coil wire in order to solder to the toroid winding's ends.

LenAnderson@ieee.org

1383. Inexpensive small shield enclosures from square tin cans

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 05:41:07 UTC
From: LenAnderson@ieee.org
Message-ID: <1140586867.550096.271600@g44g2000cwa.googlegroups.com>
Source record: 13584

If you or your significant-other use some of the specialty tea or coffee products for instant gourmet tea or coffee, do NOT throw out the little cans it comes in...they can be recycled into a variety of enclosures, shield cans, etc., if they are made of tin-plated, light sheet steel.

Of three products tried for this are various Chai Tea boxes available under "Safeway Select" brand at Von's food stores. Those are 3 3/4" wide, 1 3/8" deep, and 3 1/2" high (about 3 3/16" high inside). Those and the other two below all have a lip around the top, ideal for attaching cover plates or whatnot to protect whatever is inside. The aperture at the top is about 3 1/4" wide by 1 13/16" deep.

Through Ralphs food markets is the "Private Selection" brand of flavored coffees and General Foods International Coffee brand (General Foods also at Von's). Those are 4 1/8" wide, 2 5/16" deep, and 2 5/8" high (about 2 3/8" high inside). The aperture at the top is 3 1/2" wide by 2 1/16" deep.

With the outside paint lithography stripped off, they all take soldering very well for insuring all seams can be made conductive (and for weather-proofing if used outdoors). To check for tin-plated steel, use a "refrigerator magnet" to see if it adheres or not. [got lots of magnets, too] While not as strong as a cast aluminum box (as from Bud), they are sturdy enough to hold quite a bit inside. The price (nil) can't be beat! :-)

LenAnderson@ieee.org

1384. Re: Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 05:44:36 UTC
From: LenAnderson@ieee.org
Message-ID: <1140587075.998758.13970@o13g2000cwo.googlegroups.com>
Source record: 13585

From: "Joel Kolstad" on Mon, Feb 20 2006 2:36 pm

><LenAnderson@ieee.org> wrote in message

>> In Roy's case on EZNEC, he put in a lot of work in translation
>> of (totally copyable by law) U.S. government work into a useful
>> program of antenna analysis.
>
>Given that Roy is alive and well (I saw him walking around in Rickreal on
>Saturday!) and supporting/selling his product, I can think of no
>rationalization whatsoever whereby pirating EZNEC could be considered
>"acceptable." Now, 40 years from now when the situation has changed, I may
>feel quite differently.

Ahem, "40 years from now" may see a COMPLETELY DIFFERENT pardigm
for ALL of "radio!" "Radio" - as a communications medium is only
110 years old...look back to how it was back in 1896 with NO
true active devices. :-)

>>>Only in some sort of idealist world. In the real world, original creations
>>>will be generated so long as doing so puts bread on the table.
>>
>> THIS is the real world. There's no "special case" that justifies
>> that idealistic rationalization you made...it is circular logic in
>> itself...in the real world.
>
>Huh? My point was only that -- regardless of what I or others may rationalize
>and therefore use to relieve our consciouses while we break some law --
>original works will continue to be generated so long as there's some sort of
>income to be derived in doing so. I do agree that there's less and less
>income to be derived if more and more people go around rationalizing
>piracy/stealing/etc. in general, and I personally find it a very distrubing
>trend that so many people today don't think twice about copying
>software/music/movies/etc.

"Copying" is a way to keep one's "bread on the table" without
putting that "bread" on someone else's table. The general
rationalization is that it hurts no one (physically) and
intellectual property purloining doesn't involve tangible,
physical things (laws on stealing were based on material
objects taken). As Roy remarked, without the protection on
immaterial property (ideas, creations), there would be NO
impetus originate something new...no "ROI" or Return On
Investment of new development.

>> EZNEC is an example that applies here. The work that Roy did on
>> translation of (free) code, cleaning it up, making it presentable
>> in a meaningful manner to users, was considerable, much more so
>> than just getting the original program code to work. Why should
>> Roy give away such effort?
>
>I don't see any reason he should, unless he chooses too. Although it's
>interesting to contemplate that EZNEC probably wouldn't exist if it weren't
>for the NEC core that was developed with taxpayer dollars...

We wouldn't have SPICE derivatives if it wasn't for the efforts
of the University of California at Berkeley development group
deciding it should be available "free." SPICE itself wouldn't
have existed without the original, much older predecessor ECAP
done by IBM (not exactly free since the FORTRAN code managed to
"migrate" out and be distributed by copiers back in the 50s.
Ohio State's version (OSUCAD) code was published in a book on
the subject by two OSU professors. [irrelevant trivia fact but
illustrates just one of many, many works that have all sprung
from the original ECAP pioneering work on circuit analysis]

The NEC core cranks out numbers, numbers, numbers. [just as
ECAP did on circuit analysis] NO intuitive "feel" for the
results to most folks. The GRAPHICS and organized tabulations
had to be done to make them USEFUL for others. That work is
important but usually overlooked.

>... perhaps the
>ultimate outcome of piracy running rampant will be that software development
>will then only be performed by government-employed programmers? Or hobbyists
>with no expectation whatsoever of monetary gain from their efforts? I think
>that'd be a horrible situation, although there are plenty of people out there
>who firmly believe that most all software should be produced under such a
>model. :-(

I think it will come about as nearly ALL OTHER THINGS in radio
and electronics...via the competitive marketplace. The amount
of WORK involved to develop something almost demands some kind
of ROI to justify it to the developer/innovator.

If we look at what exists now, we get blase' about all the effort
involved to make a product (almost as if "it always existed...")
available for others to use. Too many of us take the THINGS we
have for granted.

>... very little
>new software comes out of the government today. Why is it that software like
>OpenOffice has to be developed by 100% volunteers rather than by our
>government? If you look at universities today, most of the EDA software they
>use is commercial in nature (donated or provided at a substantially reduced
>price by the manufacturer) rather than anything written in-house.

Very little actual "government software" was ever done, nearly
all was hired, contracted outside work. [see the FBI's debacle
over a national database featured in SPECTRUM a few months back]
What "the universities" do is NOT NECESSARILY what goes on in
the rest of the world! True, despite the self-promoting PR of
"the universities!"

Note: I used to be a member of SIGGRAPH when I was interested
in graphics and animation. The "universities" did some
pioneering work there, but the professional animators and
graphics folks have gone wayyyyyy beyond that. One can see
it everyday on television, principally in advertising spots.

SPICE didn't suddenly spring out of nowhere at Berkeley...it had
many, many predecessors. That it became the de facto circuit
analysis program in use anywhere in electronics is BECAUSE the
core was free to use. [I could make a big list out of those
predecessors, but that's irrelevant also here]

>Heck, back
>when Roy worked at Tektronix, my understanding was that TekSPICE was the
>simulation program of the day, whereas now Tek has also switched to commercial
>SPICE simulators and is very close to completely phasing out the usage of
>TekSPICE... kinda sad, in a way.

Before about 1975 there was VERY LITTLE "everyday" use of computer
aided design outside of IC development in the electronics industry.
Computer time was very expensive and had to be justified to the
bean counters (been there, done that, made lots of bean soup).

Tektronix was an innovator in electronics from its start. That
by itself is no right for their forever claiming such things as
the market is the driving force that rules the future. When
the market is using SPICE (almost universally), then they too
must use it in order to compete.

>> Without the protection of the copyright law, Microsoft could
>> never have made that Big Break that started their humongous
>> incoming cash flow.
>
>I think that's somewhat speculative. :-) ...but I don't really know enough of
>Microsoft's history to say for certain.

Not speculation, fact, stated in several books on their history
and the TV movie comparing Steve Jobs and Bill Gates. MS got
their Big Break at an IBM conference room in Boca Raton back
in the very late 1970s. They had the IP lock on the OS and
could then parlay that into their enormous fortune. MS took
advantage of that and applied some good sales tactics to wind
up a virtual monopolist in operating systems of PCs.

As far as IP protection on radio hobby magazines, that's
still up in the air for many. If everyone wants to sit
around and rebuild the regenerative receiver or "design"

two-tube (or teeny two-transistor) transmitters, fine, but that is just re-inventing the wheel for the nth time. Much of the output of the radio hobbyist press (other than new product info squibs and "reviews") is the publishers essentially copying their own old works...for their own profit. [the ARRL Handbook has been such for decades, most of their content already published in ARRL works prior...it makes money for the ARRL to keep the organization alive]

Yes, yes, I understand that some don't like ARRL criticized, which is not good, but they have no real competitor in the USA amateur radio community and are NOT "perfect." :-)

If we don't have IP protection, radio hobbyists will still be at least a half-century behind in most efforts of "radio," the practitioners busy, busy with nostalgic recollection of "the good old days" that were not that "good," just fascinating to individuals (like me) of a long time ago. See "Electric Radio" magazine (not on newsstands, available only by subscription...they have a website for getting such subscriptions), a good magazine but covering only the technology of yesterday (when tubes were the thing). My personal difference with that is that I'm looking forward to tomorrow a LOT more, can't wait to see the new stuff that's about to show up soon. Exciting stuff to me in my racket...and home workshop.

LenAnderson@ieee.org

1385. Re: WARNING: hackarmy trojan (was: Moms Dildo Lesson To Sister)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 06:31:45 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43FC053D.DE215033@earthlink.net>
Source record: 13586
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Lloyd wrote:
>
> On Tue, 21 Feb 2006 15:47:37 GMT, qqhrwz@shaw.ca wrote:
> [Illegal post snipped]
>
> The old hackarmy trojan is contained in the binary. Someone wants
> to take over your machine.

Why did you open it in the first place?

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

1386. Re: Inexpensive small shield enclosures from square tin cans

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 06:45:24 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43FC0870.65DE83CB@earthlink.net>
Source record: 13587

LenAnderson@ieee.org wrote:
>
> If you or your significant-other use some of the specialty tea
> or coffee products for instant gourmet tea or coffee, do NOT
> throw out the little cans it comes in...they can be recycled
> into a variety of enclosures, shield cans, etc., if they are
> made of tin-plated, light sheet steel.
>
> Of three products tried for this are various Chai Tea boxes
> available under "Safeway Select" brand at Von's food stores.
> Those are 3 3/4" wide, 1 3/8" deep, and 3 1/2" high (about
> 3 3/16" high inside). Those and the other two below all have
> a lip around the top, ideal for attaching cover plates or
> whatnot to protect whatever is inside. The aperture at the
> top is about 3 1/4" wide by 1 13/16" deep.
>
> Through Ralphs food markets is the "Private Selection" brand
> of flavored coffees and General Foods International Coffee
> brand (General Foods also at Von's). Those are 4 1/8" wide,
> 2 5/16" deep, and 2 5/8" high (about 2 3/8" high inside).
> The aperture at the top is 3 1/2" wide by 2 1/16" deep.
>
> With the outside paint lithography stripped off, they all
> take soldering very well for insuring all seams can be
> made conductive (and for weather-proofing if used outdoors).
> To check for tin-plated steel, use a "refrigerator magnet"
> to see if it adheres or not. [got lots of magnets, too]
> While not as strong as a cast aluminum box (as from Bud),
> they are sturdy enough to hold quite a bit inside. The
> price (nil) can't be beat! :-)
>
> LenAnderson@ieee.org

Did you save any of those thin metal boxes AOL was mailing their
CDROMS in a couple years ago? They look to be just thick enough for
some small SMD designs.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

1387. WTB: Triad M-4Z

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 09:27:38 UTC
From: Theo <theodore.twyler@ntlworld.com>
Message-ID: <e8WKf.40776$i2.9400@newsfe6-gui.ntli.net>
Source record: 13588

Wanted: Two Triad M-4Z combined modulation/speaker transformers.
Can anyone help, or know where such may be obtained?
Any help would be greatly appreciated.

Theo

1388. antenna coaxial switch

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 11:19:25 UTC
From: nike <nike_spike@aruba.it>
Message-ID: <1NXKf.2907$PR2.59684@twister2.libero.it>
Source record: 13589

Hi to everybody,
I need schematic of an antenna switch witout control cable, for selection I must use coaxial cable.
It will be placed on the mast. I found something interesting on ham newspapers but . . I lost it. via internet I try but if you use some search tool (ie. google) you are sure to find all but not what you are looking for.
Thanks in advance.
Nike

1389. Re: The Great Strip-X Substitute Hunt, Part 2

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 12:21:25 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <7-KdnSfO7LPbymHenZ2dneKdnZydnZ2d@bright.net>
Source record: 13590

Why bother with the stinky stuff at all? And, who wants to wait for 15 minutes before you can make the solder connection? I just tin my soldering iron and leave the little solder blob on the iron and apply it to the end of the wire. In a few seconds, the enamel coating melts off and the solder blob tins the end of the wire at the same time.

Scott
N0EDV

LenAnderson@ieee.org wrote:

> Not too long ago, I inquired about a substitute for General Cement
> "Strip-X", an old stand-by on quick removal of the enamel of "coil
> wire." It was a smelly, blackish gel, came in a small bottle, and
> wonderful for stripping off coil wire enamel in a minute or two.
> It isn't made for the electronics hobby trade anymore, but there
> IS a reasonable substitute: Jasco 0201 Premium Paint Stripper,
> available at most Lowe's, Home Depot, OSH, True Value chain
> stores, about $4.75 for a pint.
>
> I have some toroid coils under construction, all using #32 and #34
> AWG enameled coil wire. A #$%^!!! to strip those with either
> single-edge razor blades or fine-grit finishing paper. With the
> Jasco stripper gel, two dips and a WAIT of about 15 minutes will
> allow a wiping cloth to remove the enamel without damaging the
> wire. A lot longer wait than with Strip-X, but it is better than
> nothing.
>
> The same Jasco paint stripper will also loosen the lithographic
> designs/labels on small tin cans. [see other post] The newer
> can paints are tougher than those of 30+ years ago so it might
> be necessary to use some steel wool to help remove the paint
> (with the gel still on it). Doesn't appear to affect the steel
> wool.
>
> The product contains methylene chloride (said to be a toxic
> substance, especially to Californians and their overly-strict
> hazardous materials rules). Another brand and product at Do-It
> Centers had that plus formic acid; didn't get that, a bigger
> can and it cost about $18. Whatever was in old Strip-X must
> have been stronger and nastier. [my last bottle dissolved the
> bristles of the bottle cap brush after sitting for a few years]
>
> So far, the hobby room's production line has been humming along
> without breaking any fine coil wire in order to solder to the

> toroid winding's ends.
>
> LenAnderson@ieee.org
>

1390. Re: WARNING: hackarmy trojan

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 14:13:42 UTC
From: "John L. Sielke" <w2agnNOSPAM@w2agn.net>
Message-ID: <Y_qdndnmb64I7GHenZ2dnUVZ_vmdnZ2d@comcast.com>
Source record: 13591
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Michael A. Terrell wrote:
> Lloyd wrote:
>
>>On Tue, 21 Feb 2006 15:47:37 GMT, qqhrwz@shaw.ca wrote:
>>[Illegal post snipped]
>>
>>The old hackarmy trojan is contained in the binary. Someone wants
>>to take over your machine.
>
>
>
> Why did you open it in the first place?
>
>
He's just disappointed he missed out on his porn....

1391. Re: antenna coaxial switch

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 14:29:45 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1140618585.067176.310410@g47g2000cwa.googlegroups.com>
Source record: 13592

It's easy to drive one or two relays, to select one of two or three antennas. Use a capacitor at each end to feed RF through, and a choke at each end to feed DC through. For the two-relay case, from the control end of the coax, apply no DC to energize neither relay, or, say, +12V to energize one relay, or -12V to energize the other. At the mast end, use a series diode after the choke to each relay, in opposite directions. Obviously, use 12V relays. Omit the diodes for only one relay. If the run is very long, it's better to feed the DC as a current--the rated current of the relay--to account for resistance of the line. One way to do that is to use, say, 24V and put a series resistor (appropriate power rating) at the power supply end, equal to the nominal relay coil resistance. That can also protect somewhat against the effects of a DC short across the line. Pick capacitors that work well for the RF frequency you're using, and have low reactance (say less than 5 ohms) at the lowest frequency of interest. Pick chokes that have high impedance over the range of operating frequencies, say 500 ohms minimum. If you don't have much experience building RF things, check out some references for RF construction practices. Without that experience, don't expect to get good performance much above 30MHz.

1392. Re: The Great Strip-X Substitute Hunt, Part 2

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 15:17:04 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <dthv9g11r3n@enews1.newsguy.com>
Source record: 13594

ORIGINAL MESSAGE:

Scott wrote:

> Why bother with the stinky stuff at all? And, who wants to wait for
> 15 minutes before you can make the solder connection? I just tin my
> soldering iron and leave the little solder blob on the iron and apply
> it to the end of the wire. In a few seconds, the enamel coating
> melts off and the solder blob tins the end of the wire at the same
> time.
>
> Scott
> N0EDV

~~~~~~
That procedure works only with certain types of coating. With the good kind, you can let the soldering iron cook it till the cows come home and the enamel is still there.

73, Bill W6WRT
~~~~~~

1393. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 15:31:43 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1140622303.487419.325140@z14g2000cwz.googlegroups.com>
Source record: 13593

...it's Colpitts, Hartley, Clapp,Butler and Pierce!
go with Butler since it has the crystal inserted between points of low
impedance, it actually boosts the Q of the crystal above the unloaded
Q. this Q is ths single most important source of jitter and attendant
phase noise.
Saandy 4Z5KS

JJ wrote:
> I am fimilar with Colpitts, Harley, Clapps, Bulter, Piece oscillators?
>
> Which configuration with JFET or BJT would yield the highest performance
> and least jitter?
>
> JJ

1394. Re: The Great Strip-X Substitute Hunt, Part 2

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 15:58:48 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <M_WdnTJrZb6zF2HeRVn-rA@web-ster.com>
Source record: 13595

Bill Turner wrote:

> ORIGINAL MESSAGE:
>
> Scott wrote:
>
>
>>Why bother with the stinky stuff at all? And, who wants to wait for
>>15 minutes before you can make the solder connection? I just tin my
>>soldering iron and leave the little solder blob on the iron and apply
>>it to the end of the wire. In a few seconds, the enamel coating
>>melts off and the solder blob tins the end of the wire at the same
>>time.
>>
>>Scott
>>N0EDV
>
>
>
> ~~~~~~
> That procedure works only with certain types of coating. With the good
> kind, you can let the soldering iron cook it till the cows come home
> and the enamel is still there.
>
> 73, Bill W6WRT

You can buy your wire specifically to be solder-stripable. I often strip the temperature resistant stuff by scraping carefully with an Exacto knife, then peeling the residue off with a soldering iron -- it may not melt with the iron, but it'll come unstuck once it's thoroughly scarified.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

1395. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 16:27:22 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <r54pv1p5ej1qofbt9f9spiril20ammjfru@4ax.com>
Source record: 13596

On 22 Feb 2006 07:31:43 -0800, "Saandy , 4Z5KS"
<hardware2@ift-int.com> wrote:

[snip]

>it actually boosts the Q of the crystal above the unloaded Q.

By what magic does it do this?

1396. Re: The Great Strip-X Substitute Hunt, Part 2

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 17:10:50 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <wfGdnYWwmKJ1BGHenZ2dnUVZ_tednZ2d@adelphia.com>
Source record: 13597

Bill Turner wrote:
> Scott wrote:
(snip)
>>I just tin my
>>soldering iron and leave the little solder blob on the iron and apply
>>it to the end of the wire. In a few seconds, the enamel coating
>>melts off and the solder blob tins the end of the wire at the same
>>time.

Yeah. I am winding coils with some of the good stuff made for
continuous use at 200C. I heat the ends of the wire to a rosy glow
with a propane torch, and the enamel just turns dark and a little
bumpy. But at least this makes the coating brittle enough to sand
off. It just laughs at solder.

1397. Re: Which Crystal Oscillator circuit has lowest jitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 18:08:13 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <e6cff$43fca88d$d135c4af$20521@MDI.CA>
Source record: 13498

"Saandy , 4Z5KS" <hardware2@ift-int.com> wrote in
news:1140622303.487419.325140@z14g2000cwz.googlegroups.com:

> ...it's Colpitts, Hartley, Clapp,Butler and Pierce!
> go with Butler since it has the crystal inserted between points of low
> impedance, it actually boosts the Q of the crystal above the unloaded
> Q. this Q is ths single most important source of jitter and attendant
> phase noise.
> Saandy 4Z5KS
Good grief I wrote that rather late at night.
Have you seen a simple Butler cct using JFETS? The ARRL one uses a
transformer which I rather not use.

JJ

1398. Re: Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 18:30:40 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11vpbgqhm96k1f8@corp.supernews.com>
Source record: 13499

Hi Len,

Good response; I just have a couple of minor things to add:

<LenAnderson@ieee.org> wrote in message
news:1140587075.998758.13970@o13g2000cwo.googlegroups.com...
> If we look at what exists now, we get blase' about all the effort
> involved to make a product (almost as if "it always existed...")
> available for others to use. Too many of us take the THINGS we
> have for granted.

When you can run down to the local computer store and buy something like a wireless router containing a 54Mbps digital radio with very sophisticated modulation schemes running from some embedded CPU with the equivalent horsepower of an 80386 with 64MB of RAM, all for $39.99, I can see why. :-)

> Very little actual "government software" was ever done, nearly
> all was hired, contracted outside work.

I was thinking of programs such as Berkeley SPICE being "government software," actually.

> What "the universities" do is NOT NECESSARILY what goes on in
> the rest of the world! True, despite the self-promoting PR of
> "the universities!"

Very true, although I think that many univerisites have found -- in the past couple of decades -- a need to become somewhat more aligned with industry in order to continue to procur funding.

> As far as IP protection on radio hobby magazines, that's
> still up in the air for many. If everyone wants to sit
> around and rebuild the regenerative receiver or "design"
> two-tube (or teeny two-transistor) transmitters, fine, but
> that is just re-inventing the wheel for the nth time.

It is, although it can serve as a great educational tool for the person doing it. Since ham radio is -- for most people -- a hobby, re-inventing such radios is about the same as someone rebuliding the engine or transmission on a classic car: The end result is still not going to be as, say, fuel efficient or powerful as a modern design, but someone who understands the basics is then a very large way towards understanding the modern design... if they have any desire to do so.

When you go to student engineering design expos these days, there's usually plenty of wireless interfaces to robots, data collection devices, etc.; they're almost always implemented with a little wireless module where you feed

in digital data, and everything else all the way to the antenna is a black box. What you almost never see is something like a discrete transistor radio design implementing, say, BPSK at 1200bps (which often would suffice for the wireless data transmission needs). Although I find this a little lamentable, I realize that these days indsutry needs a lot more people creating such system- or IC-level designs (rather than, say, 50 years ago when I'd expect that most "electrical engineers" found themselves performing discrete transistor -- or tube! -- design), and I also realize that industry still seems to find graduates who become good RF IC designers, so clearly the problem isn't as bad as I might imagine and is probably more a reflection of just becoming set in my own ways instead! :-)

> Much
> of the output of the radio hobbyist press (other than new
> product info squibs and "reviews") is the publishers
> essentially copying their own old works...for their own
> profit.

Sure, or someone taking an old design and adding a microcontroller interface/LCD/etc. (Seems to crop up a lot with auto-tuners, power meters, etc... I've been tempted to do one of these myself... something like a mobile 2m amplifier for an HT... 300mW in, 30W or so out, with digital display of SWR or whatever... clearly the "core design" of the amplifier and SWR meter has been around for decades now...) Granted, a lot of any "new design" is just modifying old designs with various new ideas, but the ARRL's standard to publish a "new" article is perhaps rather low.

> If we don't have IP protection, radio hobbyists will still be
> at least a half-century behind in most efforts of "radio,"
> the practitioners busy, busy with nostalgic recollection of
> "the good old days" that were not that "good," just
> fascinating to individuals (like me) of a long time ago.

What's missing is some reasonable means of licensing IP to people who want to use it on a hobbyist basis. A lot of the really good speech CODECs out there are legally protected, and although I'm sure the hobbyist developer would be happy to pay some few dollars to play with one, a large company is (typically) not interested in dealing with a single user to license a single instance of their technology... And even if that hobbyist's software is good, he might sell... what... 100 or 1000 copies of it? The royalties from that pale in comparison to licensing a CODEC to a cell phone manufacturer.

As-is, HDTV reception and demodulation by a hobbyist is still legal -- but just barely, as various interests continue to push for "broadcast" flags. HD Radio probably wouldn't be legal at all to sit down and demodulate, but given that it's a proprietary standard, no hobbyist is presently able to do so anyway. I'm all for making sure that owners of IP are fairly compensated, and I believe that most hobbyist are willing to pay to do so, but the commerce models to do it just aren't there yet. How far would ham radio have gotten if it had been illegal to build your own FM radio? Or ATV receiver (since they usually still use NTSC as the baseband format)?

On the upside, today it's easy to purchase RF components that allow one to build radios that have better performance and are cheaper to build than ever before. It's the hardware<-->software interface -- with software defined radios starting to become commonplace -- where you can't just go to DigiKey and purchase a CELP software license off the shelf; this is one of the problems holding back the development of ham radio. Granted, hams could -- and do -- development a lot of these things themselves, but given their technological sophistication, ham radio will now more than ever have to follow commercial standards (as they have with FM, NTSC for ATV, etc. -- it's been a _looonnng_ time since ham radio was _setting_ the standard, although the APRS guys do like to point out that a lot of commercial systems today still aren't as good as they are).

---Joel

1399. Cost-Effective Fast Data Acquisition, and the LT5506

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 18:48:13 UTC
From: Tim Wescott <tim@wescottdesign.com>
Message-ID: <79qdnbB3CpF5LGHeRVn-qw@web-ster.com>
Source record: 13500
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,comp.dsp

I am working on a radio project in my spare time. The proposed architecture will use an LT5506 to bring a signal down to baseband, through some low-pass filters, then into a DSP chip for all the 'real' processing. I'd like to prototype this thing in pieces before I put it all onto one tiny board. So I have some questions for the group:

LT5506, 40-500MHz I/Q demodulator with built-in VGA

Have you ever used it?

Do you know if there's an eval board available (Linear doesn't appear to have anything, but I may not be navigating their site correctly).

Do you know of any alternatives? Something that had built-in low-pass filters would be tres cool.

Data Acquisition:

I'd like to buy (or build, if I have to) an eval board for the LT5506 and acquire chunks of data to feed to a PC. For this I'd need a data acquisition device that could sample two channels at no less than 10kHz; 50kHz would be nicer; 16 bits would be nice but I could live with 12 (for 8 bits or less I can use my 'scope). I've found one that's $400 or so for analog in/USB out -- is that the best I can do? Any suggestions will be appreciated.

Low-Pass Filters:

My thinking right now is that I'll just come out of the LT5506 into passive RC filters, oversample the snot out of the signals, and do a quickie filter-and-decimate before I do the complex signal processing. Anyone know of a really small low-pass filter I could use that would have better performance? The LT5506, naturally, has balanced outputs and its specifications go to hell if you don't use them as such, so any solution will have to accept a balanced input.

Thanks all.

--
Tim Wescott
Wescott Design Services
Voice: 503-631-7815
Cell: 503-349-8432
http://www.wescottdesign.com

1400. Usenet Kook Alert .... Lyle Blake

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 20:01:01 UTC
From: diannamelrose@gmail.com
Message-ID: <1140638461.482526.179120@z14g2000cwz.googlegroups.com>
Source record: 13501

The person posting here as "dot" with an ISP at sympatico.ca is a Usenet kook named Lyle Blake who is in the process of harassing 3 other newsgroups.

Lyle recently claimed on another newsgroup that he had a bank of lawyers ready to sue
the Amatreur Radio society in Canada because they would not grant him a HAM license test (hint: he's on a psych disibility and can not afford lawyers)

Lyle has appeared in several other newsgroups in the past (although he specializes in trolling transgendered ones) such as the pascal and Delphi programmers newsgroup.. He strives to create (short term) havoc on newsgroups by making overly nonsensical claims and causing flame wars.

He initially presents as "supportive" and begins by making small innocous posts a group. LShortly after he begins making overtly nonsensical posts which engage people in flame wars.

In a short while you may notice a rash of odd postings regarding black people (he uses the "N" word) and anal related postings - those are Lyle's trademarks.

Lyle specializes in harrassing people in transgendered newsgroups. He is unemployed,lives off a psychiatric disibility welfare check and spends all his time (24x7) on Usenet. He has claimed to be everything from a transexual to to a something he calls a "male-woman" and now claims to be an androgyne.

Here is an example of the things he does (ie. asking a white supremacy group to troll the transgendered groups - check it out!):

http://groups-beta.google.com/group/alt.support.crossdressing/msg/90a062cef46a3bca

More info about him can be found in this FAQ - read it and decide for yourself about him:

http://groups-beta.google.com/group/alt.fashion.crossdressing/msg/9d126cf43e96d908

And this is what the little creep looks like:
http://www.geocities.com/loonylarry2003/

1401. Re: WARNING: hackarmy trojan (was: Moms Dildo Lesson To Sister)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-22 20:53:07 UTC
From: Lloyd <lloyd@no.spammmmm>
Message-ID: <87017833.2458g8789@tarrnews.net>
Source record: 13502
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Wed, 22 Feb 2006 06:31:45 GMT, Michael A. Terrell wrote:
> Lloyd wrote:
> >
> > On Tue, 21 Feb 2006 15:47:37 GMT, qqhrwz@shaw.ca wrote:
> > [Illegal post snipped]
> >
> > The old hackarmy trojan is contained in the binary. Someone wants
> > to take over your machine.
>
>
> Why did you open it in the first place?

Your profound ignorance is showing. With a good virus scanner integrated
into your news reader, the malware is identified and blocked before it can
do any harm.

There's never any need to "open" it, newbie.

1402. FA: Unbuilt Kit - 70's Vintage Heathkit Oscilloscope.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 00:42:46 UTC
From: Tom <tfarl@iowatelecom.net>
Message-ID: <ay7Lf.815491$xm3.268849@attbi_s21>
Source record: 13503
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Unbuilt Kit - 70's Vintage Heathkit Oscilloscope.

Complete - Original Box - Parts Inventoried - No Reserve.

Click on: http://tinyurl.com/mvygq

Ends Saturday Feb-22-06 16:07:24 PST
(Sunday Feb-23-06 00:07:24 UTC)

Many thanks es 73,
Tom N&#65533;JMY

1403. Re: Cost-Effective Fast Data Acquisition, and the LT5506

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 01:02:44 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1140655498.670663.97290@z14g2000cwz.googlegroups.com>
Source record: 13504
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,comp.dsp

The data acq part: just get a stereo USB sound port. 16 bits at 22.05ks/s should be easy. I have one that's 24 bits, and it wasn't anything like $400. You can get 16 bits stereo to 48k or 96k s/s for much less than $100 these days, even isolated. Nice thing about delta-sigma converters is that the antialias filtering is relatively easy. In a design I did some fifteen years ago, I used a five-pole LC filter implemented with little smt chokes and C0G caps that worked just fine* and allowed a wide range of output data rates without changing the filter, but typically you don't need anything like that sort of rolloff if you're sticking to a narrow range of clock frequencies.

Call your local Linear Technology rep for current eval board availability.

Cheers,
Tom

* I was expecting to be able to see some distortion from those little chokes, but distortion from the AAF was well below the 16-bit ADCs' distortion.

1404. Re: Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 01:18:10 UTC
From: LenAnderson@ieee.org
Message-ID: <1140657489.953126.33790@g43g2000cwa.googlegroups.com>
Source record: 13505

From: Joel Kolstad on Wed, Feb 22 2006 10:30 am

><LenAnder...@ieee.org> wrote in message

>> If we look at what exists now, we get blase' about all the effort
>> involved to make a product (almost as if "it always existed...")
>> available for others to use. Too many of us take the THINGS we
>> have for granted.
>
>When you can run down to the local computer store and buy something like a
>wireless router containing a 54Mbps digital radio with very sophisticated
>modulation schemes running from some embedded CPU with the equivalent
>horsepower of an 80386 with 64MB of RAM, all for $39.99, I can see why. :-)

Microchip Semiconductor will tell everyone the same about their
PICs (or Atmel about theirs)...and you have a good analogy! :-)

But, as some 1950s-technology hams may grouse, "that's not RADIO!"
[I've heard that bs way too often...grrrr] Those folks can go
look into the Analog Devices ICs such as their various DDS or
log-amp-detectors, all definitely working at RF, not "digital."
Or some of the old (pre-split-up) Motorola definitely-analog
complex arrays for various functions at RF, some still made and
available 30+ years after first introduction. PLL by itself has
made "boxes of rocks" (quartz crystal units) relatively obsolete
after becoming state of the art in communications electronics
around 1970. Look at the 1 GHz RF in cellular telephony and
cordless phones operating at 5 GHz...I got into "pro" leagues
in microwaves at 1.8 GHz in 1954, thinking that a 6-wide rack
of radio relay equipment (using tubes) was "hot stuff"...only
to think of regular use of a 2.4 GHz cordless handset as being
"ordinary, everyday thing" 50 years later.

Hey, the huge electronic supermarket called Fry's is just a
mile and a half from my house here. Lots of low-cost, very-
high-tech "toys" available in there.

>> What "the universities" do is NOT NECESSARILY what goes on in
>> the rest of the world! True, despite the self-promoting PR of
>> "the universities!"
>
>Very true, although I think that many univerisites have found -- in the past
>couple of decades -- a need to become somewhat more aligned with industry in
>order to continue to procur funding.

If they want to TEACH students what goes on in industry of the
day, absolutely. They've gone insular amongst themselves in
the last few decades...in the teaching part of their activity.

>> As far as IP protection on radio hobby magazines, that's
>> still up in the air for many. If everyone wants to sit
>> around and rebuild the regenerative receiver or "design"
>> two-tube (or teeny two-transistor) transmitters, fine, but
>> that is just re-inventing the wheel for the nth time.
>
>It is, although it can serve as a great educational tool for the person doing
>it. Since ham radio is -- for most people -- a hobby, re-inventing such
>radios is about the same as someone rebuliding the engine or transmission on a
>classic car: The end result is still not going to be as, say, fuel efficient
>or powerful as a modern design, but someone who understands the basics is then
>a very large way towards understanding the modern design... if they have any
>desire to do so.

That's true, yes, but those hobbyists have to stay within their
own group to praise their work amongst themselves. I like
some nostalgic things well enough, but I've already lived
through (and worked in) the radio-electronics technology of
the 1950s and do NOT think such is very close to state of the
"radio" art of NOW.

>When you go to student engineering design expos these days, there's usually
>plenty of wireless interfaces to robots, data collection devices, etc.;
>they're almost always implemented with a little wireless module where you feed
>in digital data, and everything else all the way to the antenna is a black
>box. What you almost never see is something like a discrete transistor radio
>design implementing, say, BPSK at 1200bps (which often would suffice for the
>wireless data transmission needs).

A discrete transistor radio would be too bulky for that purpose.
Also a bit higher on the portable power source demand. :-)

I finally got around to fixing and cleaning up an "old" Sony
AM BC radio that was beloved by my late mother (the D cells
had all stayed in and leaked out while she was ill). Great
AM radio, very sensitive due to an added RF amplifier stage
(rare in designs of 30 years ago and now). [it's so "old"
that the push-pull linear AF stages used coupling transformers]

About the same time my wife got an under-the-cabinet AM/FM/CD
radio for her sewing room station (one wall of a guest room).
That radio has a SINGLE IC that does the PLL functions for
both AM/FM LO frequency control, all the RF-IF-detector stages,
AND includes the time-of-day clock PLUS the LCD display
functions! That IC is only available in very large quantities
(from Asia) but it shows the tremendous amount of mixed-signal
capability of a single IC nowadays.

>Although I find this a little lamentable,
>I realize that these days indsutry needs a lot more people creating such
>system- or IC-level designs (rather than, say, 50 years ago when I'd expect
>that most "electrical engineers" found themselves performing discrete
>transistor -- or tube! -- design), and I also realize that industry still
>seems to find graduates who become good RF IC designers, so clearly the
>problem isn't as bad as I might imagine and is probably more a reflection of
>just becoming set in my own ways instead! :-)

Well - despite being (originally) a "mustang" EE who DID do discrete tube and transistor stage design - the electronics industry has tons of already-designed ICs for various RF purposes and the folks who thunk them up. The problem is more that they came about for MARKET SPECIFIC applications. Right now one can get almost anything needed for cell phone designs, including the cell site stuff...it has been the market driver for a few years. Maybe automotive electronics is next (some applications using RF for "wireless" things like tire pressure measurement while rolling)? PCs are old hat in the industry since the user market is starting to get saturated.

Case in point for HF range transmitters: Asian designs for CB finals were already in production (in lots of thousands-plus per model) and being sold (by the tens of thousands) before 1970. Motorola started pushing power at HF, avoiding CB but going below and above it in frequency, having lots of designs of PA transistors of some power. Helge Granberg of Motorola bossed a lot of detailed, good Appnotes on the how-to and how-come aspects of various power amplifiers. [Communications Concepts has the ANs available and sells most of the "MRF" power transistors now] Motorola didn't sell as many as they thought and eventually dropped that line (before the double split into ON and Freescale). Yet Asian designers were, at the same time, turning out amateur radio power amplifiers in the 100 to 200 Watt category, lesser power outputs on VHF on their own. Nowhere can be found the depth of detail on design of those Asian HF power amp designs, but the Motorola Appnotes are still studied (even if the "MRFs" are getting a bit scarce). The detailed information EXISTS, but it doesn't exist for public distribution. The market doesn't allow it.

>> Much
>> of the output of the radio hobbyist press (other than new
>> product info squibs and "reviews") is the publishers
>> essentially copying their own old works...for their own
>> profit.
>
>Sure, or someone taking an old design and adding a microcontroller
>interface/LCD/etc. (Seems to crop up a lot with auto-tuners, power meters,
>etc... I've been tempted to do one of these myself... something like a mobile
>2m amplifier for an HT... 300mW in, 30W or so out, with digital display of SWR
>or whatever... clearly the "core design" of the amplifier and SWR meter has

>been around for decades now...) Granted, a lot of any "new design" is just
>modifying old designs with various new ideas, but the ARRL's standard to
>publish a "new" article is perhaps rather low.

Well, in my view, there's too much ham emphasis on transmitters
and power and mechanical aspect of things. Some other things
have been neglected, but taken up by others selling a product.

Another case in point: Neil Hecht's neat little frequency
displays out of AADE in Seattle. No more than three ICs
(all DIP) on a board plus a 2 x 16 LCD character display
module. The main ingredient is a PIC microcontroller that
does both the frequency counting (!), the display module's
input, AND (optionally) a compensation for IF offset in
multiple-conversion receiver/transceiver models. It can be
mounted IN just about any boat-anchor (or smaller) HF
transceiver and functions the same as a many-IC frequency
counter. Strangely enough, it was "pioneered" NOT by a ham
but a UK experimenter who was interested in getting a simple
frequency counter. The Internet allowed the idea to spread
all over the world. The microcontroller source code for
similar units can be obtained (most places for free) but you
need a programmer to stuff the code into the microcontroller.
Or, find someone to do the PIC's ROM code burn-in for you.

I bought an AADE L/C-Meter recently. Assembled, noting the
extra cost wasn't all that much. It saved adding to my
hobby workload. It is based on the same PIC microcontroller
(but with different code). AADE publishes the schematic
and component details. Had I bothered to learn the PIC
instruction set (prodigious even if RISC), I could have
done the programming myself...after about a thousand hours
of fooling around with routines versus hardware. It was
much easier for me to BUY the whole works, leaving precious
time free for other things.

>What's missing is some reasonable means of licensing IP to people who want to
>use it on a hobbyist basis.

A lot of that IP is already free. A major problem is that
there are too many kinds of programming conventions for
source codes. Few can be "expert" in all of them. Usually
one can be "good" in only one, realistically speaking. As
an example, Microchip has lots of utility routines of
various kinds for free on their website...but one needs to
know the PIC instruction set to make sense of them.

In source code it would be (in my view) better to show the
program flow rather than the code itself. That way anyone
can translate flow into the particular source code they
know. Oddly, most hobbyist programmers don't like to show
flow diagrams...those aren't as "cool" as source code

statements neatly arranged by the source code development
program. :-(

>On the upside, today it's easy to purchase RF components that allow one to
>build radios that have better performance and are cheaper to build than ever
>before.

Absolutely!

>It's the hardware<-->software interface -- with software defined
>radios starting to become commonplace -- where you can't just go to DigiKey
>and purchase a CELP software license off the shelf; this is one of the
>problems holding back the development of ham radio.

I don't quite agree with the gist of your argument. SDR is
the new buzzword and it can certainly apply to digital-based
communications (cell phones, etc.) but not necessarily to
the analog HF world.

MOST of the transceivers for amateur radio, HF to UHF, are
ALREADY software-controlled, courtesy of a built-in micro-
processor or microcontroller. For PLL or DDS frequency
control AND display of same, that is a necessity to achieve
incredible (to 1950s standards) frequency control. That
same little digital subsystem can do myriad other tasks to
eliminate the physical mechanics of construction. The
multi-wafer rotary bandswitch disappeared from ham
transceivers on the market decades ago...and it's hard to
get the parts for such rotary switch assemblies now for
any electronic purpose except high-current switching.

Because that ubiquitous internal micro has become so
commonplace, it has led to a "radio box" that is controlled
by a PC. That's a natural extension of the internal
digital control already present. But, having the PC
display the equivalent front panel does NOT make it an
SDR! It's a neat selling point, makes it LOOK high-tech
and "the latest thing" but the PC-controlled "radio box"
is really just another version of the existing manually-
controlled HF transceiver.

IF - and only IF - amateur radio voice communications goes
digital on HF will there be any real need for SDR in ham
radio "bands" (the ones on HF). Right now the existing
analog-only amplifiers and whatnot are mature and quite good
enough. One problem with digital voice is that there isn't
even a hint of a standard protocol or of many experimenters
yielding any results on same. The Data modes allocated now
can make do with peripheral adapters since they are not yet
that numerous on HF.

> Granted, hams could --
>and do -- development a lot of these things themselves, but given their

>technological sophistication, ham radio will now more than ever have to follow
>commercial standards (as they have with FM, NTSC for ATV, etc. -- it's been a
>_looonnng_ time since ham radio was _setting_ the standard, although the APRS
>guys do like to point out that a lot of commercial systems today still aren't
>as good as they are).

Well, if we dwell on such true facts, it will lead to toxic
levels of acrimony in here. :-)

Back to watching HDTV from the Winter Olympics in Turin...

LenAnderson@ieee.org

1405. Re: Inexpensive small shield enclosures from square tin cans

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 01:20:35 UTC
From: LenAnderson@ieee.org
Message-ID: <1140657635.411655.121330@g44g2000cwa.googlegroups.com>
Source record: 13506

From: "Michael A. Terrell" on Wed, Feb 22 2006 6:45 am

>LenAnderson@ieee.org wrote:

>> If you or your significant-other use some of the specialty tea
>> or coffee products for instant gourmet tea or coffee, do NOT
>> throw out the little cans it comes in...they can be recycled
>> into a variety of enclosures, shield cans, etc., if they are
>> made of tin-plated, light sheet steel.
> ...
>
> Did you save any of those thin metal boxes AOL was mailing their
>CDROMS in a couple years ago? They look to be just thick enough for
>some small SMD designs.

Not the thin ones. About 8 years ago, the Bank of America chain
was handing out "Christmas boxes" of AOL material (including CD)
which were at least an inch and a half deep. Unfortunately, the
box lid folded over the edges of the main box part and that did
not make a good enough metal-to-metal contact along the edges.

The tin-plated steel tea and coffee boxes have plastic-paper
lids (throwaway) and the lip at the top will support a metal
or PCB cover that can be sheet-metal-screw secured in place.
Better raw material for a box to shield RF in my thinking.
Solderability is great anywhere on the surfaces, good for
making connections to the can "ground."

LenAnderson@ieee.org

>Service to my country? Been there, Done that, and I've got my DD214 to
>prove it.

Me too. ["R-A all the way" :-)]

1406. Re: The Great Strip-X Substitute Hunt, Part 2

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 01:23:09 UTC
From: LenAnderson@ieee.org
Message-ID: <1140657789.942785.130590@g44g2000cwa.googlegroups.com>
Source record: 13507

From: Tim Wescott on Wed, Feb 22 2006 7:58 am

>> Scott wrote:
>
>>>Why bother with the stinky stuff at all? And, who wants to wait for
>>>15 minutes before you can make the solder connection? I just tin my
>>>soldering iron and leave the little solder blob on the iron and apply
>>>it to the end of the wire. In a few seconds, the enamel coating
>>>melts off and the solder blob tins the end of the wire at the same
>>>time.
>
>>>Scott
>>>N0EDV
>
>> ~~~~~~
>> That procedure works only with certain types of coating. With the good
>> kind, you can let the soldering iron cook it till the cows come home
>> and the enamel is still there.
>
>> 73, Bill W6WRT
>
>You can buy your wire specifically to be solder-stripable.

I know that...used it first in 1968 for prototyping. There's
all kinds of suppliers out there but I'm using up some small-
gauge coil wire first made prior to 1950. :-) "Solder-Eze"
wasn't made back then.

>I often
>strip the temperature resistant stuff by scraping carefully with an
>Exacto knife, then peeling the residue off with a soldering iron -- it
>may not melt with the iron, but it'll come unstuck once it's thoroughly
>scarified.

After making a few hundred coils and transformers, I've found
lots of ways to get the insulation off. And easily as many
ways to accidentally cut the wire by such scraping. [that's
why GC's Strip-X was so popular once upon a time...just dip
the end, wait a minute or so, wipe...all clean and ready for
soldering] I've used Gillette single-edge razor blades as
well as steel wool as alternates and those are inferior
methods.

I found out by accident that my 40 Watt iron with a 45-degree
bevelled tip was rough enough to do the "scarifying" if
solder-blobbed and rubbed lightly on the #32 wire (a couple

thicknesses of paper underneath to avoid heat draining). That's not as easy to do as it sounds. That's why I went looking for paint-remover.

The paint-remover technique is better, even with the wait. Very little chance of damaging the end of the coil wire. The active ingredient, methylene chloride, doesn't react with the copper.

When winding toroids by hand without a toroid-winder or its fancy winding bobbin, there's lots of flexure on the ends of the fine copper wire from all the threading-through the hole. Copper is maleable, but there are metal-fatigue limits even with copper. Using something that scars the surface, plus the metal-fatigue phenomenon from dozens of threading movements, makes it easy to damage the ends.

Yes, I've tried fine steel wool in removing enamel from #32 and it is as inferior as perpendicular knife-edge scraping. Such works okay on #26 or larger where one can afford to lose some copper in the process.

LenAnderson@ieee.org

1407. Input stage for VHF frequency counter in an FPGA?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 03:01:44 UTC
From: cs_posting@hotmail.com
Message-ID: <1140663703.875988.162830@g14g2000cwa.googlegroups.com>
Source record: 13508
Cross-posted to: sci.electronics.design,comp.arch.fpga,rec.radio.amateur.homebrew

The other day I found myself needing a short gate time ~200 mhz frequency counter for an automated test, and since I had an FPGA board on hand I whipped one up quickly. Getting it reading and reporting to my computer was the easy part.

Ah, the input stage....

I've got about 4dBm of RF into 50 ohms to play with - about a volt p-p or a little more if it's high-Z. The output of the device under test has a transformer and then a series cap to create an unbalanced output.

I did something ugly with a 3.3v cmos 7406 varient and a feedback resistor, which works well enough to get an accurate reading on one version of the device under test, but not on the other (both have been verified with real test equipment) It also tends to self-oscillate with no input...

What would be the right way to do this using on hand parts, such as abused logic, little 1:1 or 2:1 RF transformers, etc? One idea is to use another gate with a feedback resistor and cap to ground in the hope of establishing the threshold level, and then using a transformer to swing another input above and below this. Most parts on hand are SMD - which means dead bug construction in SOIC scale under the maginifier - discourages extensive experimentation.

Why do most abuse-of-logic RF applications seem to use NAND gates rather than inverters? From a digital perspective NAND gates are a universal element, but once you tie their inputs together, is there something to be gained from having two inputs in parallel?

Is there a way to use a differential input configuration on an FPGA to input a balanced RF signal directly? Theoretically this should be an FPGA clock input... The device in use currently is an Altera Stratix II, but a Xilinx S3 kit is available.

If ordering things, what would be a good default low supply voltage HF/VHF gain component to have on hand? I seem to recall lots of last-millenium ham designs using the MC1350P video IF amp, but what would make sense today?

1408. Re: Input stage for VHF frequency counter in an FPGA?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 03:23:13 UTC
From: Jim Granville <no.spam@designtools.co.nz>
Message-ID: <43fd2a88@clear.net.nz>
Source record: 13509
Cross-posted to: sci.electronics.design,comp.arch.fpga,rec.radio.amateur.homebrew

cs_posting@hotmail.com wrote:
> The other day I found myself needing a short gate time ~200 mhz
> frequency counter for an automated test, and since I had an FPGA board
> on hand I whipped one up quickly. Getting it reading and reporting to
> my computer was the easy part.
>
> Ah, the input stage....

Does the FPGA have LVDS option inputs ?
If it is new enough to have those, they are differential
amplifiers, designed for current mode signals, and will work
with thresholds << 1V.
IIRC the LVDS spec has +100mV and -100mV levels.
Normally, they need a common mode bias of just over 1V, and the
better ones will also tolerate rail-rail drive (on ONE ip),
but at reduced speed specs.
-jg

1409. Re: Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 03:54:21 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11vqchbql4gg9c7@corp.supernews.com>
Source record: 13510

Hi Len,

You have a lot of interesting history in there!

<LenAnderson@ieee.org> wrote in message
news:1140657489.953126.33790@g43g2000cwa.googlegroups.com...
> But, as some 1950s-technology hams may grouse, "that's not RADIO!"

Yeah, I'm surprised just how 'neatly' some people seem to be able to decide what is and isn't 'radio.'

> Hey, the huge electronic supermarket called Fry's is just a
> mile and a half from my house here. Lots of low-cost, very-
> high-tech "toys" available in there.

I think it's ironic how the cool fashion accessory today is something like a Motorola Razr phone with its associated millions of transistors buried in numerous ICs running software that even relatively few BSEE's would fully understand without a fair amount of additional study (turbo codes, direct sequence spread spectrum systems, psychoacoustic codecs, etc. not usually being a large part of the undergraduate curriculum...), yet 30 years ago anyway hauling around a brick-sized ham radio or CB was quite the nerdy thing to do... Incredible how times change...

> If they want to TEACH students what goes on in industry of the
> day, absolutely. They've gone insular amongst themselves in
> the last few decades...in the teaching part of their activity.

IMO one of the biggest problems universities face is that everyone is "expected" to get a 4 year degree these days, and yet the reality of the marketplace is that relatively few jobs truly require anything approach that level of "hard core" education. Hence, engineering courses get watered down, and a lot of BSEE of BSCS students end up performing straightforward programming or digital design using techniques that a 2 year technical college could have easily provided them with. Industry has often contributed to this problem, requiring even technical sales people to now have those 4 year degrees... sheesh!

> Maybe automotive electronics is next (some
> applications using RF for "wireless" things like tire pressure
> measurement while rolling)?

I think we're just about there -- I've seen chipsets that'll provide, e.g., some tens of bytes of data once every second or so and consume mere tens of microwatts (on average) to operate; that seems like the kind of thing some clever person can generate just from the rotation of the tire itself using some horribly crude & dirt cheap implementation of a "generator."

> Well, in my view, there's too much ham emphasis on transmitters
> and power and mechanical aspect of things.

What would you like to see more of?

> Another case in point: Neil Hecht's neat little frequency
> displays out of AADE in Seattle.

I haven't used one, but I'm aware of their existance. I bought one of Neil's L/C meters years ago now and put it together myself -- I don't recall if an assembled version was even available as an option then. I came across his web site again recently while tracking down a copy of his filter designer (which includes some very useful hints and tips on various transforms), and was pleased to find that he now gives it away for free, stating that he was selling so much more hardware than software anyway, it wasn't worth his effort to keep charging for the software!

> Oddly, most hobbyist programmers don't like to show
> flow diagrams...those aren't as "cool" as source code
> statements neatly arranged by the source code development
> program. :-(

I always figured they just didn't want to go to the extra effort. :-) I agreee that source code alone usually isn't as good as a clear flow diagram.

> I don't quite agree with the gist of your argument. SDR is
> the new buzzword and it can certainly apply to digital-based
> communications (cell phones, etc.) but not necessarily to
> the analog HF world.

I did mean "true" SDRs, such as GNU Radio, Flex Radio, etc. I think it has plenty of application to the HF world (indeed, the development of digital modes for HF seems much more active than on VHF/UHF, which has always struck me as kinda bizarre given how much less bandwidth is available there in the first place... but of course the fact that you can get a signal to the other side of the planet on 100W in good condition is always a big motivator...)

> IF - and only IF - amateur radio voice communications goes
> digital on HF will there be any real need for SDR in ham
> radio "bands" (the ones on HF).

I agree with you on this (in that, with analog HF modes, you don't really gain that much by using SDR), but I hasten to point out that there's no "real need" for the analog modes either :-). Whether or not that means Yaesu/Icom/Kenwood/etc. actually make a full-blown HF SDR that supports both the traditional analog modes and some set of newer digital ones, I don't know.

> One problem with digital voice is that there isn't
> even a hint of a standard protocol or of many experimenters
> yielding any results on same.

Have I mentioned how some of the best low-bit rate CODECs are proprietary and/or patented and not licensable by a single lowly hobbyist? ;-)

> Back to watching HDTV from the Winter Olympics in Turin...

We have an HDTV tuner but only an "EDTV" TV (an older plasma set), and it still looks fantastic; I've been most impressed.

---Joel

1410. Re: The Great Strip-X Substitute Hunt, Part 2

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 04:32:26 UTC
From: cs_posting@hotmail.com
Message-ID: <1140669146.824483.24560@t39g2000cwt.googlegroups.com>
Source record: 13511

Bill Turner wrote:

> That procedure works only with certain types of coating. With the good
> kind, you can let the soldering iron cook it till the cows come home
> and the enamel is still there.

Any idea who sells the easily solder-stripped stuff in 30 guage or
smaller (would really like some 34 guage) ?

1411. Re: Cost-Effective Fast Data Acquisition, and the LT5506

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 04:41:55 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <JOOdnc055Z6UoGDeRVn-pA@web-ster.com>
Source record: 13512
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,comp.dsp

K7ITM wrote:

> The data acq part: just get a stereo USB sound port. 16 bits at
> 22.05ks/s should be easy. I have one that's 24 bits, and it wasn't
> anything like $400. You can get 16 bits stereo to 48k or 96k s/s for
> much less than $100 these days, even isolated. Nice thing about
> delta-sigma converters is that the antialias filtering is relatively
> easy. In a design I did some fifteen years ago, I used a five-pole LC
> filter implemented with little smt chokes and C0G caps that worked just
> fine* and allowed a wide range of output data rates without changing
> the filter, but typically you don't need anything like that sort of
> rolloff if you're sticking to a narrow range of clock frequencies.
>
> Call your local Linear Technology rep for current eval board
> availability.
>
> Cheers,
> Tom
>

Thanks. Someone else pointed out the soundcard part off list (d'oh).
Linear Tech doesn't do eval boards for that part, I was hoping maybe
someone knew of someone who does. I think I'm just going to do a
quick-turn eval board myself -- it's one of those itty bitty packages
with the grounding pad in the center, so it pretty much has to be
reflowed to be useful.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

1412. Re: The Great Strip-X Substitute Hunt, Part 2

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 04:48:10 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <9PCdnXb-acTio2DeRVn-rg@web-ster.com>
Source record: 13513

LenAnderson@ieee.org wrote:

> From: Tim Wescott on Wed, Feb 22 2006 7:58 am

-snip-

> When winding toroids by hand without a toroid-winder or
> its fancy winding bobbin, there's lots of flexure on the
> ends of the fine copper wire from all the threading-through
> the hole. Copper is maleable, but there are metal-fatigue
> limits even with copper. Using something that scars the
> surface, plus the metal-fatigue phenomenon from dozens of
> threading movements, makes it easy to damage the ends.
>
> Yes, I've tried fine steel wool in removing enamel from #32
> and it is as inferior as perpendicular knife-edge scraping.
> Such works okay on #26 or larger where one can afford to
> lose some copper in the process.
>
> LenAnderson@ieee.org
>
You can predict wire length well enough to strip it before you wind the
coil? Wow. I always have to wind the coil, cut off the 0 to 4 inch
miscalculation (I always shade it high), then strip.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

1413. Re: antenna coaxial switch

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 05:43:11 UTC
From: 2greedy <vk4fact@bigpond.com>
Message-ID: <PXbLf.14240$yK1.7042@news-server.bigpond.net.au>
Source record: 13514

try this site www.vkcorner.com or http://www.vkcorner.com/forum/index.php
"nike" <nike_spike@aruba.it> wrote in message
news:1NXKf.2907$PR2.59684@twister2.libero.it...
> Hi to everybody,
> I need schematic of an antenna switch witout control cable, for selection
I
> must use coaxial cable.
> It will be placed on the mast. I found something interesting on ham
> newspapers but . . I lost it. via internet I try but if you use some
search
> tool (ie. google) you are sure to find all but not what you are looking
> for.
> Thanks in advance.
> Nike
>
>

1414. Re: Cost-Effective Fast Data Acquisition, and the LT5506

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 05:43:27 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1140673407.737843.325920@u72g2000cwu.googlegroups.com>
Source record: 13515
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,comp.dsp

One way I've considered doing those heat pads on homebrew boards is to drill a large hole there, say to just clear a 10AWG wire, tin the heat pad, solder the part down, and finally slip a very short (e.g. 0.09") length of tinned #10 into the hole, heating it to reflow to the part, and solder around the the wire to the ground plane. Should work, but haven't tried it (yet). Such a short, fat wire is pretty low thermal resistance. You can also add some heat sinking on the back to pull heat away from the wire stub. Toughest part might be cutting the wire cleanly perpendicular to its axis. A reasonably clean cut followed by a bit of filing would do it, and I can imagine better ways if I were making several.

Cheers,
Tom

1415. Re: WARNING: hackarmy trojan (was: Moms Dildo Lesson To Sister)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 05:49:48 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43FD4CF6.51683426@earthlink.net>
Source record: 13516
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Lloyd wrote:
>
> Your profound ignorance is showing. With a good virus scanner integrated
> into your news reader, the malware is identified and blocked before it can
> do any harm.
>
> There's never any need to "open" it, newbie.

Newbie? That's almost funny. Not all news servers leave infected
attachments on messages. Also I have Java and Javascripting turned off
in my news reader.

On the other hand, if anyone on this group knows anything about
profound ignorance...

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

1416. Re: Input stage for VHF frequency counter in an FPGA?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 05:56:01 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1140674161.681023.146790@g14g2000cwa.googlegroups.com>
Source record: 13517
Cross-posted to: sci.electronics.design,comp.arch.fpga,rec.radio.amateur.homebrew

For gain, have a look at MMICs. Minicircuits sell them in kits that give you a good range of performance. They're easy to use, and run on a single supply.

I think the idea of using the LVDS inputs on the FPGA is a good one, if you can get that into the clock lines you need to use. Otherwise, you only need a little gain to get to levels you need for logic input. Do your clock input lines have a bit of hysterisis? Do they have high enough input impedance to be used with a step-up transformer? Can you reliably bias the transformer DC return to a point between the hysterisis trip-points. I suspect you can do a better job with your logic-gate amplifier, too. Or you could make a fancier input using one of the very fast comparators.

Cheers,
Tom

1417. Re: Inexpensive small shield enclosures from square tin cans

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 05:59:37 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43FD4F43.754B6B3A@earthlink.net>
Source record: 13518

LenAnderson@ieee.org wrote:
>
> From: "Michael A. Terrell" on Wed, Feb 22 2006 6:45 am
>
> >LenAnderson@ieee.org wrote:
>
> >> If you or your significant-other use some of the specialty tea
> >> or coffee products for instant gourmet tea or coffee, do NOT
> >> throw out the little cans it comes in...they can be recycled
> >> into a variety of enclosures, shield cans, etc., if they are
> >> made of tin-plated, light sheet steel.
> > ...
> >
> > Did you save any of those thin metal boxes AOL was mailing their
> >CDROMS in a couple years ago? They look to be just thick enough for
> >some small SMD designs.
>
> Not the thin ones. About 8 years ago, the Bank of America chain
> was handing out "Christmas boxes" of AOL material (including CD)
> which were at least an inch and a half deep. Unfortunately, the
> box lid folded over the edges of the main box part and that did
> not make a good enough metal-to-metal contact along the edges.
>
> The tin-plated steel tea and coffee boxes have plastic-paper
> lids (throwaway) and the lip at the top will support a metal
> or PCB cover that can be sheet-metal-screw secured in place.
> Better raw material for a box to shield RF in my thinking.
> Solderability is great anywhere on the surfaces, good for
> making connections to the can "ground."
>
> LenAnderson@ieee.org
>
> >Service to my country? Been there, Done that, and I've got my DD214 to
> >prove it.
>
> Me too. ["R-A all the way" :-)]

Well, I was U-S, (Drafted, for those who don't know) but I tested out
of a three year electronics school while in basic training and was
awarded the MOS for a TV Broadcast engineer. I went straight from basic
training to working in CATV, CCTV, AML type Jerrold Microwave video
links and even a little RADAR work.
--
Service to my country? Been there, Done that, and I've got my DD214 to

prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

1418. Re: antenna coaxial switch

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 06:52:00 UTC
From: artie <artie.m@gNOSPAMmail.com>
Message-ID: <2202200622520068l0%artie.m@gNOSPAMmail.com>
Source record: 13519

In article <1NXKf.2907$PR2.59684@twister2.libero.it>, nike
<nike_spike@aruba.it> wrote:

> Hi to everybody,
> I need schematic of an antenna switch witout control cable, for selection I
> must use coaxial cable.
> It will be placed on the mast. I found something interesting on ham
> newspapers but . . I lost it. via internet I try but if you use some search
> tool (ie. google) you are sure to find all but not what you are looking
> for.
> Thanks in advance.
> Nike
>
>

What K7ITM suggests is using DC blocks to put a DC control voltage on
the coax, and take it off again at the mast end. You can build your
own with a choke and a capacitor (both components well chosen), or you
can buy them already made. Depending on the company, they're called DC
blocks, line isolators, or bias tees.

These building blocks have three connections; a RF-only connection, a
DC connection, and an RF-plus-DC connection.

Key parameters include DC current carrying capability (which is also
affected by the coaxial cable you use), and SWR/insertion loss on the
RF side.

For low frequencies, SGC (http://www.sgcworld.com) sells DC Coaxial
Line Isolators (SGC catalog 54-70) good from 1.5 MHz to around 250 MHz,
handling up tp 1.5 amps at 25 volts.

At higher frequencies, Minicircuits makes Bias tees good from 1 MHz up
to the GHz range. You can often find these on eBay.

You can also find RF switches (relay and diode) on eBay.

--
Namaste--

1419. Re: Input stage for VHF frequency counter in an FPGA?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 07:30:19 UTC
From: John Adair <removethisthenleavejea@replacewithcompanyname.co.uk>
Message-ID: <dtjoa7$1mc$1@newsg4.svr.pol.co.uk>
Source record: 13520
Cross-posted to: sci.electronics.design,comp.arch.fpga,rec.radio.amateur.homebrew

As Jim has said LVDS is a good way. Just watch the common mode input range.
You can use a RF transformer to rebias the DC level to get arround any
issues.

Another way is to use a single ended standard like SSTL and DC bias the
input to the reference voltage used for the SSTL. You do need to have access
to Vref pins on the Spartan-3 to use this technique.

We have support for LVDS and SSTL in our boards but I am not sure about the
Spartan-3 starter kit.

John Adair
Enterpoint Ltd. - Home of Raggedstone1. The low Cost Spartan-3 Development
Board.
http://www.enterpoint.co.uk

<cs_posting@hotmail.com> wrote in message
news:1140663703.875988.162830@g14g2000cwa.googlegroups.com...
> The other day I found myself needing a short gate time ~200 mhz
> frequency counter for an automated test, and since I had an FPGA board
> on hand I whipped one up quickly. Getting it reading and reporting to
> my computer was the easy part.
>
> Ah, the input stage....
>
> I've got about 4dBm of RF into 50 ohms to play with - about a volt p-p
> or a little more if it's high-Z. The output of the device under test
> has a transformer and then a series cap to create an unbalanced output.
>
>
> I did something ugly with a 3.3v cmos 7406 varient and a feedback
> resistor, which works well enough to get an accurate reading on one
> version of the device under test, but not on the other (both have been
> verified with real test equipment) It also tends to self-oscillate
> with no input...
>
> What would be the right way to do this using on hand parts, such as
> abused logic, little 1:1 or 2:1 RF transformers, etc? One idea is to
> use another gate with a feedback resistor and cap to ground in the hope
> of establishing the threshold level, and then using a transformer to
> swing another input above and below this. Most parts on hand are SMD -
> which means dead bug construction in SOIC scale under the maginifier -
> discourages extensive experimentation.
>

> Why do most abuse-of-logic RF applications seem to use NAND gates
> rather than inverters? From a digital perspective NAND gates are a
> universal element, but once you tie their inputs together, is there
> something to be gained from having two inputs in parallel?
>
> Is there a way to use a differential input configuration on an FPGA to
> input a balanced RF signal directly? Theoretically this should be an
> FPGA clock input... The device in use currently is an Altera Stratix
> II, but a Xilinx S3 kit is available.
>
> If ordering things, what would be a good default low supply voltage
> HF/VHF gain component to have on hand? I seem to recall lots of
> last-millenium ham designs using the MC1350P video IF amp, but what
> would make sense today?
>

1420. Re: Input stage for VHF frequency counter in an FPGA?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 09:52:30 UTC
From: hmurray@suespammers.org
Message-ID: <_MOdncVCNtJDGGDeRVn-tQ@megapath.net>
Source record: 13521
Cross-posted to: sci.electronics.design,comp.arch.fpga,rec.radio.amateur.homebrew

>I did something ugly with a 3.3v cmos 7406 varient and a feedback
>resistor, which works well enough to get an accurate reading on one
>version of the device under test, but not on the other (both have been
>verified with real test equipment) It also tends to self-oscillate
>with no input...

7406 is open collector. Did you mean 7404?

What size feedback resistor? What sort of oscillations?

I've had reasonable luck with that sort of hacking. Not great.

What's the output of your gate look like? Is it cleanly switching
or struggling to switch at that speed?

You might want to skip the external gate and use an inverter
in the FPGA out to a feedback pin. That gets the feedback
covering the input pin that you are really interested in.

--
The suespammers.org mail server is located in California. So are all my
other mailboxes. Please do not send unsolicited bulk e-mail or unsolicited
commercial e-mail to my suespammers.org address or any of my other addresses.
These are my opinions, not necessarily my employer's. I hate spam.

1421. Re: Input stage for VHF frequency counter in an FPGA?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 10:58:00 UTC
From: Joseph2k <joseph2k@lanset.com>
Message-ID: <YygLf.34170$Jd.2349@newssvr25.news.prodigy.net>
Source record: 13522
Cross-posted to: sci.electronics.design,comp.arch.fpga,rec.radio.amateur.homebrew

cs_posting@hotmail.com wrote:

> The other day I found myself needing a short gate time ~200 mhz
> frequency counter for an automated test, and since I had an FPGA board
> on hand I whipped one up quickly. Getting it reading and reporting to
> my computer was the easy part.
>
> Ah, the input stage....
>
> I've got about 4dBm of RF into 50 ohms to play with - about a volt p-p
> or a little more if it's high-Z. The output of the device under test
> has a transformer and then a series cap to create an unbalanced output.
>
>
> I did something ugly with a 3.3v cmos 7406 varient and a feedback
> resistor, which works well enough to get an accurate reading on one
> version of the device under test, but not on the other (both have been
> verified with real test equipment) It also tends to self-oscillate
> with no input...
>
> What would be the right way to do this using on hand parts, such as
> abused logic, little 1:1 or 2:1 RF transformers, etc? One idea is to
> use another gate with a feedback resistor and cap to ground in the hope
> of establishing the threshold level, and then using a transformer to
> swing another input above and below this. Most parts on hand are SMD -
> which means dead bug construction in SOIC scale under the maginifier -
> discourages extensive experimentation.
>
> Why do most abuse-of-logic RF applications seem to use NAND gates
> rather than inverters? From a digital perspective NAND gates are a
> universal element, but once you tie their inputs together, is there
> something to be gained from having two inputs in parallel?

the only gain is some PWB layout simplifications and less wasted part
sections.

>
> Is there a way to use a differential input configuration on an FPGA to
> input a balanced RF signal directly? Theoretically this should be an
> FPGA clock input... The device in use currently is an Altera Stratix
> II, but a Xilinx S3 kit is available.
>
> If ordering things, what would be a good default low supply voltage
> HF/VHF gain component to have on hand? I seem to recall lots of

> last-millenium ham designs using the MC1350P video IF amp, but what
> would make sense today?
>
I am thinking on the order of a single transistor amplifier to go to logic
levels, then characterize it for delay issues.
--
JosephKK
Gegen dummheit kampfen Die Gotter Selbst, vergebens.
--Shiller

1422. Re: Input stage for VHF frequency counter in an FPGA?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 11:15:04 UTC
From: Fred Bloggs <nospam@nospam.com>
Message-ID: <43FD9928.802@nospam.com>
Source record: 13523
Cross-posted to: sci.electronics.design,comp.arch.fpga,rec.radio.amateur.homebrew

```
>... but what
> would make sense today?
>

http://www.onsemi.com/PowerSolutions/product.do?id=MC100EPT21DR2
```

1423. Re: Fry's Electronics ,was : Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 12:15:47 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <9sednV5C5sz4OmDeRVny0Q@pipex.net>
Source record: 13524

Len Anderson wrote:
> Hey, the huge electronic supermarket called Fry's is just a
> mile and a half from my house here. Lots of low-cost, very-
> high-tech "toys" available in there.
==========
Indeed an amazing place,(I visited the Manhattan Beach CA store 2months ago) It is also a place with a limited selection of (pre-packaged)discrete components (Rat Shack style) However they only sell semiconductors under the NTE designation code ,so if you need semiconductors ,it is wise to bring a cross-reference table.

Frank GM0CSZ / KN6WH

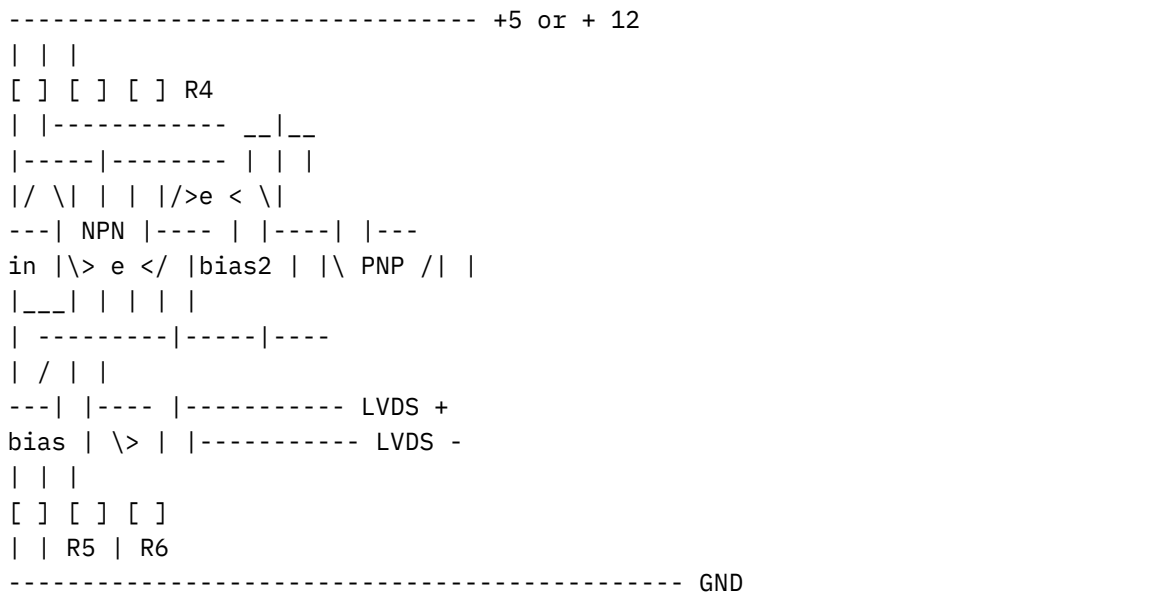
1424. Re: Input stage for VHF frequency counter in an FPGA?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 13:06:41 UTC
From: Jan Panteltje <pNaonStpealmtje@yahoo.com>
Message-ID: <dtkc15$bk0$1@news.datemas.de>
Source record: 13525
Cross-posted to: sci.electronics.design,comp.arch.fpga,rec.radio.amateur.homebrew

On a sunny day (22 Feb 2006 19:01:44 -0800) it happened cs_posting@hotmail.com
wrote in <1140663703.875988.162830@g14g2000cwa.googlegroups.com>:

>The other day I found myself needing a short gate time ~200 mhz
>frequency counter for an automated test, and since I had an FPGA board
>on hand I whipped one up quickly. Getting it reading and reporting to
>my computer was the easy part.
>
Just a partial reply... I think 7400 series should stop way below 200mHz,
perhaps 50MHz?

I would make a small diff amplifier, did something 40 years ago (yes 40!)
with I think it was BFY90 transistors, then invert with 2 more and drive
the LVDS input.



R4 could be a current source too, set it so it is guaranteed that
the voltage across R5 and R6 (max i in one leg) cannot exceed FPGA
max in.

Gives you some input protection
The 'bias voltages can be generated with diode drop.
No time now to enter it in spice to get response.....
You can use simple junction FETS for the first stage too.

There are also nice chips, but transistors I have always in the box.

1425. Re: Input stage for VHF frequency counter in an FPGA?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 14:49:32 UTC
From: cs_posting@hotmail.com
Message-ID: <1140706171.983935.190630@f14g2000cwb.googlegroups.com>
Source record: 13526
Cross-posted to: sci.electronics.design,comp.arch.fpga,rec.radio.amateur.homebrew

Jan Panteltje wrote:

> Just a partial reply... I think 7400 series should stop way below 200mHz,
> perhaps 50MHz?

It's either a 74AC04 or possibly a 74HC04 (it's upside down so I can't tell) and it's self oscillating at 294 mhz - (it's stable enough for the counter to read... a fast scope shows it approximately as a sinewave.

It seems to be oscillating at about 1/tpd... can't even really pull it much with finger capacitance - only about 10 mhz.

Interestingly, if I short a the floating input-output pair of an unused inverter with the scope probe, that runs a bit slower around 260 mhz... wheras the gate in use has about 20k of resistance in the feedback path.

> I would make a small diff amplifier, did something 40 years ago (yes 40!)
> with I think it was BFY90 transistors, then invert with 2 more and drive
> the LVDS input.

I may give your transistor circuit a try, either with components or simulation, thanks.

1426. Re: Input stage for VHF frequency counter in an FPGA?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 15:14:46 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <q9krv1hivrssv28lt30q6j0ta1ei98g66g@4ax.com>
Source record: 13527
Cross-posted to: sci.electronics.design,comp.arch.fpga,rec.radio.amateur.homebrew

On 23 Feb 2006 06:49:32 -0800, the renowned cs_posting@hotmail.com
wrote:

>Jan Panteltje wrote:
>
>> Just a partial reply... I think 7400 series should stop way below 200mHz,
>> perhaps 50MHz?
>
>It's either a 74AC04 or possibly a 74HC04 (it's upside down so I can't
>tell) and it's self oscillating at 294 mhz - (it's stable enough for
>the counter to read... a fast scope shows it approximately as a
>sinewave.
>
>It seems to be oscillating at about 1/tpd... can't even really pull it
>much with finger capacitance - only about 10 mhz.
>
>Interestingly, if I short a the floating input-output pair of an unused
>inverter with the scope probe, that runs a bit slower around 260 mhz...
>wheras the gate in use has about 20k of resistance in the feedback
>path.
>
>> I would make a small diff amplifier, did something 40 years ago (yes 40!)
>> with I think it was BFY90 transistors, then invert with 2 more and drive
>> the LVDS input.
>
>I may give your transistor circuit a try, either with components or
>simulation, thanks.

What about using a stand-alone LVDS receiver? Eg. Pericom
PI90LV179W.

1427. Re: Input stage for VHF frequency counter in an FPGA?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 15:23:38 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1140708218.865557.189570@u72g2000cwu.googlegroups.com>
Source record: 13528
Cross-posted to: sci.electronics.design,comp.arch.fpga,rec.radio.amateur.homebrew

cs_posting@hotmail.com wrote:
> The other day I found myself needing a short gate time ~200 mhz
> frequency counter for an automated test, and since I had an FPGA board
> on hand I whipped one up quickly. Getting it reading and reporting to
> my computer was the easy part.
>
> Ah, the input stage....
>
> I've got about 4dBm of RF into 50 ohms to play with - about a volt p-p
> or a little more if it's high-Z. The output of the device under test
> has a transformer and then a series cap to create an unbalanced output.
>
>
> I did something ugly with a 3.3v cmos 7406 varient and a feedback
> resistor, which works well enough to get an accurate reading on one
> version of the device under test, but not on the other (both have been
> verified with real test equipment) It also tends to self-oscillate
> with no input...

I'm surprised any CMOS 7406 variant really goes to 200MHz! I think you
got lucky with the one that did work.

> What would be the right way to do this using on hand parts, such as
> abused logic, little 1:1 or 2:1 RF transformers, etc?

I like high-speed comparators (often called "differential receivers" or
"LVDS receivers" on the spec sheet) for this.

> One idea is to
> use another gate with a feedback resistor and cap to ground in the hope
> of establishing the threshold level, and then using a transformer to
> swing another input above and below this. Most parts on hand are SMD -
> which means dead bug construction in SOIC scale under the maginifier -
> discourages extensive experimentation.

The nice thing about differential receivers are:

1. Easy to set the comparison level.
2. Lowish input impedance but not too low, such that you set the
impedance by putting a 50 or 100 or whatever ohm resistor there.
3. At least for the non-LVDS parts, there's only one or two receivers
per package so even when it's not SMD it's easy to do dead-bug
prototyping.
4. They already have some semblance of defined open-circuit response
(usually called "fail-safe" for some bizarre reason in the spec sheets)

to prevent oscillating.

> Why do most abuse-of-logic RF applications seem to use NAND gates
> rather than inverters? From a digital perspective NAND gates are a
> universal element, but once you tie their inputs together, is there
> something to be gained from having two inputs in parallel?

Usually the hex inverter packages cost a little bit more than the
4xNAND gate packages. It's nice to have the extra input to act as an
enable etc. And once you start running these parts into the linear
region you probably do not really trust using the other sections for
other functions.

> Is there a way to use a differential input configuration on an FPGA to
> input a balanced RF signal directly? Theoretically this should be an
> FPGA clock input... The device in use currently is an Altera Stratix
> II, but a Xilinx S3 kit is available.

You can even feed in non-balanced RF subject to some limitations.

> If ordering things, what would be a good default low supply voltage
> HF/VHF gain component to have on hand? I seem to recall lots of
> last-millenium ham designs using the MC1350P video IF amp, but what
> would make sense today?

VHF? MMIC's, at least as long as you have only need for AC coupling.

Tim.

1428. Re: Cost-Effective Fast Data Acquisition, and the LT5506

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 16:44:50 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <AuadnUQMAKTqe2De4p2dnA@web-ster.com>
Source record: 13529
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,comp.dsp

K7ITM wrote:

> One way I've considered doing those heat pads on homebrew boards is to
> drill a large hole there, say to just clear a 10AWG wire, tin the heat
> pad, solder the part down, and finally slip a very short (e.g. 0.09")
> length of tinned #10 into the hole, heating it to reflow to the part,
> and solder around the the wire to the ground plane. Should work, but
> haven't tried it (yet). Such a short, fat wire is pretty low thermal
> resistance. You can also add some heat sinking on the back to pull
> heat away from the wire stub. Toughest part might be cutting the wire
> cleanly perpendicular to its axis. A reasonably clean cut followed by
> a bit of filing would do it, and I can imagine better ways if I were
> making several.
>
> Cheers,
> Tom
>

Sounds like you're thinking single-sided board. I was just going to pop
for a quick turn house that delivers two-sided, plated-through holes.
The price is not too bad, all things considered.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

1429. Re: Cost-Effective Fast Data Acquisition, and the LT5506

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 18:01:40 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1140717700.728330.92880@i40g2000cwc.googlegroups.com>
Source record: 13530
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,comp.dsp

Well, I generally do double-sided boards, but the bottom side on a board like that would be (mostly) ground plane/heat sink. The solid copper plug will conduct away a lot more heat than one (or a few) plated holes.

I do agree that the proto shops offer an economical and valuable service, but still do boards myself when they are simple and I want them fast (like an hour or less from the completed layout). Analog layouts generally don't need many vias, and I just fill those with 30AWG wire.

Good luck with your project. I have something somewhat similar going on myself at the moment.

Cheers,
Tom

1430. Re: FA: Unbuilt Kit - 70's Vintage Heathkit Oscilloscope.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 18:13:33 UTC
From: k7itm@msn.com
Message-ID: <1140718413.608596.166550@i39g2000cwa.googlegroups.com>
Source record: 13531
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Wow. Dave Edwards' pristine HP1726 275MHz scope is at $26 right now,
and this 5MHz unbuilt Heathkit is at $169? Guess it must have some
antique/nostalgia value to someone. It will be interesting to me to
check back in 9 days when both auctions end to see what each went for.

1431. Re: Want: 73 & Ham Radio Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 22:50:33 UTC
From: LenAnderson@ieee.org
Message-ID: <1140735033.770191.264890@i40g2000cwc.googlegroups.com>
Source record: 13532

From: Joel Kolstad on Wed, Feb 22 2006 7:54 pm

>Hi Len,
>
>You have a lot of interesting history in there!

I feel fortunate to have experienced (first-hand) the
electronics technology revolution of the last 60 years.
Truly remarkable times!

>I think it's ironic how the cool fashion accessory today is something like a
>Motorola Razr phone with its associated millions of transistors buried in
>numerous ICs running software that even relatively few BSEE's would fully
>understand without a fair amount of additional study (turbo codes, direct
>sequence spread spectrum systems, psychoacoustic codecs, etc. not usually
>being a large part of the undergraduate curriculum...), yet 30 years ago
>anyway hauling around a brick-sized ham radio or CB was quite the nerdy thing
>to do... Incredible how times change...

Don't forget that MARKETING has been responsible for setting
"the public's" definitions of "cool" things. Lots of the
products on today's market are the work of specialists together
in one product family. It is difficult for anyone to be a
guru in more than one discipline within electronics (and radio).

Take the general MPEG4 compression that enables HDTV to work
within a 6 MHz bandwidth (and enabling 4-channel sound and
assorted whatnot to coexist there). Having been slightly
involved in some test equipment design for same, the concept
is mind-boggling to me. "Tylenol time" to attempt under-
standing it. I'd rather sit back and watch, enjoying the
MUCH better picture of HDTV as compared to the old 4:3 aspect
ratio analog TV. As far as I'm concerned, the compression
techniques are complicated enough that they don't seem to need
any IP protection...

>> If they want to TEACH students what goes on in industry of the
>> day, absolutely. They've gone insular amongst themselves in
>> the last few decades...in the teaching part of their activity.
>
>IMO one of the biggest problems universities face is that everyone is
>"expected" to get a 4 year degree these days, and yet the reality of the
>marketplace is that relatively few jobs truly require anything approach that
>level of "hard core" education. Hence, engineering courses get watered down,
>and a lot of BSEE of BSCS students end up performing straightforward
>programming or digital design using techniques that a 2 year technical college

>could have easily provided them with. Industry has often contributed to this
>problem, requiring even technical sales people to now have those 4 year
>degrees... sheesh!

I would "blame" personnel departments for the "degree required."
Hey, it's hard enough for them (now called "Human Resources") to
try to sort out applications in all the myriad specialties typical
of an electronics house in the industry now. Over 30 years ago
RCA Corporation used to give two-level interviews to applicants;
initial screening in personnel, final screening by engineering
department folks (not necessarily liking the task). That was a
better, quicker way to separate the good from the bad and ugly.
I got hired by them that way and later wound up as one of those
who did the second-level final screening. It works.

In practical matters, academia just doesn't have the familiarity
with "industry practice" so it can't get a good handle on what
they really need to stuff in a curricula. That's academia's
problem..."industry" is going to go ahead and do its thing
anyway, regardless of title-rank-status blinged into minds by
academicians. "Industry" exists to stay in existance, make
products, make profits. "Industry" ALSO winds up as the general
inventor-innovator-creator of new technology...they just don't
allot a lot of time to write up much of it a la academicians,
only for marketing purposes to get folks buying their new stuff.

>I think we're just about there -- I've seen chipsets that'll provide, e.g.,
>some tens of bytes of data once every second or so and consume mere tens of
>microwatts (on average) to operate; that seems like the kind of thing some
>clever person can generate just from the rotation of the tire itself using
>some horribly crude & dirt cheap implementation of a "generator."

Well, I'd point out the simple little "fob" transmitter for
the "keyless entry" system. A single IC in there that both
generates the "rolling code" digital sequence AND the tiny
UHF transmitter. The code sequence is flexible enough, simple
enough to set up for tens of thousands of different
combinations, low-power enough to last for years without a
battery change, can work in sub-zero and desert temperatures.
And be relatively cheap to make as well as small enough to
carry in a trouser pocket. One heckuva set of specs there!

The "keyless entry" receiver is as complicated, yet is only a
small part of the overall electronics in a modern auto. My
wife's (she picked it out, I okayed it) new Malibu hatchback
has ten kinds of bells and whistles on its dash display, a
relative drop in the bucket compared to its normal housekeeping
computerized chores of checking things, adjusting carburation,
alert warnings, light control, etc., etc., etc. It's made
possible by the ubiquitous microcomputer (now just thirty-
something old). Wonderful stuff in my view! Takes some of
the worry about cross-country driving as well as everyday

driving.

>> Well, in my view, there's too much ham emphasis on transmitters
>> and power and mechanical aspect of things.
>
>What would you like to see more of?

Receivers, subjects that don't emphasize the new buzzwords
of the industry. Oscillators, some practical skinny that
doesn't mirror the current industry need for "low phase
noise" (applicable to FM and PM yes, but not many DSSS
high-speed data communications going on in amateur radio).
Practical simple test equipment for Rx and Tx that doesn't
need some specialty component part or unobtainium. Most
authors use what they had (leftovers from work or other
projects) and don't mention what could be substituted.

Some better theory and practical uses of complex quantities
that involve impedance and admittance...especially how to
measure them good enough for a home workshop environment.
A vector impedance meter and vector analysis system is just
now (in the last few years) appearing in the ham scene.
Some practical stuff on making inductors, Q affected by
what, how to measure approximate Q with workshop gear.

Some APPLICABLE (not product-specific promotional-based)
information on making things in the home workshop, whether
it is "manhattan-style" PCBs or even better soldering
techniques. [RoHS is with us, like it or not, an tin
solder without the lead doesn't handle as the old solder
did] How to work with materials properly, metal to
fiberglass-epoxy sheet or whatever. Even something on
standard screws, fasteners, things that can hold something
together. Avoid the TV craft-show techniques of most of
the show content concerned with promoting some latest
maker's new stuff...while it is momentarily interesting
it is also obviously a part of marketing pushing this new
craft stuff. ["product reviews" are a gross example of
this kind of PR]

A "tuna-tin two" two-transistor Tx is cute, but crammed
into an Altoids box? QRP is kind of a specialty niche
and probably deserves a special issue of some magazine
for that, but the lure of "simplification" (in size and
complexity) for simplicity's sake doesn't TEACH much of
anything except serve as a real test of dexterity on the
part of the builder. "Simplicity" in ham radio was very
popular from the 30s to the 50s because ready-built was
expen$ive then. Simple things could be built in a few
weekends, provided some enjoyment, but not a great deal
of real learning (other than assembly) into theory. Today
it is possible to build a "simple" single-conversion HF

superhet receiver with zilch problems of image response
yet have fine selective IF response for AM voice. Takes
all of six ICs on a PCB size less than 6" x 8" in size.
Frequency control in tuning can be simple or complex as
desired.

>I did mean "true" SDRs, such as GNU Radio, Flex Radio, etc. I think it has
>plenty of application to the HF world (indeed, the development of digital
>modes for HF seems much more active than on VHF/UHF, which has always struck
>me as kinda bizarre given how much less bandwidth is available there in the
>first place... but of course the fact that you can get a signal to the other
>side of the planet on 100W in good condition is always a big motivator...)

IF - and only IF - the ionosphere is kind to you... :-)

In digitized "data" modes for amateur use, there's only
ONE new, innovated-for-ham-use mode: PSK31. All other
modes involving "data" are adaptations of commercial-use
modes. One mountain-states small company had their first
product as a "beginner's HF PSK31 transceiver." It didn't
sell despite having some neat, modern microcomputer
and display screen, keyboard included. It wasn't
"traditional ham" gear, wasn't pushed by a big company.
Peter Martinez (G3PLX) had his PSK31 up, running, and
being tested by others using it in Europe for a few years
without any real details of it appearing in USA ham
magazines.

There just isn't much of anything else in "data" comms
standards here in the USA unless it is already developed
and debugged by "the industry." Digitized voice IS
possible in narrowbandwidths on HF but there don't seem
to be any amateur experimenters trying it out. What would
SDR do without any standards to adapt to?

One can PROCESS an IF today and do things like make a
digital spectrum analyzer (I don't see much effort spent
on that). That isn't really a Software DEFUNED radio
system. Firmware-software already CONTROLS most of the
functions in modern ready-built amateur radios. That isn't
really Software DEFINED radio either. OK, the quibble is
a minor thing. Software/firmware/digital-control is
definitely on the scene today.

>> One problem with digital voice is that there isn't
>> even a hint of a standard protocol or of many experimenters
>> yielding any results on same.
>
>Have I mentioned how some of the best low-bit rate CODECs are proprietary
>and/or patented and not licensable by a single lowly hobbyist? ;-)

Yes, you did. :-) I also mentioned that there's not much of a hint of anyone in the USA experimenting on their own to make a trial or two at their prospective standard. Someone must BEGIN, be the flag-bearer, the amateur pioneer. What is bizarre (to me) is that a modern PC has much more computing power than big mainframes I connected to 30 years ago to do ordinary synthesis-analysis of circuitry. The tools for experimentation on coders-decoders EXIST NOW.

Perhaps the biggest bottleneck to all this possible pioneering is the current mindset of radio amateurs. If it doesn't "look" like "radio" (of their time), it "isn't real radio." :-(

The editors of the few remaining ham publications have the paper-version control over what everyone sees for new things. THEY are the ones needing to look into the future and do gauging on what THEY think is "good" for readers. Meanwhile, the Internet is busy, busy showing lots and lots of new things that ARE done, can be done, to anyone who bothers to search. [there's quite a bit of material on CODECs and general DSP out there once you get the right key search words] Most of what we see on the Internet is not locked up in truly enforceable copyrights.

LenAnderson@ieee.org

1432. Re: Input stage for VHF frequency counter in an FPGA?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 22:54:43 UTC
From: LenAnderson@ieee.org
Message-ID: <1140735283.320080.256170@j33g2000cwa.googlegroups.com>
Source record: 13533
Cross-posted to: sci.electronics.design,comp.arch.fpga,rec.radio.amateur.homebrew

From: cs_posting@hotmail.com on Wed, Feb 22 2006 7:01 pm

>The other day I found myself needing a short gate time ~200 mhz
>frequency counter for an automated test, and since I had an FPGA board
>on hand I whipped one up quickly. Getting it reading and reporting to
>my computer was the easy part.
>
>Ah, the input stage....
>
>I've got about 4dBm of RF into 50 ohms to play with - about a volt p-p
>or a little more if it's high-Z. The output of the device under test
>has a transformer and then a series cap to create an unbalanced output.

<snip>

If you want some good results, use a high-speed comparator
device. The Maxim MAX9010 family of comparators is fast
(5 nSec propagation delay) and it works into a TTL load.

At 1 V p-p you've got the input overdrive to insure fast
rise and fall times of the output. Note: 200 MHz (if that
is really what you wanted to write) has a period of 5 nSec
so even this very fast comparator is going to be pushed for
a good output. On the other hand it is STABLE and won't
"go into oscillation with no input."

http://www.maxim-ic.com

Samples are available. One in the family is in a SOT23
package, the rest smaller.

>If ordering things, what would be a good default low supply voltage
>HF/VHF gain component to have on hand? I seem to recall lots of
>last-millenium ham designs using the MC1350P video IF amp, but what
>would make sense today?

The MC1350P is second-sourced by Lansdale. It is still a very
good differential in/out building block with good AGC control.
The MC1349P is a pin/function equivalent and can be ordered from
Dieter Gentzow's PartsAndKits.com at 3 for $3. Same place is a
good source of small-quantity toroidal cores. Both ICs are
called out with 12 VDC supplies but they will work down to
9 VDC with little degredation. Open-collector outputs, constant
5 KOhm || 5 pFd input, AGC control down to 60 db (if needed).

LenAnderson@ieee.org

1433. Re: Inexpensive small shield enclosures from square tin cans

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 22:58:00 UTC
From: LenAnderson@ieee.org
Message-ID: <1140735480.391516.211840@z34g2000cwc.googlegroups.com>
Source record: 13534

From: "Michael A. Terrell" on Thurs, Feb 23 2006 5:59 am

>LenAnderson@ieee.org wrote:
>> From: "Michael A. Terrell" on Wed, Feb 22 2006 6:45 am
>> >LenAnderson@ieee.org wrote:

>> >Service to my country? Been there, Done that, and I've got my DD214 to
>> >prove it.
>>
>> Me too. ["R-A all the way" :-)]
>
> Well, I was U-S, (Drafted, for those who don't know) but I tested out
>of a three year electronics school while in basic training and was
>awarded the MOS for a TV Broadcast engineer. I went straight from basic
>training to working in CATV, CCTV, AML type Jerrold Microwave video
>links and even a little RADAR work.

Departing from the subject, those wanting to know the real HF
military communications of '53 to '60 can download:

http://sujan.hallikainen.org/BroadcastHistory/uploads/My3Years.pdf

or

sujan.hallikainen.org/BroadcastHistory/uploads/AlphabetSoup.pdf

Personal history, about 10 MB each so they take some time over
dial-ups.

Harold Hallikainen has a great collection of broadcasting material
of older times (under the org part of the URLs above) plus some
very comprehensive sites in his Links list. Maybe you wish to
contribute something there?

LenAnderson@ieee.org

1434. Re: Input stage for VHF frequency counter in an FPGA?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 23:36:20 UTC
From: Chris Jones <lugnut808@nospam.yahoo.com>
Message-ID: <11vshmrf92f55b0@corp.supernews.com>
Source record: 13535
Cross-posted to: sci.electronics.design,comp.arch.fpga,rec.radio.amateur.homebrew

cs_posting@hotmail.com wrote:

> Jan Panteltje wrote:
>
>> Just a partial reply... I think 7400 series should stop way below 200mHz,
>> perhaps 50MHz?
>
> It's either a 74AC04 or possibly a 74HC04 (it's upside down so I can't
> tell) and it's self oscillating at 294 mhz - (it's stable enough for
> the counter to read... a fast scope shows it approximately as a
> sinewave.
>
> It seems to be oscillating at about 1/tpd... can't even really pull it
> much with finger capacitance - only about 10 mhz.
>
> Interestingly, if I short a the floating input-output pair of an unused
> inverter with the scope probe, that runs a bit slower around 260 mhz...
> wheras the gate in use has about 20k of resistance in the feedback
> path.
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>> with I think it was BFY90 transistors, then invert with 2 more and drive
>> the LVDS input.
>
> I may give your transistor circuit a try, either with components or
> simulation, thanks.

There are some newer low voltage CMOS gates that are much faster than AC series, I think they are called LVC and a few other names depending on the manufacturer. The really fast ones don't support 5V supply operation because they are made on a fine geometry process. This also makes them faster. It would be very hard to stop it from self oscillating with no input signal. In order to have a meaningful way of determining if you have satisfied this requirement for not self-oscillating, you would first have to define what is the minimum input amplitude that you expect it to be able to accept and produce an output with reasonable duty cycle etc. Another approach would be to make an input buffer that does self oscillate and make a separate detector that measures the input signal amplitude and disables the measurement when the input amplitude is below a certain threshold.

Chris

Chris

1435. Re: Input stage for VHF frequency counter in an FPGA?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-23 23:59:44 UTC
From: langwadt@ieee.org
Message-ID: <1140739184.846513.228740@v46g2000cwv.googlegroups.com>
Source record: 13536
Cross-posted to: sci.electronics.design,comp.arch.fpga,rec.radio.amateur.homebrew

cs_posting@hotmail.com skrev:

> The other day I found myself needing a short gate time ~200 mhz
> frequency counter for an automated test, and since I had an FPGA board
> on hand I whipped one up quickly. Getting it reading and reporting to
> my computer was the easy part.
>
> Ah, the input stage....
>
> I've got about 4dBm of RF into 50 ohms to play with - about a volt p-p
> or a little more if it's high-Z. The output of the device under test
> has a transformer and then a series cap to create an unbalanced output.

snip

The FPGA already has a balanced input, lvds. have you tried that with a
few resistors
or maybe a RC filter on signal to set the treshold on one input and the
signal on the other input? or maybe even a cap into a cmos input
biased to close but not quite vcc/2

1Vpp should be plenty, think the thresholds for ldvs is max 100mv

-Lasse

1436. Re: Input stage for VHF frequency counter in an FPGA?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 01:26:28 UTC
From: cs_posting@hotmail.com
Message-ID: <1140744388.872164.270060@u72g2000cwu.googlegroups.com>
Source record: 13537
Cross-posted to: sci.electronics.design,comp.arch.fpga,rec.radio.amateur.homebrew

Fred Bloggs wrote:
> >... but what
> > would make sense today?
> >
>
> http://www.onsemi.com/PowerSolutions/product.do?id=MC100EPT21DR2

That sounds like a good idea, because theoretically we actually have some on hand somewhere, I'll have to see if I can scare them up.

While connecting to the FPGA directly would be simpler, I do like the idea of using an external chip as a bit of a 'fuse'. (Though transformer coupling into the FPGA should reduce some risk)

1437. Re: FA: Unbuilt Kit - 70's Vintage Heathkit Oscilloscope.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 02:33:58 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <wduLf.20072$UD1.2398@bignews2.bellsouth.net>
Source record: 13538
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

k7itm@msn.com wrote:
> Wow. Dave Edwards' pristine HP1726 275MHz scope is at $26 right now,
> and this 5MHz unbuilt Heathkit is at $169? Guess it must have some
> antique/nostalgia value to someone. It will be interesting to me to
> check back in 9 days when both auctions end to see what each went for.
>
There is something about unbuilt Heathkits. Some people collect them,
and never build them. Weird. Then again I know people who collect
Barbie dolls and never open the packages, just leave them on a shelf to
collect dust.

1438. Re: Crystals wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 02:51:09 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <DtuLf.20074$UD1.3737@bignews2.bellsouth.net>
Source record: 13539

Gary Schafer wrote:
> I have a homebrew project that I need some crystals for. Need the
> following:
>
>
>
> 3.300 mhz
>
> 3.500 mhz
>
> 10.5 mhz
>
> 17.5 mhz
>
> 24.5 mhz
>
>
>
> Prefer HC6 holders if you have them. Any help out there?
>
>
>
> Thanks!
>
> Gary K4FMX
>
> Please reply to garyschafer@comcast.net
Building a 2B clone eh?

1439. Re: Input stage for VHF frequency counter in an FPGA?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 04:12:02 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <bq1tv1t5v4ihejvrui4717uqvdnvc8lqlo@4ax.com>
Source record: 13540
Cross-posted to: sci.electronics.design,comp.arch.fpga,rec.radio.amateur.homebrew

On Thu, 23 Feb 2006 16:23:13 +1300, Jim Granville
<no.spam@designtools.co.nz> wrote:

>cs_posting@hotmail.com wrote:
>> The other day I found myself needing a short gate time ~200 mhz
>> frequency counter for an automated test, and since I had an FPGA board
>> on hand I whipped one up quickly. Getting it reading and reporting to
>> my computer was the easy part.
>>
>> Ah, the input stage....
>
> Does the FPGA have LVDS option inputs ?
>If it is new enough to have those, they are differential
>amplifiers, designed for current mode signals, and will work
>with thresholds << 1V.
> IIRC the LVDS spec has +100mV and -100mV levels.
>Normally, they need a common mode bias of just over 1V, and the
>better ones will also tolerate rail-rail drive (on ONE ip),
>but at reduced speed specs.
>-jg

Second that. We've tested the Xilinx Spartan3 LVDS inputs and they are
excellent, super-fast comparators.

John

1440. Re: Inexpensive small shield enclosures from square tin cans

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 04:24:28 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43FE8A73.55EC3D9C@earthlink.net>
Source record: 13541

LenAnderson@ieee.org wrote:
>
> From: "Michael A. Terrell" on Thurs, Feb 23 2006 5:59 am
>
> >LenAnderson@ieee.org wrote:
> >> From: "Michael A. Terrell" on Wed, Feb 22 2006 6:45 am
> >> >LenAnderson@ieee.org wrote:
>
> >> >Service to my country? Been there, Done that, and I've got my DD214 to
> >> >prove it.
> >>
> >> Me too. ["R-A all the way" :-)]
> >
> > Well, I was U-S, (Drafted, for those who don't know) but I tested out
> >of a three year electronics school while in basic training and was
> >awarded the MOS for a TV Broadcast engineer. I went straight from basic
> >training to working in CATV, CCTV, AML type Jerrold Microwave video
> >links and even a little RADAR work.
>
> Departing from the subject, those wanting to know the real HF
> military communications of '53 to '60 can download:
>
> http://sujan.hallikainen.org/BroadcastHistory/uploads/My3Years.pdf
>
> or
>
> sujan.hallikainen.org/BroadcastHistory/uploads/AlphabetSoup.pdf
>
> Personal history, about 10 MB each so they take some time over
> dial-ups.
>
> Harold Hallikainen has a great collection of broadcasting material
> of older times (under the org part of the URLs above) plus some
> very comprehensive sites in his Links list. Maybe you wish to
> contribute something there?
>
> LenAnderson@ieee.org

Thanks, Len, I'll check it out. I have some information that was
added to a website about AFRTS's history.

http://www.afrts.osd.mil/heritage/page.asp?pg=archive_email1
--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.

Member of DAV #85.

Michael A. Terrell
Central Florida

1441. A really basic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 06:03:34 UTC
From: clifto <clifto@gmail.com>
Message-ID: <n6k2d3-u2q.ln1@remote.clifto.com>
Source record: 13542

A bit off topic, as it has to do with house wiring. But how does power factor affect dissipation in the conductors? I'm wondering, for example, if a 1500 watt capacity and a 30% power factor would overload #14 wire.

--
All relevant people are pertinent.
All rude people are impertinent.
Therefore, no rude people are relevant.
-- Solomon W. Golomb

1442. Re: A really basic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 06:34:27 UTC
From: - exray - <exray@coqui.net>
Message-ID: <11vta7iahr7703@corp.supernews.com>
Source record: 13543

clifto wrote:

> A bit off topic, as it has to do with house wiring. But how does power factor
> affect dissipation in the conductors? I'm wondering, for example, if a 1500
> watt capacity and a 30% power factor would overload #14 wire.
>
To put it into perspective...NEC allows #14 for up to 15 amps when used
as a conductor in a 3-core cable. The wire alone is rated for 32 amps
for open chassis wiring. I'm not sure how its rated loose in conduit
but I suspect that NEC still treats it as 15 A.
That said, I don't think NEC takes into consideration...or actually they
do in a roundabout way by derating...the power factor variance.
I'd say you are in the clear both from a practical and a 'legal'
standpoint with 1500 watts load. However, if I were doing this from
scratch I'd bump up to #12 or #10 because 14 wire could create an
undesirable voltage drop depending on distance.

1443. Re: A really basic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 10:14:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11vtn3e72dgqo49@corp.supernews.com>
Source record: 13544

I'm assuming you're in the U.S. and by "#14" wire you mean 14 AWG.

A power factor of 30% means that only 30% of the product of V and I is power being delivered to a load. The rest is simply being moved back and forth in the power system. To get 1500 watts of power at a power factor of 100%, you need P / V amperes. For V = 120 volts, that works out to 12.5 amps. But to get 1500 watts of power with a power factor of 30%, you need P / V / 0.30 = 12.5 / 0.30 = 41.67 amps. Heating in wires is due to the current going through them. Ordinary #14 wire in houses is rated for 15 amps. So you'd be grossly exceeding the rating of the #14 wire in getting 1500 watts with a 30% power factor. [All voltages and currents in this posting are in RMS.]

When the power factor is less than 100%, you need more current for the same amount of power, because it requires current to move the "reactive power" -- power moved back and forth without being used up in a load.

If by "1500 watt capacity" you actually mean "1500 volt-ampere capacity", then you're ok. In this context, watts are real power, but volt-amperes are the product of V and I, which is the sum of the real power (watts) and "reactive power" (VARs, for "Volt Ampere Reactive"). If you limit your volt-ampere product to 1500 volt-amperes, then your maximum current is 12.5 amps. But if your power factor is 30%, you'll only be delivering 0.30 * 1500 = 450 watts to the load.

This is why you'll generally see transformers and other power devices rated by volt-amperes rather than watts.

Roy Lewallen, W7EL

clifto wrote:
> A bit off topic, as it has to do with house wiring. But how does power factor
> affect dissipation in the conductors? I'm wondering, for example, if a 1500
> watt capacity and a 30% power factor would overload #14 wire.
>

1444. SolderSmoke #16: EMRFD; NE602s, Desitin, diapers, heat sinks; The Simpsons on homebrewers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 11:41:41 UTC
From: bill.meara@gmail.com
Message-ID: <1140781301.313690.20980@t39g2000cwt.googlegroups.com>
Source record: 13545
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.basics,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc

SolderSmoke!
A SHOW FOR ELECTRONICS HOMEBREWERS!

http://www.ourmedia.org/node/168474

Topics discussed in SolderSmoke #16:

--EMRFD on mixers and balanced mixers
--LTSpice model for NE602
--Low output from NE602 Bal Mod circuit
--Desitin, diaper rash, and heat sinks
--REVVER web site and Trivial Electric Motor
--Solder smoke in space
--The Simpsons on social skills of Radio Shack customers (us!)

Listen at: http://www.ourmedia.org/node/168474

Background:
Tired of listening to Led Zepplin or NPR on your I-Pod? Wouldn't you like to be able to carry with you the kinds of ham radio conversations that you listen to while in your radio shack?
Mike, KL7R, in Juneau, Alaska, and Bill, M0HBR, in London, England meet regularly on the ECHOLINK system to discuss their homebrew radio projects. We are making them available as PODCASTS.

You can subscribe to the program, have them downloaded to your MP-3 player, and listen to them at your convenience. To subscribe, just cut and paste this URL into your I-poder (or similar) software.

http://www.ourmedia.org/mediarss/user/36170

If you don't have an MP3 player you can just go to the site below and listen to the latest program (and earlier editions) using the audio software on your computer.

http://www.ourmedia.org/node/168474

Here's the homepage for our show. All our programs area available here. There is also a blog and links

to some of the sites and documents we've been discussing: http://www.ourmedia.org/user/36170

We hope you enjoy the program. Please send us feedback.

73 from London
Bill M0HBR N2CQR CU2JL
http://www.qsl.net/n2cqr

1445. Re: A really basic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 15:34:29 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1140795268.596897.289700@e56g2000cwe.googlegroups.com>
Source record: 13546

clifto wrote:
> A bit off topic, as it has to do with house wiring. But how does power factor
> affect dissipation in the conductors? I'm wondering, for example, if a 1500
> watt capacity and a 30% power factor would overload #14 wire.

For heating wire, the I-squared-R losses are what matter. Same for most
small circuit breakers.

1500 watts at 120 volts would be a RMS current of 12.5 Amps, if the
load was purely resistive.

With a power factor of 30%, the RMS current might be 40 Amps. That's a
lot more than the 15 Amps that electrical codes allow on 14-gauge wire.
But you'd be tripping breakers if you really were putting 40 Amps
through that circuit and it's house wiring AND it's up to code AND the
breaker was Ok AND (yadda yadda yadda).

But I don't know what a "1500 watt capacity" is. I don't think you're
really talking about 1500 watts. Maybe you meant Volt-Amps (VA).

Tim.

1446. Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 15:56:07 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1140796567.271702.34800@v46g2000cwv.googlegroups.com>
Source record: 13547
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

When reading this, be on the guard against the Cry Baby (CB),
the Cackling Bully (CB) and the Complete Buffoon (CB)!

What is Ham Radio?

It is becoming increasingly difficult to fly the flag for
decency and for civilised behaviour in Radio Hammery. Even
the Usenet newsgroups dedicated to the cause have degenerated
into a hotbed of abusive onslaughts by those who ought to know better.
However, there still exists the fundamental basis on which Ham
Radio is based, and that will never die. This FAQ ("What Is
Ham Radio?") will be regularly published and will not be
shouted or bullied down. It is important that those of a
technical bent, who are the natural seed-corn of Radio Hammery
and who gravitate towards us to be the real novitiate, can
still find us, (and know that we are still here), their fellows.

-----ooooo-----

Please remember that this FAQ is a _POSITIVE EXHORTATION_
to you to exert yourselves to join our fraternity! (If you find
otherwise, then perhaps you are already classing yourself in the
mediocre groups of those who are criticised in the FAQ and from
whom we _MUST_ dissociate? If so - it's never too late for
a re-taxonomisation on your part - there's nothing elitist about
us, and we welcome all those who are prepared to put themselves
out in order to join our ranks!)

-----ooooo-----
So,.....What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One such CB type is the so-called "Not-Ham". Otherwise
known as the CBer-Masquerading-As-A-Radio-Ham, this type
had their background in the hobby that is CB Radio and not
in the technical pursuits that lead up to a coveted Ham licence.
Easily recognised by their boasts of the criminal activity of
11 metre SSB operation, one wonders why they don't go back to
the CB Bands if such bands are dearer in their hearts than are the Ham
Bands? No _REAL Radio Hams associate with those who made an
illegal installation of transmitting equipment before being
in possession of an appropriate licence.

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B
licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

1447. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 16:38:27 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <43ff3683$0$22768$dbd41001@news.wanadoo.nl>
Source record: 13448
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Plod's Conscience wrote:
> When reading this, be on the guard against the Cry Baby (CB),
> the Cackling Bully (CB) and the Complete Buffoon (CB)!
>
> What is Ham Radio?

It's Friday afternoon.... Beanies been let out for the weekend :)

--

1448. Re: Crystals wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 16:39:23 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <tgduv11avogdtchb5k6ubqqngog0ua1gui@4ax.com>
Source record: 13449

On Thu, 23 Feb 2006 21:51:09 -0500, Ken Scharf
<wa2mzeNOTTHIS@bellsouth.net> wrote:

>Gary Schafer wrote:
>> I have a homebrew project that I need some crystals for. Need the
>> following:
>>
>>
>>
>> 3.300 mhz
>>
>> 3.500 mhz
>>
>> 10.5 mhz
>>
>> 17.5 mhz
>>
>> 24.5 mhz
>>
>>
>>
>> Prefer HC6 holders if you have them. Any help out there?
>>
>>
>>
>> Thanks!
>>
>> Gary K4FMX
>>
>> Please reply to garyschafer@comcast.net
>Building a 2B clone eh?

Kind of. It is a converter for a BC453 (Q5er) that I built many years
ago. It now uses only one 3.5 Mhz crystal, dual conversion, for all
bands. Trying to clean up some of the image problems.

73
Gary K4FMX

1449. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 16:42:18 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1140799338.316367.224560@i39g2000cwa.googlegroups.com>
Source record: 13450
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Plod's Conscience wrote:
> When reading this, be on the guard against the Cry Baby (CB),
> the Cackling Bully (CB) and the Complete Buffoon (CB)!

Cry baby? See
http://groups.google.com/group/uk.radio.amateur/msg/f54f6a4dbcc634ad?dmode=source

Cackling bully? See
http://groups.google.com/group/uk.radio.amateur/msg/123abe040337481c?dmode=source

Complete buffon? So many to choose from! How about
http://groups.google.com/group/uk.rec.scouting/msg/9decfdf54cbcd16e?dmode=source

73
Mike G4KFK
www.g4kfk.co.uk

1450. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 16:44:13 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1140799453.305323.256700@e56g2000cwe.googlegroups.com>
Source record: 13451
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

know code wrote:
> It's Friday afternoon.... Beanies been let out for the weekend :)

And it's all Maggie Thatcher's fault. See
http://en.wikipedia.org/wiki/Care_in_the_Community

1451. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 16:59:42 UTC
From: 2K1LO <gareth.paley@gmail.com>
Message-ID: <dtne1t$8gl$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13452
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"know code" <know_code@wanadoo.nl> wrote in message
news:43ff3683$0$22768$dbd41001@news.wanadoo.nl...
> Plod's Conscience wrote:
>> When reading this, be on the guard against the Cry Baby (CB),
>> the Cackling Bully (CB) and the Complete Buffoon (CB)!
>>
>> What is Ham Radio?
>
>
> It's Friday afternoon.... Beanies been let out for the weekend :)
>
I'm already on the case...

http://tinyurl.com/qz3nq

Select your chosen location, take aim with the mouse and fire.

--
73de2K1LO
--

APRS ROCKS!! -
www.g1lvn.org.uk/aprs.htm

1452. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 17:09:07 UTC
From: JIMBO <jim.gm4dhj@ntlworld.com>
Message-ID: <T4HLf.59886$mf2.24985@newsfe6-win.ntli.net>
Source record: 13453
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message
news:1140796567.271702.34800@v46g2000cwv.googlegroups.com...
> When reading this, be on the guard against the Cry Baby (CB),
> the Cackling Bully (CB) and the Complete Buffoon (CB)!

.....or The Chuckle Brothers. (CB)

1453. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 17:15:00 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <oaHLf.1502$Ru5.905@newsfe6-gui.ntli.net>
Source record: 13454
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"JIMBO" <jim.gm4dhj@ntlworld.com> wrote in message
news:T4HLf.59886$mf2.24985@newsfe6-win.ntli.net...
>
> "Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message
> news:1140796567.271702.34800@v46g2000cwv.googlegroups.com...
>> When reading this, be on the guard against the Cry Baby (CB),
>> the Cackling Bully (CB) and the Complete Buffoon (CB)!
>
>
> ....or The Chuckle Brothers. (CB)

Or, of course, the Chippenham Bootee !

--
73
Brian
www.g8osn.org.uk

1454. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 17:51:01 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <43ff4785$0$22768$dbd41001@news.wanadoo.nl>
Source record: 13455
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

```
2K1LO wrote:
> "know code" <know_code@wanadoo.nl> wrote in message
> news:43ff3683$0$22768$dbd41001@news.wanadoo.nl...
>> Plod's Conscience wrote:
>>> When reading this, be on the guard against the Cry Baby (CB),
>>> the Cackling Bully (CB) and the Complete Buffoon (CB)!
>>>
>>> What is Ham Radio?
>>
>> It's Friday afternoon.... Beanies been let out for the weekend :)
>>
> I'm already on the case...
>
> http://tinyurl.com/qz3nq
>
> Select your chosen location, take aim with the mouse and fire.

That is just too funny :)

--
```

1455. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 17:55:44 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <AMHLf.51522$494.2217@newsfe2-gui.ntli.net>
Source record: 13456
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Dot" <dot@dot.dot> wrote in message
news:16huv19p7nd0vht2k4ro5mttjcldm5l4na@4ax.com...
>>http://tinyurl.com/qz3nq
>>
>>Select your chosen location, take aim with the mouse and fire.
>
> ROFL... just gotta love it!

I can't help thinking a size 10 boot would be more appropriate ;-)

--
73
Brian
www.g8osn.org.uk

1456. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 18:02:10 UTC
From: Three Cheers for PC Fuller! <s2f@f2s.com>
Message-ID: <FcOdneVkQ8u912LeRVnysA@giganews.com>
Source record: 13457
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

know code wrote:
> 2K1LO wrote:
>> "know code" <know_code@wanadoo.nl> wrote in message
>> news:43ff3683$0$22768$dbd41001@news.wanadoo.nl...
>>> Plod's Conscience wrote:
>>>> When reading this, be on the guard against the Cry Baby (CB),
>>>> the Cackling Bully (CB) and the Complete Buffoon (CB)!
>>>>
>>>> What is Ham Radio?
>>>
>>> It's Friday afternoon.... Beanies been let out for the weekend :)
>>>
>> I'm already on the case...
>>
>> http://tinyurl.com/qz3nq
>>
>> Select your chosen location, take aim with the mouse and fire.
>
>
> That is just too funny :)

Amazing how many wino shops there are in that location!

--
huLLy
Tel: 07976 123278
ICQ 136-987-925

1457. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 18:04:53 UTC
From: Three Cheers for PC Fuller! <s2f@f2s.com>
Message-ID: <3NSdnbnFLflc12LeRVnyiQ@giganews.com>
Source record: 13458
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Three Cheers for PC Fuller! wrote:
>
> Amazing how many wino shops there are in that location!

http://news.bbc.co.uk/1/hi/world/africa/4748292.stm

--
huLLy
Tel: 07976 123278
ICQ 136-987-925

1458. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 18:12:11 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <43ff4c7c$0$22768$dbd41001@news.wanadoo.nl>
Source record: 13459
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Brian Reay wrote:
> "Dot" <dot@dot.dot> wrote in message
> news:16huv19p7nd0vht2k4ro5mttjcldm5l4na@4ax.com...
> >>http://tinyurl.com/qz3nq
>>> Select your chosen location, take aim with the mouse and fire.
>> ROFL... just gotta love it!
>
> I can't help thinking a size 10 boot would be more appropriate ;-)

Would that be incitement to violence?

1459. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 18:13:16 UTC
From: capivara@gmail.com
Message-ID: <1140804796.522558.306720@u72g2000cwu.googlegroups.com>
Source record: 13460
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

An apparently bored-to-death Plod's Conscience wrote:

> Radio Hams are in a unique privileged position in that
> they can construct and operate their own equipment! No-one
> else has this privilege. Users, such as broadcasters,
> the po lice and armed farces, CBers and mobile phone
> users have to purchase ready-made gear.

They *can* construct it, but I don't know even one that does.

> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.

Same applies to many CB operators.

> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired

Wow. You actually REPAIR the modern
processor-SMD-memory-menu-submenu-miniature-components crap we have
now?

> they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;

20 years ago, yes. Nowadays, all those people don't bother about
placing an antenna, they just use MSN messenger. What's left on CB
today are people that love radio.

> they are free with rather silly personal insults;

You should listen to some of our Dutch 2-meter repeaters. And you
should listen to yourself when you talk about CB operators.

* lots of crap cut out *

> One infallible way to disambiguate the CB Radio Hobbyist
> from the _REAL_ Radio Ham is to solicit their view of the
> difference between CB Radio and Ham Radio. A Radio Ham will
> perceive Ham Radio to be a technical pursuit and will
> perceive CB Radio to be a social communications facility
> no different in essence to a land-line telephone or a
> GSM mobile in the hands of a 6-year-old.

Your views are obscured by ignorance. I know many CB operators who are appealed more by technology than all those HAM's who, after passing their exam, never touched a soldering iron in their life anymore.

* Lots of insults cut out *

Fortunately, we have a different view on CB here in Holland. One channel on CB is even an official VRZA home frequency, where official HAMs and CB operators come together to talk about their hobby. The result: they attend our meetings and start to study for the 'real' HAM status.

Don't repell them, attract them.

Hans (PD0AC), Almere, the Netherlands

1460. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 18:41:33 UTC
From: 2K1LO <gareth.paley@gmail.com>
Message-ID: <dtnk0t$5f8$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13461
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Dot" <dot@dot.dot> wrote in message
news:16huv19p7nd0vht2k4ro5mttjcldm5l4na@4ax.com...
> On Fri, 24 Feb 2006 16:59:42 +0000 (UTC), "2K1LO" <gareth.paley@gmail.com>
> wrote:
>
>>> It's Friday afternoon.... Beanies been let out for the weekend :)
>>>
>>I'm already on the case...
>>
>>http://tinyurl.com/qz3nq
>>
>>Select your chosen location, take aim with the mouse and fire.
>
> ROFL... just gotta love it!
>
>
Anyone know the location of GB4FUN? it's not showing on APRS at the moment.

--
73de2K1LO
--

APRS ROCKS!! -
www.g1lvn.org.uk/aprs.htm

1461. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 18:51:59 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1140807119.658240.99260@v46g2000cwv.googlegroups.com>
Source record: 13462
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

That anyone is subjected to a malicious, misleading
and perjurous complaint to the plods is a reflection
on the complainer and not on the victim.

Brian Reay subjected me to a scurrilous,
distressing and grossly offensive campaign of harassment
over a two-year period when he regularly accused me of
sheep-shaggingand of drinking methylated spirit. He said that
my wife was a sheep next to me in the bed. It is difficult to
understand the relevance
of such a campaign to the pursuit that is Ham Radio, but he
found it within his psyche to so behave.

That he conducted that campaign when he was under
training as a teacher in a girls' school in Dartford is very,
very worrying now that the matter of Ian Huntley has been
brought once again into our consciences.

That he is a sexual pervert who is obsessed with sheep
shagging is in no doubt. That he is a danger to children
because of that obsession is also in no doubt. That he
should not be employed in _ANY_ capacity in any school
because he repeatedly published his obsession in an
international news group to which children have access is also
in no doubt.

When "the worm turned" and I finally made a stand against
his grossly offensive tirade, Brian Reay made his
false complaint to the plods. That he attempted to hide the
true nature of what had passed is a further reason why he
is unsuitable to be employed in any capacity in any school.

Brian Reay wrote:
> "Dot" <dot@dot.dot> wrote in message
> news:16huv19p7nd0vht2k4ro5mttjcldm5l4na@4ax.com...
> >>http://tinyurl.com/qz3nq
> >>
> >>Select your chosen location, take aim with the mouse and fire.
> >
> > ROFL... just gotta love it!
>
> I can't help thinking a size 10 boot would be more appropriate ;-)
>

>
> --
> 73
> Brian
> www.g8osn.org.uk

1462. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 18:56:20 UTC
From: Conrad Poos <poos.conrad@gmail.com>
Message-ID: <1140807380.504245.153020@i39g2000cwa.googlegroups.com>
Source record: 13463
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

JIMBO wrote:

> .....or The Chuckle Brothers. (CB)

Certifiably Bonkers (CB)

Poos

1463. Re: The Great Strip-X Substitute Hunt, Part 2

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 19:02:30 UTC
From: LenAnderson@ieee.org
Message-ID: <1140807750.656721.180480@i39g2000cwa.googlegroups.com>
Source record: 13464

>You can predict wire length well enough to strip it before you wind the
>coil? Wow. I always have to wind the coil, cut off the 0 to 4 inch
>miscalculation (I always shade it high), then strip.

If the toroid calculator calls out about 30 turns or less (on a
half-inch OD core), yes, then I use the program's wire length
call-out. More turns and the manual winding isn't ideal and
the stripping has to be done after the winding is complete.

I was thinking of a 100+ turns on a toroidal core where the coil
(I should say magnet wire to be modern) lay can't be as perfect
as a toroid winder. Then there's no good, practical accounting
of the wire length ahead of time.

When faced with lots of turns like the above, and using very
small wire, there's a bit more anxiety and care needed when
trying to take off the enamel for close-to-the-core stripping.

LenAnderson@ieee.org

1464. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 19:04:30 UTC
From: Plod's Conscience <aiyr.r.bean@lycos.co.uk>
Message-ID: <1140807870.537515.192700@t39g2000cwt.googlegroups.com>
Source record: 13465
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

That anyone is subjected to a malicious, misleading
and perjurous complaint to the plods is a reflection
on the complainer and not on the victim.

Brian Reay subjected me to a scurrilous,
distressing and grossly offensive campaign of harassment
over a two-year period when he regularly accused me of
sheep-shaggingand of drinking methylated spirit. He said that
my wife was a sheep next to me in the bed. It is difficult to
understand the relevance
of such a campaign to the pursuit that is Ham Radio, but he
found it within his psyche to so behave.

That he conducted that campaign when he was under
training as a teacher in a girls' school in Dartford is very,
very worrying now that the matter of Ian Huntley has been
brought once again into our consciences.

That he is a sexual pervert who is obsessed with sheep
shagging is in no doubt. That he is a danger to children
because of that obsession is also in no doubt. That he
should not be employed in _ANY_ capacity in any school
because he repeatedly published his obsession in an
international news group to which children have access is also
in no doubt.

When "the worm turned" and I finally made a stand against
his grossly offensive tirade, Brian Reay made his
false complaint to the plods. That he attempted to hide the
true nature of what had passed is a further reason why he
is unsuitable to be employed in any capacity in any school.

Brian Reay wrote:
> "JIMBO" <jim.gm4dhj@ntlworld.com> wrote in message
> news:T4HLf.59886$mf2.24985@newsfe6-win.ntli.net...
> >
> > "Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message
> > news:1140796567.271702.34800@v46g2000cwv.googlegroups.com...
> >> When reading this, be on the guard against the Cry Baby (CB),
> >> the Cackling Bully (CB) and the Complete Buffoon (CB)!
> >
> >
> > .....or The Chuckle Brothers. (CB)

>
> Or, of course, the Chippenham Bootee !
>
> --
> 73
> Brian
> www.g8osn.org.uk

1465. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 19:07:05 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1140808025.428497.159990@v46g2000cwv.googlegroups.com>
Source record: 13466
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Gareth Alun Evans (G4SDW) wrote:
> That he conducted that campaign when he was under
> training as a teacher in a girls' school in Dartford is very,
> very worrying now that the matter of Ian Huntley has been
> brought once again into our consciences.

Ian Huntley? But surely it was YOU who wrote this, Gareth?
http://groups.google.com/group/uk.radio.amateur/msg/7ff9b267900f1c9e?dmode=source

73
Mike G4KFK

1466. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 19:16:43 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1140808603.680306.237770@u72g2000cwu.googlegroups.com>
Source record: 13467
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Gareth Alun Evans (G4SDW) wrote:
> It is difficult to
> understand the relevance
> of such a campaign to the pursuit that is Ham Radio, but he
> found it within his psyche to so behave.

Says the nutcase who subjected us to a barrage of piss-poor poetry and rabid retarded rhetoric when his pathetic perjurous performance failed to impress a court of law!

1467. FS: Copax Connectors, Adapters & Cable assemblies @ great prices

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 19:27:18 UTC
From: AAA RF Products <sales@aaarfproducts.com>
Message-ID: <J5JLf.4514$Sp2.4128@fed1read02>
Source record: 13468
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,sci.electronics.equipment

For your free copy of our new catalog,

Please email sales@AAARFProducts.com

or see www.aaarfproducts.com

or call 949 481 3154 (San Clemente, CA, USA)

No minimum order.

No handling charges

1468. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 19:35:17 UTC
From: Three Cheers for PC Fuller! <s2f@f2s.com>
Message-ID: <T9CdnblbodxgwmLeRVny3w@giganews.com>
Source record: 13469
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Mike G4KFK wrote:
> Gareth Alun Evans (G4SDW) wrote:
>> That he conducted that campaign when he was under
>> training as a teacher in a girls' school in Dartford is very,
>> very worrying now that the matter of Ian Huntley has been
>> brought once again into our consciences.
>
> Ian Huntley? But surely it was YOU who wrote this, Gareth?
> http://groups.google.com/group/uk.radio.amateur/msg/7ff9b267900f1c9e?dmode=source
>
> 73
> Mike G4KFK

He forgets most things, don't you, Gareth baby...

--
huLLy
Tel: 07976 123278
ICQ 136-987-925

1469. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 19:47:41 UTC
From: Keith <keith7373@tesco.net>
Message-ID: <xpJLf.91$57.85@newsfe3-win.ntli.net>
Source record: 13470
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Construction thier own gear
announcing ..

G8IFW

I built my own PSU regulated, and better than trio kenwood,
1- 20 amps 12v

built my own ATU - after looking at many designs
built my own design

Photos to proove

Designed my own aerial, different to what ive seen on
the net and got 9+ to belgrade 40m SSB 50w

but even though, finding the parts prooved to be hard
even though I have 2 electronics shops local

anyone got any air spaced 200w 500pf vairables
to sell ?

keith

1470. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 19:49:28 UTC
From: Plod's Conscience <aiyr.r.bean@lycos.co.uk>
Message-ID: <1140810568.204172.55970@i39g2000cwa.googlegroups.com>
Source record: 13471
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.rec.scouting

How do you manage to keep your association with the scouts
going? Don't parents object to a paedophile being associated
with a scout troop?

Mike G4KFK wrote:
> Gareth Alun Evans (G4SDW) wrote:
> > It is difficult to
> > understand the relevance
> > of such a campaign to the pursuit that is Ham Radio, but he
> > found it within his psyche to so behave.
>
> Says the nutcase who subjected us to a barrage of piss-poor poetry and
> rabid retarded rhetoric when his pathetic perjurous performance failed
> to impress a court of law!

1471. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 19:49:54 UTC
From: Keith <keith7373@tesco.net>
Message-ID: <CrJLf.70260$0N1.5719@newsfe5-win.ntli.net>
Source record: 13472
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Im glad the free democratic world can operate
on amatuer radio without other peoples opinions being forced down their
throat

yes we must have standards
and yes its about time the standard QSO should be about
people talking together not some copy of a miltery test

if one has to eat dictioneries
one would be better off getting a life
wouldnt one

over articulation, well thats democratic freedom as well,

we could try and see the good in the new changes

keith

1472. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 19:54:11 UTC
From: Three Cheers for PC Fuller! <s2f@f2s.com>
Message-ID: <6dadncKctfv0-WLeRVnyhg@giganews.com>
Source record: 13473
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.rec.scouting

```
Plod's Conscience wrote:
> How do you manage to keep your association with the scouts
> going? Don't parents object to a paedophile being associated
> with a scout troop?
>
> Mike G4KFK wrote:
>> Gareth Alun Evans (G4SDW) wrote:
>>> It is difficult to
>>> understand the relevance
>>> of such a campaign to the pursuit that is Ham Radio, but he
>>> found it within his psyche to so behave.
>>
>> Says the nutcase who subjected us to a barrage of piss-poor poetry
>> and rabid retarded rhetoric when his pathetic perjurous performance
>> failed to impress a court of law!

Ding Dong, Libel Calling!

--
huLLy
Tel: 07976 123278
ICQ 136-987-925
```

1473. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:08:49 UTC
From: Keith <keith7373@tesco.net>
Message-ID: <lJJLf.59916$mf2.20201@newsfe6-win.ntli.net>
Source record: 13474
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Sheep

well one day i met a customer who went on holiday in Greece
he picked up the local news paper and was suprised
(so woz i)

it said the following story

the police was driving along a country road
and they saw a man in a field being curious and a beady
eye they stopped and looked and decide to jump over
the fence and arrest a man who was having sex with a donkey
(im not suprised) (you dont know greek donkeys)
anyway it turns out he was an english man from east london
who was hauled into Court the next day

He haw he haw He haw

anyway the conversation went on about welsh men
now this is ..... ?????
another customer present at the time said he Knew a woman who
worked on a Welsh Farm and this lady actually witnessed some of the
farm workers shagging the sheep, for real

bahhhd baahhhd

well opinions maybe, but when witnessed by others it is what it is

Keith

what next, Gay camels,
Transvestite horses

any way the good news about this news group is we have conversations
not some pretend militery operating proceedure.

and i still dont see anyone writing E mails in morse do you ?

anyone disagree just say your readability 5 rig here is XXX QTH is XXX
73eees good bye

that was pointless

keith

1474. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:22:03 UTC
From: Keith <keith7373@tesco.net>
Message-ID: <LVJLf.18302$bw1.15063@newsfe2-win.ntli.net>
Source record: 13475
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Worse than M3
CBer`s
Worse than
Cb`ers
MW pirates

walk the plank

ps ive heard many M3 an G8 and they sound perfectly
normal they didnt have one bad word for anyone
you dont here them moaning
theres good and bad ....

keith

1475. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:25:22 UTC
From: Keith <keith7373@tesco.net>
Message-ID: <SYJLf.18305$bw1.710@newsfe2-win.ntli.net>
Source record: 13476
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Well here the bad
Shirts and ties and people who dress like they
come out of the 50`s pissy old Y fronts and smelly
crouch trousers nylon shirts DSS glass held together by
elastoplast,

1476. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:32:06 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1140813126.449685.76000@z34g2000cwc.googlegroups.com>
Source record: 13477
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Three Cheers for PC Fuller! wrote:
> Plod's Conscience wrote:
> > How do you manage to keep your association with the scouts
> > going? Don't parents object to a paedophile being associated
> > with a scout troop?
> >
> > Mike G4KFK wrote:
> >> Gareth Alun Evans (G4SDW) wrote:
> >>> It is difficult to
> >>> understand the relevance
> >>> of such a campaign to the pursuit that is Ham Radio, but he
> >>> found it within his psyche to so behave.
> >>
> >> Says the nutcase who subjected us to a barrage of piss-poor poetry
> >> and rabid retarded rhetoric when his pathetic perjurous performance
> >> failed to impress a court of law!
>
> Ding Dong, Libel Calling!

I'm sure it's just the meths talking - but I have noted it for possible
future use.

Oh - and I see he maliciously cross-posted it to the scouts newsgroup.
Follow-ups set.

73
Mike G4KFK

1477. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:35:26 UTC
From: Plod's Conscience <aiyr.r.bean@lycos.co.uk>
Message-ID: <1140813326.911536.89230@z34g2000cwc.googlegroups.com>
Source record: 13478
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.rec.scouting

How do you manage to keep your association with the scouts
going? Don't parents object to a paedophile being associated
with a scout troop?

Mike G4KFK wrote:
> I'm sure it's just the meths talking - but I have noted it for possible
> future use.
>
> Oh - and I see he maliciously cross-posted it to the scouts newsgroup.
> Follow-ups set.

1478. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:42:44 UTC
From: G4KFK <mike@g4kfk.co.uk>
Message-ID: <1140813764.297364.117290@z34g2000cwc.googlegroups.com>
Source record: 13480
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.rec.scouting

Gareth Alun Evans wrote:
> How do you manage to keep your association with the scouts
> going? Don't parents object to a paedophile being associated
> with a scout troop?

You recently claimed that if anybody posted your personal details, you would report them to the police for harassment. Here's your chance then:

Gareth Alun Evans
13 Hardens Close
Chippenham
Wiltshire
SN15 3AA

01249 651897

1479. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:43:20 UTC
From: Plod's Conscience <aiyr.r.bean@lycos.co.uk>
Message-ID: <1140813800.813100.265540@t39g2000cwt.googlegroups.com>
Source record: 13481
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.rec.scouting

It is better to be thought to be a loony than to be thought to be a
paedophile
who has formed an association with a scout troop.

Mike G4KFK wrote:
> know code wrote:
> > It's Friday afternoon.... Beanies been let out for the weekend :)
>
> And it's all Maggie Thatcher's fault. See
> http://en.wikipedia.org/wiki/Care_in_the_Community

1480. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:44:32 UTC
From: Three Cheers for PC Fuller! <s2f@f2s.com>
Message-ID: <-4idnTcEismk7WLeRVnyiA@giganews.com>
Source record: 13483
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

```
JIMBO wrote:
> "Keith" <keith7373@tesco.net> wrote in message
> news:SYJLf.18305$bw1.710@newsfe2-win.ntli.net...
>> Well here the bad
>> Shirts and ties and people who dress like they
>> come out of the 50`s pissy old Y fronts and smelly
>> crouch trousers nylon shirts DSS glass held together by
>> elastoplast,
>>
>>
>>
>>
>>
> Proove it ;~)

lol, classic Jimbo

--
huLLy
Tel: 07976 123278
ICQ 136-987-925
```

1481. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:45:19 UTC
From: Three Cheers for PC Fuller! <s2f@f2s.com>
Message-ID: <SPWdnZR5Xs_87WLenZ2dnUVZ8qOdnZ2d@giganews.com>
Source record: 13484
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.rec.scouting

```
>
> Gareth Alun Evans
> 13 Hardens Close
> Chippenham
> Wiltshire
> SN15 3AA
>
> 01249 651897

Pardon?
--
huLLy
Tel: 07976 123278
ICQ 136-987-925
```

1482. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:46:26 UTC
From: JIMBO <jim.gm4dhj@ntlworld.com>
Message-ID: <CgKLf.53633$m13.53531@newsfe5-gui.ntli.net>
Source record: 13479
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Keith" <keith7373@tesco.net> wrote in message
news:SYJLf.18305$bw1.710@newsfe2-win.ntli.net...
> Well here the bad
> Shirts and ties and people who dress like they
> come out of the 50`s pissy old Y fronts and smelly
> crouch trousers nylon shirts DSS glass held together by
> elastoplast,
>
>
>
>
>
Proove it ;~)

1483. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:47:50 UTC
From: Three Cheers for PC Fuller! <s2f@f2s.com>
Message-ID: <n7-dnQonLdtm7WLeRVny3g@giganews.com>
Source record: 13487
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.rec.scouting

Plod's Conscience wrote:
> It is better to be thought to be a loony than to be thought to be a
> paedophile
> who has formed an association with a scout troop.
>
> Mike G4KFK wrote:
>> know code wrote:
>>> It's Friday afternoon.... Beanies been let out for the weekend :)
>>
>> And it's all Maggie Thatcher's fault. See
>> http://en.wikipedia.org/wiki/Care_in_the_Community

The facts:

YOU are a loony. Quite correct
YOU are an alcoholic, by your own admission
Elizabeth is a figment of your imagination. Probably has 4 legs and woolly
jumper.
You are going to get into serious trouble sooner than later.

--
huLLy
Tel: 07976 123278
ICQ 136-987-925

1484. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:48:00 UTC
From: JIMBO <jim.gm4dhj@ntlworld.com>
Message-ID: <4iKLf.53634$m13.34936@newsfe5-gui.ntli.net>
Source record: 13482
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Conrad Poos" <poos.conrad@gmail.com> wrote in message
news:1140807380.504245.153020@i39g2000cwa.googlegroups.com...
>
> JIMBO wrote:
>
>> ....or The Chuckle Brothers. (CB)
>
> Certifiably Bonkers (CB)
>
> Poos
>

Cute Brothers. (CB)

1485. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:48:25 UTC
From: Keith <keith7373@tesco.net>
Message-ID: <tiKLf.108$57.58@newsfe3-win.ntli.net>
Source record: 13485
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

yes the docter warned me,
but he thought I was rather attactive,
and under new laws the English have made
he thought that one I could be a good husband for him
but I said theres no way on dis earth
that I would marry another man

so that was that

1486. Re: The Great Strip-X Substitute Hunt, Part 2

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:48:57 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1140814137.050346.244430@v46g2000cwv.googlegroups.com>
Source record: 13488

Just look for "heat-strippable" wire, or wire with solderable polyurethane insulation. I've seen "polythermaleze" as one brand name. And as for the "better" insulations that are not heat strippable with a low-temperature/controlled-temperature iron, simply use more heat. I suppose Teflon or polyimide coated wire would be a problem, but I'm sure there aren't many amateurs winding with those, and in any event, both would be a problem for paint strippers. I doubt very many ham applications require better wire than you can get in solderable polyurethanes.

http://www.bulkwire.com/ is one source of magnet wire. I'm not sure if they have a minimum order. I've also gotten odd-number sizes from Amidon Associates. Also, if you have a local motor rewind shop, they may just give you a small amount--though they may not have #34AWG.

http://www.essexgroup.com/News_Media/White_Papers/thermalclass.pdf may be of interest to the curious.

Or see
http://eraser.com/catpdf.cgi/magnet.pdf?mode=download&catpdf_id=11 for a supplier of strippers and stripping equipment (no, no--just for stripping WIRES!).

Cheers,
Tom

1487. Is this the address of a paedophile? (Was : Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:50:36 UTC
From: Plod's Conscience <aiyr.r.bean@lycos.co.uk>
Message-ID: <1140814236.687801.260270@p10g2000cwp.googlegroups.com>
Source record: 13490
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.rec.scouting

Michael Gathergood

6 Sylverns Court
Bracknell
Berks
RG42 3SL

07717 - 728290
01344 - 310610

G4KFK wrote:
> You recently claimed that if anybody posted your personal details, you
> would report them to the police for harassment. Here's your chance
> then:
>
>

1488. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:50:47 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1140814247.897460.277100@j33g2000cwa.googlegroups.com>
Source record: 13491
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Three Cheers for PC Fuller! wrote:
> >
> > Gareth Alun Evans
> > 13 Hardens Close
> > Chippenham
> > Wiltshire
> > SN15 3AA
> >
> > 01249 651897
>
>
> Pardon?

Are you going a bit deaf Nathan? I said:
Gareth Alun Evans
13 Hardens Close
Chippenham
Wiltshire
SN15 3AA

01249 651897

Or, from the colonies, 011 44 1249 651897

73
Mike G4KFK

1489. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:51:29 UTC
From: Keith <keith7373@tesco.net>
Message-ID: <llKLf.110$57.51@newsfe3-win.ntli.net>
Source record: 13489
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

More Crumpet needed on the HF bands
all this dah di dah business
God wots going on

1490. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:51:41 UTC
From: Keith <keith7373@tesco.net>
Message-ID: <xlKLf.70273$0N1.51105@newsfe5-win.ntli.net>
Source record: 13493
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

well it come to pass
a nice man was having trouble with his aerial
so he met others
and they had similar troubles
he said well I give a good bang
every friday night and still nothing happens
so we thought is it in the right position ?
and the other men said
no nothing yet
well wot about a SWr
he say ar Swr all the F******* time

1491. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:52:08 UTC
From: JIMBO <jim.gm4dhj@ntlworld.com>
Message-ID: <YlKLf.53637$m13.50906@newsfe5-gui.ntli.net>
Source record: 13486
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

```
>>>
>> Proove it ;~)
>
> lol, classic Jimbo
>
> --
> huLLy
```

Thanks.......

1492. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:53:43 UTC
From: Keith <keith7373@tesco.net>
Message-ID: <rnKLf.70274$0N1.58785@newsfe5-win.ntli.net>
Source record: 13497
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Ive been let out this weekend as well

and im politically correct ive been measured

keef

1493. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:53:59 UTC
From: Three Cheers for PC Fuller! <s2f@f2s.com>
Message-ID: <GfGdnU3qtqTx72LeRVny3w@giganews.com>
Source record: 13492
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Mike G4KFK wrote:
> Three Cheers for PC Fuller! wrote:
>>>
>>> Gareth Alun Evans
>>> 13 Hardens Close
>>> Chippenham
>>> Wiltshire
>>> SN15 3AA
>>>
>>> 01249 651897
>>
>>
>> Pardon?
>
> Are you going a bit deaf Nathan? I said:
> Gareth Alun Evans
> 13 Hardens Close
> Chippenham
> Wiltshire
> SN15 3AA
>
> 01249 651897
>
> Or, from the colonies, 011 44 1249 651897
>
> 73
> Mike G4KFK

I think I got it this time..

Oh, you mean fixed IP 212.21.118.235

I had a run in with him once. He won't learn..

--
huLLy
Tel: 07976 123278
ICQ 136-987-925

1494. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:55:50 UTC
From: Keith <keith7373@tesco.net>
Message-ID: <qpKLf.70281$0N1.38263@newsfe5-win.ntli.net>
Source record: 13348
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Ps I went into Tescos and said have you got any
swivel head razours

this lady ses

you havent got a swivel head
.

1495. Re: Is this the address of a paedophile? (Was : Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:56:19 UTC
From: Plod's Conscience <aiyr.r.bean@lycos.co.uk>
Message-ID: <1140814579.668459.299140@j33g2000cwa.googlegroups.com>
Source record: 13494
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.rec.scouting

Or, from international, that's 011 44 1344 310610

Plod's Conscience wrote:
> Michael Gathergood
>
> 6 Sylverns Court
> Bracknell
> Berks
> RG42 3SL
>
> 07717 - 728290
> 01344 - 310610
>
> G4KFK wrote:
> > You recently claimed that if anybody posted your personal details, you
> > would report them to the police for harassment. Here's your chance
> > then:
> >
> >

1496. Re: Is this the address of a real radio ham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:56:55 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1140814615.089242.320690@t39g2000cwt.googlegroups.com>
Source record: 13495
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Gareth Alun Evans muscled up to the bars on his cell door and, still
foaming at the mouth, screamed:
> Michael Gathergood
>
> 6 Sylverns Court
> Bracknell
> Berks
> RG42 3SL
>
> 07717 - 728290
> 01344 - 310610

Blimey - he looked up my callsign on QRZ.com, or he googled my
callsign, or maybe he just looked at www.g4kfk.co.uk

Clever lad - we can all see now why he's a Company Director!

73
Mike G4KFK
www.g4kfk.co.uk www.gb4sbs.co.uk

1497. Re: Is this the address of a real radio ham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 20:56:59 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1140814619.837456.262500@i40g2000cwc.googlegroups.com>
Source record: 13496
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Gareth Alun Evans muscled up to the bars on his cell door and, still
foaming at the mouth, screamed:
> Michael Gathergood
>
> 6 Sylverns Court
> Bracknell
> Berks
> RG42 3SL
>
> 07717 - 728290
> 01344 - 310610

Blimey - he looked up my callsign on QRZ.com, or he googled my
callsign, or maybe he just looked at www.g4kfk.co.uk

Clever lad - we can all see now why he's a Company Director!

73
Mike G4KFK
www.g4kfk.co.uk www.gb4sbs.co.uk

1498. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 21:01:28 UTC
From: Keith <keith7373@tesco.net>
Message-ID: <IuKLf.70283$0N1.60938@newsfe5-win.ntli.net>
Source record: 13349
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

I fink the price of meths is disgusting

1499. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 21:16:26 UTC
From: Three Cheers for PC Fuller! <s2f@f2s.com>
Message-ID: <kvOdnQnPoOAw6mLeRVnyhg@giganews.com>
Source record: 13350
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Keith wrote:
> I fink the price of meths is disgusting

some people steal it

--
huLLy
Tel: 07976 123278
ICQ 136-987-925

1500. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 21:47:55 UTC
From: From the shack of G1LVN <gareth.paley@gmail.com>
Message-ID: <dtnuua$1s7$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13351
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.rec.scouting

"Three Cheers for PC Fuller!" <s2f@f2s.com> wrote in message
news:SPWdnZR5Xs_87WLenZ2dnUVZ8qOdnZ2d@giganews.com...
> >
> > Gareth Alun Evans
> > 13 Hardens Close
> > Chippenham
> > Wiltshire
> > SN15 3AA
> >
> > 01249 651897
>
>
> Pardon?

what was that address again?

1501. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 22:20:43 UTC
From: Wiggy <mines.a.gin@tonic>
Message-ID: <%ELLf.26050$wl.17212@text.news.blueyonder.co.uk>
Source record: 13352
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Plod's Conscience wrote:
> When reading this, be on the guard against the Cry Baby (CB),
> the Cackling Bully (CB) and the Complete Buffoon (CB)!
>
> What is Ham Radio?
>

Please disregard the ramblings of this _egocentric socio-path_.

He feeds on flames and craves recognition.

One for the killfile.

Wiggy

1502. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 22:28:47 UTC
From: Mr W Z Boson <WZ_Boson@yahoo.co.uk>
Message-ID: <1140820127.757170.234300@z34g2000cwc.googlegroups.com>
Source record: 13353
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

know code wrote:
> Plod's Conscience wrote:
> > When reading this, be on the guard against the Cry Baby (CB),
> > the Cackling Bully (CB) and the Complete Buffoon (CB)!
> >
> > What is Ham Radio?
>
>
> It's Friday afternoon.... Beanies been let out for the weekend :)
>
> --

Good grief everyone - leave him alone.

He's clearly in need of help and this baiting does him, you, and
amateur radio a disservice.

Give it a rest for a while.

1503. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 22:45:34 UTC
From: PC Fuller for Prime Minister <Volcano@nicks-place.com>
Message-ID: <i0MLf.53647$m13.10951@newsfe5-gui.ntli.net>
Source record: 13354
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Mr W Z Boson" <WZ_Boson@yahoo.co.uk> wrote in message
news:1140820127.757170.234300@z34g2000cwc.googlegroups.com...
>>
>
> Give it a rest for a while.
>

Spoilsport...

tox

1504. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 22:45:58 UTC
From: From the shack of G1LVN <gareth.paley@gmail.com>
Message-ID: <dto2b6$s0i$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13355
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Mr W Z Boson" <WZ_Boson@yahoo.co.uk> wrote in message
news:1140820127.757170.234300@z34g2000cwc.googlegroups.com...
>
> Give it a rest for a while.
>

http://tinyurl.com/e839u

--
drei unt siebzig de Jait1LVN
http://www.g1lvn.org.uk/mrtg.htm
---
read rfc1855.txt first and
remove .invalid to reply

1505. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 23:43:47 UTC
From: Mr W Z Boson <WZ_Boson@yahoo.co.uk>
Message-ID: <1140824627.894329.29590@j33g2000cwa.googlegroups.com>
Source record: 13356
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

>From the shack of G1LVN wrote:
> "Mr W Z Boson" <WZ_Boson@yahoo.co.uk> wrote in message
> news:1140820127.757170.234300@z34g2000cwc.googlegroups.com...
> >
> > Give it a rest for a while.
> >
>
> http://tinyurl.com/e839u
>
>
> --
> drei unt siebzig de Jait1LVN
> http://www.g1lvn.org.uk/mrtg.htm
> ------------------------------------
> read rfc1855.txt first and
> remove .invalid to reply

Why are you interested in Salmesbury Bottoms?

1506. 4CX250B vs Gi7B families...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-24 23:55:44 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1140825344.868733.266910@z34g2000cwc.googlegroups.com>
Source record: 13357

Hi Guys,

I am contemplating building a 144MHz power amp and looking at various options. The obvious solution is a pair of push pull 4CX250Bs.

It appears that the Gi7B and family of Triodes can provide an equally capable solution. They appear to be much easier to cool, by something like an Axial Papst Fan (instead of a Snail Blower). The other obvious advantage is not having to deal with Screen voltage, regulation and protection. The triodes also look much easier and cheaper to mount (given the grounded grid). Finally, it seems because of the very low inter-electrode capacitances, it is quite easy to parallel the Triodes up as required (even at 432MHz).

So what is the down side for using these Triodes ?

Comments and observations appreciated as usual.

Regards,

Mark.

1507. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 00:16:32 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <43ffa1e0$0$76471$dbd41001@news.wanadoo.nl>
Source record: 13358
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

```
Mr W Z Boson wrote:
> know code wrote:
>> Plod's Conscience wrote:
>>> When reading this, be on the guard against the Cry Baby (CB),
>>> the Cackling Bully (CB) and the Complete Buffoon (CB)!
>>>
>>> What is Ham Radio?
>>
>> It's Friday afternoon.... Beanies been let out for the weekend :)
>>
>> --
>
> Good grief everyone - leave him alone.
>
> He's clearly in need of help and this baiting does him, you, and
> amateur radio a disservice.

It *is* fun though :)
```

1508. Re: Dead bugs!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 02:52:27 UTC
From: Frank <Frank.23rm9h@news.radiobanter.com>
Message-ID: <Frank.23rm9h@news.radiobanter.com>
Source record: 13359

This ain't some simple RF amplifier. I meant that ghost communication,
or transdimensional communications, is the next frontier, for those
that are brave enough not to listen to the scientists, skeptics, and
debunkers that will tell you it's impossible because it scares the crap
out of them, or goes against some brain dead theory of how life, and
physics is supposed to be.
After six years of working on these projects, you can imagine how many
idiots I've encountered that are so sure they know better.

Frank

--
Frank

1509. Re: 4CX250B vs Gi7B families...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 03:28:44 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <S6QLf.7631$Pv1.6396@bignews6.bellsouth.net>
Source record: 13360

MarkAren wrote:
> Hi Guys,
>
> I am contemplating building a 144MHz power amp and looking at various
> options. The obvious solution is a pair of push pull 4CX250Bs.
>
> It appears that the Gi7B and family of Triodes can provide an equally
> capable solution. They appear to be much easier to cool, by something
> like an Axial Papst Fan (instead of a Snail Blower). The other obvious
> advantage is not having to deal with Screen voltage, regulation and
> protection. The triodes also look much easier and cheaper to mount
> (given the grounded grid). Finally, it seems because of the very low
> inter-electrode capacitances, it is quite easy to parallel the Triodes
> up as required (even at 432MHz).
>
> So what is the down side for using these Triodes ?
>
> Comments and observations appreciated as usual.
>
> Regards,
>
> Mark.
>
In general triodes work best in grounded grid as you then
don't have to neutralize them. At 144mhz I'm not sure HOW
you would neutralize them. Triodes in GG take more drive
power than the tetrodes, so your driver stage need to be
beefier.

I'm not familiar with the tubes in question but one idea
would be to use them grid driven in push-pull with cross
over neutralization. Much easier than trying to come up
with a neutralization scheme for a single ended amplifier.

You will need less drive in this configuration, but still
more than with the tetrodes. But you will save money
on the screen supply.

Down side? Wonder what the sockets cost? At least the
4cx250's can use surplus loctal sockets. (Though the
ceramic kind are a bit hard to find, they are out there
and cheaper than REAL 4cx250 sockets.)

1510. Re: Crystals wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 03:42:18 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <AjQLf.7635$Pv1.2392@bignews6.bellsouth.net>
Source record: 13361

Gary Schafer wrote:
> On Thu, 23 Feb 2006 21:51:09 -0500, Ken Scharf
> <wa2mzeNOTTHIS@bellsouth.net> wrote:
>
>
>>Gary Schafer wrote:
>>
>>>I have a homebrew project that I need some crystals for. Need the
>>>following:
>>>
>>>
>>>
>>>3.300 mhz
>>>
>>>3.500 mhz
>>>
>>>10.5 mhz
>>>
>>>17.5 mhz
>>>
>>>24.5 mhz
>>>
>>>
>>>
>>>Prefer HC6 holders if you have them. Any help out there?
>>>
>>>
>>>
>>>Thanks!
>>>
>>>Gary K4FMX
>>>
>>>Please reply to garyschafer@comcast.net
>>
>>Building a 2B clone eh?
>
>
> Kind of. It is a converter for a BC453 (Q5er) that I built many years
> ago. It now uses only one 3.5 Mhz crystal, dual conversion, for all
> bands. Trying to clean up some of the image problems.
>
> 73
> Gary K4FMX
Since all the frequencies in question are harmonics of 3.5mhz

(except 3.3mhz) you could use a PLL to generate them by phase
locking a vco to the harmonics of a 3.5mhz oscillator.
Use a divide by N circuit to divide down the vco output to
3.5mhz and have a phase detector compare the output of the
divider with the 3.5mhz oscillator. Properly shielded,
this pll would be as clean as the crystal oscillator.

1511. Re: Dead bugs!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 05:01:11 UTC
From: Alfred Green <nu8i@cox.net>
Message-ID: <JxRLf.6026$z82.3895@fed1read07>
Source record: 13362

Frank enscribed:
> This ain't some simple RF amplifier. I meant that ghost communication,
> or transdimensional communications, is the next frontier, for those
> that are brave enough not to listen to the scientists, skeptics, and
> debunkers that will tell you it's impossible because it scares the crap
> out of them, or goes against some brain dead theory of how life, and
> physics is supposed to be.

My apologies for missing the start of this thread, but what is it that
you are trying to achieve here?
If you are looking for some assistance in building a particular circuit
I would certainly like to help. I have been a ham for almost four
decades, with a strong tilt towards building rather than operating.
My experience with the scientific and skeptic community is that they
would actually _LOVE_ to see some real evidence of the paranormal,
rather than debunking it as a matter of principle.
If you have a workable proposition we could take it to JREF,
<www.randi.org> and collect a nice $1million.
I would really like to be able to do that.
Let me know,

73 Alf NU8I
Scottsdale AZ DM43an

1512. 4CX250B vs Gi7B families...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 05:11:02 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_43ffdbe1@fidonet.org>
Source record: 13363

"MarkAren" bravely wrote to "All" (24 Feb 06 15:55:44)
--- on the heady topic of "4CX250B vs Gi7B families..."

Ma> From: "MarkAren" <markaren10@yahoo.com>
Ma> Xref: core-easynews rec.radio.amateur.homebrew:92120

Ma> Hi Guys,

Ma> I am contemplating building a 144MHz power amp and looking at various
Ma> options. The obvious solution is a pair of push pull 4CX250Bs.

Ma> It appears that the Gi7B and family of Triodes can provide an equally
Ma> capable solution. They appear to be much easier to cool, by something
Ma> like an Axial Papst Fan (instead of a Snail Blower). The other obvious
Ma> advantage is not having to deal with Screen voltage, regulation and
Ma> protection. The triodes also look much easier and cheaper to mount
Ma> (given the grounded grid). Finally, it seems because of the very low
Ma> inter-electrode capacitances, it is quite easy to parallel the Triodes
Ma> up as required (even at 432MHz).

Ma> So what is the down side for using these Triodes ?

Ma> Comments and observations appreciated as usual.

Ma> Regards,

Ma> Mark.

Having never built one I feel completely at ease if you disregard my
comments. First thing that comes to mind is in general since triodes
have less gain they will require more drive and a lower input Z.
That isn't meant to discourage anyone however since triodes are
obviously used successfully!

Asimov

... Back when I was a boy, we sucked the air out of our own vacuum tubes!

1513. Re: Input stage for VHF frequency counter in an FPGA?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 05:11:28 UTC
From: cs_posting@hotmail.com
Message-ID: <1140844288.533302.69470@e56g2000cwe.googlegroups.com>
Source record: 13364
Cross-posted to: sci.electronics.design,comp.arch.fpga,rec.radio.amateur.homebrew

cs_posting@hotmail.com wrote:
> Fred Bloggs wrote:
> > >... but what
> > > would make sense today?
> > >
> >
> > http://www.onsemi.com/PowerSolutions/product.do?id=MC100EPT21DR2
>
> That sounds like a good idea, because theoretically we actually have
> some on hand somewhere, I'll have to see if I can scare them up.

Found one and wired it up as the datasheet suggests - cap coupled input to half the differential pair, the other side floating at the reference output pin voltage with decoupling cap to ground, terminating resistor across the pair. Worked quite well.

The xilinx S3 kit from digilent doesn't seem to be designed with using the differential input capability as the pairs are split up all over the place. Not certain that I couldn't bias one input of a pair as a reference wherever it is and drive the other pin wherever that is, but putting it all in a little package seemed simpler.

1514. The Weekly FAQ (Reposted after thread was hijacked by the very Childish Broadcasters (CBers) warned against.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 08:43:55 UTC
From: Plod's Conscience <aiyr.r.bean@lycos.co.uk>
Message-ID: <1140857035.791153.194860@p10g2000cwp.googlegroups.com>
Source record: 13365
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

This is reposted because this week's thread was hijacked by the
very Childish Broadcasters (CBers) warned against. Remember that
Ham Radio is a technical pursuit for gentlemen, and not some
mindless operating hobby for Cheque-Book (CB) wielding thickos!

Jealously guard and foment what we have achieved!

When reading this, be on the guard against the Cry Baby (CB),
the Cackling Bully (CB) and the Complete Buffoon (CB)!

What is Ham Radio?

It is becoming increasingly difficult to fly the flag for
decency and for civilised behaviour in Radio Hammery. Even
the Usenet newsgroups dedicated to the cause have degenerated
into a hotbed of abusive onslaughts by those who ought to know better.
However, there still exists the fundamental basis on which Ham
Radio is based, and that will never die. This FAQ ("What Is
Ham Radio?") will be regularly published and will not be
shouted or bullied down. It is important that those of a
technical bent, who are the natural seed-corn of Radio Hammery
and who gravitate towards us to be the real novitiate, can
still find us, (and know that we are still here), their fellows.

-----ooooo-----

Please remember that this FAQ is a _POSITIVE EXHORTATION_
to you to exert yourselves to join our fraternity! (If you find
otherwise, then perhaps you are already classing yourself in the
mediocre groups of those who are criticised in the FAQ and from
whom we _MUST_ dissociate? If so - it's never too late for
a re-taxonomisation on your part - there's nothing elitist about
us, and we welcome all those who are prepared to put themselves
out in order to join our ranks!)

-----ooooo-----
So,.....What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of

self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One such CB type is the so-called "Not-Ham". Otherwise
known as the CBer-Masquerading-As-A-Radio-Ham, this type
had their background in the hobby that is CB Radio and not
in the technical pursuits that lead up to a coveted Ham licence.
Easily recognised by their boasts of the criminal activity of
11 metre SSB operation, one wonders why they don't go back to
the CB Bands if such bands are dearer in their hearts than are the Ham
Bands? No _REAL Radio Hams associate with those who made an
illegal installation of transmitting equipment before being
in possession of an appropriate licence.

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B
licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

1515. Re: The Weekly FAQ (Reposted after thread was hijacked by the very Childish Broadcasters (CBers) warned against.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 08:55:17 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1140857716.957288.217710@v46g2000cwv.googlegroups.com>
Source record: 13366
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Gareth Alun Evans (G4SDW) wrote:
The usual insane drivel...

You are the very model of a newsgroup personality.
You intersperse stupidity with tedious banality.
Psudonyms you've plenty of; both genuine and ghosted, too,
On all the countless newsgroups that your drivel is cross-posted to.
Our bandwidth you will fritter with your whining and your snivelling,
And we're the ones who pay the bills, downloading all your drivelling.
Your enemies are numerous, and no-one would be blaming us
For cracking your head open after you've been rudely flaming us.
You hate to lose an argument (by now you should be used to it).
You wouldn't know a valid point if you were introduced to it.
Your learning is extensive but consists of mindless trivia,
Designed to fan your ego, which is larger than Bolivia.
The comments that you vomit forth, disguised as jest and drollery,
Are really just an exercise in unremitting trollery.
You say you're frank and forthright, but that's merely lies and vanity,
The gibberings of one who's on the limits of his sanity.

1516. Re: Is this the address of a paedophile? (Was : Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 08:57:22 UTC
From: Plod's Conscience <aiyr.r.bean@lycos.co.uk>
Message-ID: <1140857842.643162.256120@u72g2000cwu.googlegroups.com>
Source record: 13367
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.rec.scouting

I am indebted to Mike Gathergood for pointing out the errors
in the below.

Thank-you for your correction.

Try 01344 861472 (011 44 1344 861472 from the colonies)
and 07725 576401.

Plod's Conscience wrote:
> Or, from international, that's 011 44 1344 310610
>
> Plod's Conscience wrote:
> > Michael Gathergood
> >
> > 6 Sylverns Court
> > Bracknell
> > Berks
> > RG42 3SL
> >
> > 07717 - 728290
> > 01344 - 310610
> >
> > G4KFK wrote:
> > > You recently claimed that if anybody posted your personal details, you
> > > would report them to the police for harassment. Here's your chance
> > > then:
> > >
> > >

1517. Re: Is this the address of a paedophile? (Was : Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 08:58:05 UTC
From: Plod's Conscience <aiyr.r.bean@lycos.co.uk>
Message-ID: <1140857885.876936.314520@e56g2000cwe.googlegroups.com>
Source record: 13368
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.rec.scouting

I am indebted to Mike Gathergood for pointing out the errors
in the below.

Thank-you for your correction.

Try 01344 861472 (011 44 1344 861472 from the colonies)
and 07725 576401.

Plod's Conscience wrote:
> Michael Gathergood
>
> 6 Sylverns Court
> Bracknell
> Berks
> RG42 3SL
>
> 07717 - 728290
> 01344 - 310610
>
> G4KFK wrote:
> > You recently claimed that if anybody posted your personal details, you
> > would report them to the police for harassment. Here's your chance
> > then:
> >
> >

1518. Re: Is this the address of a paedophile? (Was : Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 09:16:13 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1140858973.437242.62580@e56g2000cwe.googlegroups.com>
Source record: 13369
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Plod's Conscience wrote:
> I am indebted to Mike Gathergood for pointing out the errors
> in the below.
>
> Thank-you for your correction.
>
> Try 01344 861472 (011 44 1344 861472 from the colonies)

Aha - it finally dawned on you to call directory enquiries! Who's a
clever boy then?

> and 07725 576401.

Well the first two digits were correct :-(

Try 07970 795422 (or 011 44 7970 795422)

73
Mike G4KFK

1519. Re: Is this the address of a paedophile? (Was : Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 09:26:41 UTC
From: Plod's Conscience <aiyr.r.bean@lycos.co.uk>
Message-ID: <1140859601.310052.34860@p10g2000cwp.googlegroups.com>
Source record: 13370
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Your ongoing and desperate attempts to sneer
are as infantile as they are wrong. You really are
a sick and silly child.

http://2ndbracknell.co.uk/DistrictFootball.doc

http://www.quack.plus.com/Welcome_to_new_members.DOC

If the mobile number given there is incorrect, then better
for you to change it, or remove the web content.

Mike G4KFK wrote:
> Plod's Conscience wrote:
> > I am indebted to Mike Gathergood for pointing out the errors
> > in the below.
> >
> > Thank-you for your correction.
> >
> > Try 01344 861472 (011 44 1344 861472 from the colonies)
>
> Aha - it finally dawned on you to call directory enquiries! Who's a
> clever boy then?
>
> > and 07725 576401.
>
> Well the first two digits were correct :-(
>
> Try 07970 795422 (or 011 44 7970 795422)
>
> 73
> Mike G4KFK

1520. Re: Is this the address of a paedophile? (Was : Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 09:37:54 UTC
From: Three Cheers for PC Fuller! <s2f@f2s.com>
Message-ID: <MZydnV3ExKfvuJ3ZRVnyrw@giganews.com>
Source record: 13371
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Plod's Conscience wrote:
> Your ongoing and desperate attempts to sneer
> are as infantile as they are wrong. You really are
> a sick and silly child.
>
> http://2ndbracknell.co.uk/DistrictFootball.doc
>
> http://www.quack.plus.com/Welcome_to_new_members.DOC
>
> If the mobile number given there is incorrect, then better
> for you to change it, or remove the web content.
>
Stalker boy's at it again...
--
huLLy
Tel: 07976 123278
ICQ 136-987-925

1521. Re: The Weekly FAQ (Reposted after thread was hijacked by the very Childish Broadcasters (CBers) warned against.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 10:31:55 UTC
From: Mark <nospam@nospam.com>
Message-ID: <dtpbmq$le5$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13372
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Someone please hijack the thread- I could do with a laugh this morning ;)

Mark

1522. Re: Is this the address of a paedophile? (Was : Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 11:21:28 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1140866488.666307.135480@v46g2000cwv.googlegroups.com>
Source record: 13373
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Three Cheers for PC Fuller! wrote:
> Stalker boy's at it again...

It's sad, isn't it?

I wonder what happens to him during the week, that could possibly explain his tetchy behaviour at weekends? Maybe they don't warm the electrodes up before giving him his ECT?

73
Mike G4KFK
www.g4kfk.co.uk
Phone 07970 795422
Fax 07092 151344

1523. Re: Is this the address of a paedophile? (Was : Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 11:53:12 UTC
From: Wiggy <mines.a.gin@tonic>
Message-ID: <lyXLf.26228$wl.19459@text.news.blueyonder.co.uk>
Source record: 13374
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Mike G4KFK wrote:
> Three Cheers for PC Fuller! wrote:
>
>>Stalker boy's at it again...
>
>
> It's sad, isn't it?
>
> I wonder what happens to him during the week, that could possibly
> explain his tetchy behaviour at weekends? Maybe they don't warm the
> electrodes up before giving him his ECT?
>

I think you're on to something here! ECT causes short term memory loss.
This could be why he posts the same dross over and over again - he
simply forgot that he'd posted it last week!

Wiggy

1524. Re: The Weekly FAQ (Reposted after thread was hijacked by the very Childish Broadcasters (CBers) warned against.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 12:06:49 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dtph1suae1@newsg2.svr.pol.co.uk>
Source record: 13375
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Mike G4KFK" <mike@g4kfk.co.uk> wrote in message
news:1140857716.957288.217710@v46g2000cwv.googlegroups.com...
>
> Gareth Alun Evans (G4SDW) wrote:
> The usual insane drivel...
>
> You are the very model of a newsgroup personality.
> You intersperse stupidity with tedious banality.
> Pseudonyms you've plenty of; both genuine and ghosted, too,
> On all the countless newsgroups that your drivel is cross-posted to.
> Our bandwidth you will fritter with your whining and your snivelling,
> And we're the ones who pay the bills, downloading all your drivelling.
> Your enemies are numerous, and no-one would be blaming us
> For cracking your head open after you've been rudely flaming us.
> You hate to lose an argument (by now you should be used to it).
> You wouldn't know a valid point if you were introduced to it.
> Your learning is extensive but consists of mindless trivia,
> Designed to fan your ego, which is larger than Bolivia.
> The comments that you vomit forth, disguised as jest and drollery,
> Are really just an exercise in unremitting trollery.
> You say you're frank and forthright, but that's merely lies and vanity,
> The gibberings of one who's on the limits of his sanity.

That was reasonably good....

Graham
--
-.-. -... / .-. .- -.. .. ---

Radio is only a Hobby. Don't let it rule your life...

73/51 - Graham, 26-Golf Charlie-19

1525. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 13:06:56 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dtpkik$5lo$1@newsg3.svr.pol.co.uk>
Source record: 13376
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Let's Have a go at answering the inane banter that comes from Mr Evans...

"Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message
news:1140796567.271702.34800@v46g2000cwv.googlegroups.com...
> When reading this, be on the guard against the Cry Baby (CB),
> the Cackling Bully (CB) and the Complete Buffoon (CB)!

The above abbreviations reveal who really is the childish broadcaster...

> What is Ham Radio?
>
> It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery.

With people like you 'encouraging' new people to the hobby is it any wonder?

> Even
> the Usenet newsgroups dedicated to the cause have degenerated
> into a hotbed of abusive onslaughts by those who ought to know better.

Agreed. The sense of help and encouragement shown towards all newcomers to
the hobby is very lacking. Is it any wonder a few give up and go 'off the
rails'...

> However, there still exists the fundamental basis on which Ham
> Radio is based, and that will never die. This FAQ ("What Is
> Ham Radio?") will be regularly published and will not be
> shouted or bullied down. It is important that those of a
> technical bent, who are the natural seed-corn of Radio Hammery
> and who gravitate towards us to be the real novitiate, can
> still find us, (and know that we are still here), their fellows.

But you blatantly dismiss anyone who dare take that first step into
"Hammery" so how can they gravitate towards you?

> -----ooooo-----
>
> Please remember that this FAQ is a _POSITIVE EXHORTATION_
> to you to exert yourselves to join our fraternity! (If you find
> otherwise, then perhaps you are already classing yourself in the
> mediocre groups of those who are criticised in the FAQ and from
> whom we _MUST_ dissociate? If so - it's never too late for
> a re-taxonomisation on your part - there's nothing elitist about
> us, and we welcome all those who are prepared to put themselves
> out in order to join our ranks!)

How are beginners expected to "put themselves out? when the only way to "hammery" is through the M3 direction?

> -----ooooo-----
> So,.....What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>
> Ham Radio awakens in its aficionados a whole-life
> fascination with all things technical and gives
> an all-abiding curiosity to improve one's scientific
> knowledge. It's a great swimming pool, please dive in!

We do try but then get ridiculed by you... if you were to perhaps fill the pool a little it might be helpful...

> This excitement causes a wish to share the experience
> with ones fellow man, and shows itself in the
> gentlemanly traditions of Ham Radio.
>
> Radio Hams are in a unique privileged position in that
> they can construct and operate their own equipment! No-one
> else has this privilege. Users, such as broadcasters,
> the po lice and armed farces, CBers and mobile phone
> users have to purchase ready-made gear. Manufacturers
> are not licensed to operate their gear. Radio Hams
> are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment. This is a privilege well worth the effort
> to gain, and one to be jealously guarded.

To be proud of yes but jealously guarded? How are you going to guard it... by demanding Morse be set at 20-30 WPM in_all_classes of "Hammery"

> The excitement that drives a Radio Ham starts with
> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to
> be learnt and applied.

A bit like CB really. You start off with a basic package, you get more interested and learn the technical skills to install your own station and some go on to build their own antenna arrays, repair their own radio's and that of friends then some decide to take it a step further into the Amateur radio side of things only to meet up with people like you in the forums who welcome with one hand then dismiss immediately with the other with long winded diatribe...

> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.

Just like CB, I remember the fox-hunts we had in the late 70's - early 80's and what fun they were too. I remember also the joys of DX on 11 metres, especially the competitions and the sense of achievement in contacting those far away stations. Seems the two hobbies are similar after all... (How dare I make that comparison eh...)

> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;

Then that is appalling as most CB'ers I know are now Amateurs and are quite respectable too. They have always shown a fascination in radio, in it's DX use and internal workings and antenna from their CB days to today...

> they are free with rather silly personal insults;

You mean like "Childish Broadcaster" "Cry Baby" "Cackling Bully" "Complete Buffoon" "Criminals" "M3/CB fools" calling men who question them "girls" and so on... yes, very silly...

> they have not satisfied any technical qualification
> and their licences prevent the use of
> self-designed-and-built equipment.

You mean they haven't completed a multi-guess ticky box test? Well, unless someone's completed one of those then they obviously must know nothing at all...

> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.

Like probably over 90% of "Full" Licence Amateurs who prefer to build only some bits of kit and have an "off the shelf" radio as their main tool...?

> No _REAL_ Radio Hams are deceived by such people!

Are you sure?

> One such CB type is the so-called "Not-Ham". Otherwise
> known as the CBer-Masquerading-As-A-Radio-Ham, this type
> had their background in the hobby that is CB Radio and not
> in the technical pursuits that lead up to a coveted Ham licence.
> Easily recognised by their boasts of the criminal activity of
> 11 metre SSB operation, one wonders why they don't go back to
> the CB Bands if such bands are dearer in their hearts than are the Ham
> Bands? No _REAL Radio Hams associate with those who made an
> illegal installation of transmitting equipment before being
> in possession of an appropriate licence.

Several people even in this group have admitted to installing and using 2 Metre equipment before they actively became Amateurs... and some of these 'illegal's are even teachers of the hobby now...

> One infallible way to disambiguate the CB Radio Hobbyist
> from the _REAL_ Radio Ham is to solicit their view of the
> difference between CB Radio and Ham Radio. A Radio Ham will
> perceive Ham Radio to be a technical pursuit and will
> perceive CB Radio to be a social communications facility
> no different in essence to a land-line telephone

No disagreement there... CB radio was devised originally as a "service" for the community to keep in local touch with each other. Then anyone wishing to Advance would learn more and become a licensed Radio Amateur. Pretty straightforward stuff really.

> or a
> GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
> could also hold a CB licence safe in the knowledge that
> such a licence says no more about him than having a land-line
> telephone, whilst continuing to regard Ham Radio as a separate
> technical pursuit.

Maybe not separate, but a more advanced hobby yes. With the advent of mobile phones and just about every UK home having a telephone of some description why would a Radio Amateur wish to use a CB as a land-line especially as the average CB set up has only a 5 mile radius? Your argument on this point holds no water.

> A CB Radio hobbyist, on the other hand, sees no difference between
> a Ham Radio licence and a CB Radio licence. To him, they are
> sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
> tries to classify himself as the equal of the Radio
> Ham when, in fact, he is nothing of the kind.

No CB'er I have ever met or known has ever considered or classed himself as a Radio Ham. Maybe if you had said M3 Licence holder I could agree with you to a point...

A sure sign of
> a CB Radio hobbyist is if he holds, or has ever held, a licence
> issued under the gangrenous degeneration that is the
> M3/CB Fools' Licence scheme.

Floored statement once again. Every prospective Amateur needs to sit the M3 test before he advances (or not) and may have even only held said licence for a couple of weeks to make sure he/she is comfortable with the hobby before moving on... It is the ONLY route into "Hammery" now...

> One group of people who claim to be of the standard of
> Radio Hams but who are in reality nothing more than an
> apology for the failure of a CBer are those class B
> licensees who falsely proclaimed that they were against
> the use of a Morse Test to control access to the HF
> bands, until, that is, a test was introduced at their
> intellectual level, the intellectual level of 6-year-olds.

Another completely floored argument. Please state how many 6 yr olds hold an M3 or any other radio licence. I bet you could count them on one hand. Just because a 6 yr old 'could' pass the test if he/she is intelligently bright enough doesn't mean any 6 yr old can pass it. At 6 yrs old you are still very very young and immature and as I have said previously, unless the parents who are Amateurs themselves push their siblings into the hobby they certainly wouldn't think of it themselves... And before anyone comes back saying how simple the test is, then yes, for you it would be but not to a 6 yr old.

> 6 year-olds simply lack the mathematical tool kit to
> enable them to handle even the simplest algebraic manipulation
> for Ohm's Law and thus, the disgraceful Class Ber's in
> the aforementioned category are not Radio Hams by any stretch
> of the imagination!

All because they weren't interested in Morse code, that antiquated communication method pre-dating last century and rarely used now apart from by a few 'die hard' Amateurs. It was a different story back in the 40's and 50's. We don't even light beacons anymore to warn of invasion. Time to move into the real world Mr Evans...

> Remember - A sure sign of a CB Radio hobbyist is if he holds,
> or has ever held, a licence issued under the gangrenous
> degeneration that is the M3/CB Fools' Licence scheme!

No need to comment further here...

I would love to see the answers he would give to my questions but I won't hold my breath...

He would be too busy thinking up his next diatribe against the police and "not-hams" to concern himself with me...

Graham
--

-.-. -... / .-. .- -.. .. ---

Radio is only a Hobby. Don't let it rule your life...

73/51 - Graham, 26-Golf Charlie-19

1526. Re: The Weekly FAQ (Reposted after thread was hijacked by the very Childish Broadcasters (CBers) warned against.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 13:33:21 UTC
From: Road_Hog&#65533; <complaints@ebuyer.com>
Message-ID: <44005ca0$0$9263$ed2619ec@ptn-nntp-reader01.plus.net>
Source record: 13377
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Plod's Conscience" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1140857035.791153.194860@p10g2000cwp.googlegroups.com...
> This is reposted because this week's thread was hijacked by the
> very Childish Broadcasters (CBers) warned against. Remember that
> Ham Radio is a technical pursuit for gentlemen, and not some
> mindless operating hobby for Cheque-Book (CB) wielding thickos!
>
> Jealously guard and foment what we have achieved!

From the Cambridge Dictonary,

"Definition
foment
verb [T] FORMAL
to cause trouble to develop:
Example,
"The song was banned on the grounds that it might foment racial tension.""

Cause trouble, that would be about right for you beanie.

1527. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 14:06:17 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <44006459$0$82266$dbd41001@news.wanadoo.nl>
Source record: 13378
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

The Magnum wrote:

> How are beginners expected to "put themselves out? when the only way to
> "hammery" is through the M3 direction?

They can take the tests as that is the route they have to take. But
they certainly don't have to lower themselves to actually applying for
an M3 callsign! Maybe they could take one of the TWO all day sessions
that Brian mentioned and go straight to a Full licence. It's just a
shame this facility isn't offered ALL the time. Brian still hasn't
given a good answer as to why that facility isn't available ALL the time!

> To be proud of yes but jealously guarded? How are you going to guard it...
> by demanding Morse be set at 20-30 WPM in_all_classes of "Hammery"

That would be a good start. At least we'd get rid of a lot of the chaff
that has no intention of progressing up the so-called progressive
licensing scheme (a.k.a. an M3 licensee of more than one year). If
there had been a 20-30wpm Morse test when they got their M3 farce
licence, then they would never have bothered and Amateur Radio would
have been a better place as a result.

> Just like CB, I remember the fox-hunts we had in the late 70's - early 80's
> and what fun they were too. I remember also the joys of DX on 11 metres,
> especially the competitions and the sense of achievement in contacting those
> far away stations. Seems the two hobbies are similar after all... (How dare
> I make that comparison eh...)

Just curious.... was that 11M DXing on SSB? Can't really see what
excitement there would be trying to DX with 4W of FM!

> No disagreement there... CB radio was devised originally as a "service" for
> the community to keep in local touch with each other.

So, why were you DXing on it if it is only to be used as a local service?

> Please state how many 6 yr olds hold an
> M3 or any other radio licence.

We have been asking Brian and the RSGB to release these non-personal
stats for ages but for some reason they always avoid the question.
Brian says he would be uncomfortable doing so himself, so why doesn't he
with his Board position of "Amateur Radio Development" within RSGB Ltd
get them published in RadCom. There really is no good reason why these
stats cannot be published unless they are trying to hide something.

Another interesting stat would be the percentage of M3s that have
progressed any further!!

> All because they weren't interested in Morse code, that antiquated
> communication method pre-dating last century and rarely used now apart from
> by a few 'die hard' Amateurs.

You obviously don't listen to the HF bands much then! Morse code is
alive and well and is being used by a LOT of people. Take just about
any recent DXpedition in the past few years and look at the breakdown of
the QSOs regarding CW v SSB. Usually the CW totals are far ahead of the
SSB totals. "Rarely used".... you have no idea what you are talking
about! Or maybe you just hear all those funny noises at the low ends of
the bands and as you don't understand Morse code you are prejudiced
against it. Just a wild guess :)

>> Remember - A sure sign of a CB Radio hobbyist is if he holds,
>> or has ever held, a licence issued under the gangrenous
>> degeneration that is the M3/CB Fools' Licence scheme!
>
> No need to comment further here...

Why? Do you agree? You've commented on everything else you disagreed with!

1528. Re: Is this the address of a paedophile? (Was : Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 14:38:59 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <7_ZLf.18137$gB4.9321@newsfe4-gui.ntli.net>
Source record: 13380
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

on 25/02/2006 09:26 The Chippenham Village Idiot said the following:
> Your ongoing and desperate attempts to sneer
> are as infantile as they are wrong. You really are
> a sick and silly child.
>
> http://2ndbracknell.co.uk/DistrictFootball.doc
>
> http://www.quack.plus.com/Welcome_to_new_members.DOC
>
> If the mobile number given there is incorrect, then better
> for you to change it, or remove the web content.
>
Oh dear, what's your sudden interest in cubs and scouts, Beanie?
Have the sheep learned to fight?
...(_!_)...

1529. Re: Dead bugs!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 14:39:44 UTC
From: Andy Axnot <Andy1@nope.invalid>
Message-ID: <pan.2006.02.25.14.40.10.301216@nope.invalid>
Source record: 13379

On Tue, 14 Feb 2006 21:32:07 +0000, Frank wrote:

>
> As far as my ghost receivers, just remember those proclaiming
> something is impossible are interupted by someone doing it. Believe
> it or not, like it or not, the dead talk!

Actually, Frank, some of them read the newsgroups too, though most of
them seem to prefer the binary porn groups.

Good luck!

Andy

1530. Re: The Weekly FAQ (Reposted after thread was hijacked by the very Childish Broadcasters (CBers) warned against.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 15:10:14 UTC
From: Brian MW3BAU <notsaying@here.com>
Message-ID: <qr_Lf.51886$494.38204@newsfe2-gui.ntli.net>
Source record: 13381
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Mike G4KFK" <mike@g4kfk.co.uk> wrote in message
news:1140857716.957288.217710@v46g2000cwv.googlegroups.com...
>
> Gareth Alun Evans (G4SDW) wrote:
> The usual insane drivel...
>
> You are the very model of a newsgroup personality.
> You intersperse stupidity with tedious banality.
> Psudonyms you've plenty of; both genuine and ghosted, too,
> On all the countless newsgroups that your drivel is cross-posted to.
> Our bandwidth you will fritter with your whining and your snivelling,
> And we're the ones who pay the bills, downloading all your drivelling.
> Your enemies are numerous, and no-one would be blaming us
> For cracking your head open after you've been rudely flaming us.
> You hate to lose an argument (by now you should be used to it).
> You wouldn't know a valid point if you were introduced to it.
> Your learning is extensive but consists of mindless trivia,
> Designed to fan your ego, which is larger than Bolivia.
> The comments that you vomit forth, disguised as jest and drollery,
> Are really just an exercise in unremitting trollery.
> You say you're frank and forthright, but that's merely lies and vanity,
> The gibberings of one who's on the limits of his sanity.
>

Well Done.
Is that the Radio Pirates of Penzance??

1531. Re: The Weekly FAQ (Reposted after thread was hijacked by the very Childish Broadcasters (CBers) warned against.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 15:44:51 UTC
From: Unknown <nope@way.cc>
Message-ID: <pan.2006.02.25.15.44.50.939726@way.cc>
Source record: 13382
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

On Sat, 25 Feb 2006 00:43:55 -0800, Plod's Conscience wrote:

> This is reposted because this week's thread was hijacked by the
> very Childish Broadcasters (CBers) warned against. Remember that
> Ham Radio is a technical pursuit for gentlemen

So only people with pricks - that explains a lot!

, and not some
> mindless operating hobby for Cheque-Book (CB) wielding thickos!
>

Hmmmmmm ....

Price of CB rig - typical 50 quid.
Price of average radio amateur HF+2m+70cm import setup 1000 quid up.

He is a troll and he lives in hole ....

1532. Re: The Weekly FAQ (Reposted after thread was hijacked by the very Childish Broadcasters (CBers) warned against.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 16:49:24 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1140886164.310807.148950@v46g2000cwv.googlegroups.com>
Source record: 13383
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Brian MW3BAU wrote:
> Is that the Radio Pirates of Penzance??

Har har! Shiver me dipoles!

73
Mike G4KFK
www.g4kfk.co.uk
Phone 07970 795422
Fax 07092 151344

1533. Re: The Weekly FAQ (Reposted after thread was hijacked by the very Childish Broadcasters (CBers) warned against.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 17:14:25 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <44009071$0$82266$dbd41001@news.wanadoo.nl>
Source record: 13384
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Unknown wrote:
> On Sat, 25 Feb 2006 00:43:55 -0800, Plod's Conscience wrote:
>
>> This is reposted because this week's thread was hijacked by the
>> very Childish Broadcasters (CBers) warned against. Remember that
>> Ham Radio is a technical pursuit for gentlemen
>
> So only people with pricks - that explains a lot!
>
> , and not some
>> mindless operating hobby for Cheque-Book (CB) wielding thickos!
>>
>
>
> Hmmmmmm ....
>
> Price of CB rig - typical 50 quid.
> Price of average radio amateur HF+2m+70cm import setup 1000 quid up.

Err, FT817 at Martin Lynch.... £448.99. Covers all the bands you
mention and not even close to £1000, in fact, not even half that amount.

FT817 gives you access to 17.44MHz of Amateur allocations in any mode
for £448.99. A typical 80 channel CB gives you access to about 0.8Mhz
in FM only.

Price per MHz for the FT817 = £25.74
Price per MHz for the CB = £62.50

No wonder all these CBers are clamouring to get an M3 licence. As they
say, it's multi-band and multi-mode CB on the cheap!

1534. Re: Dead bugs!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 18:39:48 UTC
From: Mike Young <boat042-spam@yahoo.com>
Message-ID: <Uv1Mf.16422$2O6.11734@newssvr12.news.prodigy.com>
Source record: 13385

"Alfred Green" <nu8i@cox.net> wrote in message
news:JxRLf.6026$z82.3895@fed1read07...
> My experience with the scientific and skeptic community is that they would
> actually _LOVE_ to see some real evidence of the paranormal, rather than
> debunking it as a matter of principle.

There is some of that, but woe betides those who let their beliefs cloud
interpretation of the results. Skeptics and scientists remain first and
foremost skeptics and scientists. It would have to be very compelling to
even pass a first scrutiny.

1535. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 19:01:14 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dtq9au$262$1@news7.svr.pol.co.uk>
Source record: 13386
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Did someone mention

Gareth Alun Evans
13 Hardens Close
Chippenham
Wiltshire
SN15 3AA

01249 651897

Isn't that just off London Road and quite near the Cemetery ???

--
-.-. -... / .-. .- -.. .. ---

Radio is only a Hobby. Don't let it rule your life...

73/51 - Graham, 26-Golf Charlie-19

1536. Re: Input stage for VHF frequency counter in an FPGA?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 19:05:57 UTC
From: hmurray@suespammers.org
Message-ID: <KYqdnZJSfc4IN53ZRVn-qg@megapath.net>
Source record: 13387
Cross-posted to: sci.electronics.design,comp.arch.fpga,rec.radio.amateur.homebrew

>http://www.onsemi.com/PowerSolutions/product.do?id=MC100EPT21DR2

Be sure to check the output with a scope.

Years ago, I used a PECL=>TTL part. That was real/old, 5V TTL.
The problem was that I really wanted a CMOS output and what I
got was a TTL signal that only went up to 4V or so. We had to
run it through an AC dead-bug to get what we wanted.

--
The suespammers.org mail server is located in California. So are all my
other mailboxes. Please do not send unsolicited bulk e-mail or unsolicited
commercial e-mail to my suespammers.org address or any of my other addresses.
These are my opinions, not necessarily my employer's. I hate spam.

1537. Re: Input stage for VHF frequency counter in an FPGA?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 19:20:58 UTC
From: cs_posting@hotmail.com
Message-ID: <1140895258.779780.317000@z34g2000cwc.googlegroups.com>
Source record: 13388
Cross-posted to: sci.electronics.design,comp.arch.fpga,rec.radio.amateur.homebrew

Hal Murray wrote:
> >http://www.onsemi.com/PowerSolutions/product.do?id=MC100EPT21DR2
>
> Be sure to check the output with a scope.
>
> Years ago, I used a PECL=>TTL part. That was real/old, 5V TTL.
> The problem was that I really wanted a CMOS output and what I
> got was a TTL signal that only went up to 4V or so. We had to
> run it through an AC dead-bug to get what we wanted.

Good point to keep in mind. In this case though it's all 3.3v
families, and LVTTL seems to have nearly the same Vih/Vil spec as
LVCMOS. The part is spec'd with minimum Voh of 2.4v.

1538. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 20:27:05 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dtqebutgk1@newsg4.svr.pol.co.uk>
Source record: 13389
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"know code" <know_code@wanadoo.nl> wrote in message
news:44006459$0$82266$dbd41001@news.wanadoo.nl...
> The Magnum wrote:
>
> > How are beginners expected to "put themselves out? when the only way to
> > "hammery" is through the M3 direction?
>
> They can take the tests as that is the route they have to take. But
> they certainly don't have to lower themselves to actually applying for
> an M3 callsign! Maybe they could take one of the TWO all day sessions
> that Brian mentioned and go straight to a Full licence. It's just a
> shame this facility isn't offered ALL the time. Brian still hasn't
> given a good answer as to why that facility isn't available ALL the time!

Like you say, it isn't available all the time. Also some people have to
study to advance as they are new to the hobby and can't do it all in a day.
Applying for the callsign gives them the opportunity to self learn on the
bands as well as studying for it. I totally agree though that there should
be a time limit on M3 licence holders before they are asked to advance or
leave the hobby as their indifference isn't in Amateur radio's best
interest.

> > To be proud of yes but jealously guarded? How are you going to guard
it...
> > by demanding Morse be set at 20-30 WPM in_all_classes of "Hammery"
>
> That would be a good start. At least we'd get rid of a lot of the chaff
> that has no intention of progressing up the so-called progressive
> licensing scheme (a.k.a. an M3 licensee of more than one year). If
> there had been a 20-30wpm Morse test when they got their M3 farce
> licence, then they would never have bothered and Amateur Radio would
> have been a better place as a result.

Judging by many peoples comments in the newsgroups and a few Amateurs I have
spoken to face to face many feel the hobby would have all but died compared
to what it used to be if the insistence of Morse was upheld especially to
that degree.

> > Just like CB, I remember the fox-hunts we had in the late 70's - early
80's
> > and what fun they were too. I remember also the joys of DX on 11 metres,
> > especially the competitions and the sense of achievement in contacting
those

> > far away stations. Seems the two hobbies are similar after all... (How
dare
> > I make that comparison eh...)
>
> Just curious.... was that 11M Ding on SSB? Can't really see what
> excitement there would be trying to DX with 4W of FM!

Yes, it would be DX'ing on 27.555MHz USB and probably more like 15w than 4. Yes it was illegal but the achievement felt by making that contact when others didn't think it could be done gave many a great sense of an achievement rather than something that could be achieved so easily on Amateur radio. If it is easy what's the point? Also I lived in Wales for a time and it was not unknown to have contacts throughout Europe on 4w FM because I managed it a few times myself. That was on UK27/81 legally too.

> > No disagreement there... CB radio was devised originally as a "service"
for
> > the community to keep in local touch with each other.
>
> So, why were you Ding on it if it is only to be used as a local service?

Because some found it was possible to do and was quite interesting. When CB was first introduced it was thought DX was impossible and many people who had fought for AM believed FM would only get them "down the road". I used it for both. Mainly to keep in touch with local friends (These were the days before cell phones were commonplace) and talking to the locals and other mobile stations when driving. CB is still un-beatable for that quick 10-13 (Traffic report) on the road ahead. DX was just an un-expected bonus.

> > Please state how many 6 yr olds hold an
> > M3 or any other radio licence.
>
> We have been asking Brian and the RSGB to release these non-personal
> stats for ages but for some reason they always avoid the question.
> Brian says he would be uncomfortable doing so himself, so why doesn't he
> with his Board position of "Amateur Radio Development" within RSGB Ltd
> get them published in RadCom. There really is no good reason why these
> stats cannot be published unless they are trying to hide something.
> Another interesting stat would be the percentage of M3s that have
> progressed any further!!

That would be useful information and figures would not and should not make anyone uncomfortable in divulging. No-one was asking for specifics so for one I cannot see Brian's reluctance in this matter. He could just say there are 15 M3 licensed 6 yr old Amateurs. Now that in itself could not possibly make someone feel uncomfortable. If he was asked to prove it by giving out their call signs then that's a different story... but no-one is.

> > All because they weren't interested in Morse code, that antiquated
> > communication method pre-dating last century and rarely used now apart
from
> > by a few 'die hard' Amateurs.

>
> You obviously don't listen to the HF bands much then! Morse code is
> alive and well and is being used by a LOT of people. Take just about
> any recent DXpedition in the past few years and look at the breakdown of
> the QSOs regarding CW v SSB. Usually the CW totals are far ahead of the
> SSB totals. "Rarely used".... you have no idea what you are talking
> about! Or maybe you just hear all those funny noises at the low ends of
> the bands and as you don't understand Morse code you are prejudiced
> against it. Just a wild guess :)

You seem to miss my point on this subject every time we are in discussion about it so I will say it again... I hold no ill judgement to anyone who wishes to use Morse. I have no problem with Morse and I believe it is down to the individual Amateur and should not forced on them to obtain 'superior' status. Nor do I think it fair to mock "lazy-assed B's" simply because they aren't really interested in Morse but are interested in everything else. Morse isn't the be all and end all of Amateur radio. So there may be more using it than I think..Compared to the amount of licensed Amateurs though I bet it's pretty low in comparison. Let's ask Brian again if he can give us any statistics on this?

> >> Remember - A sure sign of a CB Radio hobbyist is if he holds,
> >> or has ever held, a licence issued under the gangrenous
> >> degeneration that is the M3/CB Fools' Licence scheme!
> >
> > No need to comment further here...
>
> Why? Do you agree? You've commented on everything else you disagreed
with!

Not really, the point was already answered several times so there was no real need to comment further. Just like now really but I thought I might. Besides which it's an open forum and disagreements can be aired quite openly.

Regards,
Graham
--
-.-. -... / .-. .- -.. .. ---

Radio is only a Hobby. Don't let it rule your life...

73/51 - Graham, 26-Golf Charlie-19

1539. Re: 4CX250B vs Gi7B families...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-25 20:38:35 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <fPedne0UsbTEXZ3ZnZ2dnUVZ_t6dnZ2d@comcast.com>
Source record: 13390

"MarkAren" <markaren10@yahoo.com> wrote in message
news:1140825344.868733.266910@z34g2000cwc.googlegroups.com...
> Hi Guys,
>
> I am contemplating building a 144MHz power amp and looking at various
> options. The obvious solution is a pair of push pull 4CX250Bs.
>
> It appears that the Gi7B and family of Triodes can provide an equally
> capable solution. They appear to be much easier to cool, by something
> like an Axial Papst Fan (instead of a Snail Blower). The other obvious
> advantage is not having to deal with Screen voltage, regulation and
> protection. The triodes also look much easier and cheaper to mount
> (given the grounded grid). Finally, it seems because of the very low
> inter-electrode capacitances, it is quite easy to parallel the Triodes
> up as required (even at 432MHz).
>
> So what is the down side for using these Triodes ?
>
> Comments and observations appreciated as usual.
>
> Regards,
>
> Mark.
>

As far as the "control" of tube amplifiers ...
G3SEK has very good boards for both Triode and Tetrode tubes
http://www.ifwtech.co.uk/g3sek/

Triode
http://www.ifwtech.co.uk/g3sek/boards/triode/triode-1.htm

Tetrode
http://www.ifwtech.co.uk/g3sek/boards/tetrode/tetrode-1.htm

w9gb

1540. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-26 02:04:06 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <44010c97$0$82266$dbd41001@news.wanadoo.nl>
Source record: 13391
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

The Magnum wrote:

>>> To be proud of yes but jealously guarded? How are you going to guard
> it...
>>> by demanding Morse be set at 20-30 WPM in_all_classes of "Hammery"
>> That would be a good start. At least we'd get rid of a lot of the chaff
>> that has no intention of progressing up the so-called progressive
>> licensing scheme (a.k.a. an M3 licensee of more than one year). If
>> there had been a 20-30wpm Morse test when they got their M3 farce
>> licence, then they would never have bothered and Amateur Radio would
>> have been a better place as a result.
>
> Judging by many peoples comments in the newsgroups and a few Amateurs I have
> spoken to face to face many feel the hobby would have all but died compared
> to what it used to be if the insistence of Morse was upheld especially to
> that degree.

But that is simply not true and the statistics on the IARU website prove it. The total number of Amateurs in the UK was increasing year in, year out, and that was *before* either the Novice (now Intermediate) or Foundation licenses were introduced.

However, the number of RSGB members was *reducing* year in, year out, over the same period so the only reason RSGB Ltd backed these unnecessary licence schemes so vigorously was to try to get more members. They did not have the interests of Amateur Radio at heart, all they were concerned with was keeping their commercial book publishing company alive!

1541. Re: FA: Unbuilt Kit - 70's Vintage Heathkit Oscilloscope.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-26 02:23:31 UTC
From: Brian Hill <good@it.net>
Message-ID: <4u8Mf.211$HH2.99@fe07.lga>
Source record: 13392
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:wduLf.20072$UD1.2398@bignews2.bellsouth.net...
> k7itm@msn.com wrote:
>> Wow. Dave Edwards' pristine HP1726 275MHz scope is at $26 right now,
>> and this 5MHz unbuilt Heathkit is at $169? Guess it must have some
>> antique/nostalgia value to someone. It will be interesting to me to
>> check back in 9 days when both auctions end to see what each went for.
>>
> There is something about unbuilt Heathkits. Some people collect them,
> and never build them. Weird. Then again I know people who collect
> Barbie dolls and never open the packages, just leave them on a shelf to
> collect dust.

Well humans are the weirdest animals on the planet. Every other creature you
can figure out. :)

BH

1542. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-26 03:31:49 UTC
From: an Old friend <kb9rqz@amsat.org>
Message-ID: <1140924708.930378.106180@v46g2000cwv.googlegroups.com>
Source record: 13393
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

know code wrote:
> The Magnum wrote:
>

> > Judging by many peoples comments in the newsgroups and a few Amateurs I have
> > spoken to face to face many feel the hobby would have all but died compared
> > to what it used to be if the insistence of Morse was upheld especially to
> > that degree.
>
> But that is simply not true and the statistics on the IARU website prove
> it. The total number of Amateurs in the UK was increasing year in, year
> out, and that was *before* either the Novice (now Intermediate) or
> Foundation licenses were introduced.

they prove nothing fo the kind how many of those licensee were active
you don't know
>
> However, the number of RSGB members was *reducing* year in, year out,
> over the same period so the only reason RSGB Ltd backed these
> unnecessary licence schemes so vigorously was to try to get more
> members. They did not have the interests of Amateur Radio at heart, all
> they were concerned with was keeping their commercial book publishing
> company alive!

same could be said of the ARRL but in both cases the organzation were
neither leading nor following nor getting out of the way, that is
likely the reason for the drift in the ARS over the last few years

but it is fact the insitance of Ham that Morse was somehow vital has
made us look like buffoons to rest of the folks out there that
perception is dangerous not so much from a numbers standpoint but from
the stand as being seen as worthy of the bw we hold

1543. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-26 04:30:19 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <44012edb$0$37324$dbd41001@news.wanadoo.nl>
Source record: 13394
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

an Old friend wrote:
> know code wrote:
>> The Magnum wrote:
>>
>
>>> Judging by many peoples comments in the newsgroups and a few Amateurs I have
>>> spoken to face to face many feel the hobby would have all but died compared
>>> to what it used to be if the insistence of Morse was upheld especially to
>>> that degree.
>> But that is simply not true and the statistics on the IARU website prove
>> it. The total number of Amateurs in the UK was increasing year in, year
>> out, and that was *before* either the Novice (now Intermediate) or
>> Foundation licenses were introduced.
>
> they prove nothing fo the kind how many of those licensee were active
> you don't know

In the UK, licences are renewed annually so those statistics on the IARU website are of licences that had been renewed in the previous 12 months. That makes the statistics very valid in proving the point I was making! Numbers were increasing year in, year out.

Now, had the licences only been renewed every 10 years like in the States (soon the be every five years in the UK) then you may have had a valid point.

1544. Impedence mismatch into FET preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-26 09:54:49 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <dtrtt8$s5n$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13395

Hi all.

I have a FET preamp, tuned by means of two fixed capacitors and one variable inductor that serves as an impedance transformer.

Am I correct in thinking that if there is an impedance mismatch (say the input circuit was tuned into a 50 ohm load, then was finally presented with say a 105 ohm load), then the preamp's noise figure would increase and the FET would start to become artificially noisy?

Then if the FET was pushed into overload by an adjacent strong signal, the noise would then start to reduce.

I have this odd situation on a repeater, and I can only put it down to mis-tuned cavities. I've never come across it before though, where the repeater actually IMPROVES in sensitivity when the transmitter keys up (?!?!), so I would like to know what's going on before I fix it.

Thanks all,

Sam
M1FJB

1545. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-26 14:16:31 UTC
From: class-a-licensee-pkearn-zBBpk@didnt-run-away-from-a-morse-test.es.eircom.com.net
Message-ID: <4401b809.142160165@news.iol.ie>
Source record: 13396
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote:

> Did someone mention

really Graham....

IT IS MY OPINION that you have a lot to learn.

1546. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-26 14:33:56 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dtse1m$dg4$1@newsg1.svr.pol.co.uk>
Source record: 13397
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"zBBPK"
<class-a-licensee-pkearn-zBBpk@didnt-run-away-from-a-morse-test.es.eircom.co
m.net> wrote in message news:4401b809.142160165@news.iol.ie...
> "The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote:
>
> > Did someone mention
>
>
> really Graham....
>
> IT IS MY OPINION that you have a lot to learn.

We all have lots to learn. Life is a learning curve and something new is
there to be learned each and every day... praise be to the lord...

Graham
--
-.-. -... / .-. .- -.. .. ---

Radio is only a Hobby. Don't let it rule your life...

73/51 - Graham, 26-Golf Charlie-19

1547. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-26 14:43:22 UTC
From: Plod's Conscience <aiyr.r.bean@lycos.co.uk>
Message-ID: <1140965002.818419.264780@j33g2000cwa.googlegroups.com>
Source record: 13398
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Wow! What a lot of interest in this FAQ and hence in _REAL_ Ham Radio!

185 postings in the thread in only 2 days!

Plod's Conscience wrote:
> When reading this, be on the guard against the Cry Baby (CB),
> the Cackling Bully (CB) and the Complete Buffoon (CB)!
>
> What is Ham Radio?
>
> It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery. Even
> the Usenet newsgroups dedicated to the cause have degenerated
> into a hotbed of abusive onslaughts by those who ought to know better.
> However, there still exists the fundamental basis on which Ham
> Radio is based, and that will never die. This FAQ ("What Is
> Ham Radio?") will be regularly published and will not be
> shouted or bullied down. It is important that those of a
> technical bent, who are the natural seed-corn of Radio Hammery
> and who gravitate towards us to be the real novitiate, can
> still find us, (and know that we are still here), their fellows.
>
> -----ooooo-----
>
> Please remember that this FAQ is a _POSITIVE EXHORTATION_
> to you to exert yourselves to join our fraternity! (If you find
> otherwise, then perhaps you are already classing yourself in the
> mediocre groups of those who are criticised in the FAQ and from
> whom we _MUST_ dissociate? If so - it's never too late for
> a re-taxonomisation on your part - there's nothing elitist about
> us, and we welcome all those who are prepared to put themselves
> out in order to join our ranks!)
>
> -----ooooo-----
> So,.....What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>

> Ham Radio awakens in its aficionados a whole-life
> fascination with all things technical and gives
> an all-abiding curiosity to improve one's scientific
> knowledge. It's a great swimming pool, please dive in!
>
> This excitement causes a wish to share the experience
> with ones fellow man, and shows itself in the
> gentlemanly traditions of Ham Radio.
>
> Radio Hams are in a unique privileged position in that
> they can construct and operate their own equipment! No-one
> else has this privilege. Users, such as broadcasters,
> the po lice and armed farces, CBers and mobile phone
> users have to purchase ready-made gear. Manufacturers
> are not licensed to operate their gear. Radio Hams
> are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment. This is a privilege well worth the effort
> to gain, and one to be jealously guarded.
>
> The excitement that drives a Radio Ham starts with
> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to
> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.
>
> -----OOOOO----
>
> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;

> they are free with rather silly personal insults;
> they have not satisfied any technical qualification
> and their licences prevent the use of
> self-designed-and-built equipment.
>
> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.
>
> No _REAL_ Radio Hams are deceived by such people!
>
> -----ooooo-----
>
> One such CB type is the so-called "Not-Ham". Otherwise
> known as the CBer-Masquerading-As-A-Radio-Ham, this type
> had their background in the hobby that is CB Radio and not
> in the technical pursuits that lead up to a coveted Ham licence.
> Easily recognised by their boasts of the criminal activity of
> 11 metre SSB operation, one wonders why they don't go back to
> the CB Bands if such bands are dearer in their hearts than are the Ham
> Bands? No _REAL Radio Hams associate with those who made an
> illegal installation of transmitting equipment before being
> in possession of an appropriate licence.
>
> -----ooooo-----
>
> One infallible way to disambiguate the CB Radio Hobbyist
> from the _REAL_ Radio Ham is to solicit their view of the
> difference between CB Radio and Ham Radio. A Radio Ham will
> perceive Ham Radio to be a technical pursuit and will
> perceive CB Radio to be a social communications facility
> no different in essence to a land-line telephone or a
> GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
> could also hold a CB licence safe in the knowledge that
> such a licence says no more about him than having a land-line
> telephone, whilst continuing to regard Ham Radio as a separate
> technical pursuit.
>
> A CB Radio hobbyist, on the other hand, sees no difference between
> a Ham Radio licence and a CB Radio licence. To him, they are
> sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
> tries to classify himself as the equal of the Radio
> Ham when, in fact, he is nothing of the kind. A sure sign of
> a CB Radio hobbyist is if he holds, or has ever held, a licence
> issued under the gangrenous degeneration that is the
> M3/CB Fools' Licence scheme.
>
> -----ooooo-----
>
> One group of people who claim to be of the standard of

> Radio Hams but who are in reality nothing more than an
> apology for the failure of a CBer are those class B
> licensees who falsely proclaimed that they were against
> the use of a Morse Test to control access to the HF
> bands, until, that is, a test was introduced at their
> intellectual level, the intellectual level of 6-year-olds.
>
> 6 year-olds simply lack the mathematical tool kit to
> enable them to handle even the simplest algebraic manipulation
> for Ohm's Law and thus, the disgraceful Class Ber's in
> the aforementioned category are not Radio Hams by any stretch
> of the imagination!
>
> Remember - A sure sign of a CB Radio hobbyist is if he holds,
> or has ever held, a licence issued under the gangrenous
> degeneration that is the M3/CB Fools' Licence scheme!

1548. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-26 14:50:15 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dtsf09$9t3$1@news8.svr.pol.co.uk>
Source record: 13399
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Plod's Conscience" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1140965002.818419.264780@j33g2000cwa.googlegroups.com...
> Wow! What a lot of interest in this FAQ and hence in _REAL_ Ham Radio!
>
> 185 postings in the thread in only 2 days!

Yes, and most of them telling you what a Nutter you are...

10-4 mad buddy,

Graham
--
-.-. -... / .-. .- -.. .. ---

Radio is only a Hobby. Don't let it rule your life...

73/51 - Graham, 26-Golf Charlie-19

1549. Re: Interested in _REAL_ Ham Radio? (As opposed to Complete Buffoonery (CB)?) Here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-26 16:09:08 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <4401d2a4$0$37324$dbd41001@news.wanadoo.nl>
Source record: 13400
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Plod's Conscience wrote:
> Wow! What a lot of interest in this FAQ and hence in _REAL_ Ham Radio!
>
> 185 postings in the thread in only 2 days!

And most of them by you :)

1550. Ten-Tec 1054 Shortwave Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-27 03:46:22 UTC
From: "dave_meade@yahoo.com" <dave_meade@yahoo.com>
Message-ID: <1141011981.987128.18370@e56g2000cwe.googlegroups.com>
Source record: 13401

Hi,

I built a Ten-Tec 1054 kit and I don't seem to be able to pick up any stations. I've rechecked all the parts and they are all in the right place and oriented correctly. I get a lot of static, but nothing that even sounds like a signal. I live in Chicago. Are there a lot of stations that can be picked up from here? I'm using a 6 foot antenna. Any suggestions?

1551. Re: Ten-Tec 1054 Shortwave Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-27 04:22:42 UTC
From: Mike Young <boat042-spam@yahoo.com>
Message-ID: <m8vMf.37887$F_3.16725@newssvr29.news.prodigy.net>
Source record: 13402

<dave_meade@yahoo.com> wrote in message
news:1141011981.987128.18370@e56g2000cwe.googlegroups.com...
> Hi,
>
> I built a Ten-Tec 1054 kit and I don't seem to be able to pick up any
> stations. I've rechecked all the parts and they are all in the right
> place and oriented correctly. I get a lot of static, but nothing that
> even sounds like a signal. I live in Chicago. Are there a lot of
> stations that can be picked up from here? I'm using a 6 foot antenna.
> Any suggestions?

A simple sanity check is to check the AM band.

1552. +7dB from BFO to diode ring mixer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-27 07:33:04 UTC
From: aadu.adok@gmail.com
Message-ID: <1141025584.002935.174890@t39g2000cwt.googlegroups.com>
Source record: 13403

hello,

can someone please explain me, what does it mean that DBM diode ring
mixer expects +7dB from BFO?

I do understand that from BFO comes out some peak-to-peak voltage (2.2
volts for example).
But how does it scale to +7dB?

thanks

1553. Re: +7dB from BFO to diode ring mixer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-27 09:59:23 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1141034363.277170.286850@i40g2000cwc.googlegroups.com>
Source record: 13404

hi.
it's not dB, it's dBm and it's a measure of power. the diode mixer has
a finite input resistance (read also impedance). as such a voltage
applied to its input causes power to be generated and consumed there. 0
dBm is defined to be 1mW of power into 50 ohms. 7dBm equates to 5mW of
power into a load of 50 ohms. this amounts to 500mV RMS, or
approximately 1.5 volts PTP across 50 ohms.
so you have to produce 5 mW of power to drive a regular DBM . there are
also special ones requiring up to 50 mW or more for proper performance.
Hope it helps:
Saandy 4Z5KS

aadu.adok@gmail.com wrote:
> hello,
>
> can someone please explain me, what does it mean that DBM diode ring
> mixer expects +7dB from BFO?
>
> I do understand that from BFO comes out some peak-to-peak voltage (2.2
> volts for example).
> But how does it scale to +7dB?
>
> thanks

1554. Re: A really basic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-27 10:21:04 UTC
From: steve carey <scarey@tds.net>
Message-ID: <4402cdfa$1_2@newspeer2.tds.net>
Source record: 13405

what could you possibly be operating has a 30% power factor
"clifto" <clifto@gmail.com> wrote in message
news:n6k2d3-u2q.ln1@remote.clifto.com...
>A bit off topic, as it has to do with house wiring. But how does power
>factor
> affect dissipation in the conductors? I'm wondering, for example, if a
> 1500
> watt capacity and a 30% power factor would overload #14 wire.
>
> --
> All relevant people are pertinent.
> All rude people are impertinent.
> Therefore, no rude people are relevant.
> -- Solomon W. Golomb

1555. Re: +7dB from BFO to diode ring mixer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-27 10:32:56 UTC
From: aadu.adok@gmail.com
Message-ID: <1141036376.797213.62500@e56g2000cwe.googlegroups.com>
Source record: 13406

hi Saandy,

I was not aware of the '0 dBm is defined to be 1mW of power into 50
ohms' part.
Rest of calculations were perfrectly understood ;)

thank you for your assistance!

1556. Re: Ten-Tec 1054 Shortwave Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-27 14:05:27 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1141049127.758407.212160@j33g2000cwa.googlegroups.com>
Source record: 13407

dave_meade@yahoo.com wrote:
> Hi,
>
> I built a Ten-Tec 1054 kit and I don't seem to be able to pick up any
> stations. I've rechecked all the parts and they are all in the right
> place and oriented correctly. I get a lot of static, but nothing that
> even sounds like a signal. I live in Chicago. Are there a lot of
> stations that can be picked up from here? I'm using a 6 foot antenna.
> Any suggestions?

Does the regeneration control let you turn the "whooshing" on and off? The most sensitive position is where the whooshing is just starting, but generally after you find a station you tweak the regen control for best audio.

If you have a frequency counter you ought to be able to stick the probe near the antenna jack when the "whooshing" is happening and check the oscillator/detector frequency to see if it's in the right band and that the tuning knob makes it move.

The 49M SW band (5.7-6.1 MHz roughly) should have many big-power broadcasters in the evenings your local time. Several religious broadcasters, Radio Haiti, Radio China, Radio Taiwan, Radio Netherlands, BBC, etc. Propogation has been pretty poor lately and signals on the higher frequencies (say 9MHz and above) are not booming in like normal, but still there's a few powerhouse broadcasters that you ought to be able to hear during the day.

Ham bands aren't as crowded as they used to be, unless it's a contest weekend. 6 feet of wire on a regen might be marginal. But I'd expect you to pick up a couple of 40M CW signals most evenings as well as the SW broadcasters on the 41M band (7.1-7.4 MHz roughly).

Tim.

1557. Re: A really basic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-27 17:07:53 UTC
From: Lew <lew_jean@bellsouth.net>
Message-ID: <GiGMf.34436$UD1.4459@bignews2.bellsouth.net>
Source record: 13408

To figure out your current draw:
Amps = Watts (in Kw) X 1000/(voltage X 1.732 X Pf)
Thats a very low power factor, what are you running?

Lew

"steve carey" <scarey@tds.net> wrote in message
news:4402cdfa$1_2@newspeer2.tds.net...
> what could you possibly be operating has a 30% power factor
> "clifto" <clifto@gmail.com> wrote in message
> news:n6k2d3-u2q.ln1@remote.clifto.com...
>>A bit off topic, as it has to do with house wiring. But how does power
>>factor
>> affect dissipation in the conductors? I'm wondering, for example, if a
>> 1500
>> watt capacity and a 30% power factor would overload #14 wire.
>>
>> --
>> All relevant people are pertinent.
>> All rude people are impertinent.
>> Therefore, no rude people are relevant.
>> -- Solomon W. Golomb
>
>

1558. Re: +7dB from BFO to diode ring mixer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-27 17:16:37 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <P-KdnXqaip9yrp7ZnZ2dnUVZ_s-dnZ2d@web-ster.com>
Source record: 13409

aadu.adok@gmail.com wrote:

> hi Saandy,
>
> I was not aware of the '0 dBm is defined to be 1mW of power into 50
> ohms' part.
> Rest of calculations were perfrectly understood ;)
>
> thank you for your assistance!
>
There are various dBx measures of real signal characteristics. The most common ones that I know of are dBm (dB over 1mW), dBV (dB over 1V, presumably ignoring impedance and therefore really just a fancy-pants amplitude measure) and dBc (dB under carrier, very important stuff to measure phase noise in an oscillator or transmitter).

Presumably you could define the 'x' in dBx to be anything -- if you were married many times, for instance, dBxmil would be a measure of the number of ex mothers-in-law you have in the room with you, but I'm not sure if that should be 10 log (N) or 20 log (N).

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

1559. Re: +7dB from BFO to diode ring mixer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-27 17:50:35 UTC
From: lawrence@hummer.not-here.net
Message-ID: <87oe0sr8r8.fsf@hummer.i-did-not-set--mail-host-address--so-shoot-me>
Source record: 13410

Tim Wescott <tim@seemywebsite.com> writes:

> Presumably you could define the 'x' in dBx to be anything -- if you
> were married many times, for instance, dBxmil would be a measure of
> the number of ex mothers-in-law you have in the room with you, but I'm
> not sure if that should be 10 log (N) or 20 log (N).
>

Well, since the primary charactersitic of mothers-in-law is their
volume, it should be 30 log HIHI

--
73 de N1GAK/XE2
echo 'lawrence@abaluon.abaom' | sed s/aba/c/g

1560. Re: 4CX250B vs Gi7B families...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-27 18:43:34 UTC
From: Risto Tiilikainen <risto.NON.tiilikainen@luukku.comMUNIST.invalid>
Message-ID: <44034774$0$7482$39db0f71@news.song.fi>
Source record: 13411

MarkAren wrote:

>Hi Guys,
>
>I am contemplating building a 144MHz power amp and looking at various
>options. The obvious solution is a pair of push pull 4CX250Bs.
>
>It appears that the Gi7B and family of Triodes can provide an equally
>capable solution. They appear to be much easier to cool, by something
>like an Axial Papst Fan (instead of a Snail Blower). The other obvious
>advantage is not having to deal with Screen voltage, regulation and
>protection. The triodes also look much easier and cheaper to mount
>(given the grounded grid). Finally, it seems because of the very low
>inter-electrode capacitances, it is quite easy to parallel the Triodes
>up as required (even at 432MHz).
>
>So what is the down side for using these Triodes ?
>
>Comments and observations appreciated as usual.
>
>Regards,
>
>Mark.
>
>
>
Hi

Look also following link
http://www.burle.com/cgi-bin/byteserver.pl/pdf/8121.pdf

I am using 3pcs of those 8121 in parallel in my HF linear.
My linear is class AB1 passive grid type.
I feed drive to a small 50 ohm dummy load and from this dummy is a tight
RF connection to the grids.
Drive need for 3 parallel tubes is QRP level. Only some watts.
8121 is designed for side airflow cooling.
I made myself a common socket for 3 tubes from a piece of transparent
mica plate.
I made smal holes in 3 circulars and installed single female connectors
from my junk box to the holes.
The connectors stand on the surface of mica. Only pins are going through
mica
Tubes will sit nicely and firm in these connectors
Plate connector is just a simple round aluminium belt around the plate ring.

73, Risto OH2BT

1561. Re: +7dB from BFO to diode ring mixer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-27 19:52:25 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <tNKdnVR7tpfqxZ7ZRVnytQ@pipex.net>
Source record: 13412

> There are various dBx measures of real signal characteristics. The most
> common ones that I know of are dBm (dB over 1mW), dBV (dB over 1V,
> presumably ignoring impedance and therefore really just a fancy-pants
> amplitude measure) and dBc (dB under carrier, very important stuff to
> measure phase noise in an oscillator or transmitter).
==========

RF power limitations (power into antenna) for the UK amateur radio
licences are expressed in dBW 26 dBW equals 400 Watts
15 dBW equals 32 Watts etc .

Frank GM0CSZ / KN6WH

1562. Re: Ten-Tec 1054 Shortwave Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-27 21:10:44 UTC
From: "dave_meade@yahoo.com" <dave_meade@yahoo.com>
Message-ID: <1141074644.712905.40950@z34g2000cwc.googlegroups.com>
Source record: 13413

Hi,

The regeneration control doesn't seem to do anything when I turn it.
Can I check the frequency near the antenna jack with an oscilloscope?
I'm used to digital electronics and this is the first r/f project I've
worked on.

Tim Shoppa wrote:
> Does the regeneration control let you turn the "whooshing" on and off?
> The most sensitive position is where the whooshing is just starting,
> but generally after you find a station you tweak the regen control for
> best audio.
>
> If you have a frequency counter you ought to be able to stick the probe
> near the antenna jack when the "whooshing" is happening and check the
> oscillator/detector frequency to see if it's in the right band and that
> the tuning knob makes it move.
>
> The 49M SW band (5.7-6.1 MHz roughly) should have many big-power
> broadcasters in the evenings your local time. Several religious
> broadcasters, Radio Haiti, Radio China, Radio Taiwan, Radio
> Netherlands, BBC, etc. Propogation has been pretty poor lately and
> signals on the higher frequencies (say 9MHz and above) are not booming
> in like normal, but still there's a few powerhouse broadcasters that
> you ought to be able to hear during the day.
>
> Ham bands aren't as crowded as they used to be, unless it's a contest
> weekend. 6 feet of wire on a regen might be marginal. But I'd expect
> you to pick up a couple of 40M CW signals most evenings as well as the
> SW broadcasters on the 41M band (7.1-7.4 MHz roughly).
>
> Tim.

1563. Re: Ten-Tec 1054 Shortwave Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-27 22:14:29 UTC
From: - exray - <exray@coqui.net>
Message-ID: <1206ue27tho2faa@corp.supernews.com>
Source record: 13415

dave_meade@yahoo.com wrote:
> Hi,
>
> The regeneration control doesn't seem to do anything when I turn it.
> Can I check the frequency near the antenna jack with an oscilloscope?
> I'm used to digital electronics and this is the first r/f project I've
> worked on.

If its regenerating you can hear it on a radio placed nearby.

-Bill

1564. Re: Alice Cooper joins Philly's #1 Classic Rock Station for Nights

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-28 00:13:29 UTC
From: amdx <amdx@worldnet.att.net>
Message-ID: <59a71$4403963c$45011502$12429@KNOLOGY.NET>
Source record: 13416

<info@wmgk.com> wrote in message
news:44036c65$9$14378$6d36acad@titian.nntpserver.com...
> Alice Cooper joins Philadelphia's #1 Classic Rock Station WMGK for Nights
> - Cooper will meet fans at Chickie's & Pete's from 1pm to 3pm on Thursday
>
> Philadelphia, PA, February 27, 2006 -Legendary rocker, Alice Cooper joins
Philadelphia's #1 Classic Rock Station WMGK,
> beginning Thursday, March 2, 2006. His show, "Nights with Alice Cooper"
will air weeknights from 10:00 pm - 2:00 am.
>
> The program showcases Classic Rock, Alice's personal stories about his
life as a rock icon, as well as interviews and
> special segments like the "OffBEAT News" with his counterpart, Mistress
Kitty.
>
> "Having Alice Cooper join Philadelphia's #1 Classic Rock Station, WMGK is
a perfect fit," says program director Cruze.
> "His attitude, the great rock and roll stories along with the music he
plays is an awesome way to round out our air-staff.
>
> "We are thrilled to have Alice join the MGK lineup -from Alice's Closet
Classics to listener calls to his weekly interviews
> with classic rock artists, night time in Philly will never be the same,"
adds John Fullam, VP/Market Manager - Greater Media/Philadelphia.
>
> Fans of Alice Cooper will have a chance to welcome him to Philadelphia
from Thursday from 1:00pm to 3:00pm on
> Chickie's & Pete's in South Philadelphia. The address is 1526 Packer
Avenue, Philadelphia, PA.

Listen live online at http://www.wmgk.com/

1565. Re: Impedence mismatch into FET preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-28 01:57:37 UTC
From: fmmck@aol.com
Message-ID: <fmmck-2702062057370001@ac91ea0d.ipt.aol.com>
Source record: 13417

In article <dtrtt8$s5n$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>, "Samuel Hunt" <shunt010@hotmail.com> wrote:

> Am I correct in thinking that if there is an impedance mismatch (say the
> input circuit was tuned into a 50 ohm load, then was finally presented with
> say a 105 ohm load), then the preamp's noise figure would increase and the
> FET would start to become artificially noisy?
>
> Then if the FET was pushed into overload by an adjacent strong signal, the
> noise would then start to reduce.
>
>
> I have this odd situation on a repeater, and I can only put it down to
> mis-tuned cavities. I've never come across it before though, where the
> repeater actually IMPROVES in sensitivity when the transmitter keys up
> (?!?!), so I would like to know what's going on before I fix it.

Sam-

There may be some measurable increase in a preamp's noise output, but a 2 to 1 mismatch will probably not cause such a serious degradation in its noise figure.

Perhaps I misunderstand you. When the noise reduces due to overload, that is NOT the same as an improvement in sensitivity. That is commonly refered to as desensitization (desense). An amplifier's gain is reduced to zero when it is in saturation (or oscillating).

Inadequate or mistuned cavities can cause desense. It can also be caused by poor shielding, often from poor co-axial cable. You might benefit if you switched to double-shielded cable. Also look for poorly attached connectors.

73, Fred, K4DII

1566. Re: FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-28 03:25:12 UTC
From: jmiles@gmail.com
Message-ID: <1141097112.718754.135310@u72g2000cwu.googlegroups.com>
Source record: 13418
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

Winfield Hill wrote:
> http://www.qsl.net/ke5fx/ Thanks for the heads-up. That's v1.05,
> the Jan 14, 2006 edition? Which program was updated to fix the
> phase-noise problem? The pn program's source code says 13-Jul-05,
> although the pn.cpp file date is 12-Feb-06.

The broken version was 1.05, but I "slipstreamed" the fix into the same release without updating the version stamp.

I really should've bumped the version number when I posted the fix, but it'll be pretty obvious if your copy has the bug. It will appear to work, but it will always start the PN sweep at 0 Hz rather than the minimum offset you specify. That makes the sweep take much longer than necessary, and the trace information at offsets below 10x the analyzer's minimum RBW is meaningless.

Basically, if you downloaded it around the time I posted all those auctions, you probably got the bad version.

> I like the part where you get the "number of 1000-ns intervals
> since 1-Jan-1601 UTC" :-)

Heh... I've wondered where Microsoft came up with that; it might have come from the Unix world. There's a lot of weirdness in the calendar business, and it's usually less arbitrary, but more obscure, than it seems at first.

-- john, KE5FX

1567. Re: Dead bugs!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-28 03:40:56 UTC
From: Frank <Frank.23xmxl@news.radiobanter.com>
Message-ID: <Frank.23xmxl@news.radiobanter.com>
Source record: 13421

The fact is I get voices of mostly an unknown origin that are surely not broadcast, and radio fragments, often they call me by name, first and last. I have a site with some examples http://franksumption.tripod.com/ on top of the home page is a list of links, these are pages in the site, most of which are voices received on my ghost box, some intelligible, some not so much. On the schematics page I put up photos of this fisrt dead bug board I made. The object of that being to reduce the number of baords in the system so I can use a smaller cabinet.

What you say about scientists/skeptics is untrue. There is absolutely overwhelming evidence out there that would probably stand up in a any court for the existence iof paranormal activity, and it's almost completely ignored by the scientists, and lied about by the skeptics/debunkers. It's been my experince the scientists that say they would love to see the evidence are looking with thier eyes closed! Then claim they didn't see anything.

Not only does this system let me record voices of what seem to be spirits, they will speak direct while the system is running via the monitor speaker.

This point of this whole discussion, I guess, was hoping for interested parties, and sharing information.

The system I've made is a method of developing a random audio source, which the spirits/entities use to form their voices. It works like white noise used for EVP, but the result is much louder, and clearer voices. White noise, and my system work on some kind of random energy principal. It's the randomness that seems to allow spirits to get their voices across.

Frank

Mike Young Wrote:
> "Alfred Green" nu8i@cox.net wrote in message
> news:JxRLf.6026$z82.3895@fed1read07...
> My experience with the scientific and skeptic community is that they
> would
> actually _LOVE_ to see some real evidence of the paranormal, rather
> than
> debunking it as a matter of principle.
>
> There is some of that, but woe betides those who let their beliefs
> cloud
> interpretation of the results. Skeptics and scientists remain first

> and
> foremost skeptics and scientists. It would have to be very compelling
> to
> even pass a first scrutiny.

--
Frank

1568. Re: FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-28 03:50:29 UTC
From: jmiles@gmail.com
Message-ID: <1141096857.443148.118900@u72g2000cwu.googlegroups.com>
Source record: 13419
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

Winfield Hill wrote:
> http://www.qsl.net/ke5fx/ Thanks for the heads-up. That's v1.05,
> the Jan 14, 2006 edition? Which program was updated to fix the
> phase-noise problem? The pn program's source code says 13-Jul-05,
> although the pn.cpp file date is 12-Feb-06.

The broken version was 1.05, but I "slipstreamed" the fix into the same release without updating the version stamp.

I really should've bumped the version number when I posted the fix, but it'll be pretty obvious if your copy has the bug. It will appear to work, but it will always start the PN sweep at 0 Hz rather than the minimum offset you specify. That makes the sweep take much longer than necessary, and the trace information at offsets below 10x the analyzer's minimum RBW is meaningless.

Basically, if you downloaded it around the time I posted all those auctions, you probably got the bad version.

> I like the part where you get the "number of 1000-ns intervals
> since 1-Jan-1601 UTC" :-)

Heh... I've wondered where Microsoft came up with that; it might have come from the Unix world. There's a lot of weirdness in the calendar business, and it's usually less arbitrary, but more obscure, than it seems at first.

-- john, KE5FX

1569. Re: Need H antenna help

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-28 05:55:27 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <4403E5C3.4030509@invalid.invalid>
Source record: 13420

Jim wrote:
> I need help in building an H type of tracking antenna for use around 166-167
> mhz. This is for wildlife tracking. I have a couple of handheld 3 element
> Yagi's that I built using YagiCad to do the math, and they work well, but
> they are big and clunky.
>
> There are times when I am willing to sacrifice the good f/b ratio of the
> yagi for convienience, for instance when working in brushy woods. I have
> used an H for tracking at 151 mhz, but of course, I can't use that one for
> 166.

I would think you could simply scale all the dimensions of your 151MHz H
down by a factor of 151/166.

For example, if the "crosspieces" of the 151MHz H are 39" long.. then
for a 166MHz H, they'd be 39*(151/166) = 35.5" long. You'd likewise
scale the distance between the two crosspieces.

Depending on how it's assembled (and whether you still need it for 151)
you could just cut down the 151 antenna.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

1570. Need H antenna help

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-28 08:45:17 UTC
From: Jim <jbasi@cfw.com>
Message-ID: <465a6$440371dd$d80c3ad5$3334@NAXS.COM>
Source record: 13414

I need help in building an H type of tracking antenna for use around 166-167 mhz. This is for wildlife tracking. I have a couple of handheld 3 element Yagi's that I built using YagiCad to do the math, and they work well, but they are big and clunky.

There are times when I am willing to sacrifice the good f/b ratio of the yagi for convienience, for instance when working in brushy woods. I have used an H for tracking at 151 mhz, but of course, I can't use that one for 166.

My tracking receiver, a King portable, has a BNC connector, so I can interchange antennas quickly.

Is there a web page or magazine article that can help me design my H, or can someone share their experience?

Thanks
Jim

1571. Re: Impedence mismatch into FET preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-28 11:16:15 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <du1bdv$678$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13422

Hi Fred and all....

It's not due to desense. When I tune the cavities up properly, there's about 10dB noise figure on the preamp (reciever is 0.8uV sensitive). Then when it transmits, the noise figure doesn't change.

When I tune the notches off slightly so the preamp starts to desense, the noise figure goes down as it starts to desense, then the noise figure goes up high as it pushes the preamp well into desense.

I'm going to retune the cavities for minimum SWR at some point anyway (we've got problems with the frequency and a deaf repeater is actually quite a good idea at the moment, so it's not an issue), and see what that does.

I just wanted to try to understand why it's doing this, does the FET noise figure increase with an impedance mismatch on the input, and so pushing it into desense reduces the amount of noise on the preamp?

It's just an interesting thing I've never come across before and would be interested to find out a technical explanation to it all.

Thanks all,

Sam

"Fred McKenzie" <fmmck@aol.com> wrote in message
news:fmmck-2702062057370001@ac91ea0d.ipt.aol.com...
> In article <dtrtt8$s5n$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>, "Samuel
> Hunt" <shunt010@hotmail.com> wrote:
>
>> Am I correct in thinking that if there is an impedance mismatch (say the
>> input circuit was tuned into a 50 ohm load, then was finally presented
>> with
>> say a 105 ohm load), then the preamp's noise figure would increase and
>> the
>> FET would start to become artificially noisy?
>>
>> Then if the FET was pushed into overload by an adjacent strong signal,
>> the
>> noise would then start to reduce.
>>
>>
>> I have this odd situation on a repeater, and I can only put it down to
>> mis-tuned cavities. I've never come across it before though, where the
>> repeater actually IMPROVES in sensitivity when the transmitter keys up
>> (?!?!), so I would like to know what's going on before I fix it.
>

> Sam-
>
> There may be some measurable increase in a preamp's noise output, but a 2
> to 1 mismatch will probably not cause such a serious degradation in its
> noise figure.
>
> Perhaps I misunderstand you. When the noise reduces due to overload, that
> is NOT the same as an improvement in sensitivity. That is commonly
> refered to as desensitization (desense). An amplifier's gain is reduced
> to zero when it is in saturation (or oscillating).
>
> Inadequate or mistuned cavities can cause desense. It can also be caused
> by poor shielding, often from poor co-axial cable. You might benefit if
> you switched to double-shielded cable. Also look for poorly attached
> connectors.
>
> 73, Fred, K4DII

1572. New Ham Radio Group

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-28 11:31:59 UTC
From: wy0ohg143 <wy0ohg143@invalid.net>
Message-ID: <QwWMf.5661$N75.2170@fe02.usenetserver.com>
Source record: 13423

Ham Radio Unplugged

This new group is dedicated to all aspects of Amateur Radio.
This group supports free and uncensored speech, so a moderator will not be jumping in all the time telling people how to conduct themselves as is done in other groups. Of course no ongoing "flame wars" or spam will be allowed, but if you have something to say about Ham Radio then go ahead and say it.

All are Welcome Here.

http://groups.yahoo.com/group/Ham-Radio-Unpluged/

1573. Re: New Ham Radio Group

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-28 14:15:50 UTC
From: "John L. Sielke" <w2agnNOSPAM@w2agn.net>
Message-ID: <ArKdnYfRurOTxpnZnZ2dnUVZ_v6dnZ2d@comcast.com>
Source record: 13424

wy0ohg143 wrote:
> Ham Radio Unplugged
>
> This new group is dedicated to all aspects of Amateur Radio.
> This group supports free and uncensored speech, so a moderator will not be
> jumping in all the time telling people how to conduct themselves as is done
> in other groups. Of course no ongoing "flame wars" or spam will be allowed,
> but if you have something to say about Ham Radio then go ahead and say it.
>
> All are Welcome Here.
>
> http://groups.yahoo.com/group/Ham-Radio-Unpluged/
>
>
>
Great idea, but please, to avoid looking like an idiot, spell "unplugged" correctly!

John W2AGN

1574. Re: New Ham Radio Group

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-28 15:15:44 UTC
From: wy0ohg143 <wy0ohg143@invalid.net>
Message-ID: <fPZMf.10814$x17.7104@fe60.usenetserver.com>
Source record: 13425

It was a typo I swear! lol
Thanks for pointing this out to me.

Here is the corrected address.
http://groups.yahoo.com/group/Ham-Radio-Unplugged/

"John L. Sielke" <w2agnNOSPAM@w2agn.net> wrote in message
news:ArKdnYfRurOTxpnZnZ2dnUVZ_v6dnZ2d@comcast.com...
> wy0ohg143 wrote:
>> Ham Radio Unplugged
>>
>> This new group is dedicated to all aspects of Amateur Radio.
>> This group supports free and uncensored speech, so a moderator will not
>> be
>> jumping in all the time telling people how to conduct themselves as is
>> done
>> in other groups. Of course no ongoing "flame wars" or spam will be
>> allowed,
>> but if you have something to say about Ham Radio then go ahead and say
>> it.
>>
>> All are Welcome Here.
>>
>> http://groups.yahoo.com/group/Ham-Radio-Unpluged/
>>
>>
>>
> Great idea, but please, to avoid looking like an idiot, spell "unplugged"
> correctly!
>
> John W2AGN

1575. Re: Impedence mismatch into FET preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-28 17:49:34 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1141148974.021206.227170@p10g2000cwp.googlegroups.com>
Source record: 13426

It's important to realize that the optimum match for noise is in general NOT the same as matching the impedance seen at the FET input. The optimum impedance to match to is the FET's input-referred noise voltage at the frequency of interest, divided by the corresponding noise current. RF transistor data sheets will often list the impedance for optimum noise figure. The difference between impedance matching for maximum power transfer and lowest noise figure can be significant. This is true with both bipolars and FETs.

Not sure what's going on with the change in noise as the repeater keys up. Any chance some of the xmt RF is being rectified and changing the bias on the preamp?

Cheers,
Tom

1576. FA-Custom 4CX1000 modular linear amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-28 18:25:40 UTC
From: AL7Y <powell@mosquitonet.com>
Message-ID: <1141151140.596866.56070@p10g2000cwp.googlegroups.com>
Source record: 13427

Here is a one of a kind modular 4CX1000 linear amplifier that will run the legal limit with 15 watts drive. Uses motor driven tank circuit components, with digital readouts on a modular control panel, operated with toggle switches.

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5873424808&rd=1&ss...

1577. Re: Impedence mismatch into FET preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-02-28 20:51:12 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <4qd902d9dsqknnicfnfsq22i64apu62uv1@4ax.com>
Source record: 13428

On Sun, 26 Feb 2006 09:54:49 +0000 (UTC), "Samuel Hunt"
<shunt010@hotmail.com> wrote:

>Hi all.
>
>I have a FET preamp, tuned by means of two fixed capacitors and one variable
>inductor that serves as an impedance transformer.
>
>Am I correct in thinking that if there is an impedance mismatch (say the
>input circuit was tuned into a 50 ohm load, then was finally presented with
>say a 105 ohm load), then the preamp's noise figure would increase and the
>FET would start to become artificially noisy?
>
>Then if the FET was pushed into overload by an adjacent strong signal, the
>noise would then start to reduce.
>
>
>I have this odd situation on a repeater, and I can only put it down to
>mis-tuned cavities. I've never come across it before though, where the
>repeater actually IMPROVES in sensitivity when the transmitter keys up
>(?!?!), so I would like to know what's going on before I fix it.
>
>
>Thanks all,
>
>Sam
>M1FJB
>

How are you measuring this? How do you hook the signal generator to
the system when you check the sensitivity with and with out the
transmitter on?

It sounds like a mis tuned duplexer but by what you are saying it is
hard to tell what you are seeing.

73
Gary K4FMX

1578. test

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-01 00:16:15 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <jJ5Nf.802157$_o.668780@attbi_s71>
Source record: 13429

<http.www.arrl.org>

1579. Re: A really basic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-01 08:44:54 UTC
From: clifto <clifto@gmail.com>
Message-ID: <6h3gd3-8u8.ln1@remote.clifto.com>
Source record: 13430

Lew wrote:
> To figure out your current draw:
> Amps = Watts (in Kw) X 1000/(voltage X 1.732 X Pf)
> Thats a very low power factor, what are you running?

I'm not. It's just one of those silly theory questions my mind cooks up from time to time. Answering the silly questions helps me understand the non-silly ones.

--
All relevant people are pertinent.
All rude people are impertinent.
Therefore, no rude people are relevant.
-- Solomon W. Golomb

1580. mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-01 09:03:21 UTC
From: aadu.adok@gmail.com
Message-ID: <1141203801.248815.322050@e56g2000cwe.googlegroups.com>
Source record: 13431

hello,

I'm building my first reciver. I can't choose what kind of mixers
should I use. I have read that diode ring mixers are far superior
compared to dual gate mosfet mixers.

Is this true for both - first (RF / VFO) and second (IF / BFO) stages?
Or is there any real difference at all?

thanks

1581. Re: A really basic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-01 09:50:17 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <jgra021pa68av58lvu6nu7bfsnblaqbut1@4ax.com>
Source record: 13432

On Mon, 27 Feb 2006 12:07:53 -0500, "Lew" <lew_jean@bellsouth.net>
wrote:

>To figure out your current draw:
>Amps = Watts (in Kw) X 1000/(voltage X 1.732 X Pf)
>Thats a very low power factor, what are you running?

That would be the current per phase into a three phase load.

Paul

1582. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-01 10:52:41 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2006.03.01.10.52.40.980490@oceanfree.net>
Source record: 13433

On Wed, 01 Mar 2006 01:03:21 -0800, aadu.adok wrote:

> hello,
>
> I'm building my first reciver. I can't choose what kind of mixers should I
> use. I have read that diode ring mixers are far superior compared to dual
> gate mosfet mixers.

It depends on what you mean by superior. The mosfet mixer has gain
and usually has a lower noise figure. The diode mixer will have superior
strong signal handling (higher IP3), but will have about 7dB loss. The
diode mixer needs more local oscillator power. They both make excellent
mixers if they are applied properly.

To get the most bang for your buck, it is hard to beat a ring of
1N914 or 1N4148 diodes at a few cent each. The ferrite 'cups' from
scrap Toko IF transformers can be used as cores for the trifilar
wound transformers.

There are a few other options you should consider. High level IC mixers
like the AD831 are worth considering. Switching mixers using MOSFETs
are capable of very high performance. Search for info about the N6NWP
front-end from QST Feb 93 or the H-mode mixer used in several recent
homebrew designs.
http://uk.groups.yahoo.com/group/picastar/
http://xoomer.virgilio.it/sergiocartoceti/article_7.htm
http://www.warc.org.uk/cdg2000/introduction.htm

If you build the receive mixer as a separate module,
you can try them all and pick the one that works best for you.

73, Ed. EI9GQ.

--
Linux 2.6.15
Remove 'X' to reply by e-mail.
Yes, my username really is: nospam

1583. NEW WEBSITE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-01 11:55:40 UTC
From: 2greedy <vk4fact@bigpond.com>
Message-ID: <0ZfNf.18767$yK1.13640@news-server.bigpond.net.au>
Source record: 13434

Have a look i think you will like it.
http://www.vkcorner.com or http://www.vkcorner.com/forum/index.php

1584. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-01 12:03:01 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <Z3gNf.1$Aj6.0@fe04.lga>
Source record: 13435

<aadu.adok@gmail.com> wrote in message
news:1141203801.248815.322050@e56g2000cwe.googlegroups.com...
> hello,
>
> I'm building my first reciver. I can't choose what kind of mixers
> should I use. I have read that diode ring mixers are far superior
> compared to dual gate mosfet mixers.

"Superior" is something of a loaded word. Whether a particular parts is superior or not depends on your design intent.

Probably the most popular mixer for simple HF receivers is the NE/SA 602/612. This is an active mixer. It has amazing amounts of gain, such that an RF stage is almost never needed. It is extremely simple to deploy, and it requires almost no power. Thus, in portable/battery powered circuits it is almost always the mixer of choice. It has an absolutely horrid TOIP. There are other, mostly older, even poorer, active mixers, but the 602 is a very versatile part, so it seems to show up everywhere.

At the other extreme are diode ring mixers. These can have stellar TOIPs, but take a lot of oscillator power. Further, they need lots of RF as well, so some sort of RF stage is needed. All this adds up to a need for plenty of power. The best diode ring mixers will use matched, Schottky diodes, but good old 1N4148's do work, and quite well. Many designs use packaged diode ring mixers such as those from Minicircuits.

The dual gate MOSFET falls kind of in the middle. It doesn't have the horrible TOIP problems of an active mixer, but it's not as power hungry as a diode ring. The MOSFET seems to have fallen out of favor lately, in spite of being a "balanced" sort of solution. I suspect most designers are either going for power consumption or performance, and really, quite good performance can be had with the active mixers with careful design.

> Is this true for both - first (RF / VFO) and second (IF / BFO) stages?
> Or is there any real difference at all?

Careful design can manage what the second mixer sees more easily than than the first. This can make the dynamic range problems of an active mixer less of an issue. For that reason, balanced designs that tend toward management of power consumption will sometimes use a diode ring for the first IF and an active mixer for the second. But a superhet bent all out on power conservation will almost always use a pair of 602's. Designers who want to avoid ICs for whatever reason will use a pair of diode rings.

I shouldn't sound so down on the 602. A WELL-DESIGNED 602 receiver can easily match the performance of the $1000 class rice box rigs. It cannot,

however, come close to the performance of an equally well-designed diode ring rig. But the diode ring rig will probably consume three times the power, meaning three times the heat to deal with and the associated oscillator compensation issues.

So you picks your poison.

..

1585. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-01 14:04:13 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <CRhNf.4$Uy4.1@fe05.lga>
Source record: 13436

<Allison-nospam@nouce.bellatlantic.net> wrote in message
news:jr5b029tn5nkkdlpplatj3glp3sphbgbem@4ax.com...

> If you building a radio that runs on
> batteries then using more power may be bad.

Also keep in mind that more power=more heat

If you are building a simple analog VFO, temperature compensating the VFO
can be the most tedious part of designing a receiver. Depending on how
tight your box is, the difference in heat could be an issue. Keeping the
oscillator stable while delivering more power also means more buffer stages
between the VFO and the mixer.

If you are designing with a DDS, of course, all this is pretty much moot.
With a typical DDS chip and a packaged clock oscillator at some high
frequency, the oscillator will draw so much current and generate so much
heat that what the mixer requires is invisible.

..

1586. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-01 22:33:27 UTC
From: Chris Jones <lugnut808@nospam.yahoo.com>
Message-ID: <120c89ob3mp2u39@corp.supernews.com>
Source record: 13437

aadu.adok@gmail.com wrote:

> hello,
>
> I'm building my first reciver. I can't choose what kind of mixers
> should I use. I have read that diode ring mixers are far superior
> compared to dual gate mosfet mixers.
>
> Is this true for both - first (RF / VFO) and second (IF / BFO) stages?
> Or is there any real difference at all?
>
> thanks

I have recently bought the books from the RSGB which contain all of the Technical Topics columns from RadCom for the last couple of decades or so. It seems like they really like making mixers from FST3125 Bus Switch ICs, and up to perhaps 50MHz these are supposed to be much better than the average diode ring mixer. They call the configuration "H-mode" and the guy who I believe is supposed to have come up with the idea is called Colin Horrabin. Here is an article randomly selected from a google search:
http://
xoomer.virgilio.it/sergiocartoceti/pdf%20files/IK4AUY_%20qex_07-2004.pdf
I don't like the way they generate the LO signals with XOR gates but apart from that it is interesting.

Chris

1587. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-02 03:31:17 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <cDtNf.42911$X7.28547@bignews7.bellsouth.net>
Source record: 13438

Allison-nospam@nouce.bellatlantic.net wrote:
> On Wed, 1 Mar 2006 09:04:13 -0500, "xpyttl"
> <xpyttl_NOSPAM@earthling.net> wrote:
>
>
>><Allison-nospam@nouce.bellatlantic.net> wrote in message
>>news:jr5b029tn5nkkdlpplatj3glp3sphbgbem@4ax.com...
>>
>>
>>>If you building a radio that runs on
>>>batteries then using more power may be bad.
>>
>>Also keep in mind that more power=more heat
>>
>>If you are building a simple analog VFO, temperature compensating the VFO
>>can be the most tedious part of designing a receiver. Depending on how
>>tight your box is, the difference in heat could be an issue. Keeping the
>>oscillator stable while delivering more power also means more buffer stages
>>between the VFO and the mixer.
>
>
> Actually even without the heat issue you still have to compensate it
> or ambient variation will drive you nuts. Granted a few transistors
> delivering 5-10mW of power is not a great heat generator when you add
> all the surrouding possible sources.
>
>
>>If you are designing with a DDS, of course, all this is pretty much moot.
>>With a typical DDS chip and a packaged clock oscillator at some high
>>frequency, the oscillator will draw so much current and generate so much
>>heat that what the mixer requires is invisible.
>
>
> Since buffereing the VFO is a good idea anyway the buffer and later
> statges can supply the 5 or more milliwatts needed for level 7 rings.
> Since those stages can be "remote" the small heat generated is not a
> big issue. However between a VFO, buffer and a buffer to deliver
> power you can be hitting 30-50mA and on batteries thats a bigger
> issue.
>
> If you using DDS, likely power is not an issue and the combined DDS
> and control plus display could be surprizingly high or at least has to
> be managed.
>

> However you approach the problem a little though to the overall
> effects are important. After all what usually seperates a great
> reciever from a passable one is attention to the little details.
>
>
> Allison
Some of the modern DDS chips require little power. Analog Devices
has some DDS chips that draw less than 50ma at 5v, I think there is
one that takes but 15ma. True a vfo will draw even less, but we
are not talking about gobs of power in any case.

DDS vfo's have very low phase noise, and the ones that can be clocked
at 100mhz or higher can deliver quite low spurs. The AD9954 series
have a 14 bit DAC and can make a very good HFO for a single conversion
receiver with no PLL loop filter needed to clean up the output.

1588. Re: +7dB from BFO to diode ring mixer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-02 03:35:34 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <eHtNf.42918$X7.21415@bignews7.bellsouth.net>
Source record: 13439

Highland Ham wrote:
>> There are various dBx measures of real signal characteristics. The
>> most common ones that I know of are dBm (dB over 1mW), dBV (dB over
>> 1V, presumably ignoring impedance and therefore really just a
>> fancy-pants amplitude measure) and dBc (dB under carrier, very
>> important stuff to measure phase noise in an oscillator or transmitter).
>
> ====================================
> RF power limitations (power into antenna) for the UK amateur radio
> licences are expressed in dBW 26 dBW equals 400 Watts
> 15 dBW equals 32 Watts etc .
>
> Frank GM0CSZ / KN6WH
Why not just say Watts or milliwatts and be done with it?
Why drag dB into it?

BTW dB means deci-bell, why not use a WHOLE BELL.
(and the brass figligee with bronze oak-leaf palm to anybody
who can guess who this unit of measure was named after!)

1589. Re: +7dB from BFO to diode ring mixer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-02 03:55:23 UTC
From: cs_posting@hotmail.com
Message-ID: <1141271723.460469.261400@v46g2000cwv.googlegroups.com>
Source record: 13440

Ken Scharf wrote:

> > RF power limitations (power into antenna) for the UK amateur radio
> > licences are expressed in dBW 26 dBW equals 400 Watts
> > 15 dBW equals 32 Watts etc .

> Why not just say Watts or milliwatts and be done with it?
> Why drag dB into it?

Maybe because dB gives you a better idea of the limited communications benefit to be achieved by turning up the power?

It also simplifies factoring in antenna gain, feadline loss, etc...

Really this is same idea as using a sliderule - take the log of everything and then gain/loss becomes simple addition subtraction.

One downside though is that when playing around with a signal generator calibrated in dB, you can fail to appreciate the degree to which you may be turning up the power to something under test, at least until you get used to the numbers.

1590. Looking for a GPS disciplined frequency synthesizer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-02 05:51:12 UTC
From: philvdm@sbcglobal.net
Message-ID: <1141278672.747780.34580@u72g2000cwu.googlegroups.com>
Source record: 13441
Cross-posted to: sci.electronics.equipment,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I am looking for a freqency synthesizer in the band 100Mhz-1Ghz very
stable to test quipments over a long period.

I heard that now there are some who are GPS disciplined?
How does it work ?
Which is one do you recommend ?

Phil.

1591. Re: Looking for a GPS disciplined frequency synthesizer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-02 08:17:34 UTC
From: Roberto IZ5FCY <iz5fcy_NOSPAMPLEASE_@arrl.net>
Message-ID: <18vxcu6xgme6j$.11um6y47pjmv0.dlg@40tude.net>
Source record: 13442

Hi Phil,
I suggest you to search in TAPR Web site for an synthetyzer kit, as you are looking for, for about 100US$..

--
73's de IZ5FCY Roberto

1592. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-02 08:33:22 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1141288402.846500.176900@p10g2000cwp.googlegroups.com>
Source record: 13443

...a long explanation, but a needed one.
One of the most important characteristics of a mixer is its ability to handle large input signals without overloading. if overloaded by an unwanted signal, chances are that it will not be able to handle the weak signal you're interested in. the physical mechanism involved is not important, except for the fact that increasing current through an active mixer (re FET or transistor, or the injection power in a DBM tend to alleviate the problem in some measure. the nois figure of both is more or less equal and adequate in the HF range. the main advantage of the dual gate MOSFET is that it needs much less power from the local oscillator and can save you an amplifying stage. Not really crushing, but sometimes neeedful.
If you're talking about a simple first receive I'd go with the MOSFET mixer. there are very good examples in the hand book. iI used them for years with success and still using them in one form or another.
the problem is much less severe at the second mixer, because the IF filters tend to defend it from large unwanted signals and the amplituse variations are also smaller due to AGC action.
Soooo , KISS (keep it simple, stupid!!!), a very good adage. goood luck with your first.
Saandy 4Z5KS

1593. Re: FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-02 10:50:02 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <du6ikq$j52$2@puck.litech.org>
Source record: 13444
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

In rec.radio.amateur.homebrew jmiles@gmail.com wrote:
> Winfield Hill wrote:

>> I like the part where you get the "number of 1000-ns intervals
>> since 1-Jan-1601 UTC" :-)

> Heh... I've wondered where Microsoft came up with that; it might have
> come from the Unix world. There's a lot of weirdness in the calendar
> business, and it's usually less arbitrary, but more obscure, than it
> seems at first.

Do you take into account the days lost in the change from the Julian
to the Gregorian calendars?

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

1594. Re: Looking for a GPS disciplined frequency synthesizer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-02 13:37:53 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1141306673.534053.320780@j33g2000cwa.googlegroups.com>
Source record: 13445
Cross-posted to: sci.electronics.equipment,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

philvdm@sbcglobal.net wrote:
> I am looking for a freqency synthesizer in the band 100Mhz-1Ghz very
> stable to test quipments over a long period.
>
> I heard that now there are some who are GPS disciplined?
> How does it work ?
> Which is one do you recommend ?

Before you get too far into spending money, you have to decide what stability and sidebands/phase noise you can deal with. Also, if you need traceability you have to start with that in your spec.

You can easily sink $500K into a fancy new synthesizer and end up with something that's not good enough for a lot of truly stringent applications.

Alternatively a surplus Z3801A (a few hundred $) + a surplus HP synth (a few hundred $ more) chained to the Z3801A's 10MHz out might do what you need.

The GPS lock gets you to the part per billion in precision. If the few PPM level is good enough you might not need GPS, the OCXO or TCXO that are typically built into the synths of the 80's and 90's may be good enough with a little calibration check-up.

Tim.

1595. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-02 14:20:07 UTC
From: Risto Tiilikainen <risto.NON.tiilikainen@luukku.comMUNIST.invalid>
Message-ID: <4406fe2e$0$25339$39db0f71@news.song.fi>
Source record: 13446

aadu.adok@gmail.com wrote:

>hello,
>
>I'm building my first reciver. I can't choose what kind of mixers
>should I use. I have read that diode ring mixers are far superior
>compared to dual gate mosfet mixers.
>
>Is this true for both - first (RF / VFO) and second (IF / BFO) stages?
>Or is there any real difference at all?
>
>thanks
>
>
>
Hi

If you think the situation in short waves today:
Russian and their previous satellite country jammers are quiet
Local broadcast is nearly completely in FM
Propaganda is no more effective to transmit in short waves
Commercial data is practically in Internet. and in satellites
Marine communication is in satellites.

All this means less cross modulation products in first mixer than some
sixteen years ago
Atmospheric noise in sw is much higher than the noise of modern front
and mixer stage
Advantage of diode mixer is marginal
IGFET mixer is simple and advanced solution for DIY project.
IGFET mixer doesn't need any front amplifier stage.
A selective band filter in front of mixer is superior to broadband
transformers
I am using loosely coupled 3 stage band filter tuned by variable triplet
air capacitor
3 coils for low end of sw and 3 coils for upper end of sw.
Coils are DC selected by small reed relays
KISS

If you are constructing premixer then I recommend DBM to keep birdies
in low levell
For IF/BFO my recommendation is also DBM or "semi DBM"
For both of those DBM solutions I recommend you to Google a nice
advanced component MC1496.
In some Motorola handbooks and ARRL handbooks are examples for MC1496 as

DBM, product detector and balanced modulator.
It is mostly used in single ended circuits in RF meaning and balanced
for DC

73, Risto OH2BT

1596. Re: +7dB from BFO to diode ring mixer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-02 15:17:05 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <QLmdnWeW1un9kZrZRVnytQ@pipex.net>
Source record: 13447

Ken Scharf wrote:
> Highland Ham wrote:
>>> There are various dBx measures of real signal characteristics. The
>>> most common ones that I know of are dBm (dB over 1mW), dBV (dB over
>>> 1V, presumably ignoring impedance and therefore really just a
>>> fancy-pants amplitude measure) and dBc (dB under carrier, very
>>> important stuff to measure phase noise in an oscillator or transmitter).
>> ====================================
>> RF power limitations (power into antenna) for the UK amateur radio
>> licences are expressed in dBW 26 dBW equals 400 Watts
>> 15 dBW equals 32 Watts etc .
>>
>> Frank GM0CSZ / KN6WH
> Why not just say Watts or milliwatts and be done with it?
> Why drag dB into it?
====================================
Just ask the UK licensing authority

Frank GM0CSZ / KN6WH

1597. Re: +7dB from BFO to diode ring mixer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-02 17:16:15 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <44072840.AAB9E0FE@earthlink.net>
Source record: 13298

Ken Scharf wrote:
>
> BTW dB means deci-bell, why not use a WHOLE BELL.
> (and the brass figligee with bronze oak-leaf palm to anybody
> who can guess who this unit of measure was named after!)

Well, it wasn't named after Watson, so that only leaves one man...

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

1598. Re: +7dB from BFO to diode ring mixer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-02 17:20:46 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <du79hebni2@engnntp2.cig.mot.com>
Source record: 13300

Actually I believe the unit is a Bel. Yes 10 dB is one Bel. For some
reason nobody uses the bel...or for that matter the milibel, microbel,
kilobel or megabel... Decibels are just about right all the time.
Perhaps it is because no one knows for whom it tolls...

Perhaps "no one knows for whom the decibel decides." (:-)

Also, we Engineers love to talk in dB... You can just add and subtract
them...

Then there is the practical aspects. If you have 0.1 watts going into an
step attenuator set to 32dB, how much is coming out? However, starting with
20dBm into this attenuator yields an easy -12dBm.
You get used to it, just like you got used to power in watts.

73, Steve, K9DCI

PS: dBm is dB _relative to_ (not over) one mw. (-123 dBm is "under" a mw)

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:eHtNf.42918$X7.21415@bignews7.bellsouth.net...
> Highland Ham wrote:
> >> There are various dBx measures of real signal characteristics. The
> >> most common ones that I know of are dBm (dB over 1mW), dBV (dB over
> >> 1V, presumably ignoring impedance and therefore really just a
> >> fancy-pants amplitude measure) and dBc (dB under carrier, very
> >> important stuff to measure phase noise in an oscillator or
transmitter).
> >
> > ====================================
> > RF power limitations (power into antenna) for the UK amateur radio
> > licences are expressed in dBW 26 dBW equals 400 Watts
> > 15 dBW equals 32 Watts etc .
> >
> > Frank GM0CSZ / KN6WH
> Why not just say Watts or milliwatts and be done with it?
> Why drag dB into it?
>
> BTW dB means deci-bell, why not use a WHOLE BELL.
> (and the brass figligee with bronze oak-leaf palm to anybody
> who can guess who this unit of measure was named after!)

1599. Re: +7dB from BFO to diode ring mixer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-02 17:38:50 UTC
From: - exray - <exray@coqui.net>
Message-ID: <120ebd7ekhs6113@corp.supernews.com>
Source record: 13299

Michael A. Terrell wrote:

> Ken Scharf wrote:
>
>>BTW dB means deci-bell, why not use a WHOLE BELL.
>>(and the brass figligee with bronze oak-leaf palm to anybody
>>who can guess who this unit of measure was named after!)
>
>
>
> Well, it wasn't named after Watson, so that only leaves one man...
>
>

Art Bell?

-ex

1600. Re: Impedence mismatch into FET preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-02 18:09:14 UTC
From: fmmck@aol.com
Message-ID: <fmmck-0203061309140001@ac85728a.ipt.aol.com>
Source record: 13301

In article <du1bdv$678$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>, "Samuel Hunt" <shunt010@hotmail.com> wrote:

> It's not due to desense. When I tune the cavities up properly, there's about
> 10dB noise figure on the preamp (reciever is 0.8uV sensitive). Then when it
> transmits, the noise figure doesn't change.

Sam-

What frequency is this repeater on? A sensitivity of 0.8 uV doesn't sound very good to me. On 146 MHz I'd expect that without any external preamp, although it might be good at 1200 MHz???

73, Fred, K4DII

1601. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-02 19:33:23 UTC
From: dplatt@radagast.org
Message-ID: <120ei436906hh32@corp.supernews.com>
Source record: 13302

In article <4406fe2e$0$25339$39db0f71@news.song.fi>,
Risto Tiilikainen <risto.NON.tiilikainen@luukku.comMUNIST.invalid> wrote:

>If you think the situation in short waves today:
>Russian and their previous satellite country jammers are quiet
>Local broadcast is nearly completely in FM
>Propaganda is no more effective to transmit in short waves
>Commercial data is practically in Internet. and in satellites
>Marine communication is in satellites.
>
>All this means less cross modulation products in first mixer than some
>sixteen years ago
>Atmospheric noise in sw is much higher than the noise of modern front
>and mixer stage
>Advantage of diode mixer is marginal

There's a good discussion about the advantages and disadvantages of various mixer types, for different applications, in "Experimental Methods in Radio Frequency Design", a book I strongly recommend.

As others have pointed out, there's no one right solution. Even for use in what seems like a simple, constant application (e.g. a CW receiver for the 40-meter band), the choice of which is more appropriate can swing one way or the other based on how you intend to use the receiver.

As one example given in EMiRFD, if you're looking for a simple receiver which is intended for QRP operation on backpacking trips, then the low power consumption, and the mixer gain of an active mixer such as a Gilbert cell (e.g. SA602 and similar) can make this the ideal. Out in the woods, the RF levels will be low, and the relatively low IP3 of these sorts of mixers isn't likely to be a problem.

On the other hand, if you're planning to build a receiver which may have to operate in a strong-adjacent-signal environment (e.g. for Field Day or other contesting), then you may want to favor a diode-ring double-balanced mixer operating at a high LO-injection level, and the devil take the power consumption :-)

The FET-switch mixers seem to be a really nice alternative, and although they've gotten relatively little visibility in amateur-radio applications they've become very popular in commercial use (e.g. cell-phone handsets). I haven't yet had a chance to play with these myself but they look like fun!

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1602. Re: FA: Some nice HP gear from my home lab....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-02 19:37:26 UTC
From: jmiles@gmail.com
Message-ID: <1141328246.352114.251520@j33g2000cwa.googlegroups.com>
Source record: 13303
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

That's not my code, I should (hastily) note -- it's a comment that
reflects the fact that the Win32 GetFileTime() API returns the number
of 100-ns intervals since 1-Jan-1601, and I multiply the result by 10
to obtain a 64-bit microsecond counter. I'd assume that MS is doing
the right thing.

1603. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-02 20:37:10 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <e2le025mgm1kn1h3e0ucs38bapmvrsrsaa@4ax.com>
Source record: 13304

On Wed, 1 Mar 2006 07:03:01 -0500, "xpyttl"
<xpyttl_NOSPAM@earthling.net> wrote:

>Probably the most popular mixer for simple HF receivers is the NE/SA
>602/612. This is an active mixer. It has amazing amounts of gain, such
>that an RF stage is almost never needed. It is extremely simple to deploy,
>and it requires almost no power. Thus, in portable/battery powered circuits
>it is almost always the mixer of choice. It has an absolutely horrid TOIP.
>There are other, mostly older, even poorer, active mixers, but the 602 is a
>very versatile part, so it seems to show up everywhere.

If you really intend to use mixers with such horrible IP3 figures, I would suggest using a very selective front end ahead of it. For a single band CW receiver some fixed tuned stages might suffice, but otherwise some tunable input filters should be used.

In Europe, there are several high power broadcasters starting at 7100 kHz, which would easily overload the 40 m receiver. Assuming loaded Q of 100 and the front end tuned to 7000 kHz, the -3 dB bandwidth would be +/-35 kHz from the centre frequency with some usable attenuation at 7100 kHz.

Using fixed tuned octave wide front end filters with the 602 is just asking for trouble.

Paul OH3LWR

1604. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-02 21:48:16 UTC
From: Chris Jones <lugnut808@nospam.yahoo.com>
Message-ID: <120eq0qda0uoucc@corp.supernews.com>
Source record: 13305

Chris Jones wrote:

> aadu.adok@gmail.com wrote:
>
>> hello,
>>
>> I'm building my first reciver. I can't choose what kind of mixers
>> should I use. I have read that diode ring mixers are far superior
>> compared to dual gate mosfet mixers.
>>
>> Is this true for both - first (RF / VFO) and second (IF / BFO) stages?
>> Or is there any real difference at all?
>>
>> thanks
>
> I have recently bought the books from the RSGB which contain all of the
> Technical Topics columns from RadCom for the last couple of decades or so.
> It seems like they really like making mixers from FST3125 Bus Switch ICs,
> and up to perhaps 50MHz these are supposed to be much better than the
> average diode ring mixer. They call the configuration "H-mode" and the
> guy who I believe is supposed to have come up with the idea is called
> Colin
> Horrabin. Here is an article randomly selected from a google search:
> http://
> xoomer.virgilio.it/sergiocartoceti/pdf%20files/IK4AUY_%20qex_07-2004.pdf
> I don't like the way they generate the LO signals with XOR gates but apart
> from that it is interesting.
>
> Chris

One thing I forgot: I7SWX I believe is responsible for many of the H-mode
mixer circuits in the the Technical Topics column.
http://www.qsl.net/i7swx/index.htm

Chris

1605. New program CONNECT

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 02:02:27 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <du883j$l54$1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13306

There have been recent discussions about the interchangeability of coaxial plugs and sockets, their dimensions and their impedances. But, as usual, the magnitude of the electrical effects is never mentioned. Without numbers nobody knows what they are talking about.

A coaxial connector is a very short length of transmission line but at UHF and microwave frequencies it is an appreciable fraction of a wavelength. When 1/4-wavelength long it has the property of transforming a mismatched termination to another value. When 1/2-wavelength long the input impedance repeats the value of the termination. The SWR on an adjacent line is a function of the input impedance.

What is the effect of using a 75-ohm coaxial connector in a 50-ohm system?

What is the effect of using a length of transmission line of 50-ohms nominal impedance when it is actually 53 ohms?

With mixed values of line Zo at what high frequency does the SWR and reflection loss become excessive?

Program CONNECT.exe calculates the effect of inserting a length of line in a system of different Zo. Differences can be large or small. Line length can be physically very short.

For a given frequency, mismatched Zo's and a velocity factor, input impedance, SWR, reflection coefficient and reflection loss are calculated. (Reflection loss is sometime known as mismatch loss).

The program is worded in terms of a connector mismatch but has other applications.

Input data can be varied in small increments from the keyboard while observing the effects on calculated values. Download CONNECT from website below. It has entertainment, educationaal and practical value. Amuse yourselves!

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

1606. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 02:11:16 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <cBNNf.66$UC.57@fe02.lga>
Source record: 13307

"Paul Keinanen" <keinanen@sci.fi> wrote in message
news:e2le025mgm1kn1h3e0ucs38bapmvrsrsaa@4ax.com...

> In Europe, there are several high power broadcasters starting at 7100
> kHz, which would easily overload the 40 m receiver. Assuming loaded Q

OH2BT's comments about how much better things have gotten in Europe really made me say hmmmm.... I only recently heard actual measurements, rather than whining, and things are pretty horrible today - they must have been intolerable decades ago.

Tight front ends and careful control of levels obviously are important with any mixer, but especially something with the gain of a 602. Nevertheless, I doubt there are many cases where a 602 would be even useable in Europe, let alone "good".

..

1607. Re: Crystals wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 03:36:04 UTC
From: cs_posting@hotmail.com
Message-ID: <1141356964.167265.268160@v46g2000cwv.googlegroups.com>
Source record: 13308

Ken Scharf wrote:

> Since all the frequencies in question are harmonics of 3.5mhz
> (except 3.3mhz) you could use a PLL to generate them by phase
> locking a vco to the harmonics of a 3.5mhz oscillator.
> Use a divide by N circuit to divide down the vco output to
> 3.5mhz and have a phase detector compare the output of the
> divider with the 3.5mhz oscillator. Properly shielded,
> this pll would be as clean as the crystal oscillator.

Since they are low order odd harmonics, is a PLL even necessary, or could a square wave sort of buffer, a filter at the desired frequency and then an amplifier tuned there do the trick?

With a PLL, you will still need to switch components for each frequency range - generally you get less than an octave (factor of two in frequency) out of a single VCO, but changing the inductor and/or fixed capacitors for each band shouldn't be too hard.

1608. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 07:29:30 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <03nf02daf2hltbjiq2n1ivncjik6ah3vvr@4ax.com>
Source record: 13309

On Thu, 2 Mar 2006 21:11:16 -0500, "xpyttl"
<xpyttl_NOSPAM@earthling.net> wrote:

>"Paul Keinanen" <keinanen@sci.fi> wrote in message
>news:e2le025mgm1kn1h3e0ucs38bapmvrsrsaa@4ax.com...
>
>> In Europe, there are several high power broadcasters starting at 7100
>> kHz, which would easily overload the 40 m receiver. Assuming loaded Q
>
>OH2BT's comments about how much better things have gotten in Europe really
>made me say hmmmm.... I only recently heard actual measurements, rather
>than whining, and things are pretty horrible today - they must have been
>intolerable decades ago.

We had problems keeping Radio Moscow out of _audio_ equipment :-).

Guitar amplifiers were quite problematic with long cables and a top
capacitance (the guitar and the player) at the end, bringing quite
large RF voltages into the audio stages, causing rectification in
unfiltered input stages.

Paul OH3LWR

1609. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 07:29:31 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <oknf02djhngirlhq89aqtgsopsho78shsf@4ax.com>
Source record: 13310

On Thu, 02 Mar 2006 22:06:10 GMT,
Allison-nospam@nouce.bellatlantic.net wrote:

>The lowly SA/NE602 isn't so bad considering the power it uses and the
>15-17db of gain it offers. Like any power power mixer care in use is
>important.

Certainly usable for receiving strong international broadcasters, in
which case the input signals can be sufficiently attenuated, however,
trying to receive any weak signals with such an attenuator at the
front end, is not very productive :-)

Paul OH3LWR

1610. Re: +7dB from BFO to diode ring mixer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 09:40:51 UTC
From: "owen.home" <owen.home@ntlworld.com>
Message-ID: <DaUNf.53679$Fy4.43327@newsfe4-win.ntli.net>
Source record: 13311

"Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
news:du79hebni2@engnntp2.cig.mot.com...
> Actually I believe the unit is a Bel. Yes 10 dB is one Bel. For some
> reason nobody uses the bel...or for that matter the milibel, microbel,

This may interest some.
I believe, although can't find the actual reference now, that the decibel
was used rather than the bel from the start because the numbers were very
close to those of the m.s.c. used before it.
The following are from "Signal Training" Vol 2, Part 3 (Line telephony and
Telegraphy) 1936, HMSO, an Army training manual:-

" The decibel.- The standard unit for measurement of telephone transmission
in this country [UK] is now the decibel, which is one-tenth of a bel, and
has superseded the mile of standard cable."

and

"1 decibel = 1.084 m.s.c. = 1.151 decineper"
"1 m.s.c. = 0.9221 decibel = 1.0616 necineper"

and just to explain the decineper

"In the majority of European countries the unit of measurement for telephone
transmission is the decineper, which is one-tenth of one Neper. The unit is
named after Napier, the originator of Naperian or natural logarithms, i.e.
logarithms to the base e. The neper is a measurement of the total
attenuation and can be defined as the natural logarithm of the ratio of the
currents at two different points in a network or apparatus, or as half the
natural logarithm of the ratio of powers at two different points in a
network or apparatus."

The book doesn't show an upper case B for Bel in db so that must have come
later but it does use the plural as in "30dbs" so should we be using dbuVs
etc? I've used an artificial cable box for 75 ohm video but have never seen
a reference m.s.c., originally an actual lump of cable but later a series of
switched networks.

John
MW1FGQ

1611. Re: Impedence mismatch into FET preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 12:00:53 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <du9b5l$b2j$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13312

I think that basically is the problem.

Because the impedance is not set up properly on the cavities (the pass plunger is a little off the correct impedance), then the preamp is operating with a non-optimal impedance.

Desensing the preamp reduces the gain so reduces the amount of noise the preamp is generating.

Sounds like a little lesson well learnt to me. Now on to returning the cavities up properly.....;

Thanks all,

Sam

"K7ITM" <k7itm@msn.com> wrote in message news:1141148974.021206.227170@p10g2000cwp.googlegroups.com...
> It's important to realize that the optimum match for noise is in
> general NOT the same as matching the impedance seen at the FET input.
> The optimum impedance to match to is the FET's input-referred noise
> voltage at the frequency of interest, divided by the corresponding
> noise current. RF transistor data sheets will often list the impedance
> for optimum noise figure. The difference between impedance matching
> for maximum power transfer and lowest noise figure can be significant.
> This is true with both bipolars and FETs.
>
> Not sure what's going on with the change in noise as the repeater keys
> up. Any chance some of the xmt RF is being rectified and changing the
> bias on the preamp?
>
> Cheers,
> Tom
>

1612. Re: now here sumfing funee

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 13:25:53 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <msfg021e67grt30qub1hhisramgc3it7e4@4ax.com>
Source record: 13313
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Mike G4KFK wrote:

>Each electron pushes and shoves it's neighbours backwards and forwards
>along the wire - so although the net motion of any given electron in
>nil

Or very nearly so.

As it's Friday afternoon, I'm sure the Complete Buffoon (CB) who seems to speak Copious Bowlocks (CB) when it comes to matters scientific, will be along soon with his Chattering Balderdash (CB), in which he might explain a previous posting maintaining that electrons 'whizz about'.

On the other hand, he just might carry on ranting about the Copper's Boot (CB) and trying to make a Casus Bellum (CB) out of it. After all, Cui Bono (CB), as one might ask?

Cheery Bye (CB).

from
Aero Spike

1613. Re: now here sumfing funee

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 13:48:25 UTC
From: 2K1LO <gareth.paley@gmail.com>
Message-ID: <du9hf9fai1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13314
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Spike" <Aero.Spike@S&T.invalid> wrote in message
news:msfg021e67grt30qub1hhisramgc3it7e4@4ax.com...
>
> Mike G4KFK wrote:
>
>>Each electron pushes and shoves it's neighbours backwards and forwards
>>along the wire - so although the net motion of any given electron in
>>nil
>
> Or very nearly so.

Quite, - there is some wobble and skin effect.

With DC there is movement in one direction however the speed is in the
orders of inches per hour so that's pretty much nil too IMHO ;-)

--
73de2K1LO
--
---
eQSO Gateway at
http://www.g1lvn.org.uk

1614. Re: Ten-Tec 1054 Shortwave Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 15:30:14 UTC
From: "dave_meade@yahoo.com" <dave_meade@yahoo.com>
Message-ID: <1141399814.152776.61220@z34g2000cwc.googlegroups.com>
Source record: 13315

I discovered that the solder connections on a capacitor were bad.
Apparently, the solder iron overheated the contacts on the board
causing plastic on the board to melt onto the contact. I made a
temporary fix by soldering the capacitor directly to the resistors it
is connecting. I'm picking up radio stations now, but there is a loud
squeal. Maybe the timer is oscillating? Is there anything that can
clean melted plastic off a contact?

1615. Radio Hammery - The Weekly FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 15:44:32 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1141400672.399979.311270@i39g2000cwa.googlegroups.com>
Source record: 13316
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

What is Ham Radio?

It is becoming increasingly difficult to fly the flag for
decency and for civilised behaviour in Radio Hammery. Even
the Usenet newsgroups dedicated to the cause have degenerated
into a hotbed of abusive onslaughts by those who ought to know better.
However, there still exists the fundamental basis on which Ham
Radio is based, and that will never die. This FAQ ("What Is
Ham Radio?") will be regularly published and will not be
shouted or bullied down. It is important that those of a
technical bent, who are the natural seed-corn of Radio Hammery
and who gravitate towards us to be the real novitiate, can
still find us, (and know that we are still here), their fellows.

-----ooooo-----

Please remember that this FAQ is a _POSITIVE EXHORTATION_
to you to exert yourselves to join our fraternity! (If you find
otherwise, then perhaps you are already classing yourself in the
mediocre groups of those who are criticised in the FAQ and from
whom we _MUST_ dissociate? If so - it's never too late for
a re-taxonomisation on your part - there's nothing elitist about
us, and we welcome all those who are prepared to put themselves
out in order to join our ranks!)

-----ooooo-----
So,.....What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one

else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

1616. Re: Radio Hammery - The Weekly FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 16:01:37 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <44086860$0$17159$dbd41001@news.wanadoo.nl>
Source record: 13317
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Plod's Conscience wrote:
> What is Ham Radio?

Beanies been let out for the weekend again, I see :)

1617. Re: Radio Hammery - The Weekly FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 16:04:57 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <JOZNf.56875$494.53446@newsfe2-gui.ntli.net>
Source record: 13318
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"know code" <know_code@wanadoo.nl> wrote in message
news:44086860$0$17159$dbd41001@news.wanadoo.nl...
> Plod's Conscience wrote:
>> What is Ham Radio?
>
>
> Beanies been let out for the weekend again, I see :)

At least we only have to suffer him at weekends. Maybe you should follow his example.

Brian

1618. Re: Radio Hammery - The Weekly FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 16:11:51 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1141402311.747132.47960@t39g2000cwt.googlegroups.com>
Source record: 13319
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

know code wrote:
> Beanies been let out for the weekend again, I see :)

I thought he was supposed to be watching his blood pressure?

73
Mike G4KFK
www.g4kfk.co.uk
Phone 07970 795422
Fax 07092 151344

1619. Re: Radio Hammery - The Weekly FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 16:20:05 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <44086cb4$0$17159$dbd41001@news.wanadoo.nl>
Source record: 13320
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Brian Reay wrote:
> "know code" <know_code@wanadoo.nl> wrote in message
> news:44086860$0$17159$dbd41001@news.wanadoo.nl...
>> Plod's Conscience wrote:
>>> What is Ham Radio?
>>
>> Beanies been let out for the weekend again, I see :)
>
> At least we only have to suffer him at weekends. Maybe you should follow his
> example.

TWO words Brian.... Glass houses!

1620. Re: Radio Hammery - The Weekly FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 16:43:45 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1141404225.547875.178820@i40g2000cwc.googlegroups.com>
Source record: 13321
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

know code wrote:
> Brian Reay wrote:
> > "know code" <know_code@wanadoo.nl> wrote in message
> > news:44086860$0$17159$dbd41001@news.wanadoo.nl...
> >> Plod's Conscience wrote:
> >>> What is Ham Radio?
> >>
> >> Beanies been let out for the weekend again, I see :)
> >
> > At least we only have to suffer him at weekends. Maybe you should follow his
> > example.
>
> TWO words Brian.... Glass houses!

i guess you have a weekend pass from the nut house

hmm the man that shot gets those I wonder...

1621. Re: Ten-Tec 1054 Shortwave Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 16:46:27 UTC
From: "dave_meade@yahoo.com" <dave_meade@yahoo.com>
Message-ID: <1141404387.479156.131570@p10g2000cwp.googlegroups.com>
Source record: 13322

I think the board has some kind of plastic or polymer coating because the heat from the solder iron causes the clear coating to melt. I'll hook the circuit up to an o-scope to see what part is oscillating. I suspect something is miswired, I'll let you guys know later in the week how it went. Thanks for everyone's help!

1622. Re: Radio Hammery - The Weekly FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 16:51:45 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <4408741f$0$17159$dbd41001@news.wanadoo.nl>
Source record: 13323
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

an_old_friend wrote:
> know code wrote:
>> Brian Reay wrote:
>>> "know code" <know_code@wanadoo.nl> wrote in message
>>> news:44086860$0$17159$dbd41001@news.wanadoo.nl...
>>>> Plod's Conscience wrote:
>>>>> What is Ham Radio?
>>>> Beanies been let out for the weekend again, I see :)
>>> At least we only have to suffer him at weekends. Maybe you should follow his
>>> example.
>> TWO words Brian.... Glass houses!
>
> i guess you have a weekend pass from the nut house
>
> hmm the man that shot gets those I wonder...

Care to try that again? And try to make some sense this time!

1623. Re: Radio Hammery - The Weekly FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 16:53:23 UTC
From: "Old Nicks Deputy (first class)" <tox@tox.comco>
Message-ID: <7w_Nf.54649$Fy4.33852@newsfe4-win.ntli.net>
Source record: 13324
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"know code" <know_code@wanadoo.nl> wrote in message
news:44086cb4$0$17159$dbd41001@news.wanadoo.nl...
> Brian Reay wrote:
>> "know code" <know_code@wanadoo.nl> wrote in message
>> news:44086860$0$17159$dbd41001@news.wanadoo.nl...

>
> TWO words Brian.... Glass houses!

Is that where you spent your National Service?

tox

1624. Re: Radio Hammery - The Weekly FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 16:57:35 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <4408757e$0$17159$dbd41001@news.wanadoo.nl>
Source record: 13325
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

```
Old Nicks Deputy (first class) wrote:
> "know code" <know_code@wanadoo.nl> wrote in message
> news:44086cb4$0$17159$dbd41001@news.wanadoo.nl...
>> Brian Reay wrote:
>>> "know code" <know_code@wanadoo.nl> wrote in message
>>> news:44086860$0$17159$dbd41001@news.wanadoo.nl...
>
>
>> TWO words Brian.... Glass houses!
>
> Is that where you spent your National Service?

National Service? I'm not *that* old :)
```

1625. Re: Radio Hammery - The Weekly FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 16:58:53 UTC
From: DieSea <DieSea.NoSpamPlease@ntlworldd.ccom>
Message-ID: <440875c7$0$5009$db0fefd9@news.zen.co.uk>
Source record: 13326
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Old Nicks Deputy (first class)" <tox@tox.comco> wrote in message
news:7w_Nf.54649$Fy4.33852@newsfe4-win.ntli.net...
>
> "know code" <know_code@wanadoo.nl> wrote in message
> news:44086cb4$0$17159$dbd41001@news.wanadoo.nl...
>> Brian Reay wrote:
>>> "know code" <know_code@wanadoo.nl> wrote in message
>>> news:44086860$0$17159$dbd41001@news.wanadoo.nl...
>
>
>>
>> TWO words Brian.... Glass houses!
>
> Is that where you spent your National Service?
>
> tox
>

Shepton or Colchester Tox

You'll be near Colchester this weekend methinks

Have they allowed you to escape from Yorkshire

Pity if they have

You and Nick could improve the place

Yorkshire that is

DieSea

1626. Re: Radio Hammery - The Weekly FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 17:29:15 UTC
From: "Old Nicks Deputy (first class)" <tox@tox.comco>
Message-ID: <L1%Nf.70651$K42.8227@newsfe7-win.ntli.net>
Source record: 13327
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"DieSea" <DieSea.NoSpamPlease@ntlworldd.ccom> wrote in message
news:440875c7$0$5009$db0fefd9@news.zen.co.uk...
>
>>
>
> Shepton or Colchester Tox
>
> You'll be near Colchester this weekend methinks

Indeed, DieSea. Although the weather looks iffy...Nick up to his usual
tricks with another rally
:-(

> Have they allowed you to escape from Yorkshire

Yes, until Tuesday, when I have a meeting in Morley, Bradford.

> Pity if they have
>
> You and Nick could improve the place
>
> Yorkshire that is

Nick seems to think a Hydrogen bomb would improve the place
significantly...and who am I to argue!

Regards
tox

1627. Re: Radio Hammery - The Weekly FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 17:42:43 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <du9uvc$7a7$1@newsg1.svr.pol.co.uk>
Source record: 13328
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Mike G4KFK" <mike@g4kfk.co.uk> wrote in message
news:1141402311.747132.47960@t39g2000cwt.googlegroups.com...
>
> know code wrote:
> > Beanies been let out for the weekend again, I see :)
>
> I thought he was supposed to be watching his blood pressure?

He is... that's why he probably does a cut and paste posting the same stuff
every weekend rather than post anything interesting. One is also beginning
to think either that or he has a newsgroup bot automatically posting his
mail for him and set for the weekend.

Graham
--
-.-. -... / .-. .- -.. .. ---

Radio is only a Hobby. Don't let it rule your life...

73/51 - Graham, 26-Golf Charlie-19

1628. Re: Radio Hammery - The Weekly FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 18:05:53 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <5A%Nf.70061$m13.23849@newsfe5-gui.ntli.net>
Source record: 13329
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Mike G4KFK" <mike@g4kfk.co.uk> wrote in message
news:1141402311.747132.47960@t39g2000cwt.googlegroups.com...
>
> I thought he was supposed to be watching his blood pressure?

Some doctors recommend a moderate amount of alcohol to reduce high blood pressure. Make it red wine and you can reduce your cholesterol at the same time ;-)

Of course, too much alcohol isn't a good thing, it can lead to long term brain damage and all sorts of mental problems.
--
73
Brian
www.g8osn.org.uk

1629. Re: Radio Hammery - The Weekly FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 20:06:52 UTC
From: class-a-licensee-pkearn-zBBpk@didnt-run-away-from-a-morse-test.es.eircom.com.net
Message-ID: <4408a1ca.5876710@news.iol.ie>
Source record: 13330
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Brian Reay" <see@website.invalid> wrote:

> At least we only have to suffer him at weekends. Maybe you should follow his
> example.

whereas with you its all week long...

tee hee

1630. Permeability of steel filled epoxy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-03 22:40:52 UTC
From: cs_posting@hotmail.com
Message-ID: <1141425652.682734.94300@e56g2000cwe.googlegroups.com>
Source record: 13331

Anyone have a guess as to the permeability of steel filled epoxy?

Was sort of wondering what would happen if one tried to make RF inductor or transformer (torroid, etc) cores out of the stuff...

with care, it can even reproduce threads, so tuneable slugs might be possible.

It's available as putty in tube form in many hardware stores, and as a castable liquid from industrial supply catalogs - though obviously if ordering something from a non-local supplier, it might as well be a proper core from Amidon.

(and yes, I may go ahead and try it... soon as I get my workbench set back up to the point where I could build something to measure the results)

1631. Re: Permeability of steel filled epoxy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-04 02:25:53 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <j4CdnVDoSbnwZJXZRVn-pQ@adelphia.com>
Source record: 13332

cs_posting@hotmail.com wrote:
> Anyone have a guess as to the permeability of steel filled epoxy?
>
> Was sort of wondering what would happen if one tried to make RF
> inductor or transformer (torroid, etc) cores out of the stuff...
>
> with care, it can even reproduce threads, so tuneable slugs might be
> possible.
>
> It's available as putty in tube form in many hardware stores, and as a
> castable liquid from industrial supply catalogs - though obviously if
> ordering something from a non-local supplier, it might as well be a
> proper core from Amidon.
>
> (and yes, I may go ahead and try it... soon as I get my workbench set
> back up to the point where I could build something to measure the
> results)
>
My guess (based on my attempts to make cores out of granulated ferrite
and epoxy) is that you will be doing well if you achieve a relative
permeability higher than 10. And that assumes that the iron is pure,
iron, or silicon iron, not steel.

1632. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-04 03:20:28 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <2F7Of.879$s8.113@bignews7.bellsouth.net>
Source record: 13333

> The FET-switch mixers seem to be a really nice alternative, and
> although they've gotten relatively little visibility in amateur-radio
> applications they've become very popular in commercial use (e.g.
> cell-phone handsets). I haven't yet had a chance to play with these
> myself but they look like fun!
>
There was an article in the ARRL HB (1995 and probably others)
about using an SD5000 quad mosfet as a mixer. I bought a few
of these transistors a few years ago (now where did I put them,
got lost in the last move!). They are supposed to make
a very good mixer. The only disadvantage was the circuit
required injection at twice the lo frequency as it used a jk flip
flop to develop the required 180 degree injection. I suppose
a balum could do the same thing. In any case the AD9954 DDS I am
thinking of using can clock to 400mhz and develop output to
160mhz, so getting up to 80mhz (for use with a 9mhz if) would still
be no problem.

1633. FA: Unbuilt Heath Scope Kit - Ends Saturday

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-04 04:12:20 UTC
From: Tom <tfarl@iowatelecom.net>
Message-ID: <Es8Of.3979$oL.3496@attbi_s71>
Source record: 13334
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Unbuilt Kit - 70's Vintage Heathkit Oscilloscope.

Complete - Original Box - Parts Inventoried - No Reserve.

Click on: http://tinyurl.com/mvygq

Ends Saturday Feb-22-06 16:07:24 PST
(Sunday Feb-23-06 00:07:24 UTC)

Many thanks es 73,
Tom N&#65533;JMY

1634. Re: Permeability of steel filled epoxy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-04 06:15:24 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <0sSdnd1G-vnmrZTZnZ2dnUVZ_vudnZ2d@web-ster.com>
Source record: 13335

cs_posting@hotmail.com wrote:

> Anyone have a guess as to the permeability of steel filled epoxy?
>
> Was sort of wondering what would happen if one tried to make RF
> inductor or transformer (torroid, etc) cores out of the stuff...
>
> with care, it can even reproduce threads, so tuneable slugs might be
> possible.
>
> It's available as putty in tube form in many hardware stores, and as a
> castable liquid from industrial supply catalogs - though obviously if
> ordering something from a non-local supplier, it might as well be a
> proper core from Amidon.
>
> (and yes, I may go ahead and try it... soon as I get my workbench set
> back up to the point where I could build something to measure the
> results)
>
I would expect that you would have problems with loss due to hysteresis
in the steel. A good big pile of rust may be better.

I wonder: if you had your Jr. Experimenter's Chemistry set and a pile of
iron filings, what would make the best core material?

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

1635. Re: Permeability of steel filled epoxy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-04 06:37:01 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <120idcg9lbo5pcc@corp.supernews.com>
Source record: 13336

Air (or epoxy -- doesn't matter as long as the relative permeability is 1) gaps between the particles will have a much greater impact on the characteristics than the steel itself. Compared to the steel itself, the material will have much lower permeability, much higher saturation flux density, and much lower hysteresis. I'll bet the repeatability will be pretty awful.

Roy Lewallen, W7EL

Tim Wescott wrote:
> cs_posting@hotmail.com wrote:
>
>> Anyone have a guess as to the permeability of steel filled epoxy?
>>
>> Was sort of wondering what would happen if one tried to make RF
>> inductor or transformer (torroid, etc) cores out of the stuff...
>>
>> with care, it can even reproduce threads, so tuneable slugs might be
>> possible.
>>
>> It's available as putty in tube form in many hardware stores, and as a
>> castable liquid from industrial supply catalogs - though obviously if
>> ordering something from a non-local supplier, it might as well be a
>> proper core from Amidon.
>>
>> (and yes, I may go ahead and try it... soon as I get my workbench set
>> back up to the point where I could build something to measure the
>> results)
>>
> I would expect that you would have problems with loss due to hysteresis
> in the steel. A good big pile of rust may be better.
>
> I wonder: if you had your Jr. Experimenter's Chemistry set and a pile of
> iron filings, what would make the best core material?
>

1636. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-04 10:05:16 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2006.03.04.10.05.15.919167@oceanfree.net>
Source record: 13337

On Fri, 03 Mar 2006 22:20:28 -0500, Ken Scharf wrote:

> There was an article in the ARRL HB (1995 and probably others) about using
> an SD5000 quad mosfet as a mixer.

Also see N6NWP's article from QST June 1993. And the
H-mode mixer by G3SBI in RadCom and various other RSGB
publications.

> I bought a few of these transistors a few years ago...
I see the SD5000 is still listed on Calogic's website
http://www.calogic.net/html/dmos.html Is the SD5000
still widely available? The search engines turn up a
lot of data but very few suppliers. Perhaps a ring of
discrete MOSFETs or a fast switch IC like the FST3125
might be a better choice.

73, Ed. EI9GQ.

--
Linux 2.6.15
Remove 'X' to reply by e-mail.
Yes, my username really is: nospam

1637. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-04 10:18:55 UTC
From: Risto Tiilikainen <risto.NON.tiilikainen@luukku.comMUNIST.invalid>
Message-ID: <440968a3$0$7478$39db0f71@news.song.fi>
Source record: 13338

Ken Scharf wrote:

>>The FET-switch mixers seem to be a really nice alternative, and
>>although they've gotten relatively little visibility in amateur-radio
>>applications they've become very popular in commercial use (e.g.
>>cell-phone handsets). I haven't yet had a chance to play with these
>>myself but they look like fun!
>>
>>
>>
>There was an article in the ARRL HB (1995 and probably others)
>about using an SD5000 quad mosfet as a mixer. I bought a few
>of these transistors a few years ago (now where did I put them,
>got lost in the last move!). They are supposed to make
>a very good mixer. The only disadvantage was the circuit
>required injection at twice the lo frequency as it used a jk flip
>flop to develop the required 180 degree injection. I suppose
>a balum could do the same thing. In any case the AD9954 DDS I am
>thinking of using can clock to 400mhz and develop output to
>160mhz, so getting up to 80mhz (for use with a 9mhz if) would still
>be no problem.
>
>
Hi !

At the same time Signetics included to the same fet family a double fet
SD6000
It was planned for front end applications
Single fets were done under type numbers SD305 and SD306
All three were N-channel enhancement types. Positive bias only.
I wonder whether Signetics still exists. Signetics was bought by Philips
company.

I use those fets successfully in one of my conventional type homebrew
tranceivers.
The first if is having a 10.7 MHz xtal filter. That is mixed down to
455 kHz either with 10.245 MHz or 11.155 MHz xtal
Sideband selection is done with the selection of mixing direction.
455 kHz is using Collins mechanical filter having very good shape factor
and special skirt for lower sideband use.

73, Risto OH2BT

1638. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-04 12:48:53 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <V0gOf.800979$x96.112881@attbi_s72>
Source record: 13339

> I see the SD5000 is still listed on Calogic's website
> http://www.calogic.net/html/dmos.html Is the SD5000
> still widely available? The search engines turn up a
> lot of data but very few suppliers. Perhaps a ring of
> discrete MOSFETs or a fast switch IC like the FST3125
> might be a better choice.
>
> 73, Ed. EI9GQ.

GM Ed. Certainly a better choice when it comes to conversion loss. I've built a half dozen SD5000 mixers and although at least one of them managed a measured +50 dBm Ip3, (G3SBI measured it not me!) I never managed to get the conversion loss below 9 dB and more often 10. Conversely, the 3125/ family readily does 4.8 dB conversion loss thanks to the very respectable Rds on. REALLY simplifies things in the front end department, to at least 30 MHz, with attention paid to the front end filters, you can get away without an RF amplifier.

Regards
W4ZCB

1639. Re: Radio Hammery - The Weekly FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-04 16:22:58 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1141489378.606562.278860@p10g2000cwp.googlegroups.com>
Source record: 13340
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Plod's Conscience wrote:
> What is Ham Radio?
>
> It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery. Even
> the Usenet newsgroups dedicated to the cause have degenerated
> into a hotbed of abusive onslaughts by those who ought to know better.
> However, there still exists the fundamental basis on which Ham
> Radio is based, and that will never die. This FAQ ("What Is
> Ham Radio?") will be regularly published and will not be
> shouted or bullied down. It is important that those of a
> technical bent, who are the natural seed-corn of Radio Hammery
> and who gravitate towards us to be the real novitiate, can
> still find us, (and know that we are still here), their fellows.
while you chould find another venue for your bile

1640. Biasing amps for linear service -- design question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-04 18:03:54 UTC
From: bill.meara@gmail.com
Message-ID: <1141495434.077634.71180@p10g2000cwp.googlegroups.com>
Source record: 13341

I've been looking at simple circuits used to bias solid state, common emitter, BJT amps for linear service. A very common technique is to use the voltage drop (.7 V) across a forward biased diode to bias the base of the final. See EMRFD page 2.37.

But when you do this, don't you end up with a very, very low emitter voltage (whatever you have on the base minus the drop across the base-emitter junction)? With a voltage divider bias network you can arrange to have several volts on the base, a couple of volts on the emitter, and then use the emitter resistor to set the Idc. But using the diode scheme, you just don't have much voltage on the emitter to play with.

Am I missing something here?

Doug DeMaw has a 1 watt linear amp in the Feb 1997 issue of CQ that uses this circuit. In this circuit he has 7 ohms between the emitter and ground. I measure .022Von the emitter -- that would yield an Idc of only 2 milliamps.

DeMaw also discusses this biasing arrangement on page 128 of his QRP Notebook.

Is the answer that we are biasing for Class AB and not class A and the higher level of Idc is not needed? Also, in most of these circuits, they the emitters are connected directly to ground -- that would definitely increase Idc.

73 from London
M0HBR N2CQR CU2JL
http://www.qsl.net/n2cqr

1641. Re: Biasing amps for linear service -- design question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-04 20:37:30 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <e9udnWLNBK8UZ5TZRVn-uw@web-ster.com>
Source record: 13342

bill.meara@gmail.com wrote:

> I've been looking at simple circuits used to bias
> solid state, common emitter, BJT amps for linear
> service. A very common technique is to use the
> voltage drop (.7 V) across a forward biased diode to
> bias the base of the final. See EMRFD page 2.37.
>
> But when you do this, don't you end up with a very,
> very low emitter voltage (whatever you have on the
> base minus the drop across the base-emitter junction)?
> With a voltage divider bias network you can arrange to
> have several volts on the base, a couple of volts on
> the emitter, and then use the emitter resistor to set
> the Idc. But using the diode scheme, you just don't
> have much voltage on the emitter to play with.
>
> Am I missing something here?
>
> Doug DeMaw has a 1 watt linear amp in the Feb 1997
> issue of CQ that uses this circuit. In this circuit
> he has 7 ohms between the emitter and ground. I
> measure .022Von the emitter -- that would yield an Idc
> of only 2 milliamps.
>
> DeMaw also discusses this biasing arrangement on page
> 128 of his QRP Notebook.
>
> Is the answer that we are biasing for Class AB and not
> class A and the higher level of Idc is not needed?
> Also, in most of these circuits, they the emitters are
> connected directly to ground -- that would definitely
> increase Idc.
>
> 73 from London
> M0HBR N2CQR CU2JL
> http://www.qsl.net/n2cqr
>

For a power amplifier a low emitter voltage is the point -- any voltage that you use up biasing the emitter is voltage that isn't available for generating RF power. So you bend over backwards to have low or no emitter resistance. You'll note that the diode-based bias supplies require that the diode is in thermal contact with the transistor cases -- this is to keep the diode's forward drop close to the required

base-emitter drop.

In the DeMaw circuit he is almost certainly biasing for class AB, for higher efficiency, and using the emitter degeneration for linearity (the article should say -- DeMaw was usually good about telling you what he was about).

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

1642. Question about 4-400 tube socket/mounting

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-05 01:33:34 UTC
From: DOUGLAS SNOWDEN <snowden@peoplepc.com>
Message-ID: <OdrOf.27$sL2.10@newsread2.news.atl.earthlink.net>
Source record: 13343
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I have seen 3-500Z tubes mounted in the johnson ceramic sockets. The Heath SB-220 uses them.
Will the 4-400 tube handle the airflow the same way? Usually you see the air system sockets used so that the air will flow up through the bottom. Will the filament connections remain solid in a 275 ceramic socket with a muffin fan blowing across the tube?
? I have seen the sockets raised a bit so that the filaments get cooling. Just wondering if the 4-400 would work that way as well? Any experience with this?

Doug N4IJ

1643. Buy and Sell Vintage Gear!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-05 05:06:36 UTC
From: Jeff James <cbstv@optonline.net>
Message-ID: <AluOf.4640$GL1.1427@fe09.lga>
Source record: 13344

http://www.dealamerica.com/deal/cgi-bin/ads/bcads.cgi
-The Boatanchor Classifieds-
FREE ads and a site dedicated to Vintage Amateur Radio...
You never know what you'll find..

1644. SolderSmoke #17: NE602/LTspice, K1, Enigma, Saturn

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-05 06:59:57 UTC
From: bill.meara@gmail.com
Message-ID: <1141541997.775028.103930@u72g2000cwu.googlegroups.com>
Source record: 13345

SolderSmoke!
A SHOW FOR ELECTRONICS HOMEBREWERS!

http://www.ourmedia.org/node/178965

Topics discussed in SolderSmoke #17:

-- KE6US's NE602 LTspice model
-- Mike's progress on K1 receiver
-- The joys of coaxing receivers to life
-- Ejection seat radio
-- Replacing Firewire chip on laptop board
-- Programming languages
-- Dental fillings as receivers
-- Book Review: G3VA's "Technical Topics"
-- Sidewalk Astronomy in London: Saturn!
-- Blue sun, green flash
-- Cracking an Enigma message
-- MAILBAG: N1FIY, GM4SLV, KB9BVN, G3CWI,K6GGO

Listen at: http://www.ourmedia.org/node/178965

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Tired of listening to Led Zepplin or NPR on your
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Here's the homepage for our show. All our programs are available here. There is also a blog and links to some of the sites and documents we've been discussing: http://www.ourmedia.org/user/36170

We hope you enjoy the program. Please send us feedback.

73 from London
Bill M0HBR N2CQR CU2JL
http://www.qsl.net/n2cqr

1645. Radio tracking a tortoise - help!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-05 11:16:32 UTC
From: Floatything <chrisknibbs@sinkthespamntlworld.com>
Message-ID: <kMzOf.27366$Ru5.1396@newsfe6-gui.ntli.net>
Source record: 13346

Every year, Shelly the tortoise gets lost or manages to escape the garden. It can take days to find her. I would like to build a locating device so that I can track her down.
The basic requirements are:

a) that the 'transmitter (transponder?) on the tortoise is as small as possible.

b) that it can be made by an electronics numpty. I have basic soldering skills, and can eventually work out a circuit diagram.

Can anyone point me in the right direction?

TIA
Floatything (an escapee from uk.rec.sailing)

1646. Re: Radio tracking a tortoise - help!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-05 13:09:11 UTC
From: Ian <Ian@news.com>
Message-ID: <XpBOf.27242$bw1.15907@newsfe2-win.ntli.net>
Source record: 13347

"Floatything" <chrisknibbs@sinkthespamntlworld.com> wrote in message
news:kMzOf.27366$Ru5.1396@newsfe6-gui.ntli.net...
> Every year, Shelly the tortoise gets lost or manages to escape the garden.
> It can take days to find her. I would like to build a locating device so
> that I can track her down.
> The basic requirements are:
>
Use a blob of epoxy resin with a long string stuck in it and tie it to a post! Either that or glue a mobile to it and call each night - you should hear the ringtone. You can already get small tracking devices if you look on a search engine such as GOOGLE.
I didn't think people still had tortoise! They go for between £400 and £500 in the UK depending on the seller and people in some countries eat the poor things. They turn them upside down and cut the insides out. Quite revolting.

1647. Re: Question about 4-400 tube socket/mounting

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-05 15:07:22 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <UdGdnY6SssA4Y5fZRVnysA@pipex.net>
Source record: 13248
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

DOUGLAS SNOWDEN wrote:
> I have seen 3-500Z tubes mounted in the johnson ceramic sockets. The Heath
> SB-220 uses them.
> Will the 4-400 tube handle the airflow the same way? Usually you see the air
> system sockets used so that the air will flow up through the bottom. Will
> the filament connections remain solid in a 275 ceramic socket with a muffin
> fan blowing across the tube?
> ? I have seen the sockets raised a bit so that the filaments get cooling.
> Just wondering if the 4-400 would work that way as well? Any experience
> with this?
==========
During the late 1970s ,the old 405 lines TV system in the UK operating
in Band 1 (approx 45 -65 MHz) was decommissioned and some equipment
landed at junk sales held at radio clubs . I managed to obtain two 1 kW
amplifier racks (out of 7 released from a local 7 kW TV repeater)

The rack had 2 QY4-400 (tetrode)valves with the (flat,ceramic) sockets
fitted approx 12 mm below the chassis on stand-offs . The space under
the chassis was fully enclosed (almost air -tight) and was fitted with a
pressure switch (with a large diaphragm to sense and switch a low pressure).
A centrigugal fan blew air under the chassis which escaped via the valve
socket openings thus cooling the valves. There were no valve 'chimneys'

Upon fan failure the pressure switch would initiate the rack's shutdown.

A simple but effective way of cooling the valves.

Frank GM0CSZ / KN6WH

1648. 6J6 convertor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-05 16:14:44 UTC
From: Juul Geleick <gjgeleick@hetnet.nl>
Message-ID: <gjgeleick-BF2CE8.17144405032006@reader28.wxs.nl>
Source record: 13249

Hi folks,
when I was young, in de 60-ties, I build a so called 6J6 balance
145mHz convertor.
But I lost the diagram. And I will build it again.
Can anyone help?

thanks,

Juul Geleick - PE0GJG (The Netherlands)

1649. Re: 6J6 convertor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-06 04:24:17 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <440bb971$1_3@newsfeed.slurp.net>
Source record: 13250

ORIGINAL MESSAGE:

Juul Geleick wrote:

> Hi folks,
> when I was young, in de 60-ties, I build a so called 6J6 balance
> 145mHz convertor.
> But I lost the diagram. And I will build it again.
> Can anyone help?
>
> thanks,
>
> Juul Geleick - PE0GJG (The Netherlands)

~~~~~~
A fun project, but I'd recommend a different tube. The 6J6 was
notorious for intermittents. It was a bad design from the start. In my
other life as a TV repair guy, I changed hundreds of them.

73, Bill W6WRT
~~~~~~

1650. kenwood tk-690 anyone have a schematic they can post for the kpg-43 ? same txd rxd data line

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-06 05:17:10 UTC
From: help@please.com
Message-ID: <440bc5d5$0$4006$c3e8da3@news.astraweb.com>
Source record: 13251

[No readable article body recovered]

1651. Re: Biasing amps for linear service -- design question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-06 05:45:12 UTC
From: bill.meara@gmail.com
Message-ID: <1141623912.490085.192000@u72g2000cwu.googlegroups.com>
Source record: 13252

Thanks Tim. I think my mistake was that I was thinking Class A when the design was for Class AB. Bill

1652. Re: Question about 4-400 tube socket/mounting

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-06 12:01:05 UTC
From: "terry@terryking.us" <terry@terryking.us>
Message-ID: <1141646465.739304.322020@e56g2000cwe.googlegroups.com>
Source record: 13253
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Doug, Here's what I remember from several RCA and Collins Broadcast transmitters and a KW amp I built: Those ceramic sockets SHOULD have holes in them of about 1/2" diameter. Line up a 4-400A with the socket. Notice that the BASE of the 4-400A has holes that line up with the socket holes. Notice that the 4-400A has a metal base which has a series of holes around it. It's very important to put lots of air thru those holes to flow around the tube base pins. If you're going to run lots of dissipation (definite color on plate) then the usual approach is to mount the socket just below the chassis on standoffs or about 3/16 to 1/4" as I recall. THe SIZE of the hole in the chassis then is set to have about 3/16 to 1/4" of space around the outside of the metal tube base, so there is additional airflow which will hopefully stay fairly laminar around the upper part of the tube envelope. NOTE: Normally that metal base ring is grounded by several metal clips.

SOME systems used the "Air System Chimney" (A pyrex glass open-topped "bottle" around the tube) to direct the air around the tube envelope, although 1000W OUT Broadcast transmitters from Collins and RCA did not use them, and their high level modulators put out 750 watts of audio, at, say, 50 percent efficiency, so there was about 375 watts of plate dissipation per 4-400A at 100% sinewave modulation. Which at one time was OK, because the actual duty cycle on "Typical Program Material" was much lower. But about 1970, as I recall, watching the plate color during "Magic Carpet Ride" by Steppenwolf, with an asymetrical limiter, 20 db of syllable-rate compression, plus the pre-processing of the airplay cart by a demented Program Director, the plates looked a lot like 100% modulation during an Audio Proof of Performance test :-)

Regards, Terry King ...On The Mediterranean in Carthage

1653. Service Manual Dressler D200s

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-06 13:28:26 UTC
From: Volker <df7it@aol.com>
Message-ID: <1141651706.351208.281800@i39g2000cwa.googlegroups.com>
Source record: 13254

Hi !
I am looking for the scematics for that PA.
The PA at DL0WH is broken, and the manual could not be found in the
clubstation.
There is a problem in the HV / Grid circuit.

73!
Volker

1654. Coherent CW

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-06 15:14:59 UTC
From: Bob <wb0poq@visi.com>
Message-ID: <120okfk2nguet3e@corp.supernews.com>
Source record: 13255

Hi gang,
Is there anyone still playing around with this mode?

tnx
Bob WB0POQ

1655. ICOM SC-1132 data ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-06 15:29:08 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1141658948.369355.258990@e56g2000cwe.googlegroups.com>
Source record: 13256

Can anyone help with a data sheet for this RF power brick ?

Thanks,

Mark.

1656. ICOM SC-1132 data ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-06 15:29:09 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1141658949.689342.148260@v46g2000cwv.googlegroups.com>
Source record: 13257

Can anyone help with a data sheet for this RF power brick ?

Thanks,

Mark.

1657. SN 602, SA602 etc. for an R4C

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-06 15:44:38 UTC
From: Andy Bullington <a7bull@hotmail.com>
Message-ID: <pdqdnX7ohepKxZHZnZ2dnUVZ_s6dnZ2d@comcast.com>
Source record: 13258

I'm really interested in building the product detector and second and third mixers for my R4C as described in the recent QEX article. My question is (and please pardon my ignorance) in 2 places an SN 602 IC is called for but I can find no trace of such a component anywhere. Is the SA 602 or NE 602 the same? I'm a ham but a musician by trade and learning this stuff as I go. Thanks in advance.
Andy W1AWB

1658. Re: Coherent CW

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-07 01:17:20 UTC
From: hhc314@yahoo.com
Message-ID: <1141694240.515014.144720@z34g2000cwc.googlegroups.com>
Source record: 13259

I've never before heard it described as "Coherent CW", but CW is hard
to avoid on any of the HF bands.

Harry C.

1659. Re: SN 602, SA602 etc. for an R4C

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-07 01:35:25 UTC
From: Andy Bullington <a7bull@hotmail.com>
Message-ID: <vJWdnZTv-MLCfpHZnZ2dnUVZ_sSdnZ2d@comcast.com>
Source record: 13260

Thanks Allison!

1660. Re: Coherent CW

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-07 02:17:52 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <w26Pf.2294$Uc2.1639@fed1read04>
Source record: 13261

For Coherent CW - go to http://www.google.com/
Type in Coherent CW -- gets lots of articles

Quick bottom line
Coherent CW is morse code with precise timing and frequency accuracy, so you can use 20Hz filters and integrators to get remarkable results from very weak signals.

--
CL -- I doubt, therefore I might be !

<hhc314@yahoo.com> wrote in message
news:1141694240.515014.144720@z34g2000cwc.googlegroups.com...
> I've never before heard it described as "Coherent CW", but CW is hard
> to avoid on any of the HF bands.
>
> Harry C.
>

1661. Re: SN 602, SA602 etc. for an R4C

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-07 02:28:06 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <Te2dnWKKUbYucpHZRVn-tA@web-ster.com>
Source record: 13262

Allison-nospam@nouce.bellatlantic.net wrote:

> On Mon, 6 Mar 2006 10:44:38 -0500, "Andy Bullington"
> <a7bull@hotmail.com> wrote:
>
>
>>I'm really interested in building the product detector and second and third
>>mixers for my R4C as described in the recent QEX article. My question is
>>(and please pardon my ignorance) in 2 places an SN 602 IC is called for but
>>I can find no trace of such a component anywhere. Is the SA 602 or NE 602
>>the same? I'm a ham but a musician by trade and learning this stuff as I go.
>>Thanks in advance.
>> Andy W1AWB
>>
>
>
> Looked at the article and it's a misprint, NE/SA602 are the same
> thing. The true believers will argue they are not identical but,
> for R4C service they are interchangeable.
>
>
>
> Allison
>
They come off the same production line, but one has been tested over a
wider temperature range. Generally the looser specced parts from any
semiconductor vendor are either untested at the tighter spec (and may
work there) or are rejects from the tighter spec testing but still pass
lower spec.

If you aren't going to operate where you are either shivering or baking
then the looser spec part will be fine.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

1662. R4C QEX project tansistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-07 12:44:16 UTC
From: Andy Bullington <a7bull@hotmail.com>
Message-ID: <pJidnUQEa9W9HZDZnZ2dnUVZ_s-dnZ2d@comcast.com>
Source record: 13263

I've found all the parts for this project except for the ZTX330 and 2N5950 transistors which seem to be extinct. The 2N5950 is available at some commercial venues but I only need one of em. Are there readily available subs for these? I'm getting a little discouraged. Thanks.
Andy W1AWB

1663. Re: SN 602, SA602 etc. for an R4C

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-07 13:08:00 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <SAfPf.1$1e6.0@fe04.lga>
Source record: 13264

The NE602 was an old part. The product was bought by another company (Signetics?) who renamed it SA602, but kept the rights to the name NE602 so sometimes you still find an NE602. Worse yet, the NE/SA 612 is a little more widely available and somewhat cheaper -- sometimes a lot cheaper. It is the same part with a little different set of QC tests, so for any imaginable application, all 4 parts are the same thing. If you were doing some military application there might be a slight advantage to the 602 over the 612, but even that isn't clear from the spec sheets. Usually (but not always) if you find an NE part it will be "old stock". Sometimes the 602 will be a few cents more than a 612, other times it will be 2 or 3 times the price, although it's only a couple buck part so paying double isn't going to break the bank, anyway.

The NE602 was widely used in a lot of projects, and still is. Hams got used to calling it an NE602 so the name stuck, even though an actual NE602 is hard to find anymore and the alternatives at least as good. Guys who build lots of receivers have a drawer marked NE602 that probably contains more SA612's than NE602's.

..

"Andy Bullington" <a7bull@hotmail.com> wrote in message news:pdqdnX7ohepKxZHZnZ2dnUVZ_s6dnZ2d@comcast.com...
> I'm really interested in building the product detector and second and
> third mixers for my R4C as described in the recent QEX article. My
> question is (and please pardon my ignorance) in 2 places an SN 602 IC is
> called for but I can find no trace of such a component anywhere. Is the SA
> 602 or NE 602 the same? I'm a ham but a musician by trade and learning
> this stuff as I go. Thanks in advance.
> Andy W1AWB
>

1664. Re: R4C QEX project tansistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-07 13:33:12 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <BomdnX36x54TFpDZRVnyrg@pipex.net>
Source record: 13265

Andy Bullington wrote:
> I've found all the parts for this project except for the ZTX330 and 2N5950
> transistors which seem to be extinct. The 2N5950 is available at some
> commercial venues but I only need one of em. Are there readily available
> subs for these? I'm getting a little discouraged. Thanks.
==========
ZTX 330 equivalents BC349C and 2N3904

2N5950 is not listed in my reference docs : Tower's International
transistor selector (1984 edition)
However via Google I found an e-Bay site with the following info :
2N5950 N-CHANNEL JFET AMPLIFIER

Have a look at the spec(via Google) of the 2N5950 and I am sure you'll
find an equivalent . Parts Express sell the 2N5950 for $0.35 each.

Frank GM0CSZ / KN6WH

1665. Remote Car Battery Voltage Monitoring

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-07 13:52:55 UTC
From: Robert Green <ROBERT_GREEN1963@YAH00.COM>
Message-ID: <t5ednd7Nt7ULDZDZRVn-rA@rcn.net>
Source record: 13266
Cross-posted to: comp.home.automation,rec.autos.misc,rec.radio.amateur.homebrew

Anyone have ideas or sources for remotely monitoring an infrequently used car's 12V battery to make sure it didn't go dead from simple attrition?

Ideally, I want some sort of contact closure when voltage drops below a certain point. I want to sent that information wirelessly to a base unit inside the house that would flash, beep, and then call my cellphone and say "Dad's wheelchair van needs recharging."

What I would like to do is hijack a wireless thermometer - the thermistor probe should be able to read voltage with a few modifications to the probe end. The thermometer base station has an "alarm on temperature" feature that could, with a little recalibration, serve to monitor dropping voltage and to beep when it dropped below a threshold I would set. With any luck, I could get it to read 100 degrees when the battery was fully charged and 0 degrees when depleted. Not sure there would be linearity along the scale, though! <g>

Another thought would be some sort of docking cradle on the front bumper that allowed feeding a charging current to the car without the need for connecting charging cables or a charger that can be dragged down the street for several blocks until the car manages to run over it (the reason why I just don't leave the sucker plugged in all the time for him!).

--
Bobby G.

1666. Re: Remote Car Battery Voltage Monitoring

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-07 14:16:43 UTC
From: FrankW <fworm@norpak.ca>
Message-ID: <qemdnUW3UqrACJDZRVn-pw@magma.ca>
Source record: 13267
Cross-posted to: comp.home.automation,rec.autos.misc,rec.radio.amateur.homebrew

Justr get one of these

http://www.vdcelectronics.com/camping.htm

Robert Green wrote:
> Anyone have ideas or sources for remotely monitoring an infrequently used
> car's 12V battery to make sure it didn't go dead from simple attrition?
>
> Ideally, I want some sort of contact closure when voltage drops below a
> certain point. I want to sent that information wirelessly to a base unit
> inside the house that would flash, beep, and then call my cellphone and say
> "Dad's wheelchair van needs recharging."
>
> What I would like to do is hijack a wireless thermometer - the thermistor
> probe should be able to read voltage with a few modifications to the probe
> end. The thermometer base station has an "alarm on temperature" feature
> that could, with a little recalibration, serve to monitor dropping voltage
> and to beep when it dropped below a threshold I would set. With any luck,
> I could get it to read 100 degrees when the battery was fully charged and 0
> degrees when depleted. Not sure there would be linearity along the scale,
> though! <g>
>
> Another thought would be some sort of docking cradle on the front bumper
> that allowed feeding a charging current to the car without the need for
> connecting charging cables or a charger that can be dragged down the street
> for several blocks until the car manages to run over it (the reason why I
> just don't leave the sucker plugged in all the time for him!).
>
> --
> Bobby G.
>
>
>

1667. Re: R4C QEX project tansistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-07 14:23:41 UTC
From: Andy Bullington <a7bull@hotmail.com>
Message-ID: <ZoCdnYS9j8vxCpDZnZ2dnUVZ_s2dnZ2d@comcast.com>
Source record: 13268

Thanks guys...didn't think to look at Parts Express.
"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:BomdnX36x54TFpDZRVnyrg@pipex.net...
> Andy Bullington wrote:
>> I've found all the parts for this project except for the ZTX330 and
>> 2N5950 transistors which seem to be extinct. The 2N5950 is available at
>> some commercial venues but I only need one of em. Are there readily
>> available subs for these? I'm getting a little discouraged. Thanks.
> ==
> ZTX 330 equivalents BC349C and 2N3904
>
> 2N5950 is not listed in my reference docs : Tower's International
> transistor selector (1984 edition)
> However via Google I found an e-Bay site with the following info :
> 2N5950 N-CHANNEL JFET AMPLIFIER
>
> Have a look at the spec(via Google) of the 2N5950 and I am sure you'll
> find an equivalent . Parts Express sell the 2N5950 for $0.35 each.
>
> Frank GM0CSZ / KN6WH

1668. Re: Remote Car Battery Voltage Monitoring

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-07 14:53:49 UTC
From: Ralf Ballis <ralf.ballis@arcor.de>
Message-ID: <440d9f24$0$14888$9b4e6d93@newsread2.arcor-online.net>
Source record: 13269
Cross-posted to: comp.home.automation,rec.autos.misc,rec.radio.amateur.homebrew

Robert Green wrote:

> Anyone have ideas or sources for remotely monitoring an infrequently used
> car's 12V battery to make sure it didn't go dead from simple attrition?

Don't know about ready to use products. They sell some cellphone remote
module by some electronic stores. It could by connected to alarm system and
other surveillance device or circuit.

Regards,

Ralf
--
www.omnibusclub.de
Erfinder des Abgasturboladers Dr. Alfred J. Bï¿œchi: "Die Abgase,
deren noch inne-wohnende Energie bis dahin vergeudet wurde ..."

1669. Re: Remote Car Battery Voltage Monitoring

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-07 15:43:57 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <WRhPf.1977$kg.367@news02.roc.ny>
Source record: 13270
Cross-posted to: comp.home.automation,rec.autos.misc,rec.radio.amateur.homebrew

You might not need to get that fancy, try something like
http://www.baproducts.com/sm831.htm

just put it on the dashboard, plug it in, and stop worrying.

Look around a little, that was the first link my search found, they may
be available elsewhere for less.

FrankW wrote:
> Justr get one of these
>
> http://www.vdcelectronics.com/camping.htm
>
> Robert Green wrote:
>
>> Anyone have ideas or sources for remotely monitoring an infrequently used
>> car's 12V battery to make sure it didn't go dead from simple attrition?

1670. Picket-fenced ground gias next to microstrip traces

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-07 17:19:40 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <120rg6otjsdv574@corp.supernews.com>
Source record: 13271

I've noticed that various data sheet application circuits for items such as RF switches, amplifiers, etc. (e.g., http://www.hittite.com/product_info/product_specs/switches/hmc349lp4c.pd f) use what I would call "microstrip traces surrounded by a ground pour 'guard' to reduce coupling to adjacent traces." Someone else, however, has suggested that the application circuits were really designed as co-planar waveguides (with grounds). Anyone else want to venture an opinion?

For a 62.5 mil board, a 50 ohm microstrip's width is around 115 mils using FR-4 (k=4.7). Using TxLine 2003, for a CPW w/ground I have to reduce the gap to ~50 mils before the signal trace width reduces ~10% to ~104 mils. I take this to imply that there's not a lot of coupling between the signal trace and the copper pours (instead of the ground plane) until the gap width is comparable to the board thickness.

In general, my impression has been that the use of copper flooding is more to provide isolation between adjacent traces than to change the form of the transmission line, and the use of the picket fenced vias was to insure that a large chunk of copper pour didn't suddently turn into a resonator. Does that sound correct?

---Joel Kolstad

1671. Re: Biasing amps for linear service -- design question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-07 17:30:27 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dukfvjifj2@engnntp2.cig.mot.com>
Source record: 13273

<bill.meara@gmail.com> wrote in message
news:1141495434.077634.71180@p10g2000cwp.googlegroups.com...
> I've been looking at simple circuits used to bias
> solid state, common emitter, BJT amps for linear
> service. A very common technique is to use the
> voltage drop (.7 V) across a forward biased diode to
> bias the base of the final. See EMRFD page 2.37.
>
> But when you do this, don't you end up with a very,
> very low emitter voltage (whatever you have on the
> base minus the drop across the base-emitter junction)?
> With a voltage divider bias network you can arrange to
> have several volts on the base, a couple of volts on
> the emitter, and then use the emitter resistor to set
> the Idc. But using the diode scheme, you just don't
> have much voltage on the emitter to play with.
>
> Am I missing something here?
>
> Doug DeMaw has a 1 watt linear amp in the Feb 1997
> issue of CQ that uses this circuit. In this circuit
> he has 7 ohms between the emitter and ground. I
> measure .022Von the emitter -- that would yield an Idc
> of only 2 milliamps.
>
> DeMaw also discusses this biasing arrangement on page
> 128 of his QRP Notebook.
>
> Is the answer that we are biasing for Class AB and not
> class A and the higher level of Idc is not needed?
> Also, in most of these circuits, they the emitters are
> connected directly to ground -- that would definitely
> increase Idc.
>
> 73 from London
> M0HBR N2CQR CU2JL
> http://www.qsl.net/n2cqr
>

For RF power over just a few watts, it is very hard to get good
bypassing...VERY difficult..actually impossible. You want to make a good,
low impedance (inductance) path in the emitter. Impedances in RF power
stages are in the sub ohm range and anything can cause trouble. The
divider/emitter resistor method is only good at lower levels.

The diode bias is set up to give the correct class AB bias, just like in a tube. The circuit is designed to give the correct bias. I believe the circuit also must provide a low DC impedance to the part, but I better ask some of the PA gurus around here to be sure.

The diode has to be in thermal contact with the part to get tracking over temp. Ideally it should be "on the die" because there is a thermal lag and differential between the die and anywhere outside.

It is possible to put a very small resistor in the collector supply and use an active feedback to control the bias, but that is complex.
73, Steve, K9DCI

1672. Re: Permeability of steel filled epoxy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-07 17:35:31 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dukg93ioj2@engnntp2.cig.mot.com>
Source record: 13274

My guess is that it will be very non-repeatable. Not being an RF designed
product, it isn't tracked in manufacture and can vary..lots.
Guess #1a It can vary depending how it is formed...do particles touch and
support eddy currents or not.
Guess #2. It is a poor material for any RF work.
Guess #3 It is messy to cast into a usable form.

$0.02

Maybe that's $0.08

73, Steve, K,9.D;C'I

<cs_posting@hotmail.com> wrote in message
news:1141425652.682734.94300@e56g2000cwe.googlegroups.com...
> Anyone have a guess as to the permeability of steel filled epoxy?
>
> Was sort of wondering what would happen if one tried to make RF
> inductor or transformer (torroid, etc) cores out of the stuff...
>
> with care, it can even reproduce threads, so tuneable slugs might be
> possible.
>
> It's available as putty in tube form in many hardware stores, and as a
> castable liquid from industrial supply catalogs - though obviously if
> ordering something from a non-local supplier, it might as well be a
> proper core from Amidon.
>
> (and yes, I may go ahead and try it... soon as I get my workbench set
> back up to the point where I could build something to measure the
> results)
>

1673. Re: Picket-fenced ground gias next to microstrip traces

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-07 17:50:30 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <dukh55$u1$1@puck.litech.org>
Source record: 13272

Joel Kolstad <JKolstad71HatesSpam@yahoo.com> wrote:
> I've noticed that various data sheet application circuits for items such as RF
> switches, amplifiers, etc. (e.g.,
> http://www.hittite.com/product_info/product_specs/switches/hmc349lp4c.pd f)
> use what I would call "microstrip traces surrounded by a ground pour 'guard'
> to reduce coupling to adjacent traces." Someone else, however, has suggested
> that the application circuits were really designed as co-planar waveguides
> (with grounds). Anyone else want to venture an opinion?

Their Application Note 17 ("Design techniques enhance isolation in
switch assemblies") talks explicitly about grounded-coplanar-waveguide
techniques. The evaluation boards for the "349" switches certainly
appear to use the CPW techniques discussed in AppNote 17, including
closely-spaced plated thru-holes to tie top and bottom ground planes
together.

> For a 62.5 mil board, a 50 ohm microstrip's width is around 115 mils using
> FR-4 (k=4.7). Using TxLine 2003, for a CPW w/ground I have to reduce the gap
> to ~50 mils before the signal trace width reduces ~10% to ~104 mils. I take
> this to imply that there's not a lot of coupling between the signal trace and
> the copper pours (instead of the ground plane) until the gap width is
> comparable to the board thickness.

> In general, my impression has been that the use of copper flooding is more to
> provide isolation between adjacent traces than to change the form of the
> transmission line, and the use of the picket fenced vias was to insure that a
> large chunk of copper pour didn't suddently turn into a resonator. Does that
> sound correct?

If by "picket fenced vias" you mean the projections outward from the
signal vias on the evaluation boards, I take those to be the plated
thru-holesdiscussed in AppNote 17.

Are you seeing something I'm not?

Interesting gadgets. Awfully small, but interesting; may have to
ask for samples and eval boards.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

1674. Re: Picket-fenced ground gias next to microstrip traces

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-07 18:12:29 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <120rjaj6aaeagf5@corp.supernews.com>
Source record: 13275

Hi Mike,

Thanks for the response -- I'll go and read that app note.

> If by "picket fenced vias" you mean the projections outward from the
> signal vias on the evaluation boards

I mean all the vias going from the top side copper to the ground plane.
Viewed from the side -- and with a little imagination -- those vias kinda look
like a picket fense. OK, maybe not so much, but I *have* heard this term
before; I'm not making it up myself! :-)

1675. Re: Remote Car Battery Voltage Monitoring

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-07 19:30:59 UTC
From: BruceR <br@NOhawaiiSPAM.com>
Message-ID: <TblPf.2595$pV5.325@tornado.socal.rr.com>
Source record: 13276
Cross-posted to: comp.home.automation,rec.autos.misc,rec.radio.amateur.homebrew

I have a car at a second home that sits for months without use and a marine battery that sits in a small sailboat to power a bilge pump and lights. For the boat, I found a flexible, waterproof solar panel at West Marine that keeps the battery fully charged. In 4 years I've never had to charge it with anything else. For the car, I use a Battery Tender Jr. to keep the battery "ready-to-start" and it works well. Rather than monitoring the battery's condition remotely, in both cases I just use the chargers and never have to worry about it. If the car has a lighter socket, power outlet that's always on you can just plug it in that way. http://tinyurl.com/k9w56 shows the Battery Tender Jr. and you can buy it for under $30 at places like Pep Boys.

> Anyone have ideas or sources for remotely monitoring an infrequently
> used car's 12V battery to make sure it didn't go dead from simple
> attrition?
>
> Ideally, I want some sort of contact closure when voltage drops below
> a certain point. I want to sent that information wirelessly to a
> base unit inside the house that would flash, beep, and then call my
> cellphone and say "Dad's wheelchair van needs recharging."
>
> What I would like to do is hijack a wireless thermometer - the
> thermistor probe should be able to read voltage with a few
> modifications to the probe end. The thermometer base station has an
> "alarm on temperature" feature that could, with a little
> recalibration, serve to monitor dropping voltage and to beep when it
> dropped below a threshold I would set. With any luck, I could get
> it to read 100 degrees when the battery was fully charged and 0
> degrees when depleted. Not sure there would be linearity along the
> scale, though! <g>
>
> Another thought would be some sort of docking cradle on the front
> bumper that allowed feeding a charging current to the car without the
> need for connecting charging cables or a charger that can be dragged
> down the street for several blocks until the car manages to run over
> it (the reason why I just don't leave the sucker plugged in all the
> time for him!).

1676. Re: ICOM SC-1132 data ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-07 20:56:59 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <BradnWxasKoAbpDZRVn-qw@comcast.com>
Source record: 13277

"MarkAren" <markaren10@yahoo.com> wrote in message
news:1141658948.369355.258990@e56g2000cwe.googlegroups.com...
> Can anyone help with a data sheet for this RF power brick ?
>
> Thanks,
>
> Mark.
>

Icom Policy Statement
Requesting an Instruction Manual or Technical Documentation:

If you cannot find the intended instruction manual you require on this download page (global support site), you can make a request to the Support Center to have it uploaded or sent to you.
Please do not forget to write the model name of the intended instruction manual in your request mail.
It may take some time to prepare the requested manual (scan for PDF), in such cases, please allow some time for us to upload it. Thank you for your request.
http://www.icom.co.jp/world/support/index.htm

w9gb

1677. Re: Remote Car Battery Voltage Monitoring

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-08 00:14:12 UTC
From: B Fuhrmann <b-fuhrmann-usenet@mplsfridayDELETEskate.com>
Message-ID: <120s91r12q0i771@corp.supernews.com>
Source record: 13278
Cross-posted to: comp.home.automation,rec.autos.misc,rec.radio.amateur.homebrew

"Robert Green" wrote ...
> Another thought would be some sort of docking cradle on the front bumper
> that allowed feeding a charging current to the car without the need for
> connecting charging cables or a charger that can be dragged down the
> street
> for several blocks until the car manages to run over it (the reason why I
> just don't leave the sucker plugged in all the time for him!).

With the low current needed for a trickle charger, just wire it to a cigarette lighter plug and drape the wire across the steering wheel. It would be hard to drive off without noticing it.

Another solution would be to wire a 3 wire 1/4" phone plug to it and a jack to the car in an appropriate location where it will unplug if you drive away. Connect the 3rd terminal to get power from the car's jack and use it as a safety circuit to shut off the charger if it is not connected.

A lot easier, more reliable, and cheaper than monitoring the voltage and calling your cell phone.

--
Bill Fuhrmann

1678. Re: R4C QEX project tansistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-08 01:22:20 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <j8cs02leuq4l6il823ck69dmujldajf6sm@4ax.com>
Source record: 13279

On Tue, 07 Mar 2006 13:27:05 GMT,
Allison-nospam@nouce.bellatlantic.net wrote:

>On Tue, 7 Mar 2006 07:44:16 -0500, "Andy Bullington"
><a7bull@hotmail.com> wrote:
>
>>I've found all the parts for this project except for the ZTX330 and 2N5950
>>transistors which seem to be extinct. The 2N5950 is available at some
>>commercial venues but I only need one of em. Are there readily available
>>subs for these? I'm getting a little discouraged. Thanks.
>> Andy W1AWB
>>
>
>I'd think the 40673 mosfets harder to find though easy to substitute.
>
>The ZTX330 is generic and a 2n3904, 2n2222 or similar should
>work fine. For the 2n5950 I'd use a MPF102, 2n3819 or J310 fet as
>those are easy to get. The transistors used are in non critical
>circuits so substitutions should easily work.
>
>Generally speaking the transistors and IC used reflects those
>available to the author and reasonable substitutions will work
>with no degradation.
>
>The only parts that require care are the MAV-11 MIMICs and the SBL-3
>as they helps define many of the modified recievers desired
>characteristics.
>
>Allison

These folks have a decent supply of 40673s. They advertise being
"Leaders on the trailing edge of technology". I don't know what their
onesy - twosey policy is, having never done business with them.
http://www.rocelec.com/

Also, search for "NTE" equivalents.

Russ

1679. Re: SN 602, SA602 etc. for an R4C

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-08 01:51:01 UTC
From: cs_posting@hotmail.com
Message-ID: <1141782661.482281.64720@i39g2000cwa.googlegroups.com>
Source record: 13280

xpyttl wrote:

> The NE602 was an old part.

Speaking of the NE602 - the old one - I have a question...

Is my chip dead, or is 40 meters dead?

I recently got re-interested in RF and pulled out some old parts to play with. I wired up an NE602 on a breadboard (yeah, I know), with a torroid, some padding caps, and a varactor for tuning, and got is oscillating on what my scope (yeah, I know) claimed was around 7 mhz.

Lots of domestic AM broadcast interference eventually tamed, but then only shortware broadcast received at these frequencies (ie, tunes like AM should with a direct conversion receiver) - no ham CW. I do remember from way back when that I found the novice 40m band useless in the evenings and would hang out on 15m then instead. Is that still true right now?

I know the receiver isn't totally dead as I increased the capacitance, tuned it down to what my scope claims is 80 meteres, and heard CW. Added an old op-amp audio filter circuit from the handbook and it's almost useable on 80m, but tuned back up to forty and nothing but broadcast...

What kind of ballpark magintude of oscillation should I measure if I probe the tank (well, actually pin 7) with a high impedance probe?

1680. Re: SN 602, SA602 etc. for an R4C

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-08 02:09:35 UTC
From: dplatt@radagast.org
Message-ID: <120sf6v3ftnf801@corp.supernews.com>
Source record: 13281

In article <1141782661.482281.64720@i39g2000cwa.googlegroups.com>,
<cs_posting@hotmail.com> wrote:

>Speaking of the NE602 - the old one - I have a question...
>
>Is my chip dead, or is 40 meters dead?

Can't say anything about the health of your chip.

There are times when 40 meters is dead, or pretty weak. There are
other days when it's fine. Sunspot numbers have been quite low
lately. The Western States Noontime Net on 40 meters was fairly weak
today and was weak yesterday... the net controls commented that
propagation was horrible. For a couple of days before that,
propagation was excellent and signals were just booming in.

>Lots of domestic AM broadcast interference eventually tamed, but then
>only shortware broadcast received at these frequencies (ie, tunes like
>AM should with a direct conversion receiver) - no ham CW. I do
>remember from way back when that I found the novice 40m band useless in
>the evenings and would hang out on 15m then instead. Is that still
>true right now?

I don't ever hear much in the old 40-Novice band segment. There's
enough foreign-broadcast interference after dark these days to drive
most ham activity out of the 7100-7300 frequencies. There's usually
some CW pipping away down at the very low end of 40 almost any time I
tune around to check.

The phone segment on 40 is usually quite active during the day, if the
band conditions aren't too horrible, since most of the foreign
broadcast interference is heavily attenuated.

My impression is that 15 is as dead as a doornail after sunset these
days.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1681. kpg-43 schematic pls

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-08 06:09:17 UTC
From: help@please.com
Message-ID: <440e750d$0$3994$c3e8da3@news.astraweb.com>
Source record: 13282

[No readable article body recovered]

1682. Re: Picket-fenced ground gias next to microstrip traces

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-08 09:56:33 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1141811793.163207.70710@j33g2000cwa.googlegroups.com>
Source record: 13283

the most important reason for the "pouring" is to reduce the inductance
of the upper side gorund plane.
most of the relevant field in the microstrip is confined in the volume
between the microstrip itself and the gorun plane beneath. there is a
phemomenon called fring effect, whereby fields generated on the upper
side of the microstrip come into play, but that occurs only at
frequencies of about 5GHZ and above, not at the usual frequencies we
talk about. it belong more to the microwaves' people realm.
leave it alone under 1GHz. you don't have to worry about that effect at
lower frequencies.
Saandy 4Z5KS

1683. Re: R4C QEX project tansistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-08 14:36:20 UTC
From: ricknj10@hotmail.com
Message-ID: <440eea0e.49291046@news.optonline.net>
Source record: 13284

Hi Andy,

I don't know if you want to do any experimenting. If you do, one thing to consideris to not use a 602 as the product detector in that conversion. I have done it last month and it worked ok but I didn't really see any difference in the performance of the receiver.
the original product detector, being made from diodes, was a low impedance device. Consider replacing it with a DBM, since you already have a low impedance source of 50 KHz LO. If you make the conversion the authors did you end up moving the components to use the oscillator in the 602 and end up having to attenuate the IF signal coming into the 602 also. My only concern is the frequency response of the packaged DBMs - they are speced at 500 KHz as the lower frequency limit. Maybe using them at 50 KHz is pushing them too far.
I DID make the power supply and audio amp mods. The audio amp, especially, is extremely crude. I can't believe Drake actually built their audio amp that way (Class A with a transformer). I used a simple little 380 IC mounted right next to the volume control and it works fantastic.
I haven't done the earlier mixer mods yet, but so far the improvements in heat reduction and consequent VFO stability are worthwhile.

Rick K2XT

1684. Re: R4C QEX project tansistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-08 14:56:37 UTC
From: Andy Bullington <a7bull@hotmail.com>
Message-ID: <nN6dnaFGMqc-bZPZRVn-jw@comcast.com>
Source record: 13285

Boy have I learned a lot on this little search...thanks to you guys. NTE
lists the NTE 222 as equivalent to the 40673 and Parts Express has them for
just under 9 bucks each. RF Parts has the 40673 for about $7.
"Russ" <carlzomer@hotmail.com> wrote in message
news:j8cs02leuq4l6il823ck69dmujldajf6sm@4ax.com...
> On Tue, 07 Mar 2006 13:27:05 GMT,
> Allison-nospam@nouce.bellatlantic.net wrote:
>
>>On Tue, 7 Mar 2006 07:44:16 -0500, "Andy Bullington"
>><a7bull@hotmail.com> wrote:
>>
>>>I've found all the parts for this project except for the ZTX330 and
>>>2N5950
>>>transistors which seem to be extinct. The 2N5950 is available at some
>>>commercial venues but I only need one of em. Are there readily available
>>>subs for these? I'm getting a little discouraged. Thanks.
>>> Andy W1AWB
>>>
>>
>>I'd think the 40673 mosfets harder to find though easy to substitute.
>>
>>The ZTX330 is generic and a 2n3904, 2n2222 or similar should
>>work fine. For the 2n5950 I'd use a MPF102, 2n3819 or J310 fet as
>>those are easy to get. The transistors used are in non critical
>>circuits so substitutions should easily work.
>>
>>Generally speaking the transistors and IC used reflects those
>>available to the author and reasonable substitutions will work
>>with no degradation.
>>
>>The only parts that require care are the MAV-11 MIMICs and the SBL-3
>>as they helps define many of the modified recievers desired
>>characteristics.
>>
>>Allison
>
> These folks have a decent supply of 40673s. They advertise being
> "Leaders on the trailing edge of technology". I don't know what their
> onesy - twosey policy is, having never done business with them.
> http://www.rocelec.com/
>
> Also, search for "NTE" equivalents.
>
> Russ

1685. Re: R4C QEX project tansistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-08 15:26:44 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2006.03.08.15.26.44.575614@oceanfree.net>
Source record: 13286

On Wed, 08 Mar 2006 09:56:37 -0500, Andy Bullington wrote:

> Boy have I learned a lot on this little search...thanks to you guys. NTE
> lists the NTE 222 as equivalent to the 40673 and Parts Express has them
> for just under 9 bucks each. RF Parts has the 40673 for about $7. "Russ"

Thats a high price for a dual-gate MOSFET. You can buy more modern
devices for a much lower price. The BF981 and BF961 make excellent
RF and IF amplifiers. If you shop around, you can get them for
less than a dollar. Surface mount devices like the the BF996S are
well under a dollar, even from notoriously expensive suppliers
like Maplin. http://www.maplin.co.uk

73, Ed. EI9GQ.

--
Linux 2.6.15
Remove 'X' to reply by e-mail.
Yes, my username really is: nospam

1686. Re: SolderSmoke #17: NE602/LTspice, K1, Enigma, Saturn

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-08 16:27:32 UTC
From: cs_posting@hotmail.com
Message-ID: <1141835252.824526.15370@j52g2000cwj.googlegroups.com>
Source record: 13287

bill.meara@gmail.com wrote:

> Topics discussed in SolderSmoke #17:
>
> -- KE6US's NE602 LTspice model

Is this available in a beta version? KE6US's website lists it as under
development

1687. FS: RF Connectors & Adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-08 19:00:28 UTC
From: AAA RF Products <sales@aaarfproducts.com>
Message-ID: <1QFPf.2813$ld2.2727@fed1read11>
Source record: 13288
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

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1688. Low distortion HF rcv preamp?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-08 19:46:09 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1141847168.969764.25480@v46g2000cwv.googlegroups.com>
Source record: 13289

Hi all,

I'm interested in finding out what the state of the art is in low distortion preamps for HF receiving systems. Anyone out there have pointers to reasonable designs for a preamp with input IP3 above, say, +55dBm, with amplifier power requirements limited to half a watt, and a noise figure better than 10dB? IP2 should also be high--greater than +100dBm--though it may be acceptable to have a lower IP2 as frequency increases. Gain around +10dB would be good.

Cheers,
Tom

1689. Re: Low distortion HF rcv preamp?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-08 19:56:40 UTC
From: dplatt@radagast.org
Message-ID: <120udnohvdp8s4e@corp.supernews.com>
Source record: 13290

>Hi all,
>
>I'm interested in finding out what the state of the art is in low
>distortion preamps for HF receiving systems. Anyone out there have
>pointers to reasonable designs for a preamp with input IP3 above, say,
>+55dBm, with amplifier power requirements limited to half a watt, and a
>noise figure better than 10dB? IP2 should also be high--greater than
>+100dBm--though it may be acceptable to have a lower IP2 as frequency
>increases.

I certainly hope you're going to be willing to accept an
estimated/extrapolated rating for that last figure, and don't require
an actual performance test!

:-)

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1690. Re: Low distortion HF rcv preamp?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-08 20:09:06 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <dundl2sed7@puck.litech.org>
Source record: 13291

Dave Platt <dplatt@radagast.org> wrote:
>>Hi all,
>>
>>I'm interested in finding out what the state of the art is in low
>>distortion preamps for HF receiving systems. Anyone out there have
>>pointers to reasonable designs for a preamp with input IP3 above, say,
>>+55dBm, with amplifier power requirements limited to half a watt, and a
>>noise figure better than 10dB? IP2 should also be high--greater than
>>+100dBm--though it may be acceptable to have a lower IP2 as frequency
>>increases.

> I certainly hope you're going to be willing to accept an
> estimated/extrapolated rating for that last figure, and don't require
> an actual performance test!

Somehow this .sig file seems doubly appropriate here:

> >> .... from S-30 to ...
> >Now _there's_ a signal report you don't often enter in your log...
> True... most of us are too busy running away from the electric arcs
> and dodging the ball lightning :-) -- Dave Platt, in r.r.a.h

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

1691. Re: Low distortion HF rcv preamp?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-08 20:18:27 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1141849107.473175.197940@j33g2000cwa.googlegroups.com>
Source record: 13292

:-) Yes, I would expect the IP3 and IP2 to be measured with signals in the -10dBm to 0dBm range. AFAIK, testing IP3 and IP2 is pretty much always done at levels way below the intercept points. It would be a pretty non-linear amplifier that had IP3 and IP2 below its maximum output before clipping. With the performance I'm looking for, it means detecting distortion products down more than 100dB from the inputs, but that's something I'm up for. I do need to work on a little better combiner for my sources, though, so they don't intermodulate before going into the D.U.T.. I can get fairly close to the sort of performance I asked about with some modern op amps, but not across the full HF band.

Cheers,
Tom

1692. yahoo rf amplifiers group

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-08 22:25:25 UTC
From: Skipp sent this <spammenotyourubberhead@yahoo.com>
Message-ID: <dunlkl$g24$1@skeeter.ucdavis.edu>
Source record: 13293
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.swap

Just a 50 cent plug to let you folks know about the Yahoo RF Amplifiers Group, please feel free to join in if you have an interest in rf and audio amplifiers. Building - construction - operation - design - operation, you get the idea.

Hope to see you there...

http://groups.yahoo.com/group/rfamplifiers/

cheers,
skipp

1693. Re: Question about 4-400 tube socket/mounting

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-08 22:27:33 UTC
From: DOUGLAS SNOWDEN <snowden@peoplepc.com>
Message-ID: <pTIPf.1837$sL2.126@newsread2.news.atl.earthlink.net>
Source record: 13294
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

That helps Terry. I guess I will follow pretty much the way you described it except will try and put a chimney on the tubes. I plan on driving the crap out of them! Naw! Just joking. I try to build and use to last.

Doug N4IJ

<terry@terryking.us> wrote in message
news:1141646465.739304.322020@e56g2000cwe.googlegroups.com...
> Doug, Here's what I remember from several RCA and Collins Broadcast
> transmitters and a KW amp I built: Those ceramic sockets SHOULD have
> holes in them of about 1/2" diameter. Line up a 4-400A with the socket.
> Notice that the BASE of the 4-400A has holes that line up with the
> socket holes. Notice that the 4-400A has a metal base which has a
> series of holes around it. It's very important to put lots of air thru
> those holes to flow around the tube base pins. If you're going to run
> lots of dissipation (definite color on plate) then the usual approach
> is to mount the socket just below the chassis on standoffs or about
> 3/16 to 1/4" as I recall. THe SIZE of the hole in the chassis then is
> set to have about 3/16 to 1/4" of space around the outside of the metal
> tube base, so there is additional airflow which will hopefully stay
> fairly laminar around the upper part of the tube envelope. NOTE:
> Normally that metal base ring is grounded by several metal clips.
>
> SOME systems used the "Air System Chimney" (A pyrex glass open-topped
> "bottle" around the tube) to direct the air around the tube envelope,
> although 1000W OUT Broadcast transmitters from Collins and RCA did not
> use them, and their high level modulators put out 750 watts of audio,
> at, say, 50 percent efficiency, so there was about 375 watts of plate
> dissipation per 4-400A at 100% sinewave modulation. Which at one time
> was OK, because the actual duty cycle on "Typical Program Material" was
> much lower. But about 1970, as I recall, watching the plate color
> during "Magic Carpet Ride" by Steppenwolf, with an asymetrical limiter,
> 20 db of syllable-rate compression, plus the pre-processing of the
> airplay cart by a demented Program Director, the plates looked a lot
> like 100% modulation during an Audio Proof of Performance test :-)
>
> Regards, Terry King ...On The Mediterranean in Carthage
>

1694. Re: Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-08 23:35:44 UTC
From: Risto Tiilikainen <risto.NON.tiilikainen@luukku.comMUNIST.invalid>
Message-ID: <440f695b$0$25356$39db0f71@news.song.fi>
Source record: 13295

TomJ kirjoitti:
> Looking for something else, I found this site.
> Sources for kits. lots of schematics, theory.
>
> Ranging from hobbyist to engineer.
>
> www.pcs-electronics.com/en/guide.php?sub=NewSchematics#Motor
>
> I've spent about four hours (so far) and am amazed at how much info is
> there.
> Looking at the requests for info here, this site has covered most, if
> not all topics.
>
> TomJ
>
>
>
Hi

Tnx for link
Forwarded it to our domestic news pages

73, Risto OH2BT

1695. Re: Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-08 23:38:08 UTC
From: Stargatesg1 <nospam@here.net>
Message-ID: <AVJPf.28721$W42.17038@trnddc02>
Source record: 13296

Great site!
Thanks for the link.

"Risto Tiilikainen" <risto.NON.tiilikainen@luukku.comMUNIST.invalid> wrote
in message news:440f695b$0$25356$39db0f71@news.song.fi...
> TomJ kirjoitti:
> > Looking for something else, I found this site.
> > Sources for kits. lots of schematics, theory.
> >
> > Ranging from hobbyist to engineer.
> >
> > www.pcs-electronics.com/en/guide.php?sub=NewSchematics#Motor
> >
> > I've spent about four hours (so far) and am amazed at how much info is
> > there.
> > Looking at the requests for info here, this site has covered most, if
> > not all topics.
> >
> > TomJ
> >
> >
> >
> Hi
>
> Tnx for link
> Forwarded it to our domestic news pages
>
> 73, Risto OH2BT

1696. Re: Question about 4-400 tube socket/mounting

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-09 01:27:40 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <ftLPf.153$R7.114@bignews3.bellsouth.net>
Source record: 13297
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

DOUGLAS SNOWDEN wrote:
> I have seen 3-500Z tubes mounted in the johnson ceramic sockets. The Heath
> SB-220 uses them.
> Will the 4-400 tube handle the airflow the same way? Usually you see the air
> system sockets used so that the air will flow up through the bottom. Will
> the filament connections remain solid in a 275 ceramic socket with a muffin
> fan blowing across the tube?
> ? I have seen the sockets raised a bit so that the filaments get cooling.
> Just wondering if the 4-400 would work that way as well? Any experience
> with this?
>
> Doug N4IJ
>
>
I built a linear using two 4-400's. I used the Johnson ceramic
sockets (square type) that did have some holes which lined up
with the ones in the bottom of the tubes. I mounted the sockets
under the chassis FLUSH with the bottom of the chassis. I pressurized
the chassis with a 4" boxer type fan mounted under the tube sockets.
This fan was one of the high speed types that could move lots of air.
I also mounted a pair of the same type of fans next to the
bottles on the top of the chassis, blowing air from outside
into the chassis past the tubes. The air flow went through the base holes
and around the glass bottle. This is similar to the way the
SB220 linear was build, as with many HB amps. The tubes did not
suffer any heat effects, while the pair ran near the legal limit.

BTW, 4-400's work ok in GG, but they like more HV than their triode
counterparts. While a pair of 3-500's work well with 2500v, the 4-400
likes more like 3300-3500v to get the same output and IM figures.
So your tank circuit will have more "L" and less "C".

1697. Re: Low distortion HF rcv preamp?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-09 03:57:35 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <PINPf.808994$x96.761118@attbi_s72>
Source record: 13198

With the performance I'm looking for, it means
> detecting distortion products down more than 100dB from the inputs, but
> that's something I'm up for. I do need to work on a little better
> combiner for my sources, though, so they don't intermodulate before
> going into the D.U.T.. I can get fairly close to the sort of
> performance I asked about with some modern op amps, but not across the
> full HF band.
>
> Cheers,
> Tom

Hi Tom. Look for Anzac combiners, we used them to measure +55 dBm Ip3 on the VMP-4 amplifiers and didn't get measureable IMD from them at +6 dBm in.

John Thorpe (AOR 7030 fame) assures us that the simple MCL PSC 2-1 is blameless to 0 dBm.

http://www.aoruk.com/comments.htm
>
I had been having what appeared to be hybrid IMD using some Merrimac combiners, which totally cleared up by using DDS sources instead of low noise HP 8640's modified to remove the levelling crosstalk. The DDS's do NOT talk to each other and less attenuation for isolation is required.

Gimmee a hint on your "modern" op-amps. Split PSU's I presume?

Regards
W4ZCB

1698. how to wind 10mH inductor for AF diplexer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-09 08:21:04 UTC
From: aadu.adok@gmail.com
Message-ID: <1141892464.866553.169310@p10g2000cwp.googlegroups.com>
Source record: 13199

hello,

After completing my AF amp and BFO, I'm in the process of doing IF/BFO diode ring mixer.
I understood that it is a good idea (or even mandatory?) to follow DBM with a diplexer.

I found one from http://www.qrp.pops.net/dip2.htm

My question is: how on earth should I wind those 10mH inductors? My calculations show that I should wind 487 turns on FT37-43 (which is obviously impossible), or 437 turns on FT50-43 (which is hard..but should be possible).

Any other ideas how to make 10mH inductors for AF diplexer?

thanks!

1699. Re: FS: RF Connectors & Adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-09 09:03:32 UTC
From: SamSvL <samsvl@nlr.nl>
Message-ID: <Xns97816653B3F63samsvlnlrnl@137.17.128.14>
Source record: 13200
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

"AAA RF Products" <sales@aaarfproducts.com> wrote in news:1QFPf.2813
$ld2.2727@fed1read11:

> For your free copy of our new catalog,
>
> please email sales@AAARFProducts.com
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> or see www.aaarfproducts.com
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> or call 949 481 3154 (San Clemente, CA)
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> No minimum order.
>
> No handling charges.
>
>
No shipping to Europe?

1700. Re: how to wind 10mH inductor for AF diplexer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-09 09:15:58 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <120vsifssu92cc4@corp.supernews.com>
Source record: 13201

aadu.adok@gmail.com wrote:
> hello,
>
> After completing my AF amp and BFO, I'm in the process of doing IF/BFO
> diode ring mixer.
> I understood that it is a good idea (or even mandatory?) to follow DBM
> with a diplexer.
>
> I found one from http://www.qrp.pops.net/dip2.htm
>
> My question is: how on earth should I wind those 10mH inductors? My
> calculations show that I should wind 487 turns on FT37-43 (which is
> obviously impossible), or 437 turns on FT50-43 (which is hard..but
> should be possible).
>
> Any other ideas how to make 10mH inductors for AF diplexer?
>
> thanks!

The best solution is a pot core. A molded inductor is ok, too, but you might have trouble with hum pickup -- the voltage produced by any field coupled into the inductor will be amplified by the whole audio chain. A pot core is self-shielding like a toroid.

Roy Lewallen, W7EL

1701. Re: Question about 4-400 tube socket/mounting

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-09 10:13:38 UTC
From: "terry@terryking.us" <terry@terryking.us>
Message-ID: <1141899218.563731.304420@i40g2000cwc.googlegroups.com>
Source record: 13202
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Doug, a suggestion about "Longevity" for 4-400's (Actually, any thoriated-tungsten filament power tubes):

These tubes are very sensitive to filament voltage. Make sure the tube pins and socket are nice and clean and shiny (don't use any abrasives!).. Measure filament voltage at the socket. This is all to make sure the tubes REALLY get the correct filament voltage to the filament... It's 28 Amps for two tubes!

Tubes that are new or in good condition do NOT need the full rated filament voltage for full output. But if you do not have good AC line regulation at your location, it's hard to get it exactly right.

In Broadcast use, I modified some RCA and Collins transmitters by adding a "Sola" type voltage regulator on the AC line, and an adjustable autotransformer ("Variac" or "Powerstat") to feed the filament transformer. With all new tubes, I could measure the distortion percentage on the transmitted audio, and lower the filament voltage until the distortion just started to creep up. And set a little margin. As I recall, a 5.0V tube would initially run fine at 4.6 to 4.7V. On one transmitter, the tube life went from 4000 hours to over 9000 hours (a year, 24-7). Of course, the filament voltage was slowly raised, and the tubes were 'retired' when the filament voltage for low distortion got up above 5.0 volts. In noncommercial service, you could get some retired 4-400a's to work for another 1000 hours or more by raising the voltage to 5.1 or 5.2

-- Plenty of air
-- Clean bright tube pins and sockets
-- Minimum required filament voltage

were the main considerations.

Have fun!

1702. Re: Picket-fenced ground gias next to microstrip traces

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-09 12:01:46 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1141905706.649458.178340@u72g2000cwu.googlegroups.com>
Source record: 13203

,,,,,,this is PRECISELY what a CPW is NOT!
A coplanar wave guide relies on the ground planes colocated on the same side of the board with the microstrip. there is no ground plane underneath. As such there is nothing to connect with through vias. This is a technique widely used in order to reduce crosstalk efects on PCB's when shielding and/or separation are not an option. The electrical field present upon the "fence" acts as sort of a shield and this help reduce coupling. Not much, but every single drop helps. It is quite similar with the DC guard ring used against lekage. The difference lies in the fact that at higher frequencies an elctromagnetic field rather than a purely electrostatic one is formed. You can see that it isn't a CPW when you reduce the separation. You have to go down to tenths of millimeters before you see the effect occuring.
Saandy 4Z5KS

1703. Re: Remote Car Battery Voltage Monitoring

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-09 12:05:14 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <441019FA.20604@bloomer.net>
Source record: 13204
Cross-posted to: comp.home.automation,rec.autos.misc,rec.radio.amateur.homebrew

Why go through all that bother? Look on ebay for a solar panel. There
are a ton on small units that VW uses to keep the batteries topped off
while the cars are in transit. They are small 5-10 Watt units. Usually
go for about $10. Lay one on the dash and park the vehicle so the
windshield is facing south. The unit has a cigarette lighter adapter
and you just plug it in.

Scott

Robert Green wrote:
> Anyone have ideas or sources for remotely monitoring an infrequently used
> car's 12V battery to make sure it didn't go dead from simple attrition?
>
> Ideally, I want some sort of contact closure when voltage drops below a
> certain point. I want to sent that information wirelessly to a base unit
> inside the house that would flash, beep, and then call my cellphone and say
> "Dad's wheelchair van needs recharging."
>
> What I would like to do is hijack a wireless thermometer - the thermistor
> probe should be able to read voltage with a few modifications to the probe
> end. The thermometer base station has an "alarm on temperature" feature
> that could, with a little recalibration, serve to monitor dropping voltage
> and to beep when it dropped below a threshold I would set. With any luck,
> I could get it to read 100 degrees when the battery was fully charged and 0
> degrees when depleted. Not sure there would be linearity along the scale,
> though! <g>
>
> Another thought would be some sort of docking cradle on the front bumper
> that allowed feeding a charging current to the car without the need for
> connecting charging cables or a charger that can be dragged down the street
> for several blocks until the car manages to run over it (the reason why I
> just don't leave the sucker plugged in all the time for him!).
>
> --
> Bobby G.
>
>
>

1704. Re: Low distortion HF rcv preamp?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-09 12:10:54 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1141906254.485087.50350@j33g2000cwa.googlegroups.com>
Source record: 13205

Do you realize that 100dBm means o power output capability 10 10
MegaWatts? Even backing up 20 dB for improved linearity, not even the
Voice of Ameirca will be able to compete with your LNA!
I suggest you reformulate the question. then we'll be able to give you
some answers.
Saandy 4Z5KS

1705. Re: how to wind 10mH inductor for AF diplexer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-09 13:08:02 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1141909682.254268.164810@e56g2000cwe.googlegroups.com>
Source record: 13207

aadu.adok@gmail.com wrote:
> My question is: how on earth should I wind those 10mH inductors?

In years past I would pick up 88mH/22mH and like "phone company"
toroids at hamfests etc.

My understanding is that these were used to compensate for line loading
in long phone wire runs.

Windings were either used as-is (if 88 mH or 22mH was appropriate) or
were removed and rewound.

Don't know what the actual core material was, I'm sure it was
completely inappropriate for RF but did fine at audio (I used them in
RTTY demodulators).

Haven't seen these on the surplus market in many years now. Too bad,
just about every 70's-era ARRL handbook had a half-dozen projects based
around them. A quick look at Digikey turns up some 2 through 16 mH
toroids intended for use in switching power supplies (page 1619).

Tim.

1706. True a.m.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-09 13:09:59 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <juSdnU5TGuN_u43ZnZ2dnUVZ_tOdnZ2d@comcast.com>
Source record: 13206

I saw this post on rec.audio.tubes, but it is more germaine to RRAH -- how to build a modulation transformer:

http://www.amwindow.org/tech/htm/tvtomod.htm

1707. Re: how to wind 10mH inductor for AF diplexer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-09 14:46:33 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <dupf49$ol5$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13208

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
news:1141909682.254268.164810@e56g2000cwe.googlegroups.com...
> aadu.adok@gmail.com wrote:
> > My question is: how on earth should I wind those 10mH inductors?
>
> In years past I would pick up 88mH/22mH and like "phone company"
> toroids at hamfests etc.
>
> My understanding is that these were used to compensate for line
loading
> in long phone wire runs.
>
> Windings were either used as-is (if 88 mH or 22mH was appropriate)
or
> were removed and rewound.

==========

88 mH loading coils were used on 300-3,600 Hz phone circuits ever since around the years 1900 to 1910. Spaced every 2000 yards in 542-pair underground, long distance cables between phone exchanges and towns and cities, they were an international standard of loading. Countless millions were manufactured. 88 mH coils must have outnumbered all coils of all other values of inductance put together. Originally the core was a bundle of soft iron wires but in the 1950's after 50 years they changed to ferrites.

22 mH coils were another popular value. They were used on "music" circuits. Spaced every 500 yards the frequency range was 100-15,000 Hz. At one time used on a network between radio broadcast studios and transmitters.

Coils had to be removed to make cables suitable for carrier telephony and then digital transmission. But there must be millions still in use around the World.

Reg.

1708. Re: Low distortion HF rcv preamp?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-09 15:34:12 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1141918452.779024.240090@i39g2000cwa.googlegroups.com>
Source record: 13210

Hi Saandy,

"+100dBm second order intercept" means that second order distortion products, following a simple small-signal second order model, would become equal to the input if extrapolated up to +100dBm. Second order products increase in dB amplitude exactly twice as fast as the fundamental, so that means that, say, a -10dBm input would produce an input-referred second harmonic of -120dBm, or -110dBc. If you decrease the input to -20dBm, the second harmonic drops to -140dBm, or -120dBc. If you increase the input to 0dBm, the second harmonic increases to -100dBm, which is also -100dBc. Extrapolating those numbers, you get a +100dBm second order intercept. In no way does it imply that the preamp (not all that low noise at a 10dB noise figure) can put out +100dBm, or can handle even +10dBm input without clipping or serious compression (though it would be nice in this case to get to close to that input level before clipping). Of course, distortion rises very quickly as you go into compression/clipping.

Similarly, a +55dBm third order intercept implies third harmonic at -110dBm for a 0dBm signal. In other words, I'm looking for an amplifier that has about equally good second and third order distortion products for inputs near full scale. I don't want super-good TOI without also having second order products low.

Cheers,
Tom

1709. Re: how to wind 10mH inductor for AF diplexer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-09 15:37:29 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <H8udndUNz_Hy143ZnZ2dnUVZ_sGdnZ2d@adelphia.com>
Source record: 13209

aadu.adok@gmail.com wrote:
> hello,
>
> After completing my AF amp and BFO, I'm in the process of doing IF/BFO
> diode ring mixer.
> I understood that it is a good idea (or even mandatory?) to follow DBM
> with a diplexer.
>
> I found one from http://www.qrp.pops.net/dip2.htm
>
> My question is: how on earth should I wind those 10mH inductors? My
> calculations show that I should wind 487 turns on FT37-43 (which is
> obviously impossible), or 437 turns on FT50-43 (which is hard..but
> should be possible).
>
> Any other ideas how to make 10mH inductors for AF diplexer?
>
> thanks!
>
I would be looking for a core with bobbin to make winding a lot
easier. Something like this:
http://cgi.ebay.com/FERRITE-TRANSFORMER-CORE-ASSEMBLY-WITH-BOBBIN_W0QQitemZ7597936903QQ
Is an over sized core, but would work. One 1/4 this size would also
work. I would add a thin gap (sheet of paper) between the core
halves, to make the inductance stable. You can chuck the bobbin in a
variable speed drill, by passing a bolt through it, and wind hundreds
of turns in a couple minutes. You can adjust the inductance with the
core gap, if you have a way to measure the inductance.

1710. Re: Low distortion HF rcv preamp?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-09 15:43:08 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1141918988.407417.251540@v46g2000cwv.googlegroups.com>
Source record: 13211

Since I really need wider bandwidth than the super-low-distortion ones
will give me, I'm not remembering those off the top of my head.
Well-at AUDIO, you can get distortion down in the -140dBc range for
outputs at a couple volts RMS with either the OPA627/OPA637 or the
AD797 at low gains, and the '797 also has about a 4dB noise figure for
a 50 ohm source. But for wider-band RF stuff, the OPA847 is one
candidate, if used carefully. It's not quite as good as I'd like to
see, but close.

Cheers,
Tom

1711. Re: how to wind 10mH inductor for AF diplexer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-09 15:46:09 UTC
From: cs_posting@hotmail.com
Message-ID: <1141919169.245613.168700@j52g2000cwj.googlegroups.com>
Source record: 13212

aadu.adok@gmail.com wrote:

> I understood that it is a good idea (or even mandatory?) to follow DBM
> with a diplexer.

> My question is: how on earth should I wind those 10mH inductors?

I'm curious, is the virtual ground at the input of a modern
high-bandwidth op-amp (set up with unity or only moderate gain) good
enough at frequencies of concern that terminating the mixer into this
with a resistive network would produced the needed lack of RF
reflection?

I know that in terms of the audio frequencies, op amps with R and C
passives have long been a viable option to big inductors - but can they
now satisfy the need to terminate the RF components?

1712. Re: Picket-fenced ground gias next to microstrip traces

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-09 20:36:17 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12114fu63q9bief@corp.supernews.com>
Source record: 13213

"Saandy , 4Z5KS" <hardware2@ift-int.com> wrote in message
news:1141905706.649458.178340@u72g2000cwu.googlegroups.com...
> ,,,,,,this is PRECISELY what a CPW is NOT!

It's a "coplanar waveguide with ground plane." This seems more popular than strict CPWs, as far as I can tell.

1713. Diode Deal

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-09 21:07:33 UTC
From: Brian <mementodvd@earthlink.net>
Message-ID: <n661129akhcda359k65j5eg8nk32msr520@4ax.com>
Source record: 13214

I am cleaning out my parts pile...

1N4148 diodes

200 for $3.00
500 for $5.00

Price includes US shipping. DX shipping is not included.

Send cash or money order or check....NO PAYPAL.

KB9BVN
47 Grassy Drive
New Whiteland IN 46184

1714. Re: Picket-fenced ground gias next to microstrip traces

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-09 22:51:27 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <duqbhgdv2@engnntp2.cig.mot.com>
Source record: 13215

This appears to be a blend of co-planar and microstrip. Co-planar has no
ground plane, that is, everything is in one plane thus the name "co-planar".
A "microstrip-like" line is flanked by two ground surfaces and there is no
ground plane under it.
Like this
---- - ----

Microstrip is a flat line over a ground plane. Like this
-

The vias along both sides of this "CPW" T-line appear to be used to
constrain the fields and

The Vias most certainly must enter into the characteristic impedance
equation since the spacing to the line is so close. Therefore the line must
be narrower than pure coplanar.

I was part of a program to design a family of his same type of switch on
GaAs, back in the early 90's and the co-planar line was used.

73, Steve, k9DCi

"Mike Andrews" <mikea@mikea.ath.cx> wrote in message
news:dukh55$u1$1@puck.litech.org...
> Joel Kolstad <JKolstad71HatesSpam@yahoo.com> wrote:
> > I've noticed that various data sheet application circuits for items such
as RF
> > switches, amplifiers, etc. (e.g.,
> > http://www.hittite.com/product_info/product_specs/switches/hmc349lp4c.pd
f)
> > use what I would call "microstrip traces surrounded by a ground pour
'guard'
> > to reduce coupling to adjacent traces." Someone else, however, has
suggested
> > that the application circuits were really designed as co-planar
waveguides
> > (with grounds). Anyone else want to venture an opinion?
>
> Their Application Note 17 ("Design techniques enhance isolation in
> switch assemblies") talks explicitly about grounded-coplanar-waveguide
> techniques. The evaluation boards for the "349" switches certainly
> appear to use the CPW techniques discussed in AppNote 17, including
> closely-spaced plated thru-holes to tie top and bottom ground planes
> together.
>

> > For a 62.5 mil board, a 50 ohm microstrip's width is around 115 mils
using
> > FR-4 (k=4.7). Using TxLine 2003, for a CPW w/ground I have to reduce
the gap
> > to ~50 mils before the signal trace width reduces ~10% to ~104 mils. I
take
> > this to imply that there's not a lot of coupling between the signal
trace and
> > the copper pours (instead of the ground plane) until the gap width is
> > comparable to the board thickness.
>
> > In general, my impression has been that the use of copper flooding is
more to
> > provide isolation between adjacent traces than to change the form of the
> > transmission line, and the use of the picket fenced vias was to insure
that a
> > large chunk of copper pour didn't suddently turn into a resonator. Does
that
> > sound correct?
>
> If by "picket fenced vias" you mean the projections outward from the
> signal vias on the evaluation boards, I take those to be the plated
> thru-holesdiscussed in AppNote 17.
>
> Are you seeing something I'm not?
>
> _Interesting_ gadgets. Awfully small, but interesting; may have to
> ask for samples and eval boards.
>
> --
> Mike Andrews, W5EGO
> mikea@mikea.ath.cx
> Tired old sysadmin

1715. Re: Picket-fenced ground gias next to microstrip traces

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 01:35:23 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <1211m0nk6dleu25@corp.supernews.com>
Source record: 13216

Hi Steve,

"Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
news:duqbhgdv2@engnntp2.cig.mot.com...
> This appears to be a blend of co-planar and microstrip.

The freebie program TxLine 2003 "knows" about (can compute dimensions from impedances, etc.) CPWs, CPWs w/ground planes, microstrips, etc. and you can get some feel for how wide you can make a CPW w/GP gap before it's effectively a microstrip -- when the signal trace widths became nearly the same. I dug up some more Hittite app notes, and it does seem as though they're clearly playing in the CPW w/GP arena. They do point out that a major downside is that you eat up a fair number of routing channels with all those vias.

> I was part of a program to design a family of his same type of switch on
> GaAs, back in the early 90's and the co-planar line was used.

I'm surprised just how much "chaos" there seems to be in the RF IC (primarily MMIC) arena... there are plenty of old standbys like Hittite, MA/COM (now Tyco), and Watkins-Johnson, but they seem to have a pretty well stocked "stable" of components and only introduce a handful of new ones every year. On the other hand, the little guys and mergers like Freecell, California Eastern, and RF Micro Devices seems to have lots of good parts that suddenly get discontinued, product introductions that turn out to be vaporware (a friend claims that RFMD is great for this -- their data sheets are really part of their marketing department, with specs drawn strictly from simulation -- they initially quote everyone a lead time of, say, 3 months, and if they don't get orders for large quantities, they just never fab the chip in the first place), and otherwise seem a little difficult to rely on at times!

---Joel

1716. Re: how to wind 10mH inductor for AF diplexer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 01:43:52 UTC
From: cs_posting@hotmail.com
Message-ID: <1141955032.508373.319690@j52g2000cwj.googlegroups.com>
Source record: 13217

cs_posting@hotmail.com wrote:
> aadu.adok@gmail.com wrote:
>
> > I understood that it is a good idea (or even mandatory?) to follow DBM
> > with a diplexer.

> I know that in terms of the audio frequencies, op amps with R and C
> passives have long been a viable option to big inductors - but can they
> now satisfy the need to terminate the RF components?

I've been playing with this a bit in simulation, and came up with
something seems to work. Most likely it is either common knowledge, or
fatally flawed - would be interested to hear which.

What I started with is an op amp with a grounded non-inverting input, a
50 ohm resistor from the mixer output to the inverting input, and a 50
ohm feedback resistor from the op amp output to the inverting input.
With an ideal op-amp, the inverting input would match the non-inverting
input's ground with a virtual ground, and the mixer would be
resistively terminted into this at 50 ohms for all frequencies.

Two obvious failure modes come to mind. First, at some frequency the
op-amp feedback will no longer be able to maintain a satisfactory
virtual ground. I tried to address this with a capacitor from the
inverting input to ground. 220 nF seems to clamp it there below the RF
frequencies where a 1 Mhz gain-bandwidth op amp fails, but not roll off
the audio response too badly.

Second, in the presence of a strong intefering signal on the order of
volts, the op-amp probably can't drive enough current through the 50
ohm feedback resistor to reproduce this, so non-linear effects (and
intermodulation) may set in. I attempt to address this by shunting the
feedback resistor with a 470nF capacitor, to make the gain roll off
towards zero above audio.

There is some slight reflection at the transition frequencies, but it
looks like it can be kept very low. One major weakness of this circuit
is that the rolloffs are largely first order and thus gradual. Given
that the goal of the exercise was to avoid the use of large inductors,
one improvement might be to precede the mixer with some higher order
selectivity at RF or IF, where inductors, or even ceramic resonators
are easy to come by. Another obvious improvement would be to pad the
output of the mixer down by quite a bit, though that probably means
picking up some broadband noise from the op-amp when it is reamplified?

So far I've only played with this in simulation. Trying to think how I would test it if I were to actually build it. I have some access to a network analyzer and would guess I could use that to measure the reflection from the input that the mixer would see over a wide frequency range. Measuring the ability to handle a weak signal in the presence of a strong interfering one might be harder.

1717. Re: Remote Car Battery Voltage Monitoring

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 07:35:33 UTC
From: Robert Green <ROBERT_GREEN1963@YAH00.COM>
Message-ID: <pMednUnCwvczsYzZnZ2dnUVZ_sKdnZ2d@rcn.net>
Source record: 13218
Cross-posted to: comp.home.automation,rec.autos.misc,rec.radio.amateur.homebrew

"gwatts" <gwatts@frontiernet.net> wrote in message
news:WRhPf.1977$kg.367@news02.roc.ny...
>
> You might not need to get that fancy, try something like
> http://www.baproducts.com/sm831.htm
> just put it on the dashboard, plug it in, and stop worrying.

I got something very much like it that clips to the sun visor and plugs into
the cigarette lighter. We'll see if it does the trick . . .

--
Bobby G.

1718. Re: Remote Car Battery Voltage Monitoring

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 07:39:01 UTC
From: Robert Green <ROBERT_GREEN1963@YAH00.COM>
Message-ID: <4KGdnSJp9NFBsIzZnZ2dnUVZ_tudnZ2d@rcn.net>
Source record: 13220
Cross-posted to: comp.home.automation,rec.autos.misc,rec.radio.amateur.homebrew
Body handling: HTML body converted to readable text

"BruceR" wrote in message
news:TblPf.2595$pV5.325@tornado.socal.rr.com...
> I have a car at a second home that sits for months without use and a
> marine battery that sits in a small sailboat to power a bilge pump and
> lights. For the boat, I found a flexible, waterproof solar panel at West
> Marine that keeps the battery fully charged. In 4 years I've never had
> to charge it with anything else. For the car, I use a Battery Tender Jr.
> to keep the battery "ready-to-start" and it works well. Rather than
> monitoring the battery's condition remotely, in both cases I just use
> the chargers and never have to worry about it. If the car has a lighter
> socket, power outlet that's always on you can just plug it in that way.
> http://tinyurl.com/k9w56 shows the Battery Tender Jr. and you can buy
> it for under $30 at places like Pep Boys.

I just bought a solar panel that plugs into the dash. We'll see if it
works. The van doesn't get a lot of sun where it's parked and the rear
windows are all heavily tinted so mounting it back there won't help much. I
may still have to go with some sort of detachable umbilical because I need
to be able to charge his scooter while it's in the van, since he still walks
from the van into the house with his cane.

Thanks for the info. Hopefully the dash charger will do the trick.

--
Bobby G.

1719. Re: Remote Car Battery Voltage Monitoring

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 07:40:59 UTC
From: Robert Green <ROBERT_GREEN1963@YAH00.COM>
Message-ID: <4KGdnV1p9NFAsIzZnZ2dnUVZ_tudnZ2d@rcn.net>
Source record: 13219
Cross-posted to: comp.home.automation,rec.autos.misc,rec.radio.amateur.homebrew
Body handling: HTML body converted to readable text

"B Fuhrmann" wrote in message
news:120s91r12q0i771@corp.supernews.com...
> "Robert Green" wrote ...
> > Another thought would be some sort of docking cradle on the front bumper
> > that allowed feeding a charging current to the car without the need for
> > connecting charging cables or a charger that can be dragged down the
> > street
> > for several blocks until the car manages to run over it (the reason why
I
> > just don't leave the sucker plugged in all the time for him!).
>
> With the low current needed for a trickle charger, just wire it to a
> cigarette lighter plug and drape the wire across the steering wheel. It
> would be hard to drive off without noticing it.

I've thought about that as well as the solar panels but the car's parked in an area that gets very little sun. My damn toothbrush can recharge without any wires - why can't the car (aside from the massive size difference!)?

> Another solution would be to wire a 3 wire 1/4" phone plug to it and a
jack
> to the car in an appropriate location where it will unplug if you drive
> away. Connect the 3rd terminal to get power from the car's jack and use
it
> as a safety circuit to shut off the charger if it is not connected.

This is probably the most appropriate solution. I especially like your idea of wiring it so that if it is accidentally disconnected via a "drive off" that there won't be a live 12VDC plug lying in the driveway. I was also thinking of affixing the charging cable to a spring-wound reel so that when disconnected, it would retract into the reel housing. Not sure where to find one for 12VDC charging wire, but can probably make one from a retractable clothesline pulley.

The one downside to this solution is that sometimes, depending on weather and other factors, the van is backed in, not nosed in. I suppose recharge connectors on both ends would solve the problem. I think I'll end up getting RV connectors because another issue cropped up yesterday - the need to recharge his 24VDC powerscooter while it's sitting in the van. That means at least 4 separate conductors going to the van in addition to any supervisory wiring that I might need. My concern for those would be to waterproof them and make sure they didn't get clotted with road slime and become useless.

> A lot easier, more reliable, and cheaper than monitoring the voltage and
> calling your cell phone.

I'm still not giving up on the cell phone notification. It will tell me if the car charger wasn't plugged in to begin with! Whatever I do, I think I will incorporate the ability to determine whether the car is plugged in and if, so, what the charge level is.

Thanks for the insights, Bill.

--
Bobby G.

1720. Re: Remote Car Battery Voltage Monitoring

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 07:41:09 UTC
From: Robert Green <ROBERT_GREEN1963@YAH00.COM>
Message-ID: <4KGdnVxp9NFCsIzZnZ2dnUVZ_tudnZ2d@rcn.net>
Source record: 13221
Cross-posted to: comp.home.automation,rec.autos.misc,rec.radio.amateur.homebrew

Which one? That URL points to a whole page of items!

--
Bobby G.

"FrankW" <fworm@norpak.ca> wrote in message
news:qemdnUW3UqrACJDZRVn-pw@magma.ca...
> Justr get one of these
>
> http://www.vdcelectronics.com/camping.htm
>
> Robert Green wrote:
> > Anyone have ideas or sources for remotely monitoring an infrequently
used
> > car's 12V battery to make sure it didn't go dead from simple attrition?
> >
> > Ideally, I want some sort of contact closure when voltage drops below a
> > certain point. I want to sent that information wirelessly to a base
unit
> > inside the house that would flash, beep, and then call my cellphone and
say
> > "Dad's wheelchair van needs recharging."
> >
> > What I would like to do is hijack a wireless thermometer - the
thermistor
> > probe should be able to read voltage with a few modifications to the
probe
> > end. The thermometer base station has an "alarm on temperature"
feature
> > that could, with a little recalibration, serve to monitor dropping
voltage
> > and to beep when it dropped below a threshold I would set. With any
luck,
> > I could get it to read 100 degrees when the battery was fully charged
and 0
> > degrees when depleted. Not sure there would be linearity along the
scale,
> > though! <g>
> >
> > Another thought would be some sort of docking cradle on the front bumper
> > that allowed feeding a charging current to the car without the need for
> > connecting charging cables or a charger that can be dragged down the
street
> > for several blocks until the car manages to run over it (the reason why

I
> > just don't leave the sucker plugged in all the time for him!).
> >
> > --
> > Bobby G.
> >
> >
> >
>

1721. Re: Remote Car Battery Voltage Monitoring

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 07:43:25 UTC
From: Robert Green <ROBERT_GREEN1963@YAH00.COM>
Message-ID: <pK6dnYSB5PuPsozZnZ2dnUVZ_tSdnZ2d@rcn.net>
Source record: 13222
Cross-posted to: comp.home.automation,rec.autos.misc,rec.radio.amateur.homebrew

"Scott" <acepilot@bloomer.net> wrote in message
news:441019FA.20604@bloomer.net...
> Why go through all that bother? Look on ebay for a solar panel. There
> are a ton on small units that VW uses to keep the batteries topped off
> while the cars are in transit. They are small 5-10 Watt units. Usually
> go for about $10. Lay one on the dash and park the vehicle so the
> windshield is facing south. The unit has a cigarette lighter adapter
> and you just plug it in.

That's the plan for now. Hopefully it will end the problem of run-down
batteries. I may still need to go the "plug in" route because I want to
also be able to charge my Dad's 24VDC scooter while it's loaded in the van.

--
Bobby G.

1722. Re: how to wind 10mH inductor for AF diplexer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 08:58:00 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1141981080.558250.223480@i39g2000cwa.googlegroups.com>
Source record: 13223

aadu.adok@gmail.com wrote:
> hello,
>
> After completing my AF amp and BFO, I'm in the process of doing IF/BFO
> diode ring mixer.
> I understood that it is a good idea (or even mandatory?) to follow DBM
> with a diplexer.
>
> I found one from http://www.qrp.pops.net/dip2.htm
>
> My question is: how on earth should I wind those 10mH inductors? My
> calculations show that I should wind 487 turns on FT37-43 (which is
> obviously impossible), or 437 turns on FT50-43 (which is hard..but
> should be possible).
>
> Any other ideas how to make 10mH inductors for AF diplexer?
>
> thanks!

Just buy some Toko 10RB 10mH inductors. I've use them in that type of
diplexer and they work very well. They are available in the UK from
Rapid Electronics and other suppliers.

73, Leon

1723. What do you call these devices?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 09:55:19 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <1212j86qjoboec6@corp.supernews.com>
Source record: 13224

At work we have these "do-hickeys" that look like a regular "tee" connector. However, it's meant to be used such that a signal passes through the "top" of the tee while the "leg" of the tee "picks off" the signal some 10dB or so down from the input. (The insertion loss is some fraction of a dB.) The pick off seems to just be a wire tip coming out of the backside of the connector (just capacitively coupled?); there's an adjustable sleeve that lets you position this tip closer or further from the through line; moving it closer creates better coupling, but also tends to decrease frequency flatness. The cool thing is that all ports drive 50 ohms, and the pick-off's output is surprisingly flat over more than an octave.

Any ideas? It's definitely not constructed the way I'd build a directional coupler -- even though it performs a somewhat similar function --, nor a "magic tee" (although I've only seem magic tees in the form of waveguides and transformer-based affairs for HF).

Thanks,
---Joel Kolstad

1724. 7/8 wave antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 10:27:03 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <durk9n$28n$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13225

Do these things actually work?

I have a 2m 5/8 wave that I use mobile, and am told that a 7/8 wave will give more gain. Can anyone confirm?

I'm told also that I can just take the 5/8 wave out and stick the 7/8 wave in and it will load up. I doubt this personally - can anyone tell me if it needs more or less inductance?

Any ideas where to get loading coils from in the UK?

Thanks all!

Sam
M1FJB

1725. Re: 7/8 wave antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 10:48:31 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1212mc1l4k6eeb4@corp.supernews.com>
Source record: 13226

Samuel Hunt wrote:
> Do these things actually work?
>
> I have a 2m 5/8 wave that I use mobile, and am told that a 7/8 wave will
> give more gain. Can anyone confirm?

Well, the 7/8 wave vertical has about 1-1/2 dB more gain than a 5/8 wave, if you measure that gain at the angle at which each antenna's radiation is greatest. The problem is that while the 5/8 wave antenna radiates most strongly toward the horizon (assuming a large ground plane), the 7/8 wave radiates almost nothing at the horizon. Its radiation is maximum at about 40 degrees above the horizon. Great for contacting aircraft at a particular distance, but very poor for general line-of-sight and repeater use. At the horizon, the gain of the 7/8 wave is about 20 dB less than that of the 5/8 wave. This assumes a large ground plane, and relative performance will vary depending on the frequency and installation. But you can count on the 5/8 being much better than the 7/8.

> I'm told also that I can just take the 5/8 wave out and stick the 7/8 wave
> in and it will load up. I doubt this personally - can anyone tell me if it
> needs more or less inductance?

Considering the lousy radiation pattern, I can't see why anyone would want to use a 7/8 wave vertical.

Roy Lewallen, W7EL

1726. Re: 7/8 wave antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 13:21:15 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <f3fQf.26065$eP4.15396@trnddc05>
Source record: 13227

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:1212mc1l4k6eeb4@corp.supernews.com...
> Samuel Hunt wrote:
>> Do these things actually work?
>>
>> I have a 2m 5/8 wave that I use mobile, and am told that a 7/8 wave will
>> give more gain. Can anyone confirm?
>
> Well, the 7/8 wave vertical has about 1-1/2 dB more gain than a 5/8 wave,
> if you measure that gain at the angle at which each antenna's radiation is
> greatest. The problem is that while the 5/8 wave antenna radiates most
> strongly toward the horizon (assuming a large ground plane), the 7/8 wave
> radiates almost nothing at the horizon. Its radiation is maximum at about
> 40 degrees above the horizon. Great for contacting aircraft at a
> particular distance, but very poor for general line-of-sight and repeater
> use. At the horizon, the gain of the 7/8 wave is about 20 dB less than
> that of the 5/8 wave. This assumes a large ground plane, and relative
> performance will vary depending on the frequency and installation. But you
> can count on the 5/8 being much better than the 7/8.
>
>> I'm told also that I can just take the 5/8 wave out and stick the 7/8
>> wave in and it will load up. I doubt this personally - can anyone tell me
>> if it needs more or less inductance?
>
> Considering the lousy radiation pattern, I can't see why anyone would want
> to use a 7/8 wave vertical.
>
> Roy Lewallen, W7EL

This line of reasoning (a longer wavelength is better) harks back to the days of mobile CB antennas. Manufacturers would advertise their mobile whips as being 1/2 wave, 5/8, 3/4 even 1 wavelength. None were even close to being that long physically. The claim was that they had that much wire wound up in them. One manufacturer placed a layer of aluminum foil over a portion of the winding allowing them to claim 1/2 wavelength (of wire) and still be 1/4 wavel resonant. In addition, the I squared R of the shorted coil improved their BW.

Dale W4OP

1727. Re: What do you call these devices?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 13:28:53 UTC
From: Bob <wb0poq@visi.com>
Message-ID: <1212voorvaeqh5f@corp.supernews.com>
Source record: 13228

"Joel Kolstad" <JKolstad71HatesSpam@Yahoo.Com> wrote in message news:1212j86qjoboec6@corp.supernews.com...
> At work we have these "do-hickeys" that look like a regular "tee" connector. >

We called these an "isolated T" when I worked in 2 way radio and used them to check for receiver desense in a repeater. The through ports were placed in the line to the antenna, while the isolated port was connected to a signal generator on the receiver frequency. We would disable the repeat function, turn the generator amplitude up until we got some value of quieting in the receiver, and then re-enable the repeat function. If the duplexer was mistuned (or was a cheap notch only type), or you had a dirty transmitter, you would hear the noise level in the received signal rise. The isolated port was needed so you did not transmit into the generator and cause the magic smoke contained therein to issue forth. ;)

Some repeaters were very quiet (Motorola for one). Others (brands will not be mentioned but they had horns on them) often showed several dB of desense. I spent many an hour trying to finesse a sow's ear into a silk purse by tuning for minimum desense. Ahhhhhhhhh those were the days..... ;) :)

Bob WB0POQ

1728. What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 15:03:30 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142003010.363667.13530@j52g2000cwj.googlegroups.com>
Source record: 13229
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

What is Ham Radio?

It is becoming increasingly difficult to fly the flag for
decency and for civilised behaviour in Radio Hammery. Even
the Usenet newsgroups dedicated to the cause have degenerated
into a hotbed of abusive onslaughts by those who ought to know better,
the Nugatory Numpties who boast of an interest exceeding 10,
20, 30, 40 or even 50 years and yet who have proved themselves
incapable of even meeting the trivial exam standards set for
6-year-olds.
However, there still exists the fundamental basis on which Ham
Radio is based, and that will never die. This FAQ ("What Is
Ham Radio?") will be regularly published and will not be
shouted or bullied down. It is important that those of a
technical bent, who are the natural seed-corn of Radio Hammery
and who gravitate towards us to be the real novitiate, can
still find us, (and know that we are still here), their fellows.

-----ooooo-----

Please remember that this FAQ is a _POSITIVE EXHORTATION_
to you to exert yourselves to join our fraternity! (If you find
otherwise, then perhaps you are already classing yourself in the
mediocre groups of those who are criticised in the FAQ and from
whom we _MUST_ dissociate? If so - it's never too late for
a re-taxonomisation on your part - there's nothing elitist about
us, and we welcome all those who are prepared to put themselves
out in order to join our ranks!)

-----ooooo-----
So,.....What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

1729. Re: Remote Car Battery Voltage Monitoring

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 15:22:56 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <441199C5.90801@invalid.invalid>
Source record: 13230
Cross-posted to: comp.home.automation,rec.autos.misc,rec.radio.amateur.homebrew

Robert Green wrote:
> This is probably the most appropriate solution. I especially like your idea
> of wiring it so that if it is accidentally disconnected via a "drive off"
> that there won't be a live 12VDC plug lying in the driveway. I was also

A possibly easier alternative would be to use a different connector.
Like the Anderson Powerpoles. This too would disconnect via
"drive-off", but it wouldn't accidentially short the 12V charger if the
plug happened to land on a piece of metal. Yet you wouldn't have to
worry about the loose plug on the van end shorting the battery either.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

1730. Re: Remote Car Battery Voltage Monitoring

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 15:25:41 UTC
From: Frank Olson <Use_the_email_links@yoursecuritysource.com>
Message-ID: <VTgQf.129863$sa3.91586@pd7tw1no>
Source record: 13231
Cross-posted to: comp.home.automation,rec.autos.misc,rec.radio.amateur.homebrew
Body handling: HTML body converted to readable text

Robert Green wrote:
> "BruceR" wrote in message
> news:TblPf.2595$pV5.325@tornado.socal.rr.com...
>
>>I have a car at a second home that sits for months without use and a
>>marine battery that sits in a small sailboat to power a bilge pump and
>>lights. For the boat, I found a flexible, waterproof solar panel at West
>>Marine that keeps the battery fully charged. In 4 years I've never had
>>to charge it with anything else. For the car, I use a Battery Tender Jr.
>>to keep the battery "ready-to-start" and it works well. Rather than
>>monitoring the battery's condition remotely, in both cases I just use
>>the chargers and never have to worry about it. If the car has a lighter
>>socket, power outlet that's always on you can just plug it in that way.
>> http://tinyurl.com/k9w56 shows the Battery Tender Jr. and you can buy
>>it for under $30 at places like Pep Boys.
>
>
> I just bought a solar panel that plugs into the dash. We'll see if it
> works. The van doesn't get a lot of sun where it's parked and the rear
> windows are all heavily tinted so mounting it back there won't help much. I
> may still have to go with some sort of detachable umbilical because I need
> to be able to charge his scooter while it's in the van, since he still walks
> from the van into the house with his cane.
>
> Thanks for the info. Hopefully the dash charger will do the trick.

Hi Bobby:

Make sure the dash charger is putting out more current than the "on
board electronics" require. If, for instance, your total current draw
is greater than the dash charger can supply, you're going to wind up in
the same situation (dead battery). Additionally, (and at night time)
the current draw on the battery is going to go back to "normal", and the
charger may not be powerful enough to "keep up".

I found this in a "Froogle" search:

http://froogle.google.com/froogle_cluster?q=mounted+battery+chargers&pid=4854524895284469150&oid=2589900813912983575&btnG=Search+Froogle&scoring=mrd&hl=en

1731. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 16:01:25 UTC
From: Bob Bob <bob3bob3@cox.net>
Message-ID: <mfk8e3-qlc.ln1@p400bob.personal.cox.net>
Source record: 13233
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Although well written Mr Plod and in some places downright excellent I think you are making assumptions about what AR "really is" and imprinting your own views as being the gospel. Mind you there is nothing wrong with that and invites positive discussion. Things could also be very different in G land but my experiences are different. Just be careful presenting this to outsiders as being something other than your personal view.

You seem to dwell on the "difference" or "better than" that AR has over other radio services. Since this and the associated CB bashing that pervades this NG on a regular basis I guess you are in good company. You could roughly divide radio use into "CB related" "Amateur related" and anything else like public services and commercial. You then concentrate yet again on the CB vs AR debate.

In my view there has always been a blurring about what use CB vs AR is about. It's a double set of bell shape curves that overlap in a lot of ways.

The first thing you have to do when judging behaviour and use is to throw away the ideal world of what the law that was passed on the topic actually menas or is interpreted to mean. Such arguments as "go get your license and we'll let you experiment" are irrelevent in the light of what ACTUALLY happens in the real world. The law is suppose to reflect the community attitude and beliefs rather than force its direction. There will never be enough resources to enforce a law if a large percentage of those that affect it, ignore it! Yes there are undesirable people on both CB and AR bands. This however is a subset of people generally. You can be obnoxious just as easily without a radio as having one. What grade of license you have is irrelevent and it continues to happen.

There is a lot of social conversion on AR, husbands and wives use it as a contact medium, people exchange weather reports and QSL cards. Those that go on desert treks use it as a backup emergency system. There is a lot on inane chatter about all types of things simply to hear one self speak! Are these within the technical pursuit of the hobby? CB'ers experiment with antenna systems and propagation, do technically illegal things to their radios in the PURSUIT of making them work better. In the process they learn and enjoy their hobby like an AR user does. Yes the technical standard isnt likely to be as high but it is there.

There is NO brick wall seperating the use of the respective services. It is very blurred and overlaps considerably. There is no black or white view amongst most of those that use it. There are of course exceptions

that dont look at the real world and try to force their own misguided views as correct. There is however a continual case of "I am better than you because I am licensed" not unlike the "keeping up with the Jones's" habit of preening in ones own nest.

Unhappily though "decency" or whatever you like to call it is not just a function of radio users. Its the result of the way the world is changing or if you like a sociological problem just waiting to explode. The place is a lot unhappier, people are more willing to return to their animal instincts and anything that makes it easy to tread in your neighbours is fair game. I mean just look at this newsgroup...

Apologies for this post being OT in the other groups posted

Bob VK2YQA (Who is more intersted in technical pursuits)

Plod's Conscience wrote:
>
> What is Ham Radio?
>

1732. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 16:03:36 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142005509.474645.202170@u72g2000cwu.googlegroups.com>
Source record: 13232
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Mrs. Nugatory And The Numpties" - sounds like
a 60's pop group, or else a description of those
vacuous-brained losers who frequent this NG but
yet who have been singularly unsuccessful in passing
even the exams set for 6-year-olds! (Easily recognised
by their failure to contribute anything of relevance
unless the answers they seek are available via a
hastily-undertaken Google search,
their habituation of sneering at things about which they
know nothing, and their choice in obscure films such
as The Bitches Of Toko-Roko)

Plod's Conscience wrote:
> What is Ham Radio?
>
> It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery. Even
> the Usenet newsgroups dedicated to the cause have degenerated
> into a hotbed of abusive onslaughts by those who ought to know better,
> the Nugatory Numpties who boast of an interest exceeding 10,
> 20, 30, 40 or even 50 years and yet who have proved themselves
> incapable of even meeting the trivial exam standards set for
> 6-year-olds.

1733. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 16:15:38 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <4411a62a$0$71763$dbd4d001@news.wanadoo.nl>
Source record: 13234
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Bob Bob wrote:

> The law is suppose to reflect
> the community attitude and beliefs rather than force its direction.

I think someone needs to tell that to the lawmakers in the UK regarding
the speed limits on the motorways and the positioning of some of the
fixed speed cameras which are in areas that are NOT dangerous.

1734. Re: Diode Deal

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 16:58:02 UTC
From: cs_posting@hotmail.com
Message-ID: <1142009882.564755.116140@i40g2000cwc.googlegroups.com>
Source record: 13235

Brian wrote:

> 1N4148 diodes
>
> 200 for $3.00
> 500 for $5.00

Now even the average joe can afford to "bug" an embassy!

1735. Re: What do you call these devices?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 17:06:24 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dusbmg$gf9$2@engnntp2.cig.mot.com>
Source record: 13239

RF sampler. RF pick-off. RF tap-off.

I don't know if there is an accepted "standard" name, but I have seen many types. They're used for just sampling RF where a wideband response isn't needed. You can inject RF also. Flat over an octave...that's interesting. The cap-tap usually will give a rising response. I forgot what a magic Tee is...

73, Steve, K9DCi

"Joel Kolstad" <JKolstad71HatesSpam@Yahoo.Com> wrote in message news:1212j86qjoboec6@corp.supernews.com...
> At work we have these "do-hickeys" that look like a regular "tee" connector.
> However, it's meant to be used such that a signal passes through the "top"
> of the tee while the "leg" of the tee "picks off" the signal some 10dB or so
> down from the input. (The insertion loss is some fraction of a dB.) The
> pick off seems to just be a wire tip coming out of the backside of the
> connector (just capacitively coupled?); there's an adjustable sleeve that
> lets you position this tip closer or further from the through line; moving
> it closer creates better coupling, but also tends to decrease frequency
> flatness. The cool thing is that all ports drive 50 ohms, and the
> pick-off's output is surprisingly flat over more than an octave.
>
> Any ideas? It's definitely not constructed the way I'd build a directional
> coupler -- even though it performs a somewhat similar function --, nor a
> "magic tee" (although I've only seem magic tees in the form of waveguides
> and transformer-based affairs for HF).
>
> Thanks,
> ---Joel Kolstad
>
>

1736. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 17:17:55 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142011075.318858.200330@i40g2000cwc.googlegroups.com>
Source record: 13236
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Then I regret that it is likely that you are a CBer, or
a CBer-Masquerading-As-A-Radio-Ham. I very
much regret that you may have been misled into
a false sense of belief.

There is _NO_ common ground between CB Radio
and Ham Radio.

Ham Radio is a technical pursuit for gentlemen.

CB Radio is an operating hobby for idiots. (Save
when used in its original mode as a social communications
facility when it is then indistinguishable from land-line
telephony or GSM mobiles)

Bob Bob wrote:
>
> In my view there has always been a blurring about what use CB vs AR is
> about. It's a double set of bell shape curves that overlap in a lot of
> ways.
>

1737. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 17:29:49 UTC
From: Plod Kicked Me Unconscious <stevenalanraugh@hotmail.co.uk>
Message-ID: <1142011789.126390.256300@i40g2000cwc.googlegroups.com>
Source record: 13237
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

These M3s make my blood boil
They make me see bright red
"So have a troll on Usenet"
Say the voices in my head

The R.S.C.B. traitors
I wish they were all dead
"Cancel your subscription then"
Say the voices in my head

PC Fuller's stalking me
With a cosh he's stuffed with lead
"Call the I.P.C.C., report the c***"
Say the voices in my head

"Come on dear", says Elizabeth,
"I'm warming up the bed"
But I'm much too busy trolling
For those voices in my head

"Mathematics teachers
With arsenic should be fed
That'll end their ego trips"
Say the voices in my head

E to the power of minus j
W, t and z?
Who gives a shit, just piss and moan!
Like the voices in my head

The scouts are dangerous criminals
By war-mongers they are led
"Expose their foul skulduggery!"
Say the voices in my head

That evil Windsor family
I'll pump 'em full of lead
I'll end their evil dynasty
For the voices in my head

I'm working on an atom bomb
I'm fettling it in my shed
Then I'll wait to hear the "DETONATE"
>From the voices in my head

So in the final reckoning
When all is done and said
I'm really quite a nice guy
It's just these voices in my head

The voices in my head, oh yeah!
The voices in my head
A bullet will end the cackling of
The voices in my head

1738. Re: Remote Car Battery Voltage Monitoring

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 17:35:03 UTC
From: Robert Green <ROBERT_GREEN1963@YAH00.COM>
Message-ID: <dLCdnU02063lJIzZRVn-iA@rcn.net>
Source record: 13238
Cross-posted to: comp.home.automation,rec.autos.misc,rec.radio.amateur.homebrew

"Frank Olson" <Use_the_email_links@yoursecuritysource.com> wrote in

<stuff snipped>

> > Thanks for the info. Hopefully the dash charger will do the trick.
>
>
> Hi Bobby:
>
> Make sure the dash charger is putting out more current than the "on
> board electronics" require. If, for instance, your total current draw
> is greater than the dash charger can supply, you're going to wind up in
> the same situation (dead battery). Additionally, (and at night time)
> the current draw on the battery is going to go back to "normal", and the
> charger may not be powerful enough to "keep up".

Thanks for the heads up.

http://www.exide.com/products/trans/na/battery_care/electrical_parasitic_loa
d.pdf

Has a discussion of just that potential problem and how to trace it. The
process is woefully very much like hunting down a bad X-10 device or
telephone extension. Out comes the clamp ammeter.

--
Bobby G.

1739. Re: Remote Car Battery Voltage Monitoring

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 17:56:43 UTC
From: Frank Olson <Use_the_email_links@yoursecuritysource.com>
Message-ID: <v5jQf.130253$sa3.49365@pd7tw1no>
Source record: 13240
Cross-posted to: comp.home.automation,rec.autos.misc,rec.radio.amateur.homebrew

Robert Green wrote:

> Thanks for the heads up.

You're welcome. I figured this solution would be the best for you because you could also install a jack to charge your dad's chair and the output is a "tad" higher than the solar charger option. You'll need an automatic isolator, but that's a snap to find and install as well. I know you're not in Canada, but a store by the name of Canadian Tire (http://www.canadiantire.ca) has one (search on "battery charger" in "automotive").

>
> http://www.exide.com/products/trans/na/battery_care/electrical_parasitic_load.pdf
>
> Has a discussion of just that potential problem and how to trace it. The
> process is woefully very much like hunting down a bad X-10 device or
> telephone extension. Out comes the clamp ammeter.

In my experience, the "clamp" style ammeters aren't all that accurate when it comes to reading small currents. I like my digital multimeter and doing things the "old fashioned" way. :-)

Mind you, it'll mean you'll have to reset your dash clock and reprogram the radio buttons, but I figure you're more than capable. ;-)

Frank Olson
http://www.yoursecuritysource.com

1740. Re: What do you call these devices?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 18:33:48 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <1213hmd26dlvs04@corp.supernews.com>
Source record: 13241

"Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
news:dusbmg$gf9$2@engnntp2.cig.mot.com...
> RF sampler. RF pick-off. RF tap-off.

Great, thanks.

> Flat over an octave...that's interesting.
> The cap-tap usually will give a rising response.

The cap was largely balancing out some really lossy cable, I think. :-) And
"flat" to me is about +/-2dB in this case, which is a pretty crude definition,
I expect.

1741. Re: What do you call these devices?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 19:10:43 UTC
From: dplatt@radagast.org
Message-ID: <1213jpj68rool4a@corp.supernews.com>
Source record: 13242

In article <1212j86qjoboec6@corp.supernews.com>,
Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com> wrote:

>At work we have these "do-hickeys" that look like a regular "tee" connector.
>However, it's meant to be used such that a signal passes through the "top"
>of the tee while the "leg" of the tee "picks off" the signal some 10dB or so
>down from the input. (The insertion loss is some fraction of a dB.) The
>pick off seems to just be a wire tip coming out of the backside of the
>connector (just capacitively coupled?); there's an adjustable sleeve that
>lets you position this tip closer or further from the through line; moving
>it closer creates better coupling, but also tends to decrease frequency
>flatness. The cool thing is that all ports drive 50 ohms, and the
>pick-off's output is surprisingly flat over more than an octave.
>
>Any ideas? It's definitely not constructed the way I'd build a directional
>coupler -- even though it performs a somewhat similar function --, nor a
>"magic tee" (although I've only seem magic tees in the form of waveguides
>and transformer-based affairs for HF).

http://www.bird-electronic.com/products/product.aspx?id=115 is one
example of what you're talking about, I think.

It's nondirectional. Quite handy for monitoring RF (one of these plus
a cheap used low-bandwidth Tek oscilloscope makes a decent HF station
monitor) and for signal injection (e.g. IMD, desense testing).

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1742. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 20:29:15 UTC
From: wy0ohg143 <wy0ohg143@invalid.net>
Message-ID: <GkIQf.56345$9d2.32386@fe38.usenetserver.com>
Source record: 13244
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message
news:1142003010.363667.13530@j52g2000cwj.googlegroups.com...
> What is Ham Radio?
>
> It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery. Even
> the Usenet newsgroups dedicated to the cause have degenerated
> into a hotbed of abusive onslaughts by those who ought to know better,

If you're tired of what is going on in the Usenet groups, you're welcome to
join the Ham Radio Unplugged group:
http://groups.yahoo.com/group/Ham-Radio-Unplugged/

1743. APRS Armageddon !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 20:30:40 UTC
From: From the shack of G1LVN <gareth.paley@gmail.com>
Message-ID: <dusnlg$4d7$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13243
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

http://www.g1lvn.org.uk/maps/

or if you feel like you have been effected by the rantings of "Plods Conscience" aka G4SDW please feel free to bomb the b&sta&rd to oblivion here:

http://tinyurl.com/je93r

Have fun...

--
--
--
drei unt siebzig de M0WWS oh noes!!!
It's teh --Double Whisky and Soda --!!!
http://www.g1lvn.org.uk

--
--
--
drei unt siebzig de M0WWS oh noes!!!
It's teh --Double Whisky and Soda --!!!
http://www.g1lvn.org.uk

1744. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 20:37:55 UTC
From: huLLy <s2f@f2s.com>
Message-ID: <2rydnfP7uZQHfozZRVny0A@giganews.com>
Source record: 13245
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

wy0ohg143 wrote:
> "Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message
> news:1142003010.363667.13530@j52g2000cwj.googlegroups.com...
>> What is Ham Radio?
>>
>> It is becoming increasingly difficult to fly the flag for
>> decency and for civilised behaviour in Radio Hammery. Even
>> the Usenet newsgroups dedicated to the cause have degenerated
>> into a hotbed of abusive onslaughts by those who ought to know
>> better,
>
> If you're tired of what is going on in the Usenet groups, you're
> welcome to join the Ham Radio Unplugged group:
> http://groups.yahoo.com/group/Ham-Radio-Unplugged/

You're new here, aren't you?

--
huLLy
Tel: 07976 123278
ICQ 136-987-925

1745. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 21:29:04 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dusqschoa1@news7.svr.pol.co.uk>
Source record: 13246
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"know code" <know_code@wanadoo.nl> wrote in message
news:4411a62a$0$71763$dbd4d001@news.wanadoo.nl...
> Bob Bob wrote:
>
> > The law is suppose to reflect
> > the community attitude and beliefs rather than force its direction.
>
> I think someone needs to tell that to the lawmakers in the UK regarding
> the speed limits on the motorways and the positioning of some of the
> fixed speed cameras which are in areas that are NOT dangerous.

Surely if the argument for the cameras was a valid one i.e. safety then the
slow down lights that flash at you to reduce your speed would be 100% better
than cameras which you sometimes don't even notice they are there until a
week later when the intent to prosecute letter drops through your
door...where does safety come in to it?, nothing to do with safety at all...
just revenue makers... so I agree with you...

Graham
--
-.-. -... / .-. .- -.. .. ---

Radio is only a Hobby. Don't let it rule your life...

73/51 - Graham, 26-Golf Charlie-19

1746. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-10 21:29:29 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <4411efba$0$71763$dbd4d001@news.wanadoo.nl>
Source record: 13247
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

The Magnum wrote:
> "know code" <know_code@wanadoo.nl> wrote in message
> news:4411a62a$0$71763$dbd4d001@news.wanadoo.nl...
>> Bob Bob wrote:
>>
>>> The law is suppose to reflect
>>> the community attitude and beliefs rather than force its direction.
>> I think someone needs to tell that to the lawmakers in the UK regarding
>> the speed limits on the motorways and the positioning of some of the
>> fixed speed cameras which are in areas that are NOT dangerous.
>
> Surely if the argument for the cameras was a valid one i.e. safety then the
> slow down lights that flash at you to reduce your speed would be 100% better
> than cameras which you sometimes don't even notice they are there until a
> week later when the intent to prosecute letter drops through your
> door...where does safety come in to it?, nothing to do with safety at all...
> just revenue makers... so I agree with you...

Whoa, now I'm getting scared.... we actually agree on something :)

1747. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 00:28:29 UTC
From: wy0ohg143 <wy0ohg143@invalid.net>
Message-ID: <YQoQf.61739$6Q3.6114@fe84.usenetserver.com>
Source record: 13148
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"huLLy" <s2f@f2s.com> wrote in message
news:2rydnfP7uZQHfozZRVny0A@giganews.com...
>> >
> You're new here, aren't you?
>

No, I'm not new.
Come join the group.

1748. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 00:29:27 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <441219e7_1@newsfeed.slurp.net>
Source record: 13149
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

What does it mean to be a real radio ham?

It means you have a real ham license. Anything else, including the rest of your post, is just one person's opinion, period.

Bill, W6WRT

1749. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 00:37:52 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <44121be0$0$37857$dbd4d001@news.wanadoo.nl>
Source record: 13150
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Bill Turner wrote:
> What does it mean to be a real radio ham?
>
> It means you have a real ham license. Anything else, including the rest
> of your post, is just one person's opinion, period.

Ah, but define a 'real ham license'. A lot of people in the UK think
the M3/Foundation licence is NOT a real ham licence! Herein lies the
problem!

1750. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 02:20:25 UTC
From: Keith <keith7373@tesco.net>
Message-ID: <JtqQf.69$Dg5.67@newsfe4-gui.ntli.net>
Source record: 13151
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Quote

1 This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio. = MAN

2 Thus a Radio Ham could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line = MAN

3 Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then = MAN

Sir with respect to you
this is error

I myself have heard on quite few occasions
women with their own stations / license G3`s 4`s and 8
and have met a female Radio ham
at the Canvey Island public Amatuer Radio Rally Sale
who was also a stall - holder

another licensed Female operater was a sales lady in an
Essex amatuer radio Shop, she used to go to the same
social club as me.

Keith
G8IFW
after this, I think look how many mistakes I make, loads of them.
I think i had better write better messages myself

1751. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 02:59:18 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <44123d06_3@newsfeed.slurp.net>
Source record: 13152
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

ORIGINAL MESSAGE:

know code wrote:

> Bill Turner wrote:
> > What does it mean to be a real radio ham?
> > > It means you have a real ham license. Anything else, including
> > > the rest
> > of your post, is just one person's opinion, period.
>
> Ah, but define a 'real ham license'. A lot of people in the UK think
> the M3/Foundation licence is NOT a real ham licence! Herein lies the
> problem!

~~~~~~
In this context, it doesn't matter what individuals think. What matters is what the gummint says. If they call it an "Amateur Radio License" or the equivalent, that's what it is. IF they call it a "Citizen's Band License" or the equivalent, that's also what it is.

What you or I make of those is important to us but irrelevant to the original question.

Bill T.
~~~~~~

1752. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 06:24:54 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142058294.852020.303130@j52g2000cwj.googlegroups.com>
Source record: 13153
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

The Usenet discussion groups are well-established.

No need to dilute them with Yahoo's proprietary poor imitations.

wy0ohg143 wrote:
> "Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message
> news:1142003010.363667.13530@j52g2000cwj.googlegroups.com...
> > What is Ham Radio?
> >
> > It is becoming increasingly difficult to fly the flag for
> > decency and for civilised behaviour in Radio Hammery. Even
> > the Usenet newsgroups dedicated to the cause have degenerated
> > into a hotbed of abusive onslaughts by those who ought to know better,
>
> If you're tired of what is going on in the Usenet groups, you're welcome to
> join the Ham Radio Unplugged group:
> http://groups.yahoo.com/group/Ham-Radio-Unplugged/

1753. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 06:27:43 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142058463.217115.95880@v46g2000cwv.googlegroups.com>
Source record: 13154
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Au contraire.

You might have one of those, but otherwise be
a CBer-Masquerading-As-A-Radio-Ham.

Ham Radio is a technical pursuit for gentlemen; a technical
pursuit whose rights and standards we must uphold.

The operating hobby is known as CB Radio.

Bill Turner wrote:
> What does it mean to be a real radio ham?
>
> It means you have a real ham license. Anything else, including the rest
> of your post, is just one person's opinion, period.
>
> Bill, W6WRT

1754. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 06:30:42 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142058642.385404.294790@j33g2000cwa.googlegroups.com>
Source record: 13155
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Au contraire.

It is _VERY_ important what we as individuals think.

I am part of a community of like-minded individuals who
are motivated by technical interest. I have no wish to
communicate with the dregs of society who are the
CB-Fraternity, nor with other peoples' 6-year-old-children.

Bill Turner wrote:
> ORIGINAL MESSAGE:
>
> know code wrote:
>
> > Bill Turner wrote:
> > > What does it mean to be a real radio ham?
> > > > It means you have a real ham license. Anything else, including
> > > > the rest
> > > of your post, is just one person's opinion, period.
> >
> > Ah, but define a 'real ham license'. A lot of people in the UK think
> > the M3/Foundation licence is NOT a real ham licence! Herein lies the
> > problem!
>
>
> ~~~~~~
> In this context, it doesn't matter what individuals think. What matters
> is what the gummint says. If they call it an "Amateur Radio License" or
> the equivalent, that's what it is. IF they call it a "Citizen's Band
> License" or the equivalent, that's also what it is.
>
> What you or I make of those is important to us but irrelevant to the
> original question.
>
> Bill T.

1755. yFIf yFIf

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 06:36:04 UTC
From: Kelly <vohvamwu@tngtalut.com>
Message-ID: <0luQf.1367$br4.736@newsfe14.phx>
Source record: 13156

I discovered a great marketplace for specials,
deals and entertainment at
http://www.cashdeals4u2save.com !

`E$b:

1756. Re: Question about 4-400 tube socket/mounting

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 07:59:06 UTC
From: Straydog <asd@panix.com>
Message-ID: <Pine.NEB.4.63.0603110248340.28911@panix3.panix.com>
Source record: 13157
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Sun, 5 Mar 2006, DOUGLAS SNOWDEN wrote:

> I have seen 3-500Z tubes mounted in the johnson ceramic sockets. The Heath
> SB-220 uses them.
> Will the 4-400 tube handle the airflow the same way? Usually you see the air
> system sockets used so that the air will flow up through the bottom. Will
> the filament connections remain solid in a 275 ceramic socket with a muffin
> fan blowing across the tube?
> ? I have seen the sockets raised a bit so that the filaments get cooling.
> Just wondering if the 4-400 would work that way as well? Any experience
> with this?

My recollection from Eimac tube spec sheets is that there must be forced-air directed upwards from the non-tube side of the tube socket and there are specifications for flow rate and pressure. Both the 3-500 and 4-400 (100 watts less plate dissipation) call for 5 v at 15 amps (IIRC) on the filament and that is a lot of heat. I don't know if the 3-500 is pushed closer to the limits on this but Eimac made a special socket (and chimney) for the 4-400 but many ARRL handbook amplifiers went for a much simpler socket. And, the Johnson Thunderbolt (I had two of them at one time) used a simple ceramic socket plus an under-chassis phonograph motor type of fan to blow air up from the bottom as well as an above chassis fan motor to blow more air around the pair of 4-400s for a 1 KW DC plate input level (with dull red cherry glow on cw carrier and a little less glow on SSB voice).

Beyond that, if you are thinking of running 4-400s instead of the 3-500z, you also need to worry about bias voltage a little and you would have to resolder the socket pins because the 3-500 is a triode and the 4-400 is a tetrode (need to ground the screen, as well as control grid). But I have run 4-400s in GG in a homebrew amp in the past.

> Doug N4IJ
>
>
>

1757. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 11:16:14 UTC
From: realradioham <realradioham@tiscali.co.uk>
Message-ID: <4412b264$1_4@mk-nntp-2.news.uk.tiscali.com>
Source record: 13158
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message
news:1142058642.385404.294790@j33g2000cwa.googlegroups.com...
> I am part of a community of like-minded individuals

Say no more;c)

rrh

1758. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 14:47:34 UTC
From: Bob Bob <bob3bob3@cox.net>
Message-ID: <7h4be3-3pe.ln1@p400bob.personal.cox.net>
Source record: 13159
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

You are wrong Mr Plod.

Try to open your mind up just a little, learn some new things and consider that your views are based on prejudice and a very narrow view of what the world is and should be.

How you live your life and what beliefs you have are your right. Dont however use them as a base frame of reference.

At least you used the word "likely". That implies statistical possibility. Something that you havent applied to CB vs AR.

There are also a large number of female amateurs. How do they fit into the "gentlemen" designation?

Please back up your assertions with statistical analysis with a sound technical base. ie Dont use rhetoric & prove what you say is true with specific data.

I do however congratulate you for not appearing racists. (ie I shouldnt be using a UK newsgroup...)

Bob VK2YQA

Plod's Conscience wrote:
>
> Then I regret that it is likely that you are a CBer, or
> a CBer-Masquerading-As-A-Radio-Ham.

1759. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 14:50:01 UTC
From: Bob Bob <bob3bob3@cox.net>
Message-ID: <pl4be3-3pe.ln1@p400bob.personal.cox.net>
Source record: 13160
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

I detect some copy and pasting going on here..

Plod's Conscience wrote:
>
> Au contraire.
>
> You might have one of those, but otherwise be
> a CBer-Masquerading-As-A-Radio-Ham.
>
> Ham Radio is a technical pursuit for gentlemen; a technical
> pursuit whose rights and standards we must uphold.
>
> The operating hobby is known as CB Radio.
>

1760. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 15:18:41 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <4412ea51_4@newsfeed.slurp.net>
Source record: 13161
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

ORIGINAL MESSAGE:

Plod's Conscience wrote:

> > If you're tired of what is going on in the Usenet groups, you're
> > welcome to join the Ham Radio Unplugged group:
> > http://groups.yahoo.com/group/Ham-Radio-Unplugged/

~~~~~~
Quoting from the moderator's message:

"This group supports free and uncensored speech, so a moderator will
not be jumping in all the time telling people how to conduct themselves
as is done in other groups. Of course no ongoing "flame wars" or spam
will be allowed..."

In other words, you're free to say anything the moderator thinks is ok.

No, thanks.

Bill, W6WRT
~~~~~~

1761. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 15:22:50 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <4412eb4a$1_5@newsfeed.slurp.net>
Source record: 13162
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

ORIGINAL MESSAGE:

Plod's Conscience wrote:

> Ham Radio is a technical pursuit for gentlemen; a technical
> pursuit whose rights and standards we must uphold.

~~~~~~
I love this kind of stuff. Think how boring it would be if we were all
just normal, rational beings living in the real world.

Bill, W6WRT
~~~~~~

1762. Re: Question about 4-400 tube socket/mounting

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 15:29:15 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <4412eccb_5@newsfeed.slurp.net>
Source record: 13163
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

ORIGINAL MESSAGE:

Straydog wrote:

> there must be forced-air directed upwards from the non-tube side of
> the tube socket and there are specifications for flow rate and
> pressure.

~~~~~~
"Flow rate and pressure" are nice, but the *only* important thing is the temperature of the tube at various points as specified by the tube manufacturer. If you are serious about proper tube cooling, use either a non-contact thermometer of some kind or thermally-sensitive paint to ensure your tube is within temp specs. Flow rate and pressure are a means to an end, not an end in themselves.

Bill, W6WRT
~~~~~~

1763. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 15:54:24 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142092464.204794.167230@e56g2000cwe.googlegroups.com>
Source record: 13164
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

I think it is you who is, perhaps, analysing this thread
with a limited purview, and who is in the wrong.

You will find that the FAQ is very much an encouragement
for all to learn new things and apply themselves to improve
their lot.

I cannot see how your remarks below can be squared with
the exhortations and encouragements that are in the FAQ.

Please read the FAQ, perhaps for the first time?

Bob Bob wrote:
> You are wrong Mr Plod.
>
> Try to open your mind up just a little, learn some new things and
> consider that your views are based on prejudice and a very narrow view
> of what the world is and should be.

1764. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 15:55:51 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142092551.102616.175570@i40g2000cwc.googlegroups.com>
Source record: 13165
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Is that some form of CB mentalism, for there
was none in what you quoted?

Bob Bob wrote:
> I detect some copy and pasting going on here..
>
> Plod's Conscience wrote:
> >
> > Au contraire.
> >
> > You might have one of those, but otherwise be
> > a CBer-Masquerading-As-A-Radio-Ham.
> >
> > Ham Radio is a technical pursuit for gentlemen; a technical
> > pursuit whose rights and standards we must uphold.
> >
> > The operating hobby is known as CB Radio.
> >

1765. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 15:57:13 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142092633.779293.226260@j33g2000cwa.googlegroups.com>
Source record: 13166
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

I wonder if you are Completely Baffled (CB) by Usenet?

I did not write the words that you have attributed to me.

Bill Turner wrote:
> ORIGINAL MESSAGE:
>
> Plod's Conscience wrote:
>
> > > If you're tired of what is going on in the Usenet groups, you're
> > > welcome to join the Ham Radio Unplugged group:
> > > http://groups.yahoo.com/group/Ham-Radio-Unplugged/
> >
> >
> > ~~~~~~
> > Quoting from the moderator's message:
> >
> > "This group supports free and uncensored speech, so a moderator will
> > not be jumping in all the time telling people how to conduct themselves
> > as is done in other groups. Of course no ongoing "flame wars" or spam
> > will be allowed..."
> >
> > In other words, you're free to say anything the moderator thinks is ok.
> >
> > No, thanks.
> >
> > Bill, W6WRT

1766. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 15:58:03 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142092683.101264.234480@j52g2000cwj.googlegroups.com>
Source record: 13167
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

You're not, then?

Bill Turner wrote:
> ORIGINAL MESSAGE:
>
> Plod's Conscience wrote:
>
> > Ham Radio is a technical pursuit for gentlemen; a technical
> > pursuit whose rights and standards we must uphold.
>
>
> ~~~~~~
> I love this kind of stuff. Think how boring it would be if we were all
> just normal, rational beings living in the real world.
>
> Bill, W6WRT

1767. The smallest Baird Televisor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 17:43:47 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142099027.152408.11300@i39g2000cwa.googlegroups.com>
Source record: 13168
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

My local garage is selling laser devices that project
a straight line for just under a fiver. I wonder if these
devices (with the lens removed so that they just
produce a single spot) could be modulated to be
the light source in a Baird Televisor?

Also, I wonder what is the smallest such Televisor
that has been produced?

1768. Re: The smallest Baird Televisor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 17:49:48 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <05EQf.154$qH2.151@newsfe4-win.ntli.net>
Source record: 13169
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message
news:1142099027.152408.11300@i39g2000cwa.googlegroups.com...
> My local garage is selling laser devices that project
> a straight line for just under a fiver. I wonder if these
> devices (with the lens removed so that they just
> produce a single spot) could be modulated to be
> the light source in a Baird Televisor?
>

The Baird system has been superceded by more modern techniques. In fact,
unless you catch up quick, you may miss out a whole generation of technical
improvements that have occured since "Stookie"

Brian

1769. Re: The smallest Baird Televisor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 18:12:35 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <duv3ujqrk1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13170
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

No it won't

How will you bend the beam? Do you propose that people look straight at it?

You would need to get the beam just the right width.

Just face it beanie, you're an idiot, nobody likes you, you have no life and you'd do us all a favour if you took an overdose of something fatal.....

Sam
M1FJB (Not scared to put my callsign to it for fear of being beaten up by the police because unlike you I am not sad and don't have violent tendencies towards the police)

"Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message news:1142099027.152408.11300@i39g2000cwa.googlegroups.com...
> My local garage is selling laser devices that project
> a straight line for just under a fiver. I wonder if these
> devices (with the lens removed so that they just
> produce a single spot) could be modulated to be
> the light source in a Baird Televisor?
>
> Also, I wonder what is the smallest such Televisor
> that has been produced?
>

1770. Re: The smallest Baird Televisor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 18:17:46 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <evEQf.471$GN1.405@newsfe2-gui.ntli.net>
Source record: 13171
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

on 11/03/2006 17:49 Brian Reay said the following:
> "Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message
> news:1142099027.152408.11300@i39g2000cwa.googlegroups.com...
>
>>My local garage is selling laser devices that project
>>a straight line for just under a fiver. I wonder if these
>>devices (with the lens removed so that they just
>>produce a single spot) could be modulated to be
>>the light source in a Baird Televisor?
>>
>
>
> The Baird system has been superceded by more modern techniques. In fact,
> unless you catch up quick, you may miss out a whole generation of technical
> improvements that have occured since "Stookie"
>
> Brian
>
>
Don't disappoint him like that, Brian, the poor guy's only just
discovered electric lights, and he's certainly not the brightest bulb in
the box.
--
;-)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

1771. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 18:58:57 UTC
From: Conrad Poos <poos.conrad@gmail.com>
Message-ID: <1142103537.846377.13230@j33g2000cwa.googlegroups.com>
Source record: 13172
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Plod's Conscience wrote:

> There is _NO_ common ground between CB Radio
> and Ham Radio.

erm...RF?

Poos

1772. Re: The smallest Baird Televisor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 19:24:21 UTC
From: "Old Nicks Deputy (first class)" <"trabant owners club"@Nicks>
Message-ID: <FtFQf.5118$FV3.3607@newsfe2-win.ntli.net>
Source record: 13173
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message
news:1142099027.152408.11300@i39g2000cwa.googlegroups.com...
> My local garage is selling laser devices that project
> a straight line for just under a fiver.>

I think your question should be "can anyone lend me a fiver"?

HTH

tox

1773. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 19:54:12 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <duv9lp$u96$1@news8.svr.pol.co.uk>
Source record: 13174
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"know code" <know_code@wanadoo.nl> wrote in message
news:4411efba$0$71763$dbd4d001@news.wanadoo.nl...
> The Magnum wrote:
> > "know code" <know_code@wanadoo.nl> wrote in message
> > news:4411a62a$0$71763$dbd4d001@news.wanadoo.nl...
> >> Bob Bob wrote:
> >>
> >>> The law is suppose to reflect
> >>> the community attitude and beliefs rather than force its direction.
> >> I think someone needs to tell that to the lawmakers in the UK regarding
> >> the speed limits on the motorways and the positioning of some of the
> >> fixed speed cameras which are in areas that are NOT dangerous.
> >
> > Surely if the argument for the cameras was a valid one i.e. safety then
the
> > slow down lights that flash at you to reduce your speed would be 100%
better
> > than cameras which you sometimes don't even notice they are there until
a
> > week later when the intent to prosecute letter drops through your
> > door...where does safety come in to it?, nothing to do with safety at
all...
> > just revenue makers... so I agree with you...
>
> Whoa, now I'm getting scared.... we actually agree on something :)

I'm sure it won't last..... >:)

Graham
--
-.-. -... / .-. .- -.. .. ---

Radio is only a Hobby. Don't let it rule your life...

73/51 - Graham, 26-Golf Charlie-19

1774. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 19:54:52 UTC
From: WA5OES <NOSPAM_winterbauer@comcast.net>
Message-ID: <Xns9783835DE9A81winterbauercomcastne@216.196.97.136>
Source record: 13175
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Plod's Conscience" <radio.ham@lycos.co.uk> wrote in
news:1142092551.102616.175570@i40g2000cwc.googlegroups.com:

> Is that some form of CB mentalism, for there
> was none in what you quoted?
>

Is Plod for real or just a Pythonesque spoof?

1775. Re: The smallest Baird Televisor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 20:11:15 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <duvalo$258$1@newsg1.svr.pol.co.uk>
Source record: 13176
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Old Nicks Deputy (first class)" <trabant owners club@Nicks place.comco>
wrote in message news:FtFQf.5118$FV3.3607@newsfe2-win.ntli.net...
>
> "Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message
> news:1142099027.152408.11300@i39g2000cwa.googlegroups.com...
> > My local garage is selling laser devices that project
> > a straight line for just under a fiver.>
>
> I think your question should be "can anyone lend me a fiver"?
>
> HTH
>
> tox

Why? has he been in the locals bins again and been unable to find one?

Graham
--
-.-. -... / .-. .- -.. .. ---

Radio is only a Hobby. Don't let it rule your life...

73/51 - Graham, 26-Golf Charlie-19

1776. Re: The smallest Baird Televisor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 20:25:45 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <44133249$0$71982$dbd49001@news.wanadoo.nl>
Source record: 13177
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

The Magnum wrote:
> "Old Nicks Deputy (first class)" <trabant owners club@Nicks place.comco>
> wrote in message news:FtFQf.5118$FV3.3607@newsfe2-win.ntli.net...
>> "Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message
>> news:1142099027.152408.11300@i39g2000cwa.googlegroups.com...
>>> My local garage is selling laser devices that project
>>> a straight line for just under a fiver.>
>> I think your question should be "can anyone lend me a fiver"?
>>
>> HTH
>>
>> tox
>
> Why? has he been in the locals bins again and been unable to find one?

What is your fixation with bins? Now you're introducing them to this
thread as well! Do you get a sexual thrill from them or something?

1777. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 21:08:06 UTC
From: Bob Bob <bob3bob3@cox.net>
Message-ID: <nqqbe3-mgt.ln1@p400bob.personal.cox.net>
Source record: 13178
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

We'll um if that document (after "So What is Ham Radio") was the entire FAQ that you published you only dedicated the first few paragraphs to what AR is about. The rest seems to be more dedicated to what it isnt and what CB is/isnt. True, it contains some more positive references to AR but you keep needling at CB etc excessively. As far as I am concerned it would have been far more meaningful to omit any reference to CB whatsoever. I suggest you rewrite it like this, post it and see what we think.

I dont disagree with your first parts. It is well written even if it is what I deem a too narrow view as to what AR is about. The bit about being gentlemanly is irrelevent to me simply because I was never bought up or lived in a class atmosphere where that term had any importance. This however is probably a language difference as I might ascribe possibly similar qualities to AR people in general. (eg willing to help, never being violent etc) Of course these qualities are dissappearing in the world generally so I suggest AR is tending to go the same way. I also take your section on competition being something that spurs us all on to bigger and better things as being a load of tripe. It is true that competition occurs, but I and many others I have talked to never see it as important at all. It is in fact the "leisure and social" side showing through along the same lines as getting excited over a football match! I experiment becasue I am interested in it, not because I want to be better than everyone.

If I was a CB'er I'd take your FAQ as a slap in the face and it would drive me not to even think about taking up the AR hobby. Perhaps that is your agenda?

Bob VK2YQA

Plod's Conscience wrote:
>
> I think it is you who is, perhaps, analysing this thread
> with a limited purview, and who is in the wrong.

1778. Re: The smallest Baird Televisor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-11 21:58:41 UTC
From: Bob Bob <bob3bob3@cox.net>
Message-ID: <iptbe3-rit.ln1@p400bob.personal.cox.net>
Source record: 13179
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

I'll admit I dont know Baird and the Televisor stuff. (Beyond the "father of TV "stuff) Lasers though are can be pulse width modulated (PWM) to pseudo change the spot intensity. In a air comms environment they are pulsed at some "carrier" frequency and data then sits on top of that. At the RX end they have a filter at the "carrier" frequency so you dont get noise etc from other light sources.

Making a picture? Had a brief think about bending light but that physics is kind of missing in my brain! I think if you used a rotating mirror array on two axis in front of the beam you might get something acceptable, be a real cow to manufacture though. Syncing would be reasonably easy (assuming a standard TV picture signal) but I think the spot would be a bit large unless you wall projected it.

Colour wouldnt work BTW as the (laser) spot will be one freq only. This means any filtering or coloured mirrors wont work.

Those laser pointers sound like a nice cheap way to experiment with some short haul data comms as well.

Bob

Plod's Conscience wrote:
>
> My local garage is selling laser devices that project
> a straight line for just under a fiver. I wonder if these
> devices (with the lens removed so that they just
> produce a single spot) could be modulated to be
> the light source in a Baird Televisor?
>
> Also, I wonder what is the smallest such Televisor
> that has been produced?
>

1779. Re: The smallest Baird Televisor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 01:21:43 UTC
From: Butch Magee <lynyrd@cableone.net>
Message-ID: <1216ttactegtd01@corp.supernews.com>
Source record: 13180
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Plod's Conscience wrote:
> My local garage is selling laser devices that project
> a straight line for just under a fiver. I wonder if these
> devices (with the lens removed so that they just
> produce a single spot) could be modulated to be
> the light source in a Baird Televisor?
>
> Also, I wonder what is the smallest such Televisor
> that has been produced?
>
What a Televisor?
KF5DE

1780. Re: What do you call these devices?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 01:28:17 UTC
From: Butch Magee <lynyrd@cableone.net>
Message-ID: <1216u9laguvli11@corp.supernews.com>
Source record: 13181

A "do-hickey" by anyother name is still a "do-hickey"! Therefore a "T"
is a "T". No matter what "et-al" say.

Butch said this!

Joel Kolstad wrote:
> At work we have these "do-hickeys" that look like a regular "tee" connector.
> However, it's meant to be used such that a signal passes through the "top"
> of the tee while the "leg" of the tee "picks off" the signal some 10dB or so
> down from the input. (The insertion loss is some fraction of a dB.) The
> pick off seems to just be a wire tip coming out of the backside of the
> connector (just capacitively coupled?); there's an adjustable sleeve that
> lets you position this tip closer or further from the through line; moving
> it closer creates better coupling, but also tends to decrease frequency
> flatness. The cool thing is that all ports drive 50 ohms, and the
> pick-off's output is surprisingly flat over more than an octave.
>
> Any ideas? It's definitely not constructed the way I'd build a directional
> coupler -- even though it performs a somewhat similar function --, nor a
> "magic tee" (although I've only seem magic tees in the form of waveguides
> and transformer-based affairs for HF).
>
> Thanks,
> ---Joel Kolstad
>
>

1781. Re: Question about 4-400 tube socket/mounting

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 01:33:17 UTC
From: w8ji@akorn.net
Message-ID: <1142127197.420037.283170@u72g2000cwu.googlegroups.com>
Source record: 13182
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

terry@terryking.us wrote:
> Doug, a suggestion about "Longevity" for 4-400's (Actually, any
> thoriated-tungsten filament power tubes):
>
> These tubes are very sensitive to filament voltage. Make sure the tube
> pins and socket are nice and clean and shiny (don't use any
> abrasives!).. Measure filament voltage at the socket. This is all to
> make sure the tubes REALLY get the correct filament voltage to the
> filament... It's 28 Amps for two tubes!

Actually in amateur service filament voltage is not that big a worry. I think the excessive worry comes as a carryover from BC service where tubes are operated far below ratings and can be operated for almost 9000 hours per year.

In BC service, excessive voltage shows up in a noticable period of time since the tubes are operated 24/7. The voltages and currents of other elements are a much lower percentage of maximum compared to amateur service, and filaments are not cycled. As such, emission failures are a common failure mechanism.

In amateur service, it takes many years and thousands of fialment cycles to accumalate the hours a BC tube sees in one year. Tubes in amateur service much more often fail from seal leakage, element structure defects, and occasional abuse.

Out of hundreds of tubes I've seen fail in amateur service over the past 30 years, I can count the number of emission failures on my two hands.

I'm not saying filaments should be run extra hot, but I am trying to point out what worries BC stations is often not a concern in amateur use.

By the way, two of the emission failures I saw were in 8877 tubes that were operated too cold. The owners had reduced filament voltage below 4.75 volts. NEVER run a MOX cathode tube at reduced voltage unless you also plan to limit peak emission current.

My advice is to run all tubes in amateur service at RATED filament voltage or in the allowable tolerance range for voltage.

As for cooling, seal cooling is critical in glass tubes. So is periodic operation to keep the tubes gettered.

http://www.w8ji.com/vacuum_tubes_and_vaccum_tube_failures.htm

73 Tom

1782. Re: The smallest Baird Televisor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 02:42:53 UTC
From: Bob Bob <bob3bob3@cox.net>
Message-ID: <eeece3-71u.ln1@p400bob.personal.cox.net>
Source record: 13183
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Ok ta

I remember seeing a colour wheel project some years ago whereby a B&W TV set could be used to watch colour images. The idea was to alternate the displayed filds in sync with whatever colour filter was in front at the time.

I didnt make my original comment real clear either so perhaps it is worth fixing.

Laser light is coherent and of one frequency - ie monochromatic.

Nedlar wrote:
>>Colour wouldnt work BTW as the (laser) spot will be one freq only. This
>>means any filtering or coloured mirrors wont work.
>
>
> For info only...
> John Logie Baird demonstrated colour TV in 1928.
>

1783. TIME TO RESIGN FROM THE RSCB? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 05:37:40 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142141860.064593.294620@u72g2000cwu.googlegroups.com>
Source record: 13184
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

When directors of the RSCB sneer at attempts to promote
discussion, then perhaps it is time for all self-respecting
REAL Radio Hams to resign en masse from the RSCB?

(Is Peter Kirby aware of the way in which his latest pet
lap-dog is pooing on the lounge carpet?)

Brian Reay wrote:
> "Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message
> news:1142099027.152408.11300@i39g2000cwa.googlegroups.com...
> > My local garage is selling laser devices that project
> > a straight line for just under a fiver. I wonder if these
> > devices (with the lens removed so that they just
> > produce a single spot) could be modulated to be
> > the light source in a Baird Televisor?
>
> The Baird system has been superceded by more modern techniques. In fact,
> unless you catch up quick, you may miss out a whole generation of technical
> improvements that have occured since "Stookie"

1784. Re: The smallest Baird Televisor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 05:46:09 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142142369.662154.234810@e56g2000cwe.googlegroups.com>
Source record: 13185
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

It was the name given to the receiver end of the Baird
mechanical TV system, used by the BBC before
Britland went out and started WWII.

30-line picture, transmitted in audio bandwidth.

A similar scanning system appears (from the nature
of the picture) to be used in some of the security
cameras that rely on detecting bodily emissions.
(Difficulty of getting a sensor that can work over the
area of a pictur)

Butch Magee wrote:
> Plod's Conscience wrote:
> > My local garage is selling laser devices that project
> > a straight line for just under a fiver. I wonder if these
> > devices (with the lens removed so that they just
> > produce a single spot) could be modulated to be
> > the light source in a Baird Televisor?
> >
> > Also, I wonder what is the smallest such Televisor
> > that has been produced?
> >
> What a Televisor?
> KF5DE

1785. Re: The smallest Baird Televisor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 05:55:51 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142142951.651057.150590@v46g2000cwv.googlegroups.com>
Source record: 13186
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"superseded"

"quickly"

" "Stookie". "

What is quoted below is a disgraceful exhibition of the
standards of schoolteachers and of L.I.A.R.s today.

Perhaps it is no wonder that those who are candidates
for the gangrenous degeneration that is the M3/CB Fools'
Licence scheme have such difficulty in making any
further progress, especially those who were either too
lazy or too stupid to be able to tackle and then pass a
Morse Code exam intended for 14-year-olds and had to
wait until an exam targetted at 6-year-olds came along?

Brian Reay wrote:
>
> The Baird system has been superceded by more modern techniques. In fact,
> unless you catch up quick, you may miss out a whole generation of technical
> improvements that have occured since "Stookie"

1786. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 06:21:34 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142144494.406485.96440@i40g2000cwc.googlegroups.com>
Source record: 13187
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

In view of the Childish Broadcast (CB) quoted below,
would it be reasonable to assume that "WA5OES" is
some form of Yankland CB issue?

WA5OES wrote:
> >
>
> Is Plod for real or just a Pythonesque spoof?

1787. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 06:23:56 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142144636.034290.324790@i39g2000cwa.googlegroups.com>
Source record: 13188
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Do you really think that after your personal outbursts
directed at me, including your opening paragraph below, that
I regard you as a serious debater?

Bob Bob wrote:
> We'll um if that document (after "So What is Ham Radio") was the entire
> FAQ that you published you only dedicated the first few paragraphs to
> what AR is about. The rest seems to be more dedicated to what it isnt
> and what CB is/isnt. True, it contains some more positive references to
> AR but you keep needling at CB etc excessively. As far as I am concerned
> it would have been far more meaningful to omit any reference to CB
> whatsoever. I suggest you rewrite it like this, post it and see what we
> think.
>
> I dont disagree with your first parts. It is well written even if it is
> what I deem a too narrow view as to what AR is about. The bit about
> being gentlemanly is irrelevent to me simply because I was never bought
> up or lived in a class atmosphere where that term had any importance.
> This however is probably a language difference as I might ascribe
> possibly similar qualities to AR people in general. (eg willing to help,
> never being violent etc) Of course these qualities are dissappearing in
> the world generally so I suggest AR is tending to go the same way. I
> also take your section on competition being something that spurs us all
> on to bigger and better things as being a load of tripe. It is true that
> competition occurs, but I and many others I have talked to never see it
> as important at all. It is in fact the "leisure and social" side showing
> through along the same lines as getting excited over a football match! I
> experiment becasue I am interested in it, not because I want to be
> better than everyone.
>
> If I was a CB'er I'd take your FAQ as a slap in the face and it would
> drive me not to even think about taking up the AR hobby. Perhaps that is
> your agenda?
>
> Bob VK2YQA
>
> Plod's Conscience wrote:
> >
> > I think it is you who is, perhaps, analysing this thread
> > with a limited purview, and who is in the wrong.

1788. Re: The smallest Baird Televisor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 06:41:38 UTC
From: "Old Nicks Deputy (first class)" <"trabant owners club"@Nicks>
Message-ID: <CoPQf.816$8g4.36@newsfe7-gui.ntli.net>
Source record: 13189
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Nedlar" <Sam@techno.invalid> wrote in message
news:a6n612dfv9ofm8kavklad2u08on36bca3o@4ax.com...
> On Sat, 11 Mar 2006 15:58:41 -0600, Bob Bob <bob3bob3@cox.net> wrote:
>

>
> For info only...
> John Logie Baird demonstrated colour TV in 1928.

Coincidently, the year of your fiftieth birthday, IIRC.

tox

1789. Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 06:49:45 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142146185.518102.243580@j52g2000cwj.googlegroups.com>
Source record: 13190
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Played with it last night.

Powered as it is by AAA cells, it seems to have
a greater power, and a greater reserve of power, than
those laserpointers powered by watch batteries.

Allowing for the lens that is used to produce the
straight line beam, the spot from the end was
easily picked out on a gravestone 1/4 mile away,
thus suggesting that a tight beam is being produced.

As these beasties come in a mounting that already
has facilities for screw fixing, perhaps there is
potential capability for optical communications?

(Brian - in your experiments with the Fullerphone, you
ran away from the question as to whether you crossed
a property boundary, so....

1. Did you cross a property boundary?
2. Why do you run away from this and so many other questions?
3. Is your attitude what we must all now expect from the RSCB?)

Plod's Conscience wrote:
> My local garage is selling laser devices that project
> a straight line for just under a fiver. I wonder if these
> devices (with the lens removed so that they just
> produce a single spot) could be modulated to be
> the light source in a Baird Televisor?
>
> Also, I wonder what is the smallest such Televisor
> that has been produced?

1790. Re: The smallest Baird Televisor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 07:46:46 UTC
From: "Jimbo..." <jim.gm4dhj@ntlworld.com>
Message-ID: <GlQQf.228$qH2.224@newsfe4-win.ntli.net>
Source record: 13191
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

>>
> What a Televisor?
> KF5DE

....it is a bit like an Interositer.

1791. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 09:22:37 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <xLRQf.999$_W6.95@newsfe5-win.ntli.net>
Source record: 13192
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message
news:1142146185.518102.243580@j52g2000cwj.googlegroups.com...
> Played with it last night.
>
> Powered as it is by AAA cells, it seems to have
> a greater power, and a greater reserve of power, than
> those laserpointers powered by watch batteries.

Given the relative size of AAA and "watch batteries", this is hardly
surprising.

> Allowing for the lens that is used to produce the
> straight line beam, the spot from the end was
> easily picked out on a gravestone 1/4 mile away,
> thus suggesting that a tight beam is being produced.
>

Laser's are coherent sources, the "ASER" stands for Amplification by
Stimulated Emission of Radiation- the crucial phenomena in the operation of
lasers and masers. The emitted photon is in phase with the stimulating
photon.

> As these beasties come in a mounting that already
> has facilities for screw fixing, perhaps there is
> potential capability for optical communications?

Been done. UK record, as of a couple of years back at least, was something
like 75km. There is project in the latest RSGB handbook (if you are
interesed I'll look up the page, I noticed the article but haven't read the
detail).

--
73
Brian
www.g8osn.org.uk

1792. In the interests of historical accuracy: Case White

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 09:36:36 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <4oq712df168pnt2pqt68ujg19hulruu7ts@4ax.com>
Source record: 13193
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Invasion of Poland (Fall Weiss)

On August 31st, Hitler signed Directive No.1 for the Conduct of the War and the order went out at 4:00pm to invade Poland at 4:45am on September 1st of 1939. That night SS units staged incidents along the border including a phony Polish raid on a German radio station at Gleiwitz (Gliwice). Before sunrise the next morning, Friday, September 1st of 1939, World War Two began. Germany invaded Poland, the German attack beginning at 4:45am, when the Battleship (training ship) "Schleswig-Holstein" (on a so-called "goodwill visit") opened fire on a Polish naval depot and garrison at Westeplatte. An hour later, first German units crossed the border. On September 3rd, 1939, Great Britain and France declared war on Germany.

The full article, which makes very interesting reading, is available at http://gi.grolier.com/wwii/wwii_3.html

from
Aero Spike

1793. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 09:41:34 UTC
From: Gordon Hudson <gordon@usenet3.hostroute.co.uk>
Message-ID: <4413eccf$0$1171$5a6aecb4@news.aaisp.net.uk>
Source record: 13194
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Brian Reay" <see@website.invalid> wrote in message
news:xLRQf.999$_W6.95@newsfe5-win.ntli.net...
>
> "Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message
> news:1142146185.518102.243580@j52g2000cwj.googlegroups.com...
>> Played with it last night.
>>
>> Powered as it is by AAA cells, it seems to have
>> a greater power, and a greater reserve of power, than
>> those laserpointers powered by watch batteries.
>
> Given the relative size of AAA and "watch batteries", this is hardly
> surprising.
>
>> Allowing for the lens that is used to produce the
>> straight line beam, the spot from the end was
>> easily picked out on a gravestone 1/4 mile away,
>> thus suggesting that a tight beam is being produced.
>>
>
> Laser's are coherent sources, the "ASER" stands for Amplification by
> Stimulated Emission of Radiation- the crucial phenomena in the operation
> of lasers and masers. The emitted photon is in phase with the stimulating
> photon.
>
>> As these beasties come in a mounting that already
>> has facilities for screw fixing, perhaps there is
>> potential capability for optical communications?
>
> Been done. UK record, as of a couple of years back at least, was something
> like 75km. There is project in the latest RSGB handbook (if you are
> interesed I'll look up the page, I noticed the article but haven't read
> the detail).

Many years ago Practical Wireless had adesign for turning every ready
torches (the ones with the big 9v batteries) into a transmitter and receiver
by amplitude modulating the bulb.
It actually worked (over about 20 feet).

1794. Re: Optical Communications?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 09:51:14 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <maSQf.509$j7.230@newsfe3-win.ntli.net>
Source record: 13195
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Gordon Hudson" <gordon@usenet3.hostroute.co.uk> wrote in message
news:4413eccf$0$1171$5a6aecb4@news.aaisp.net.uk...
>> Been done. UK record, as of a couple of years back at least, was
something
>> like 75km. There is project in the latest RSGB handbook (if you are
>> interesed I'll look up the page, I noticed the article but haven't read
>> the detail).
>
>
> Many years ago Practical Wireless had adesign for turning every ready
> torches (the ones with the big 9v batteries) into a transmitter and
> receiver by amplitude modulating the bulb.
> It actually worked (over about 20 feet).

Remember it (or one like it) well- it was one of the many projects I tried
as a youngster. (Same sort of time I played with the Fuller Phone).

With a laser pointer but I'm not sure how linear the transfer function is-
ie is it linear enough to make AM viable. I've not looked into this but
maybe someone will know.

--
73
Brian
www.g8osn.org.uk

1795. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 10:01:42 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <6cr712du3m5q1vg49fhjfm0n21bst29sdk@4ax.com>
Source record: 13196
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Brian Reay wrote:

>
>"Plod's Conscience" <radio.ham@lycos.co.uk> wrote
>
>> Played with it last night.

Perhaps he and Nedlar could get together; Nedlar didn't seem to have
much to do last night either.

>> Powered as it is by AAA cells, it seems to have
>> a greater power, and a greater reserve of power, than
>> those laserpointers powered by watch batteries.

>Given the relative size of AAA and "watch batteries", this is hardly
>surprising.

Well, quite.

The shortest Google search would have turned up the information needed
to avoid him making such an obvious statement. A CR2032 battery has a
capacity of 220 mAh at a current drain of 0.2 m/A.A modern AAA battery
far exceeds that - I've left it as an exercise for the OP to search
for that info..

>> Allowing for the lens that is used to produce the
>> straight line beam, the spot from the end was
>> easily picked out on a gravestone 1/4 mile away,
>> thus suggesting that a tight beam is being produced.

A 'tight beam' would indicate a spot not much larger than the laser
source. Unfortunately, the lack of *any* objective statement in the
above gives no indication that the beam was 'tight', merely that it
reached it's target.

>Laser's are coherent sources, the "ASER" stands for Amplification by
>Stimulated Emission of Radiation- the crucial phenomena in the operation of
>lasers and masers. The emitted photon is in phase with the stimulating
>photon.
>
>> As these beasties come in a mounting that already
>> has facilities for screw fixing, perhaps there is
>> potential capability for optical communications?
>
>Been done. UK record, as of a couple of years back at least, was something

>like 75km. There is project in the latest RSGB handbook (if you are
>interesed I'll look up the page, I noticed the article but haven't read the
>detail).

Nothing new there with Gareth reinventing the wheel; it's very similar
(perhaps part of the same syndrome?) to his continually re-writing
history in his own vein.

from
Aero Spike

1796. Wainwright Mini-Mounts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 10:04:11 UTC
From: John A <e455gkf@yahoo.co.uk>
Message-ID: <dv0rmouoa1@newsg2.svr.pol.co.uk>
Source record: 13098

Does anyone know of a UK source for "Wainwright Mini-mounts"? These are small PCBs made in Germany by WMM GmbH (no web-site or email!), laid out to take an IC, with tracks from each IC pad taken out to the edge of the PCB - very useful for prototyping with TSSOP devices it seems.

If they sound interesting, see:

http://www.rdi-wainwright.com/

which is the site of the US agent - $100 min order!

John

1797. radio content?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 10:05:12 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1142157912.307772.280240@i39g2000cwa.googlegroups.com>
Source record: 13099
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Spike wrote:
> Invasion of Poland (Fall Weiss)
>
> On August 31st, Hitler signed Directive No.1 for the Conduct of the
radio content?

1798. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 10:05:16 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142157916.828014.60990@p10g2000cwp.googlegroups.com>
Source record: 13100
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Your underlying motivatiopn to pooh-pooh makes you
seem like a fool.

It is the optical path that determines the divergence, or otherwise
of the beam, by dispersion, diffraction, refraction mechanisms,
and not the coherence of the radiation.

(Cue rejoinder by Mrs.Nugatory, given 5 minutes or so, to look
things up on google, to say that monochomatic radiation is
unaffected by a dispersive medium.)

Brian Reay wrote:
> "Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message
> news:1142146185.518102.243580@j52g2000cwj.googlegroups.com...
>
> > Allowing for the lens that is used to produce the
> > straight line beam, the spot from the end was
> > easily picked out on a gravestone 1/4 mile away,
> > thus suggesting that a tight beam is being produced.
> >
>
> Laser's are coherent sources, the "ASER" stands for Amplification by
> Stimulated Emission of Radiation- the crucial phenomena in the operation of
> lasers and masers. The emitted photon is in phase with the stimulating
> photon.

1799. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 10:06:19 UTC
From: Lloydie <Woger@anon>
Message-ID: <dv0rjm$1jh$0@pita.alt.net>
Source record: 13197
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message
news:1142144636.034290.324790@i39g2000cwa.googlegroups.com...
Do you really think that after your personal outbursts
directed at me, including your opening paragraph below, that
I regard you as a serious debater?

Aw, come on. Humor these guys a little bit. After all, they spend a half
hour at their keyboards picking and typing to come up with their responses.
You could at least show a bit of condescension and treat them as underlings.
Oops...I see that you have already done so.

1800. TIME TO RESIGN FROM THE RSCB? (Was : Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?))

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 10:12:18 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142158338.258452.309190@i39g2000cwa.googlegroups.com>
Source record: 13101
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Your deep-seated motivation to pooh-pooh just serves to
make you look a fool.

If you, as a director of the RSCB unfailingly try to put down
discussion, then perhaps it is a sign that any self-respecting
REAL Radio Ham should resign from the RSCB?

There are many things which have "been done" and yet which
you do. (Apart from a Morse Code test that had "been done"
by otherwise-unqualified self-taught 14-year-olds).

HF Communication had "been done" by thousands, long before
you purchased all the Cheque-Book (CB) rigs that you boast about.

I don't think that I have ever been "interesed", whatever that may
mean.

Brian Reay wrote:
> "Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message
> news:1142146185.518102.243580@j52g2000cwj.googlegroups.com...
>
> > As these beasties come in a mounting that already
> > has facilities for screw fixing, perhaps there is
> > potential capability for optical communications?
>
> Been done. UK record, as of a couple of years back at least, was something
> like 75km. There is project in the latest RSGB handbook (if you are
> interesed I'll look up the page, I noticed the article but haven't read the
> detail).

1801. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 10:23:16 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <oESQf.854$Tv.794@newsfe5-gui.ntli.net>
Source record: 13102
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

on 12/03/2006 06:49 Beanie said the following:
> Played with it last night.
>
Same as every other night.
...(_!_)...

1802. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 10:29:46 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <uKSQf.1365$8g4.110@newsfe7-gui.ntli.net>
Source record: 13103
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message
news:1142157916.828014.60990@p10g2000cwp.googlegroups.com...
> Your underlying motivatiopn to pooh-pooh makes you
> seem like a fool.
>

Someone offers you genuine information, on topic to your post, and you see it as "pooh-pooh". I can see why you are a "slow learner", to use your own description of yourself.

> It is the optical path that determines the divergence, or otherwise
> of the beam, by dispersion, diffraction, refraction mechanisms,
> and not the coherence of the radiation.
>

Eh, no.

A laser will diverge in the absence of a medium.

Degree of collimation and coherence both are factors in divergence and you are jumbling together a raft of factors that I supect you don't understand and I know you don't want to learn about.

--
73
Brian
www.g8osn.org.uk

1803. Re: Optical Communications?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 10:34:28 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <UOSQf.1378$8g4.297@newsfe7-gui.ntli.net>
Source record: 13104
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Spike" <Aero.Spike@S&T.invalid> wrote in message
news:6cr712du3m5q1vg49fhjfm0n21bst29sdk@4ax.com...
>
> A 'tight beam' would indicate a spot not much larger than the laser
> source. Unfortunately, the lack of *any* objective statement in the
> above gives no indication that the beam was 'tight', merely that it
> reached it's target.
>

I half suspect the lens is present to spread the beam- to make it large
enough to see a worthwhile "spot.

--
73
Brian
www.g8osn.org.uk

1804. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 11:16:55 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142162215.860630.26500@u72g2000cwu.googlegroups.com>
Source record: 13105
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Your underlying motivation to pooh-pooh and to utter rather
silly and childish remarks makes you seem like a fool.

Why do you behave in that way?

Brian Reay wrote:
> Someone offers you genuine information, on topic to your post, and you see
> it as "pooh-pooh". I can see why you are a "slow learner", to use your own
> description of yourself.
>
> A laser will diverge in the absence of a medium.
> Degree of collimation and coherence both are factors in divergence and you
> are jumbling together a raft of factors that I supect you don't understand
> and I know you don't want to learn about.

1805. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 11:28:36 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142162916.666036.88390@z34g2000cwc.googlegroups.com>
Source record: 13106
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"The Baird system has been superceded by more modern techniques. In
fact,
unless you catch up quick, you may miss out a whole generation of
technical
improvements that have occured since "Stookie" "

An offer of genuine information?

Or the result of a deeply-seated motivation to want to cause
insult?

Stupid boy.

Brian Reay wrote:
>
> Someone offers you genuine information, on topic to your post, and you see
> it as "pooh-pooh". I can see why you are a "slow learner", to use your own
> description of yourself.
>

1806. 4CX250B 2m linear circuit? (Class C ideally!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 11:30:43 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <dv10p2$1fh$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13107

Hi all.

I'm trying to find a good circuit for a Class C 4CX250B linear.

I've found a few for multiple valves in Class A, but I'm after just a simple circuit that shows a 4CX250B linear for 2m with Class C biasing.

Idea is to use it for a little project where I want to run about 100W, but run it cleanly without all the RF hash that transistor amps give.

Can anyone point me in the right direction?

Also, how would you go about varying the RF power output on a 4CX250B linear in class C? Is it by varying the 1.2kV supply voltage, which would make sense, or is there some other recommended way?

Sam

1807. Re: 7/8 wave antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 11:32:38 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <dv10smibe1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13108

Thanks all

It seems like it's false advertising claims when you see them with 6dB then,
so I'll save my money and stick with my 5/8 wave.

It's nice to run things like this past people before I get conned myself!

Sam

1808. Re: Wainwright Mini-Mounts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 12:12:44 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1142165564.245781.180380@i39g2000cwa.googlegroups.com>
Source record: 13109

Wainwright Instruments in Germany used to have the mini-mounts on their web site, but they seem to have disappeared. Perhaps someone else now makes them.

They are very expensive, anyway. I make my own similar little PCBs at home if I need them. It only takes 30 minutes or so.

Leon

1809. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 12:17:30 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142165850.861457.69840@v46g2000cwv.googlegroups.com>
Source record: 13110
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Well, you're the expert in behaving like that, and as you
practised it for over 20 years, it probably accounts for
it being uppermost in your mind.

How come you never managed to pass a 12 WPM Morse
Test targetted at 14-year-olds in all that time?

Are you, perhaps, too lazy or too stupid, or both?

How come your objection to a Morse Code exam
being used as a filter to control access to HF suddenly
disappeared when a test down at your level, ie, targetted
at 6-year-olds, came along?

Hypocrisy, perhaps?

"Do as I say and not as I do", perhaps?

Bullshitting and downright lying, perhaps?

Is such two-faced behaviour that to be expected from
all directors of the RSCB?

Brian Reay wrote:
> .....a raft of factors that I supect you don't understand
> and I know you don't want to learn about.

1810. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 12:30:45 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142166645.941532.34190@z34g2000cwc.googlegroups.com>
Source record: 13111
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Mrs Nugatory appeared for a short time in uk.rec.models.engineering
masquerading as, "Novae Artless", but her modus operandi gave her away;
in particular her plagiarising of google articles and attempting to
pass them
off as a facet of the skill which she doesn't have, her obsessive
sneering
at me, and the completely vacuous and nugatory irrelevance of her
contributions.

Will she ever be able to pass even an exam targetted at 6-year-olds
in her desperation to be accepted amongst the fraternity of
REAL Radio Hams?

Seemingly not - Mrs Nugatory and The Numpties are well named!

Nedlar wrote:
> Well we seem to be making progress. You are now acknowledging that you
> use Google to gather information and are not trying to pass it off as
> your own work. Well done, keep it up!

1811. Re: 4CX250B 2m linear circuit? (Class C ideally!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 12:53:08 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <UQUQf.10389$S25.8418@newsread1.news.atl.earthlink.net>
Source record: 13112

"Samuel Hunt" <shunt010@hotmail.com> wrote in message
news:dv10p2$1fh$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com...
> Hi all.
>
> I'm trying to find a good circuit for a Class C 4CX250B linear.
>
> I've found a few for multiple valves in Class A, but I'm after just a
simple
> circuit that shows a 4CX250B linear for 2m with Class C biasing.
>
> Idea is to use it for a little project where I want to run about 100W, but
> run it cleanly without all the RF hash that transistor amps give.
>
>
> Can anyone point me in the right direction?
>
> Also, how would you go about varying the RF power output on a 4CX250B
linear
> in class C? Is it by varying the 1.2kV supply voltage, which would make
> sense, or is there some other recommended way?
>
>
There is not really any difference in a class A and Class C circuit. Just
adjust the screen and control grid voltage to the class of operation you
want. Should be in any of the tube manuals.

1812. Re: The smallest Baird Televisor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 13:22:38 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dv1734$l3f$1@newsg4.svr.pol.co.uk>
Source record: 13113
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Butch Magee" <lynyrd@cableone.net> wrote in message
news:1216ttactegtd01@corp.supernews.com...
> Plod's Conscience wrote:
> > My local garage is selling laser devices that project
> > a straight line for just under a fiver. I wonder if these
> > devices (with the lens removed so that they just
> > produce a single spot) could be modulated to be
> > the light source in a Baird Televisor?
> >
> > Also, I wonder what is the smallest such Televisor
> > that has been produced?
> >
> What a Televisor?
> KF5DE

A television transmitter.
A broadcaster of television programs; a telecaster.

Regards,
Graham
--
-.-. -... / .-. .- -.. .. ---

Radio is only a Hobby. Don't let it rule your life...

73/51 - Graham, 26-Golf Charlie-19

1813. need bandswitch

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 13:29:42 UTC
From: Chris Fox NI4L <ni4l@charter.net>
Message-ID: <jnVQf.1483$R36.38@fe03.lga>
Source record: 13114

Hi everyone,

I am in need of a complete multi wafer bandswitch 5/6 lugs for a set of 3-500Z.

Currently, the one installed is a single wafer, trying to hookup

a tuned input board. The amp i am working on is Hunter Bandit 2000C

which is 10-80 meters. Any suggestions, or have one laying around in your parts bin you can let go?

Thanks for looking.

73

Chris NI4L

1814. Re: 4CX250B 2m linear circuit? (Class C ideally!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 13:32:48 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <dv17tv$5l5$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13115

So basically take off the bias?

I assume then that I can just use the tank circuit to tune it nicely?

And I might have to increase the drive by 4 times in order to get the
potential 4 times increase in output?

Sounds simple enough to me!

Sam

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in message
news:UQUQf.10389$S25.8418@newsread1.news.atl.earthlink.net...
>
> "Samuel Hunt" <shunt010@hotmail.com> wrote in message
> news:dv10p2$1fh$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com...
>> Hi all.
>>
>> I'm trying to find a good circuit for a Class C 4CX250B linear.
>>
>> I've found a few for multiple valves in Class A, but I'm after just a
> simple
>> circuit that shows a 4CX250B linear for 2m with Class C biasing.
>>
>> Idea is to use it for a little project where I want to run about 100W,
>> but
>> run it cleanly without all the RF hash that transistor amps give.
>>
>>
>> Can anyone point me in the right direction?
>>
>> Also, how would you go about varying the RF power output on a 4CX250B
> linear
>> in class C? Is it by varying the 1.2kV supply voltage, which would make
>> sense, or is there some other recommended way?
>>
>>
> There is not really any difference in a class A and Class C circuit. Just
> adjust the screen and control grid voltage to the class of operation you
> want. Should be in any of the tube manuals.
>
>

1815. Re: What does it mean to be a _REAL_ Radio Ham? The FAQ is here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 13:48:44 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dv18k3$2vv$1@news6.svr.pol.co.uk>
Source record: 13116
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Plod's Conscience" <radio.ham@lycos.co.uk> wrote in message
news:1142144636.034290.324790@i39g2000cwa.googlegroups.com...
> Do you really think that after your personal outbursts
> directed at me, including your opening paragraph below, that
> I regard you as a serious debater?

Whereas most people in this newsgroup recognise Mr Evans as a 'Mass Debater'

Graham
--
-.-. -... / .-. .- -.. .. ---

Radio is only a Hobby. Don't let it rule your life...

73/51 - Graham, 26-Golf Charlie-19

1816. Re: 4CX250B 2m linear circuit? (Class C ideally!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 14:10:14 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2006.03.12.14.10.14.112153@oceanfree.net>
Source record: 13117

On Sun, 12 Mar 2006 11:30:43 +0000, Samuel Hunt wrote:

> Hi all.
>
> I'm trying to find a good circuit for a Class C 4CX250B linear.

There are a few designs in the old RSGB VHF/UHF Manual. If you
are searching the web for info, leave out the word 'linear'.
A class C amp is usually not linear.

I use a single 4CX250B on 2M. The G1 bias control is on
the front panel so that I can adjust it to class AB for
SSB and class B or C for CW,JT65 or FM.

http://www.qsl.net/la0by/2m-hpa.htm
http://www.nitehawk.com/sm5bsz/power.htm

73, Ed. EI9GQ.

--
Linux 2.6.15
Remove 'X' to reply by e-mail.
Yes, my username really is: nospam

1817. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 14:40:00 UTC
From: Bob Bob <bob3bob3@cox.net>
Message-ID: <1fode3-1jv.ln1@p400bob.personal.cox.net>
Source record: 13119
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

What is the efficiency of a laser device like nowadays?

I went to a 3D TV IEEE demo back in the 1970's where the device looked like a TV but had "depth". Kind of like those kids puppet theatres! The big thing I remember at the time was the huge power consumption (1000-2000W?) needed to produce even a moderately lit picture. It was said at the time that the appliance would probably never be marketed as a 3DTV in every house would flatten the electricity supply system every time a football/crickrt match was on!

I cant quite remember the physics or name behind the 3D technique. Some kind of inteference pattern generation maybe. The name escapes me...

Cheers Bob VK2YQA

Spike wrote:

>
>>>Powered as it is by AAA cells, it seems to have
>>>a greater power, and a greater reserve of power, than
>>>those laserpointers powered by watch batteries.

> The shortest Google search would have turned up the information needed
> to avoid him making such an obvious statement. A CR2032 battery has a
> capacity of 220 mAh at a current drain of 0.2 m/A.A modern AAA battery
> far exceeds that - I've left it as an exercise for the OP to search
> for that info..

1818. Re: 4CX250B 2m linear circuit? (Class C ideally!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 15:02:41 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <e7b812h0e55hjen33b160ual7ch8b44i48@4ax.com>
Source record: 13118

On Sun, 12 Mar 2006 11:30:43 +0000 (UTC), "Samuel Hunt"
<shunt010@hotmail.com> wrote:

>Hi all.
>
>I'm trying to find a good circuit for a Class C 4CX250B linear.

Good luck. "Linear" and "Class C" are mutually exclusive.

>
>I've found a few for multiple valves in Class A, but I'm after just a simple
>circuit that shows a 4CX250B linear for 2m with Class C biasing.
>
>Idea is to use it for a little project where I want to run about 100W, but
>run it cleanly without all the RF hash that transistor amps give.

Then you want to run it class AB1, which is much easier on the fragile
grids, BTW.
>
>
>Can anyone point me in the right direction?
>
>Also, how would you go about varying the RF power output on a 4CX250B linear
>in class C? Is it by varying the 1.2kV supply voltage, which would make
>sense, or is there some other recommended way?

If you would just forget the Class C part, you would simply vary the
input (drive) power and get a linear change in output power. Varying
the drive power to a Class C amplifier will change the output power
too, but in a "non-linear" way. Changing the anode voltage on a
tetrode to vary (DC) input power is fraught with trouble and doesn't
make sense.

If you insist on Class C bias, (grid cut off with no drive) and you
can't vary the rf drive level for some reason, with excess drive
power, you can bias the grid further into cutoff. This will increase
the harmonic content, but the plate capacitance of these tubes
(valves) is high enough that the Q of the plate tank will be
necessarily high so this may not be an issue.

You might consider changing the screen voltage. Be advised, however,
the screen grids in the tubes are very delicate and you will have to
insure that dissipation limits are not exceeded.

1819. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 15:14:17 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <44143a01.671848046@news.blueyonder.co.uk>
Source record: 13120
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On Sun, 12 Mar 2006 09:22:37 GMT, "Brian Reay" <see@website.invalid>
wrote:

>> As these beasties come in a mounting that already
>> has facilities for screw fixing, perhaps there is
>> potential capability for optical communications?
>
>Been done. UK record, as of a couple of years back at least, was something
>like 75km. There is project in the latest RSGB handbook (if you are
>interesed I'll look up the page, I noticed the article but haven't read the
>detail).

The current UK laser record is around 73km I believe... held by G0MFR
and G8LSD. They used standard low power red laser diodes of the kind
found in the pointers. Barry,G8AGN, Gordon G0EWN and myself (all in
Sheffield) are also experimenting on these lines have done a 45km path
so far... using cw. We have some LOS paths up here in the North up to
136km so we're hoping to better the record one day soon :-)

Peter, G3PHO

1820. Re: 4CX250B 2m linear circuit? (Class C ideally!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 15:33:20 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <4bXQf.10426$S25.6037@newsread1.news.atl.earthlink.net>
Source record: 13121

"Samuel Hunt" <shunt010@hotmail.com> wrote in message
news:dv17tv$5l5$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com...
> So basically take off the bias?
>
>
You don't take it off like you would a transistor. Tubes work sort of backwards from transistors. YOu increase the voltage to the recommended value of plate current. Somewhere around -50 volts for AB and -100 volts for C. That would give around 60 ma of plate current for AB and very low current for C with no input signal.
You will need the tube spec sheet for closer values. Also the screen voltage should be changed for the mode if operation is for CW only. Think it is about 250 Volts for CW and 350 for AB but may have it backwards.

1821. Re: 4CX250B 2m linear circuit? (Class C ideally!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 15:48:39 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <pmXQf.1944$96.213@bignews8.bellsouth.net>
Source record: 13122

Samuel Hunt wrote:
> Hi all.
>
> I'm trying to find a good circuit for a Class C 4CX250B linear.
>
> I've found a few for multiple valves in Class A, but I'm after just a simple
> circuit that shows a 4CX250B linear for 2m with Class C biasing.
>
> Idea is to use it for a little project where I want to run about 100W, but
> run it cleanly without all the RF hash that transistor amps give.
>
>
> Can anyone point me in the right direction?
>
> Also, how would you go about varying the RF power output on a 4CX250B linear
> in class C? Is it by varying the 1.2kV supply voltage, which would make
> sense, or is there some other recommended way?
>
>
> Sam
>
>
Oxymoron. Class C is NOT linear!
Now if you want to amplify CW or FM signals, class
C is fine. For AM or SSB signals you want class A, AB or B.
For this tube the grid #1 bias, grid #2 voltage and grid #1
drive (signal input) are different as you change class of
operation. (Mostly the screen and plate voltages can remain
the same and just change the resting plate current with the
bias and don't apply more than a specific signal level so
your max plate current isn't exceeded.)

1822. Re: Question about 4-400 tube socket/mounting

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 15:54:03 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <srXQf.1945$96.68@bignews8.bellsouth.net>
Source record: 13123
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

w8ji@akorn.net wrote:
> terry@terryking.us wrote:
>
>>Doug, a suggestion about "Longevity" for 4-400's (Actually, any
>>thoriated-tungsten filament power tubes):
>>
>>These tubes are very sensitive to filament voltage. Make sure the tube
>>pins and socket are nice and clean and shiny (don't use any
>>abrasives!).. Measure filament voltage at the socket. This is all to
>>make sure the tubes REALLY get the correct filament voltage to the
>>filament... It's 28 Amps for two tubes!
>
>
> Actually in amateur service filament voltage is not that big a worry. I
> think the excessive worry comes as a carryover from BC service where
> tubes are operated far below ratings and can be operated for almost
> 9000 hours per year.
>
> In BC service, excessive voltage shows up in a noticable period of time
> since the tubes are operated 24/7. The voltages and currents of other
> elements are a much lower percentage of maximum compared to amateur
> service, and filaments are not cycled. As such, emission failures are a
> common failure mechanism.
>
> In amateur service, it takes many years and thousands of fialment
> cycles to accumalate the hours a BC tube sees in one year. Tubes in
> amateur service much more often fail from seal leakage, element
> structure defects, and occasional abuse.
>
> Out of hundreds of tubes I've seen fail in amateur service over the
> past 30 years, I can count the number of emission failures on my two
> hands.
>
> I'm not saying filaments should be run extra hot, but I am trying to
> point out what worries BC stations is often not a concern in amateur
> use.
>
> By the way, two of the emission failures I saw were in 8877 tubes that
> were operated too cold. The owners had reduced filament voltage below
> 4.75 volts. NEVER run a MOX cathode tube at reduced voltage unless you
> also plan to limit peak emission current.
>
> My advice is to run all tubes in amateur service at RATED filament

> voltage or in the allowable tolerance range for voltage.
>
> As for cooling, seal cooling is critical in glass tubes. So is periodic
> operation to keep the tubes gettered.
>
> http://www.w8ji.com/vacuum_tubes_and_vaccum_tube_failures.htm
>
> 73 Tom
>
If oversize filament transformers are used (never know what kind of
surplus junk hams use!) there is a danger of filament failure
due to starting in-rush current. My home brew linear started these
tubes up with a power resistor in series with the primary of the
filament transformer for a few seconds, which was then shorted out
by a relay. A transistor r/c delay circuit did the dirty work.
This lets the tube filaments preheat a bit before applying full
voltage.

1823. Re: need bandswitch

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 15:57:03 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <guXQf.1946$96.263@bignews8.bellsouth.net>
Source record: 13124

Chris Fox NI4L wrote:
> Hi everyone,
>
> I am in need of a complete multi wafer bandswitch 5/6 lugs for a set of
> 3-500Z.
>
> Currently, the one installed is a single wafer, trying to hookup
>
> a tuned input board. The amp i am working on is Hunter Bandit 2000C
>
> which is 10-80 meters. Any suggestions, or have one laying around in your
> parts bin you can let go?
>
> Thanks for looking.
>
> 73
>
> Chris NI4L
>
>
You can try to home brew your own by attaching a shaft to the
back of the main band switch to gang to a second one.
If in your case, you want to add a tuned input switch this
is the best bet as the two switches should be of different
sizes (one high power one low). You might need to use
flexible shafting for the coupling, and gearing if the
two switches have different switching angles.

1824. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 16:51:53 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <441451a6$0$42166$dbd49001@news.wanadoo.nl>
Source record: 13125
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Plod's Conscience wrote:

> Played with it last night.

What you do in the privacy of your own home is up to you!

> Powered as it is by AAA cells, it seems to have
> a greater power, and a greater reserve of power

Again, what you do in the privacy of your own home.....

1825. Re: In the interests of historical accuracy: Case White

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 17:20:44 UTC
From: Hils <hilsnews@nospam.demon.co.uk>
Message-ID: <maBdfkBshFFEFw3n@newearth.demon.co.uk>
Source record: 13126
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Spike wrote

>The full article, which makes very interesting reading, is available
>at http://gi.grolier.com/wwii/wwii_3.html

More information in David Irving's "Hitler's War", free download from
http://www.fpp.co.uk/

--
Hil

1826. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 18:19:33 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <jvo81218ttpoou8muoi5k1j51a9o7c2l0l@4ax.com>
Source record: 13127
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Nedlar, hoping that Sunday evening wouldn't turn out like Saturday evening did, wrote:

>Spike <Aero.Spike@S&T.invalid> wrote:
>
>>Perhaps he and Nedlar could get together; Nedlar didn't seem to have
>>much to do last night either.
>
>Well I certainly didn't waste it doing Google searches, like you do.
>Has your copy of the crap film ' Bridges at Toko Ri' bit the dust?

You are quite free to waste your time in any way that you wish; even on the Internet if you feel so inclined. After all, you say you like things kept simple. There's no need to feel apologetic.

>>The shortest Google search would have turned up the information needed
>>to avoid him making such an obvious statement. A CR2032 battery has a
>>capacity of 220 mAh at a current drain of 0.2 m/A.A modern AAA battery
>>far exceeds that - I've left it as an exercise for the OP to search
>>for that info..
>
>Well we seem to be making progress. You are now acknowledging that you
>use Google to gather information and are not trying to pass it off as
>your own work. Well done, keep it up!

Unfortunately, you are making no progress whatsoever.

I merely mentioned some characteristics of a typical watch cell, suggesting that if the OP looked on Google he could have found it out for himself, thus avoiding posting what he did and looking like a fool. Is that simple enough for you?

>If we could now get you to understand what ' I can't think of anything
>else' means, then that would be real progress.

I know you like things kept simple, so I strongly suggest you never attempt to repair anything at all - you just don't have the brains for it.

No throwing away of a fine receiver here due to 'nerves', fettling, or missing pages from the manual. ROFLMAO. In fact, it directly follows the Gospel According to Gareth, in his (still unqualified and therefore dangerous) 'repair with gusto' creed; something he has admitted failing in the past. ROFLMAO.

Is that simple enough for you?

from
Aero Spike

1827. Re: 7/8 wave antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 19:48:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1218uop8o40971f@corp.supernews.com>
Source record: 13128

If you're talking about the gain and power handling claims for CB antennas, they're pure fabrications.

Roy Lewallen, W7EL

Samuel Hunt wrote:
> Thanks all
>
> It seems like it's false advertising claims when you see them with 6dB then,
> so I'll save my money and stick with my 5/8 wave.
>
> It's nice to run things like this past people before I get conned myself!
>
> Sam
>
>

1828. "Mini-Circuits" group?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 21:25:39 UTC
From: WA9YOZ <abodo@netnitco.net>
Message-ID: <1142198739.849287.295940@i40g2000cwc.googlegroups.com>
Source record: 13129

Greetings all! I just got me the book from "Mini-Circuits" with lots of
projects.
Has anyone built some of them? Is there like a support group, where
individuals
exchange schematics or ideas from the "Mini-Circuit" Handbook?
Thank you for your time & cul...tony...wa9yoz

1829. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 21:40:29 UTC
From: Bob Bob <bob3bob3@cox.net>
Message-ID: <d3hee3-ng.ln1@p400bob.personal.cox.net>
Source record: 13130
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Yep thats the word.. Thanks!

Custos Custodum wrote:
> Holography?
>

1830. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-12 23:15:50 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <aoa9125m9s9bpamjv8v12o15918r9m72nm@4ax.com>
Source record: 13131
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Nedlar wrote:

>On Sun, 12 Mar 2006 18:19:33 +0000, Spike <Aero.Spike@S&T.invalid>
>wrote:
>
>
>>You are quite free to waste your time in any way that you wish; even
>>on the Internet if you feel so inclined. After all, you say you like
>>things kept simple. There's no need to feel apologetic.
>
>Fortunately I am not confined to my house through fear and cowardice
>when the children are not at school, unlike yourself, so I have little
>time to waste on anything. Unnecessary embellishment of anything is a
>complete waste of time and effort. It's a pity you are too stupid to
>know this.

Do your neighbours know you have an excessive interest in the school
holidays?

>If we could now get you to understand what ' I can't think of anything
>else' means, then that would be real progress.

>What is it about the above sentence that confuses you?

What is it about "No throwing away of a fine receiver here due to
'nerves', fettling, or missing pages from the manual. ROFLMAO. In
fact, it directly follows the Gospel According to Gareth, in his
(still unqualified and therefore dangerous) 'repair with gusto' creed;
something he has admitted failing in the past. ROFLMAO." that you have
difficulty with? Isn't the statement simple enough for you?

from
Aero Spike

1831. Re: 4CX250B 2m linear circuit? (Class C ideally!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-13 04:05:06 UTC
From: Allan Butler <ka0ies@hotmail.com>
Message-ID: <1142222573_37@64triton.net>
Source record: 13132

Samuel Hunt wrote:

> Hi all.
>
> I'm trying to find a good circuit for a Class C 4CX250B linear.
>
> I've found a few for multiple valves in Class A, but I'm after just a
> simple circuit that shows a 4CX250B linear for 2m with Class C biasing.
>
> Idea is to use it for a little project where I want to run about 100W, but
> run it cleanly without all the RF hash that transistor amps give.
>
>
> Can anyone point me in the right direction?
>
> Also, how would you go about varying the RF power output on a 4CX250B
> linear in class C? Is it by varying the 1.2kV supply voltage, which would
> make sense, or is there some other recommended way?
>
>
> Sam

Sam:

If you want to run an RF amp in a linear manner then one cannot bias the amp in class C. Class C is not a linear mode of operation and will give all kinds of trash if running in SSB. Now if you are running either CW or FM, then you can run a class C amplifier.

The Most linear class of amplifier operation in the classic modes is class A mode. This mode means the active device is always conducting even when the input is not being fed any signal. In an ideal world efficiency of class A is only going to be 25 percent.

Most amateur class amplifiers run in a mode that is either ABone or ABtwo. I can't recall the differences between the two at the moment but they are clean under normal operation and don't put out a lot of noise.

-----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

1832. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-13 10:48:58 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <v8ja12tlbjtpmjlhqqltl293dtn8a7glnd@4ax.com>
Source record: 13133
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Nedlar The Simpleton Simon wrote:

>On Sun, 12 Mar 2006 23:15:50 +0000, Spike <Aero.Spike@S&T.invalid>the
>coward wrote:
>
>>Do your neighbours know you have an excessive interest in the school
>>holidays?
>
>My only interest in the holidays are a deep concern for your welfare.
>I know that you, being paedophobic, suffer greatly.

Nice try at blame-shifting, but your excessive interest in the timing
of school holidays is entirely down to you, and is a matter of public
record. Perhaps you'd like to ponder the implications of that.

Don't use me as a cover.

>If we could now get you to understand what ' I can't think of anything
>else' means, then that would be real progress.
>
>What is it about the above sentence that confuses you?
>
>Post the article if your man enough.

If you aren't careful someone will tell your Care in the Community
Social Worker how naughty you've been. You won't like that, she won't
wipe the egg from your face.

No throwing away of a fine receiver here due to 'nerves', fettling, or
missing pages from the manual. ROFLMAO. In fact, it directly follows
the Gospel According to Gareth, in his (still unqualified and
therefore dangerous) 'repair with gusto' creed; something he has
admitted failing in the past. ROFLMAO.

from
Aero Spike

1833. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-13 11:54:53 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <q9na129m494d89l99tvkbfaqslh9msd355@4ax.com>
Source record: 13134
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Nedlar wrote, before the nurse took away his computer:

>On Mon, 13 Mar 2006 10:48:58 +0000, Spike <Aero.Spike@S&T.invalid>
>wrote:
>
>>
>>Nice try at blame-shifting, but your excessive interest in the timing
>>of school holidays is entirely down to you, and is a matter of public
>>record. Perhaps you'd like to ponder the implications of that.
>
>The blame shifting is entirely yours. It was your original article
>that mentioned problems during school holidays. Perhaps you'd like to
>ponder on that!

That was very poor...is the medication wearing off?

>Don't use me as a cover.
>
>Still not man enough to post the article eh?

Still not technical enough to repost one of your own articles?

If you aren't careful someone will tell your Care in the Community
Social Worker how naughty you've been. You won't like that, she won't
wipe the egg from your face.

No throwing away of a fine receiver here due to 'nerves', fettling, or
missing pages from the manual. ROFLMAO. In fact, it directly follows
the Gospel According to Gareth, in his (still unqualified and
therefore dangerous) 'repair with gusto' creed; something he has
admitted failing in the past. ROFLMAO.

from
Aero Spike

1834. Re: Wainwright Mini-Mounts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-13 11:57:12 UTC
From: Per-Åke Andersson <pake@extrafoi.se>
Message-ID: <dv3mmo$875$1@mercur.foi.se>
Source record: 13135

John A wrote:

> Does anyone know of a UK source for "Wainwright Mini-mounts"? These are
> small PCBs made in Germany by WMM GmbH (no web-site or email!), laid out to
> take an IC, with tracks from each IC pad taken out to the edge of the PCB -
> very useful for prototyping with TSSOP devices it seems.
>
> If they sound interesting, see:
>
> http://www.rdi-wainwright.com/
>
> which is the site of the US agent - $100 min order!
>
> John
>
>
>

Could be the same as
http://www.wainwright-filters.com/
There adress is andechs (See Impressum at homepage)

/Per-Ake
--
Remove "extra" in my e-mail

1835. GG Tetrode/Pentode QRO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-13 14:05:04 UTC
From: Roberto IZ5FCY <iz5fcy_NOSPAMPLEASE_@arrl.net>
Message-ID: <1afj8ab1gogi.qjys8f3ucsch$.dlg@40tude.net>
Source record: 13136

Hello to everybody.

I would want to use a pair or quad tetrode (4-400a or 4cx250/350) as GG
triode for AB/C class operations.

I don't remember where I have read that only the control grid had
physically push to ground, while the others grid(s) was electrically
floating and connected to ground through of the capacitors....

Can you help me with schemas, links and suggestions?

Many thanks in advance..and sorry for bandwidht...

Roberto IZ5FCY

--
73's de IZ5FCY Roberto

1836. Re: GG Tetrode/Pentode QRO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-13 17:12:41 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <uvOdnQOQDIafNYjZRVn-tA@web-ster.com>
Source record: 13137

Roberto IZ5FCY wrote:

> Hello to everybody.
>
> I would want to use a pair or quad tetrode (4-400a or 4cx250/350) as GG
> triode for AB/C class operations.
>
> I don't remember where I have read that only the control grid had
> physically push to ground, while the others grid(s) was electrically
> floating and connected to ground through of the capacitors....
>
> Can you help me with schemas, links and suggestions?
>
> Many thanks in advance..and sorry for bandwidht...
>
>
> Roberto IZ5FCY
>

AFAIK a tetrode in grounded grid doesn't give you much more (if any)
gain than a triode in grounded grid, but you still need all the special
care and feeding of the screen.

So why not just use triodes?

Better yet, why not use the tetrodes in common-cathode service, and get
1000 watts out for 1-10 watts in?

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

1837. Re: GG Tetrode/Pentode QRO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-13 17:19:19 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <4415a997$1_1@newsfeed.slurp.net>
Source record: 13138

ORIGINAL MESSAGE:

> I don't remember where I have read that only the control grid had
> physically push to ground, while the others grid(s) was electrically
> floating and connected to ground through of the capacitors....

~~~~~~
The control grid should be connected directly to ground but never allow the other grids to float. They must either be connected to a standard bias supply or grounded themselves. If they are floating, they will pick up a charge and do things you don't want them to do. :-)

Connecting all grids to ground was a common practice in the old days but is rarely done anymore, due I believe to bad linearity. If you're only doing CW, FM or RTTY, linearity is not an issue and it should work fine that way.

Bill, W6WRT
~~~~~~

1838. Re: GG Tetrode/Pentode QRO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-13 20:29:35 UTC
From: Roberto IZ5FCY <iz5fcy_NOSPAMPLEASE_@arrl.net>
Message-ID: <eciayc08n67e$.bv2p6jsq5855.dlg@40tude.net>
Source record: 13139

> AFAIK a tetrode in grounded grid doesn't give you much more (if any)
> gain than a triode in grounded grid, but you still need all the special
> care and feeding of the screen.

I agree with you opinion.

> So why not just use triodes?

My experiences are only in triode PA and I have a lot of tetrodes and
pentodes "unemployed" :-)))

> Better yet, why not use the tetrodes in common-cathode service, and get
> 1000 watts out for 1-10 watts in?

Sure, but I don't have experience in tetrode or pentode PA and the screen
grid managenement, isn't a walking...
In all know books and websites I don't find a valid explaination of this
matter....

Thanks!!
--
73's de IZ5FCY Roberto

1839. Re: GG Tetrode/Pentode QRO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-13 20:30:15 UTC
From: Roberto IZ5FCY <iz5fcy_NOSPAMPLEASE_@arrl.net>
Message-ID: <1ec0b1uuy54a9.gfut7q4gm29g.dlg@40tude.net>
Source record: 13140

> The control grid should be connected directly to ground but never allow
> the other grids to float. They must either be connected to a standard
> bias supply or grounded themselves. If they are floating, they will
> pick up a charge and do things you don't want them to do. :-)
>
> Connecting all grids to ground was a common practice in the old days
> but is rarely done anymore, due I believe to bad linearity. If you're
> only doing CW, FM or RTTY, linearity is not an issue and it should work
> fine that way.
>
> Bill, W6WRT

Thanks Bill...
--
73's de IZ5FCY Roberto

1840. Re: Wainwright Mini-Mounts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-13 22:52:55 UTC
From: DPhil <DPhil@breathemail.net>
Message-ID: <4415f73d_2@mk-nntp-1.news.uk.worldonline.com>
Source record: 13141

Try www.rapidelectronics.co.uk
look under PCB Equipment
described as surface mount development boards
Phil G8AAE

"John A" <e455gkf@yahoo.co.uk> wrote in message
news:dv0rmouoa1@newsg2.svr.pol.co.uk...
> Does anyone know of a UK source for "Wainwright Mini-mounts"? These are
> small PCBs made in Germany by WMM GmbH (no web-site or email!), laid out
to
> take an IC, with tracks from each IC pad taken out to the edge of the
PCB -
> very useful for prototyping with TSSOP devices it seems.
>
> If they sound interesting, see:
>
> http://www.rdi-wainwright.com/
>
> which is the site of the US agent - $100 min order!
>
> John
>
>
>

1841. Re: 4CX250B 2m linear circuit? (Class C ideally!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-13 22:59:27 UTC
From: Risto Tiilikainen <risto.NON.tiilikainen@luukku.comMUNIST.invalid>
Message-ID: <4415f851$0$7477$39db0f71@news.song.fi>
Source record: 13142

Ken Scharf kirjoitti:
>
>>
>>
>>
> Oxymoron. Class C is NOT linear!
>
True
> Now if you want to amplify CW or FM signals, class
> C is fine. For AM or SSB signals you want class A, AB or B.
> For this tube the grid #1 bias, grid #2 voltage and grid #1
> drive (signal input) are different as you change class of
> operation. (Mostly the screen and plate voltages can remain
> the same and just change the resting plate current with the
> bias and don't apply more than a specific signal level so
> your max plate current isn't exceeded.)
>
Hi

Class C isn't fine.
Class C is producing a lot of harmonics
Specially odd ones are bad.
I don't recomment class C elsewhere but for transistor FM use in VHF and
UHF
Maybe also for KISS QRP in HF CW

73 , Risto OH2BT

1842. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-13 23:17:38 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <mbvb121hn57j1e4qnv70ba4ue6r93rl7s4@4ax.com>
Source record: 13143
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Nedlar wrote:

>On Mon, 13 Mar 2006 11:54:53 +0000, Spike <Aero.Spike@S&T.invalid>
>wrote:
>
>>That was very poor...is the medication wearing off?
>You're getting more childish by the hour. No wonder the kids hate you.
>(It's that word again, sorry it frightens you).
>
>Still not man enough to post the article eh?

Still not man enough to repost one of your technical articles?

I thought not.

from
Aero Spike

1843. Re: GG Tetrode/Pentode QRO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 02:59:28 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <dv5big$52h$1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13144

How to adjust DC grid bias, screen and plate voltages, RF grid-drive
volts, to provide a given plate-current operating angle, is shown in
program OPANGLE3.

It is the plate current operating angle which decides which condition
the amplifier is operated under. Program OPANGLE3 covers covers
class-AB, B and C conditions.

Download now from website below.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

1844. Re: GG Tetrode/Pentode QRO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 03:04:19 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <QlqRf.6001$wQ6.5865@bignews6.bellsouth.net>
Source record: 13145

Tim Wescott wrote:
> Roberto IZ5FCY wrote:
>
>> Hello to everybody.
>> I would want to use a pair or quad tetrode (4-400a or 4cx250/350) as GG
>> triode for AB/C class operations.
>>
>> I don't remember where I have read that only the control grid had
>> physically push to ground, while the others grid(s) was electrically
>> floating and connected to ground through of the capacitors....
>>
>> Can you help me with schemas, links and suggestions?
>>
>> Many thanks in advance..and sorry for bandwidht...
>>
>>
>> Roberto IZ5FCY
>>
> AFAIK a tetrode in grounded grid doesn't give you much more (if any)
> gain than a triode in grounded grid, but you still need all the special
> care and feeding of the screen.
>
> So why not just use triodes?
>
> Better yet, why not use the tetrodes in common-cathode service, and get
> 1000 watts out for 1-10 watts in?
>
By connecting BOTH grids of a 4-400A or similar tube to ground you are creating a high mu triode out of a tetrode/pentode/beampower tube. Nothing wrong with that, but triodes made specificly for the purpose do work better. Now if you happen to have gotten the tetrodes surplus, or they are already in the junk box, use them, they make good grounded grid amplifiers.

The "triode" grounded grid connection does not require neutralization, bias, or screen power. It DOES require more driving power. You can also apply normal grid and screen voltages but ground the grids (for RF) with capacitors and apply drive to the cathode as in grounded grid. This is called "cathode driven". A cathode driven tetrode requires no neutralization and needs less drive than a true grounded grid amp, but more drive than grounded cathode (grid driven).

BTW not all tetrodes can be driven in true grounded grid. The 4cx250 for example, can ONLY be used in cathode driven or grid driven service. If you try to run it as true grounded grid you will MELT the grids!

1845. RF power transistor - CM10-12A datasheet, and stock

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 05:23:41 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1142313821.705029.197960@i39g2000cwa.googlegroups.com>
Source record: 13146

Hi Guys,

Can anyone help with a full data sheet and an idea where I might be
able to buy one without getting charged the earth.

Thanks,

Mark.

1846. Solid state vhf and UHF amplifier designs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 05:50:46 UTC
From: VK3XL <VK3XL.24nka8@news.radiobanter.com>
Message-ID: <VK3XL.24nka8@news.radiobanter.com>
Source record: 13052

Hi all, Im looking for solid state amplifier designs for use on 144 MHZ SSB of about 100 W output for up to 20 watts drive. Does anyone have links to suitable circuit diagrams?
I am also interested to increase my output power on 432 SSB as well. I currently have 10 w drive and would like to increase that to 100w or there abouts. Solid state amp circuits only please
Thanks for looking
Mike VK3XL

--
VK3XL

1847. UHF, RF Power NPN - CM10-12A datasheet

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 06:54:23 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1142313649.410614.305650@j33g2000cwa.googlegroups.com>
Source record: 13147

Hi Guys,

Can anyone help with a full CM10-12A datasheet please.

Thanks,

Mark.

1848. Re: RF power transistor - CM10-12A datasheet, and stock

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 08:24:24 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2006.03.14.08.24.23.811386@oceanfree.net>
Source record: 13048

On Mon, 13 Mar 2006 21:23:41 -0800, MarkAren wrote:

> Hi Guys,
>
> Can anyone help with a full data sheet and an idea where I might be able
> to buy one without getting charged the earth.
>
> Thanks,
>
> Mark.

datasheetarchive.com list the MRF641 as a possible substitute.
The MRF641 datasheet is readily available. A comparison with
the specs below shows that they are quite similar but not
identical.

The following specs are also from datasheetarchive.com
Part Number = CM10-12A
Description = Bipolar NPN UHF-Microwave Transisitor
Manufacturer = Various
V(BR)CBO (V) = 36
I(C) Abs.(A) Collector Current = 2.5
Absolute Max. Power Diss. (W) = 35
Power Gain Min. (dB) = 7
@V(CE) (V) (Test Condition) = 12
@Freq. (Hz) (Test Condition) = 470M
@I(C) (A) (Test Condition) = 10
@V(CE) (V) (Test Condition) = 12
@Freq. (Hz) (Test Condition) = 470M
Semiconductor Material = Silicon
Package = SOT-119var

73, Ed. EI9GQ.

--
Linux 2.6.15
Remove 'X' to reply by e-mail.
Yes, my username really is: nospam

1849. Re: RF power transistor - CM10-12A datasheet, and stock

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 08:46:29 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1142325989.690980.31500@u72g2000cwu.googlegroups.com>
Source record: 13049

Hi Ed,

Yup, I found the 641 also, the thing which is odd is that the CM10-12A is designed for linear while the 641 is FM class, I am surprised that they were crossed. The CM10 is supplied with a matched thermistor, and I doubt that it will track the 641 correctly.

I have a low gain CM10 and I think that direct replacement is the only way to go.

Thanks for looking

Regards,

Mark.

1850. Re: GG Tetrode/Pentode QRO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 08:50:38 UTC
From: Roberto IZ5FCY <iz5fcy_NOSPAMPLEASE_@arrl.net>
Message-ID: <dej9cz4ejma3$.1dam6mz7q7wei.dlg@40tude.net>
Source record: 13050

> BTW not all tetrodes can be driven in true grounded grid. The 4cx250
> for example, can ONLY be used in cathode driven or grid driven service.
> If you try to run it as true grounded grid you will MELT the grids!

Mhmmm.. good info, Ken. Thank you !!

--
73's de IZ5FCY Roberto

1851. Re: GG Tetrode/Pentode QRO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 08:51:46 UTC
From: Roberto IZ5FCY <iz5fcy_NOSPAMPLEASE_@arrl.net>
Message-ID: <1u3nud01x5cng$.1gio3y1vhc1ue.dlg@40tude.net>
Source record: 13051

Excellent software mine, Reg !!
Thanks and compliments.
--
73's de IZ5FCY Roberto

1852. Re: how to wind 10mH inductor for AF diplexer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 09:42:05 UTC
From: 3flp <zalio@optusnet.com.au>
Message-ID: <1142329324.958572.203220@i40g2000cwc.googlegroups.com>
Source record: 13053

Hi,

I had exactly the same issue a few months back. Winding so many turns on a FT50-43 is not realistic. Actually, winding the same number of turns on any core, even the pot cores recommended by other people are not so good for this application. The issue is the parasitic capacitance. In my case, I needed ~2mH inductors. After I wound the required number of turns on FT50-43, which was about 60 (IIRC), then measured the parasitic capacitance, it was too much. The self resonance was somewehere in the below 1 MHz. The 60 turns just about fits onto the core. If you go for second layer (and beyond), the capacitance will skyrocket.

A diplexer is supposed to provide close to real, near 50 Ohm impedance to the mixer. At the same time, it needs to work as a low pass filter, to keep the RF out of teh audio stages. If you do some simulations of the common audio diplexer topologies and take into account the parasitic capacitance of the inductors, you'll find out that the match is close to 50-Ohms real only at audio, maybe up to LF. Completely useless at HF and above.

So what's the solution? A few options:
1/ Try a material with higher permeability. Toroids are best, because they don't need shielding and they don't break as easily as pot cores. I'd recommend FT50-J. This is I think the highest permeability that Amidon sells. You should end up with much smaller number of turns. It may improve things in your case.
2/ Forget diplexer. Use an attenuator, followed with a low pass filter. This will increase the noise figure & gain of the mixer-post-amp combo, so you'll have to make it up with more gain ahead of the mixer. But you'l have higher IP3. You could set the amount of attenuation to balance the noise figure against IP3. Where the optimum is, I have no idea.
3/ Since you are mentioning BFO & IF, I assume that you have a superhet. The mixer at the end of the IF strip does not have such hard requirements, since you've already filtered the 'bad guys' out. For SSB, you would not care about intermod performance after IF filter too much; well maybe except for audio distortion. Actually, for a product detector in a superhet for something like SSB, don't even use a diode mixer. Too much power and not necessary. Switch over to an active mixer, like the NE602.

Anyway, your mileage may vary. The above should work for common cases. If you really need a proper broad-band RF diplexer which also works as an audio low pass filter, then you're in for an interesting journey...

Hope this helps,
Fil
VK3FLP

aadu.adok@gmail.com wrote:
> hello,
>
> After completing my AF amp and BFO, I'm in the process of doing IF/BFO
> diode ring mixer.
> I understood that it is a good idea (or even mandatory?) to follow DBM
> with a diplexer.
>
> I found one from http://www.qrp.pops.net/dip2.htm
>
> My question is: how on earth should I wind those 10mH inductors? My
> calculations show that I should wind 487 turns on FT37-43 (which is
> obviously impossible), or 437 turns on FT50-43 (which is hard..but
> should be possible).
>
> Any other ideas how to make 10mH inductors for AF diplexer?
>
> thanks!

1853. Re: Solid state vhf and UHF amplifier designs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 10:01:49 UTC
From: 3flp <zalio@optusnet.com.au>
Message-ID: <1142330509.065322.33260@p10g2000cwp.googlegroups.com>
Source record: 13054

Hi Mike,

One option is to try the hybrid power modules. A lot of these are listed at http://www.rfparts.com/module.html. For 432, I'd try http://www.rfparts.com/pdf_docs/RA/ra45h4047m.pdf. Low drive though - so maybe not exactly what you're after. But you get 50in-50 out, no hassle. Combine a number of these to get desired power.

73,
Fil
VK3FLP

1854. Re: What do you call these devices?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 16:51:30 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <121dt7d6b1mpha0@corp.supernews.com>
Source record: 13055

Hi Rex,

"Rex" <me@hotmail.invalid> wrote in message
news:451d12psikgo37pu10ko4ef7lumbk50g14@4ax.com...
> Here's a link to one manufacturer
> http://www.microlab.fxr.com/pdf/HX,HY,Hzseries.pdf

Yep, that's them alright. The one we have is the electrostatic version.

I took a closer look over a wider frequency range at its response and -- not too surprisingly -- it's a straight line on a log-log plot (i.e., the coupling is almost purely capacitive).

Thanks for everyone's help,
---Joel

1855. Re: What do you call these devices?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 17:36:56 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <dv6uvo$o53$1@puck.litech.org>
Source record: 13056

Rex <me@hotmail.invalid> wrote:
> On Fri, 10 Mar 2006 01:55:19 -0800, "Joel Kolstad"
> <JKolstad71HatesSpam@Yahoo.Com> wrote:

>>At work we have these "do-hickeys" that look like a regular "tee" connector.
>>However, it's meant to be used such that a signal passes through the "top"
>>of the tee while the "leg" of the tee "picks off" the signal some 10dB or so
>>down from the input. (The insertion loss is some fraction of a dB.) The
>>pick off seems to just be a wire tip coming out of the backside of the
>>connector (just capacitively coupled?); there's an adjustable sleeve that
>>lets you position this tip closer or further from the through line; moving
>>it closer creates better coupling, but also tends to decrease frequency
>>flatness. The cool thing is that all ports drive 50 ohms, and the
>>pick-off's output is surprisingly flat over more than an octave.
>>
>>Any ideas? It's definitely not constructed the way I'd build a directional
>>coupler -- even though it performs a somewhat similar function --, nor a
>>"magic tee" (although I've only seem magic tees in the form of waveguides
>>and transformer-based affairs for HF).

> Here's a link to one manufacturer
> http://www.microlab.fxr.com/pdf/HX,HY,Hzseries.pdf

> As on their page, I've always called them samplers.

> The picture shows the probe end of an electromagnetic coupler with a
> wire loop to ground. The electrostatic version looks like the head of a
> nail sticking out of the teflon.

Yeah. for 50-12000 MHz. 6m and above and not much use for HF, then.
Good thing they've got a feedback E-mail address, but I suspect that
they'd want lots'o'$ for a one-off modification.

--
"If God had intended us to vote, he'd have given us candidates."

1856. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 17:42:00 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <230e12p06p1jkja0ufqcj4n6tuktl1astn@4ax.com>
Source record: 13057
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Nedlar wrote:

>On Mon, 13 Mar 2006 23:17:38 +0000, Spike <Aero.Spike@S&T.invalid>
>wrote:
>
>>
>>Nedlar wrote:
>>
>>>On Mon, 13 Mar 2006 11:54:53 +0000, Spike <Aero.Spike@S&T.invalid>
>>>wrote:
>>>
>>>>That was very poor...is the medication wearing off?
>>>You're getting more childish by the hour. No wonder the kids hate you.
>>>(It's that word again, sorry it frightens you).
>>>
>>>Still not man enough to post the article eh?
>>
>>Still not man enough to repost one of your technical articles?
>>
>>I thought not.
>>
>>from
>>Aero Spike
>
>Still afraid to tell the truth?

Whatever are you blabbering on about? Truth? Would you know the
meaning of the word? Truth about what?

from
Aero Spike

1857. Re: What do you call these devices?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 18:16:03 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <121e26cdhe9jscc@corp.supernews.com>
Source record: 13058

"Mike Andrews" <mikea@mikea.ath.cx> wrote in message
news:dv6uvo$o53$1@puck.litech.org...
> Yeah. for 50-12000 MHz. 6m and above and not much use for HF, then.

I suspect you could make your own for HF without too much difficulty by
modifying something like a SO259 tee along with a standard PL259 connector.

On the other hand, for HF you can make pretty decent directional couplers
using transformers and get a significantly flatter response if you're looking
to accurately measure signal levels.

1858. Re: RF power transistor - CM10-12A datasheet, and stock

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 18:54:09 UTC
From: Bob <bobXstein@sbcglobal.net>
Message-ID: <IjERf.567$4L1.176@newssvr11.news.prodigy.com>
Source record: 13059

MarkAren wrote:

> Hi Guys,
>
> Can anyone help with a full data sheet and an idea where I might be
> able to buy one without getting charged the earth.
>
> Thanks,
>
> Mark.
>
I will only charge you the moon, not the earth.:-)
It is 8 pages, which I will copy today and email to you. Enjoy.

Bob, w6nbi

--
When replying direct, remove the X from my address.

1859. Winding coils

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 20:45:37 UTC
From: Howard <howardwj@ntlworld.com>
Message-ID: <RXFRf.2417$Dg5.1488@newsfe4-gui.ntli.net>
Source record: 13060

I can't find the answers to these in the books and I've wondered about them for years.
When winding a coil on a standard (say 1/4") former with ferrite or iron dust core, should the secondary be wound adjacent to the "hot" end of the primary or the earthy end? Also, should the earthy end of the secondary be adjacent to the primary hot end or earthy end?
What's the difference between dust iron and ferrite cores and can you tell the difference by just looking at them?
Thanks. Howard.

1860. Re: Winding coils

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 21:23:35 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <v4WdncaJ8cvSqYrZnZ2dnUVZ_tudnZ2d@web-ster.com>
Source record: 13061

Howard wrote:

> I can't find the answers to these in the books and I've wondered about them
> for years.
> When winding a coil on a standard (say 1/4") former with ferrite or iron
> dust core, should the secondary be wound adjacent to the "hot" end of the
> primary or the earthy end? Also, should the earthy end of the secondary be
> adjacent to the primary hot end or earthy end?
> What's the difference between dust iron and ferrite cores and can you tell
> the difference by just looking at them?
> Thanks. Howard.
>
>

Usually you would wind the secondary on the ground end of the primary, because you'll get less capacitive coupling from the primary to the secondary. The direction of the secondary probably matters much less.

Iron dust cores are made with various different iron compounds ground to dust and bound in a matrix of some sort of plastic (they probably use epoxy or phenol, but I don't really know). Ferrite cores are made with various different ceramics that include iron. The surface of ferrite cores usually look more solid, less porous. Iron cores can be scratched or cut with steel tools. The ferrite cores I've used are quite hard.

Just knowing that a core is iron or ferrite won't help you much, because there's a whole bunch of different mixes of each.

Ferrite cores usually have higher permitivity, which means more inductance for the same number of winds. They also usually saturate quicker, which means that they aren't as good for resonant circuits or for filters.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

1861. Re: Winding coils

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 21:43:07 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1142372587.457648.325250@p10g2000cwp.googlegroups.com>
Source record: 13062

Tim W. wrote, "Ferrite cores usually have higher permitivity, which means more
inductance for the same number of winds."

Presumably he means permeability.

You should be able to find both downloadable programs and web applets which let you find the inductance for a given number of turns, for a core of particular dimensions and permeability. Using that info, you can go back to permeability if you measure the dimensions and an inductance with a known number of turns.

There are also fairly standard color codes for powdered iron toroids, though, as they say, your mileage may vary. But in general if you find a permeability below about 50, it's very likely a powdered iron core, and above that it's much more likely to be ferrite.

You can find some good core info at the Amidon Associates web site, or at least could the last time I looked. A Google search should turn up lots of other references.

Cheers,
Tom

1862. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 21:50:29 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <44173a9c.15307821@news.blueyonder.co.uk>
Source record: 13063
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On Sun, 12 Mar 2006 09:22:37 GMT, "Brian Reay" <see@website.invalid>
wrote:

>> As these beasties come in a mounting that already
>> has facilities for screw fixing, perhaps there is
>> potential capability for optical communications?
>
>Been done. UK record, as of a couple of years back at least, was something
>like 75km. There is project in the latest RSGB handbook (if you are
>interesed I'll look up the page, I noticed the article but haven't read the
>detail).

The current UK laser record is around 73km I believe... held by G0MFR
and G8LSD. They used standard low power red laser diodes of the kind
found in the pointers. Barry,G8AGN, Gordon G0EWN and myself (all in
Sheffield) are also experimenting on these lines have done a 45km path
so far... using cw. We have some LOS paths up here in the North up to
136km so we're hoping to better the record one day soon :-)

Peter, G3PHO

1863. Re: Winding coils

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 22:05:49 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <0cidnS3rGMKpo4rZRVn-vw@web-ster.com>
Source record: 13064

K7ITM wrote:

> Tim W. wrote, "Ferrite cores usually have higher permitivity, which
> means more
> inductance for the same number of winds."
>
> Presumably he means permeability.

Yes, he did. They may have more permitivity, as well, but since they're
rarely touted as a dielectric it doesn't make much difference.
>
> You should be able to find both downloadable programs and web applets
> which let you find the inductance for a given number of turns, for a
> core of particular dimensions and permeability. Using that info, you
> can go back to permeability if you measure the dimensions and an
> inductance with a known number of turns.
>
> There are also fairly standard color codes for powdered iron toroids,
> though, as they say, your mileage may vary. But in general if you find
> a permeability below about 50, it's very likely a powdered iron core,
> and above that it's much more likely to be ferrite.

AFAIK the color codes vary by company. There is probably overlap, but I
don't think it's "standard".
>
> You can find some good core info at the Amidon Associates web site, or
> at least could the last time I looked. A Google search should turn up
> lots of other references.
>
> Cheers,
> Tom
>

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

1864. Digikey phishing

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-14 23:12:41 UTC
From: "James F. Mayer" <jfma@ix.netcom.com>
Message-ID: <J5IRf.11859$S25.7274@newsread1.news.atl.earthlink.net>
Source record: 13065
Cross-posted to: alt.politics.usa.constitution.gun-rights,rec.antiques.radio+phono,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,sci.electronics.cad,sci.electronics.components,sci.electronics.

Someone or a group of persons are phishing with the subject header "CC Pending Order Letter from Digi-Key for salesorder 16642643" I have received 2 (two) of them in the last two days and I have forwarded them to Digikey. They are investigating. If you receive any, please notify Digikey so thay can trsck down the culprits and prosecute them to the fullest extent of the law.

1865. Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-15 02:30:38 UTC
From: mrhaney <w4pqw@cox.net>
Message-ID: <1142389838.536897.247510@i39g2000cwa.googlegroups.com>
Source record: 13066

I am looking for a 10 volt 5 amp. center tapped filament transformer
for an 813 tube. Good Used OK . TNX W4PQW

1866. Re: Winding coils

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-15 04:19:54 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <441795ea$1_2@newsfeed.slurp.net>
Source record: 13067

ORIGINAL MESSAGE:

Howard wrote:

> should the secondary be wound adjacent to the "hot" end of the
> primary or the earthy end?

********** REPLY SEPARATOR **********

The earthy end. (Love that term!).

Winding over the hot end will cause capacitive coupling in addition to
the magnetic, something generally not desired.

73, Bill W6WRT

1867. Re: 4CX250B 2m linear circuit? (Class C ideally!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-15 07:04:58 UTC
From: ZS1KE <usenet-2006@dW.co.za>
Message-ID: <Xns97875D19396AARetroUsenet@196.22.225.198>
Source record: 13069

Hi Samuel and all
>
> I'm trying to find a good circuit for a Class C 4CX250B linear.

cough *cough* *choke*

A Class C is *not* linear.

I think the usage of "linear" for "an external amplifier to boost
the power going to the antenna" comes from the CB crowd, who *do*
need a linear amplifier (for SSB).

OK, you want to boost FM, and for that you can use Class C. The
only ARRL Handbook I have here (1992, I'm not counting the '48 :-)
has two very similar schematics, one for a 3CX800 and the other
for a 3CX1500, but I do seem to recall that a different edition had
a 4CX250 schematic. Or maybe it's the RSGB handbook.

> I've found a few for multiple valves in Class A, but I'm after just a
> simple circuit that shows a 4CX250B linear for 2m with Class C
> biasing.

Don't search for "linear", search for "amplifier" :-)

W

1868. focus group question for new products

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-15 07:08:41 UTC
From: eternalsquire@comcast.net
Message-ID: <1142406521.125109.71730@u72g2000cwu.googlegroups.com>
Source record: 13068

Hi,

If I could build a high quality rf-tight small enclosure for dc-30 Mhz
at low to moderate cost, what would you need?

Thanks,

The Eternal Squire

1869. Re: Wainwright Mini-Mounts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-15 09:26:10 UTC
From: John A <e455gkf@yahoo.co.uk>
Message-ID: <dv8mjl$1fh$1@newsg1.svr.pol.co.uk>
Source record: 13070

Thanks Leon and Per,

WWM are linked to Wainwright filters, I suspect - but there is no sign of
the Mini-Mount product or anything like it on Wainwright Filter's web-site.

Thanks Phil,

What we are looking for is TSSOP adapters (nt so easy to homebrew, Leon!),
which rules out the items on Rapid's website.

I'll keep looking, but many thanks for your thoughts - and any other still
to come!

John

"John A" <e455gkf@yahoo.co.uk> wrote in message
news:dv0rmouoa1@newsg2.svr.pol.co.uk...
> Does anyone know of a UK source for "Wainwright Mini-mounts"? These are
> small PCBs made in Germany by WMM GmbH (no web-site or email!), laid out
to
> take an IC, with tracks from each IC pad taken out to the edge of the
PCB -
> very useful for prototyping with TSSOP devices it seems.
>
> If they sound interesting, see:
>
> http://www.rdi-wainwright.com/
>
> which is the site of the US agent - $100 min order!
>
> John
>
>
>

1870. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-15 09:46:26 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <cjof1294snfdu7mdd16mrusvq2ieaj9mig@4ax.com>
Source record: 13071
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Nedlar wrote:

>On Tue, 14 Mar 2006 17:42:00 +0000, Spike <Aero.Spike@S&T.invalid>
>wrote:
>
>>Whatever are you blabbering on about? Truth? Would you know the
>>meaning of the word? Truth about what?
>>
>
>Still digging eh?
>
>Tell the truth.

Tell the truth or stop claiming a certain 'licence class'.

>HTH

from
Aero Spike

1871. Re: Wainwright Mini-Mounts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-15 10:53:59 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1142420039.036045.117250@e56g2000cwe.googlegroups.com>
Source record: 13072

John A wrote:
> Thanks Leon and Per,
>
> WWM are linked to Wainwright filters, I suspect - but there is no sign of
> the Mini-Mount product or anything like it on Wainwright Filter's web-site.
>
>
> Thanks Phil,
>
> What we are looking for is TSSOP adapters (nt so easy to homebrew, Leon!),
> which rules out the items on Rapid's website.
>
> I'll keep looking, but many thanks for your thoughts - and any other still
> to come!

I've homebrewed TSSOP (0.5 mm lead spacing) without problems.

Leon

1872. Re: focus group question for new products

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-15 12:57:31 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1142427451.724573.102690@i39g2000cwa.googlegroups.com>
Source record: 13073

eternalsquire@comcast.net wrote:
> Hi,
>
> If I could build a high quality rf-tight small enclosure for dc-30 Mhz
> at low to moderate cost, what would you need?

They already have them at the grocery store. They must be for us
homebrewers, because they even come with these useful breath mints too.

More seriously, what have you got that isn't a minibox or a die-cast
box or a chassis box or a desktop enclosure?

Tim.

1873. Re: focus group question for new products

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-15 14:18:07 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <4418221f_5@newsfeed.slurp.net>
Source record: 13074

ORIGINAL MESSAGE:

eternalsquire@comcast.net wrote:

> Hi,
>
> If I could build a high quality rf-tight small enclosure for dc-30 Mhz
> at low to moderate cost, what would you need?
>
> Thanks,
>
> The Eternal Squire

********** REPLY SEPARATOR **********

I use the Pomona die-cast boxes, but they are expensive. If you can
improve the cost factor, I will beat a path to your doorstep, as will
others.

Bill, W6WRT

1874. Re: 4CX250B 2m linear circuit? (Class C ideally!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-15 14:46:26 UTC
From: ray13 <ray_psi@yahoo.com>
Message-ID: <1142433986.226545.286410@i39g2000cwa.googlegroups.com>
Source record: 13075

In class G or H amplifiers you do vary the supply voltage. But not much out there on class G or H amps. I'm suprized nobody mentioned class G or H.

I have two 4x150G's These are 1000 VDC plates, and coax style connections. I'm running:
at 144mhz
800VDC on the plates dual input choke supply
375 on the screens regulated and protected
-50 on the grids, adjustable for any class, regulated and protected grounded cathodes
Push pull
With a strip line low pass filter for 2M on the output -60db

73
Ray KC8OJU

1875. Re: focus group question for new products

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-15 15:16:18 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1142435778.651755.112250@i39g2000cwa.googlegroups.com>
Source record: 13076

Bill Turner wrote:
> I use the Pomona die-cast boxes, but they are expensive. If you can
> improve the cost factor, I will beat a path to your doorstep, as will
> others.

The Pomona die-cast boxes with card mounting slots and prefabbed for BNC's are the glitz, man. (And it's not easy to die-cast all that stuff on, probably explains why even the little boxes can cost $70.)

Bud/Hammond/etc. make much less glitzy die-cast boxes for a lot less $.

Maybe our eternal squire wants to use CNC machines to make boxes out of aluminum ingot? :-). Take the scraps, melt them down, repeat!

Tim.

1876. Re: focus group question for new products

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-15 15:49:29 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <hIWRf.13$vd5.0@fe06.lga>
Source record: 13077

I find that boxes are generally too expensive, and rarely the right size.

Generally, I want a box for the desk, so it typically could stand to be fairly deep -- say 7-10 inches. I also want it wide enough for a few controls and an LCD, so maybe again, 7-10 inches. The height generally seems to be the problem. It seems like boxes are either an inch and a half high, so you can't get a display in there, or 5 inches, way taller than necessary. I would think that 2.5-3" high boxes would be awfully handy, but they seem rare.

And of course, they tend to be horribly expensive.

Card guides inside would be nice.

Aluminum would be nice so that it is easy to machine. Although in reality, some sort of lined plastic might be better.

Thick enough to be strong, but thin enough that it doesn't weigh a ton -- plus, a thick panel looks junky in front of a display.

Powder coated would be nice, but at least some reasonably clean finish so I don't have a ton of work to do before painting.

I often use plastic boxes with a removeable, flat panel. I can replace the panel with plexiglas, so that instead of trying to make a square hole for the display, I can simply mask off a square hole. As an added bonus, my labels are protected by the plexi. Unfortunately, these kinds of boxes aren't RF tight. In an ideal world, I would have that sort of box, sprayed on the inside with RF proof paint, and with an insert I could place behind the display to make the front RF tight too, while still allowing for the display. Pipe dreams I guess.

..

<eternalsquire@comcast.net> wrote in message
news:1142406521.125109.71730@u72g2000cwu.googlegroups.com...
> Hi,
>
> If I could build a high quality rf-tight small enclosure for dc-30 Mhz
> at low to moderate cost, what would you need?
>
> Thanks,
>
> The Eternal Squire
>

1877. Re: focus group question for new products

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-15 17:40:18 UTC
From: johan aeq <pe1aeq@amsat.og>
Message-ID: <7367a$4418526b$52ad139c$2141@news.versatel.nl>
Source record: 13078

i usually use unethed doublesided pcb and solder it together.

"xpyttl" <xpyttl_NOSPAM@earthling.net> schreef in bericht
news:hIWRf.13$vd5.0@fe06.lga...
> I find that boxes are generally too expensive, and rarely the right size.
>
> Generally, I want a box for the desk, so it typically could stand to be
> fairly deep -- say 7-10 inches. I also want it wide enough for a few
> controls and an LCD, so maybe again, 7-10 inches. The height generally
> seems to be the problem. It seems like boxes are either an inch and a
half
> high, so you can't get a display in there, or 5 inches, way taller than
> necessary. I would think that 2.5-3" high boxes would be awfully handy,
but
> they seem rare.
>
> And of course, they tend to be horribly expensive.
>
> Card guides inside would be nice.
>
> Aluminum would be nice so that it is easy to machine. Although in
reality,
> some sort of lined plastic might be better.
>
> Thick enough to be strong, but thin enough that it doesn't weigh a ton --
> plus, a thick panel looks junky in front of a display.
>
> Powder coated would be nice, but at least some reasonably clean finish so
I
> don't have a ton of work to do before painting.
>
> I often use plastic boxes with a removeable, flat panel. I can replace
the
> panel with plexiglas, so that instead of trying to make a square hole for
> the display, I can simply mask off a square hole. As an added bonus, my
> labels are protected by the plexi. Unfortunately, these kinds of boxes
> aren't RF tight. In an ideal world, I would have that sort of box,
sprayed
> on the inside with RF proof paint, and with an insert I could place behind
> the display to make the front RF tight too, while still allowing for the
> display. Pipe dreams I guess.
>
> ..
>

> <eternalsquire@comcast.net> wrote in message
> news:1142406521.125109.71730@u72g2000cwu.googlegroups.com...
> > Hi,
> >
> > If I could build a high quality rf-tight small enclosure for dc-30 Mhz
> > at low to moderate cost, what would you need?
> >
> > Thanks,
> >
> > The Eternal Squire
> >
>
>

1878. More Parts for Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-15 20:48:24 UTC
From: Brian <mementodvd@earthlink.net>
Message-ID: <gdvg12172c2gdcvm83er516qba5nhiqivp@4ax.com>
Source record: 13079

More parts to sell from the junkbox...

1N4148 Diodes $3.00 for 200, $6.00 for 500
1N4007 - 1 Amp General Purpose Rectifier Diodes - $3.00 for 50

1500pf NPO Caps, SMT 0805, 50V - $3.00 for 100
3300pf NPO Caps, SMT 0805, 25V - $3.00 for 100
220pf NPO Caps, SMT 0805, 50V - $3.00 for 100
150pf NPO Caps, SMT 0805, 50V - $3.00 for 100

2N2907 PNP Transistor, TO92 Package - $3.00 for 50 or $5.00 for 100

That's it for now...maybe more stuff later.

No Paypal. Cash or Check or Money Order only.

Prices include shipping, minimum order is $5.00, otherwise add a buck
for shipping.

Brian Murrey
47 Grassy Drive
New Whiteland IN 46184

1879. mini-DX-60 status report.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-16 02:48:35 UTC
From: kh <nospam@nospam.com>
Message-ID: <0QMXZWh9EdSr-pn2-NH0e0dg7c19i@localhost>
Source record: 13080
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

-- Updated my mini-DX-60 page at www.kiyoinc.com/dx60.htm

Please enjoy.

de ah6gi/4 thinking about a mini-30S-1 now

1880. Crystal replacement

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-16 05:31:20 UTC
From: Joel <Joel@cyberbest.com>
Message-ID: <1142486941_139@sp6iad.superfeed.net>
Source record: 13081

I have a couple 6 channel public service radios that are in the 155Mhz range. Some are synthesized and require cutting diodes to change the frequency and that works out well.
But some are crystal controlled and with the cost and availability of crystals it's cost prohibitive to re-crystal these radios. It looks like these crystals are in the X9 mode so that puts them in the 16-16.5 MHz range. I am considering building a VCO to inject a signal into the old crystal socket to get around the crystal issue. Actually I figure a PIC to program the PLL would be great. I'm just not sure what frequency to inject into the old crystal socket. Should I build a 16mhz VCO or some harmonic? Will injecting a signal into a crystal-less oscillator even work? I'm going to use a ADF4110 PLL and a 16F89 PIC. Any suggestions for the VCO? Schematic for a 16 MHz VCO?

Joe Loucka AG4QC

-----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

1881. Re: Crystal replacement

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-16 14:45:47 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1142520347.864591.223820@e56g2000cwe.googlegroups.com>
Source record: 13082

Allison-nospam@nouce.bellatlantic.net wrote:
> If you going to do a "crystal equivilent" using a PIC and PLL
> the PLL system must be very well done to avoid the sideband noise
> that can occur when multiplied by 9 (or 18). The reason you need a
> PLL as a VCO has not the stability to hold a given frequency alone.

It depends on mode, reference frequency, et al. VHF-FM and VHF-AM are remarkably less sensitive to crap coming out of the synthesizer than say HF SSB operation. I shiver when I look at the 50's and 60's ARRL handbooks and see construction articles for 2M and 70cm transmitters using a tube VFO at 8MHz multiplied all the way up!

All that said, chips made specifically for VHF synth operation (MC145170) are available as are kits using these marketed towards hams (e.g. http://www.dckits.com/) who want to play around and learn. It's not a guarantee that you won't be radiating crap all over the public service frequencies of course (that is the biggest risk here, isn't it?)

Tim.

1882. Re: Wainwright Mini-Mounts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-16 15:15:17 UTC
From: John A <e455gkf@yahoo.co.uk>
Message-ID: <dvbvea$c9q$1@newsg1.svr.pol.co.uk>
Source record: 13083

I'm impressed! I don't think that I could make PCBs to that sort of
resolution and the prototype I made as a birdsnest five years ago, and which
has recently expired, was built with eyesight that I can now only dream of.

John

"Leon" <leon_heller@hotmail.com> wrote in message
news:1142420039.036045.117250@e56g2000cwe.googlegroups.com...
>
> I've homebrewed TSSOP (0.5 mm lead spacing) without problems.
>
> Leon
>

1883. Re: Wainwright Mini-Mounts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-16 15:34:23 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1142523263.492542.52400@i39g2000cwa.googlegroups.com>
Source record: 13084

John A wrote:
> I'm impressed! I don't think that I could make PCBs to that sort of
> resolution and the prototype I made as a birdsnest five years ago, and which
> has recently expired, was built with eyesight that I can now only dream of.
>
> John
>
> "Leon" <leon_heller@hotmail.com> wrote in message
> news:1142420039.036045.117250@e56g2000cwe.googlegroups.com...
> >
> > I've homebrewed TSSOP (0.5 mm lead spacing) without problems.
> >
> > Leon
> >

I do need a microscope for assembling that sort of thing. At 63 my
eyesight is deteriorating as well. 8-(

73, Leon

1884. Re: Question about 4-400 tube socket/mounting

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-16 15:53:41 UTC
From: Bob Spooner <rls19@psu.edu>
Message-ID: <dvc1m6$1jho$1@f04n12.cac.psu.edu>
Source record: 13085
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Why is the dissipation rating of the 4-400A lower when used in grounded grid service than it is when used in the traditional configuration?

73,
Bob AD3K

"Bill Turner" <noway@nohow.com> wrote in message news:4412eccb_5@newsfeed.slurp.net...
> ORIGINAL MESSAGE:
>
> Straydog wrote:
>
>> there must be forced-air directed upwards from the non-tube side of
>> the tube socket and there are specifications for flow rate and
>> pressure.
>
>
> ~~~~~~
> "Flow rate and pressure" are nice, but the *only* important thing is
> the temperature of the tube at various points as specified by the tube
> manufacturer. If you are serious about proper tube cooling, use either
> a non-contact thermometer of some kind or thermally-sensitive paint to
> ensure your tube is within temp specs. Flow rate and pressure are a
> means to an end, not an end in themselves.
>
> Bill, W6WRT

1885. Re: focus group question for new products

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-16 17:11:01 UTC
From: eternalsquire@comcast.net
Message-ID: <1142529061.429608.10260@j52g2000cwj.googlegroups.com>
Source record: 13086

Tim Shoppa wrote:
> Bill Turner wrote:
> > I use the Pomona die-cast boxes, but they are expensive. If you can
> > improve the cost factor, I will beat a path to your doorstep, as will
> > others.
>
> The Pomona die-cast boxes with card mounting slots and prefabbed for
> BNC's are the glitz, man. (And it's not easy to die-cast all that stuff
> on, probably explains why even the little boxes can cost $70.)
>
> Bud/Hammond/etc. make much less glitzy die-cast boxes for a lot less $.
>
> Maybe our eternal squire wants to use CNC machines to make boxes out of
> aluminum ingot? :-). Take the scraps, melt them down, repeat!
>
> Tim.

Got it in one guess! That, or you've been reading more newsgroups
than homebrewers.
I'll be happy for specs.

The Eternal Squire

1886. FM S:N and C:N relationship?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-16 18:09:24 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <dvc9kk$8ho$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 13087

Does anyone know any sort of a formulas that might give me a clue as to the relationship between S:N and C:N for an FM system?

I'm playing with narrow FM (500hz deviation kind of stuff), and want to try to work out the expected S:N for various different deviations with different C:N radios. Obviously the C:N improves with lower deviation because of the tighter IF filter, but the S:N will worsen because of the lower deviation, but I would appreciate some sort of help in the right direction for the formulas.

Thanks all,

Sam

1887. Re: focus group question for new products

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-16 18:51:20 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1142535080.772184.106510@p10g2000cwp.googlegroups.com>
Source record: 13088

eternalsquire@comcast.net wrote:
> Tim Shoppa wrote:
> > Maybe our eternal squire wants to use CNC machines to make boxes out of
> > aluminum ingot? :-). Take the scraps, melt them down, repeat!
>
> Got it in one guess! That, or you've been reading more newsgroups
> than homebrewers.
> I'll be happy for specs.

Look at how, for example http://www.pcbexpress.com/ and
http://www.frontpanelexpress.com/ do business. I could imagine a
business model not too different working for custom-machined enclosures
(and CNC'ed metal widgets in general.) Target audience would be
engineering firms that don't do this in-house and aren't set up with a
local vendor, hobbyists, etc. Maybe some customers that don't do this
at all yet (amateur jewelers? who knows!!!!?!!!)

One thing that those outfits have is free CAD software for
design/specifying. If you kept your options really straightforward
(e.g. boxes with round holes and square holes for example) maybe design
could be done over the web. (Dynamic graphic generation, or maybe SVG
with user interface.)

Tim.

1888. Re: focus group question for new products

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-16 22:56:06 UTC
From: eternalsquire@comcast.net
Message-ID: <1142549766.748158.310770@j33g2000cwa.googlegroups.com>
Source record: 13089

Allison-nospam@nouce.bellatlantic.net wrote:
> On 14 Mar 2006 23:08:41 -0800, eternalsquire@comcast.net wrote:
>
> >Hi,
> >
> >If I could build a high quality rf-tight small enclosure for dc-30 Mhz
> >at low to moderate cost, what would you need?
> >
> >Thanks,
> >
> >The Eternal Squire
>
> I have plenty of diecast and Other aluminum boxes from various
> vendors. The usual problems are finding them and cos t(even
> aluminum miniboxes are costly for the metal sheet in them).
>
> Often a project will require several of differing sizes so I may make
> internal shield boxes box using single or two sided copper clad
> board (scrap). Cheap, solderable, good shielding.
>
> Whem I want something that looks good Hammond, LMB and TenTec
> offer very stylish boxes.
>
> Allison

Thank you all,

The Eternal Squire

1889. Re: focus group question for new products

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-16 22:58:50 UTC
From: eternalsquire@comcast.net
Message-ID: <1142549930.590841.222720@u72g2000cwu.googlegroups.com>
Source record: 13090

I'll study this.

Thanks!

The Eternal Squire

1890. Re: Winding coils

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-16 23:38:56 UTC
From: Risto Tiilikainen <risto.NON.tiilikainen@luukku.comMUNIST.invalid>
Message-ID: <4419f609$0$7480$39db0f71@news.song.fi>
Source record: 13091

Tim Wescott kirjoitti:
>
>
> Ferrite cores usually have higher permitivity, which means more
> inductance for the same number of winds. They also usually saturate
> quicker, which means that they aren't as good for resonant circuits or
> for filters.
>
Hi

The great advantage of ferrite materials is just what you said - more
inductance for the same number of winds.
In this way high Q coils can be done. A good example is direction
finding receiver with ferrite rod antenna for magnetical field component
of fox transmitter.

I agree that saturation can be a problem in higher power levells
Anyhow good high power baluns are made with toroids and filament chokes
with ferrite rods for grounded grid linears (Yes- they are not tuned
resonant circuits)

73, Risto OH2BT

1891. Re: focus group question for new products

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-17 01:28:30 UTC
From: eternalsquire@comcast.net
Message-ID: <1142558910.394369.77220@i39g2000cwa.googlegroups.com>
Source record: 13092

Tim,

After studying this, I have a question:

It seems to me that I should basically have a standard design with
options. I could then post the drawings as a webpage for people to
look at and specify those options. It will be a while before I can
consider making one-of-a-kinds for people, but standard specs and
stackable configurations I could do on a JIT basis.

Would that be acceptable for now until I could afford greater
sophistication?

Thanks,

The Eternal Squire

Tim Shoppa wrote:
> eternalsquire@comcast.net wrote:
> > Tim Shoppa wrote:
> > > Maybe our eternal squire wants to use CNC machines to make boxes out of
> > > aluminum ingot? :-). Take the scraps, melt them down, repeat!
> >
> > Got it in one guess! That, or you've been reading more newsgroups
> > than homebrewers.
> > I'll be happy for specs.
>
> Look at how, for example http://www.pcbexpress.com/ and
> http://www.frontpanelexpress.com/ do business. I could imagine a
> business model not too different working for custom-machined enclosures
> (and CNC'ed metal widgets in general.) Target audience would be
> engineering firms that don't do this in-house and aren't set up with a
> local vendor, hobbyists, etc. Maybe some customers that don't do this
> at all yet (amateur jewelers? who knows!!!!?!!!)
>
> One thing that those outfits have is free CAD software for
> design/specifying. If you kept your options really straightforward
> (e.g. boxes with round holes and square holes for example) maybe design
> could be done over the web. (Dynamic graphic generation, or maybe SVG
> with user interface.)
>
> Tim.

1892. Re: Crystal replacement

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-17 06:49:53 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <441a5c11$0$18561$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 13093

If its for commercial use it would probably be easiest just to get the crystals.
Otherwise designing a PLL system is possible - particularly if you want to learn about them for your own education. But the work involved is not trivial - probably not worth it for a few old radios. The other issue will be how the radio achieves FM - if it does it swinging the crystal, then this will impose another restriction on the PLL. While it is possible to do (keep loop filter BW below min audio freq) I tried doing this on a 2M design once - couldnt get it stable. Some radios phase modulate one of the multipliers, which would avoid this issue.

R

Joel wrote:
> I have a couple 6 channel public service radios that are in the 155Mhz
> range. Some are synthesized and require cutting diodes to change the
> frequency and that works out well.
> But some are crystal controlled and with the cost and availability of
> crystals it's cost prohibitive to re-crystal these radios. It looks like
> these crystals are in the X9 mode so that puts them in the 16-16.5 MHz
> range. I am considering building a VCO to inject a signal into the old
> crystal socket to get around the crystal issue. Actually I figure a PIC to
> program the PLL would be great. I'm just not sure what frequency to inject
> into the old crystal socket. Should I build a 16mhz VCO or some harmonic?
> Will injecting a signal into a crystal-less oscillator even work? I'm going
> to use a ADF4110 PLL and a 16F89 PIC. Any suggestions for the VCO? Schematic
> for a 16 MHz VCO?
>
> Joe Loucka AG4QC
>
>
>
> -----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
> ----= East and West-Coast Server Farms - Total Privacy via Encryption =----

1893. Re: Crystal replacement

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-17 07:01:23 UTC
From: Joel <Joel@cyberbest.com>
Message-ID: <1142578756_9403@sp6iad.superfeed.net>
Source record: 13094

The idea is we have a few dozen crystallized Maxon 4010's here and figured
we could get them converted to 2 meters to give to the new ham's in the
area. We would do the crystal route, but crystals seem to be in the $12.50
or more range (If you can even find them) That means it would be about 25
buck/channel. The price quickly makes conversion cost prohibitive compared
to a new 2 meter radio.

I reversed engineered the Maxon 3010 as they are synthesized and by cutting
diodes we have them working on 2 meters. Of course, having a schematic for
either radio would make things a lot easer.. (hint)..

Joe Loucka AG4QC

"Richard Hosking" <richardh@iinet.net.au> wrote in message
news:441a5c11$0$18561$5a62ac22@per-qv1-newsreader-01.iinet.net.au...
> If its for commercial use it would probably be easiest just to get the
> crystals.
> Otherwise designing a PLL system is possible - particularly if you want to
> learn about them for your own education. But the work involved is not
> trivial - probably not worth it for a few old radios. The other issue will
> be how the radio achieves FM - if it does it swinging the crystal, then
> this will impose another restriction on the PLL. While it is possible to
> do (keep loop filter BW below min audio freq) I tried doing this on a 2M
> design once - couldnt get it stable. Some radios phase modulate one of the
> multipliers, which would avoid this issue.
>
> R
>
> Joel wrote:
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>> range. Some are synthesized and require cutting diodes to change the
>> frequency and that works out well.
>> But some are crystal controlled and with the cost and availability of
>> crystals it's cost prohibitive to re-crystal these radios. It looks like
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>> range. I am considering building a VCO to inject a signal into the old
>> crystal socket to get around the crystal issue. Actually I figure a PIC
>> to program the PLL would be great. I'm just not sure what frequency to
>> inject into the old crystal socket. Should I build a 16mhz VCO or some
>> harmonic? Will injecting a signal into a crystal-less oscillator even
>> work? I'm going to use a ADF4110 PLL and a 16F89 PIC. Any suggestions
>> for the VCO? Schematic for a 16 MHz VCO?
>>
>> Joe Loucka AG4QC ----== Posted via Newsfeeds.Com -
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1894. Re: Crystal replacement

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-17 12:24:33 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <jJ-dncrEDuwYN4fZnZ2dnUVZ_vmdnZ2d@bright.net>
Source record: 13095

Here's another idea...instead of making these radios to hand out to new hams, maybe you could remove the transmit crystal and just replace the receive crystal, lowering the conversion cost. You could hand these out to NON-HAMS so they could listen in on the local repeater or simplex channel. Maybe they would be interested in becoming hams. 2M HTs are so cheap these days, just about any new ham can afford one with a lot of bells and whistles built in.

Scott
N0EDV

Joel wrote:
> The idea is we have a few dozen crystallized Maxon 4010's here and figured
> we could get them converted to 2 meters to give to the new ham's in the
> area. We would do the crystal route, but crystals seem to be in the $12.50
> or more range (If you can even find them) That means it would be about 25
> buck/channel. The price quickly makes conversion cost prohibitive compared
> to a new 2 meter radio.
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> I reversed engineered the Maxon 3010 as they are synthesized and by cutting
> diodes we have them working on 2 meters. Of course, having a schematic for
> either radio would make things a lot easer.. (hint)..
>
> Joe Loucka AG4QC
>
>
>
> "Richard Hosking" <richardh@iinet.net.au> wrote in message
> news:441a5c11$0$18561$5a62ac22@per-qv1-newsreader-01.iinet.net.au...
>
>>If its for commercial use it would probably be easiest just to get the
>>crystals.
>>Otherwise designing a PLL system is possible - particularly if you want to
>>learn about them for your own education. But the work involved is not
>>trivial - probably not worth it for a few old radios. The other issue will
>>be how the radio achieves FM - if it does it swinging the crystal, then
>>this will impose another restriction on the PLL. While it is possible to
>>do (keep loop filter BW below min audio freq) I tried doing this on a 2M
>>design once - couldnt get it stable. Some radios phase modulate one of the
>>multipliers, which would avoid this issue.
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>>>I have a couple 6 channel public service radios that are in the 155Mhz
>>>range. Some are synthesized and require cutting diodes to change the
>>>frequency and that works out well.
>>>But some are crystal controlled and with the cost and availability of
>>>crystals it's cost prohibitive to re-crystal these radios. It looks like
>>>these crystals are in the X9 mode so that puts them in the 16-16.5 MHz
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>>>crystal socket to get around the crystal issue. Actually I figure a PIC
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1895. Re: Crystal replacement

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-17 15:03:17 UTC
From: Joel <Joel@cyberbest.com>
Message-ID: <1142607665_9759@sp6iad.superfeed.net>
Source record: 13096

Scott,
I hear your point.. These are not HT's but 40 watt mobiles. I understand how cheap HT's are and that's why I can't see spending much resources on the conversion. But I'm always looking for new uses to implement PIC chips and interfacing one to a synthesizer seemed like an inexpensive idea. PIC and synthesizer cost together is barely 12 bucks.

Joe Loucka AG4QC

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news:jJ-dncrEDuwYN4fZnZ2dnUVZ_vmdnZ2d@bright.net...
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1896. Re: focus group question for new products

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-17 15:10:40 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1142608240.785602.114430@i39g2000cwa.googlegroups.com>
Source record: 13097

eternalsquire@comcast.net wrote:
> Tim,
>
> After studying this, I have a question:
>
> It seems to me that I should basically have a standard design with
> options. I could then post the drawings as a webpage for people to
> look at and specify those options. It will be a while before I can
> consider making one-of-a-kinds for people, but standard specs and
> stackable configurations I could do on a JIT basis.
>
> Would that be acceptable for now until I could afford greater
> sophistication?

I actually found your aluminum scrap thread on rec.crafts.metalworking, and I think it's pretty much hopeless to mill "standard" boxes out of aluminum ingots and make money.

I mean, frontpanelexpress has the advantage that they start with a sheet of the final thickness. Even a front panel with a lot of holes is still 50% of the original material - enough of a difference to matter for large scale production but truly negligible for small-volume stuff. OTOH you will be milling away 99% of the original block and you truly have to be creating unique value to make this worthwhile. At that point the energy cost of melting down all the scraps to start over again are probably more than the inflated retail cost of a die-cast or extruded box.

I think you've got to concentrate on quick-turnaround custom stuff. Just my opinion. And think about doing more than just boxes (although boxes with holes is probably a not-too-hard-place to start from.)

Or think about a way to do custom sheet-metal operations (shearing, bending, curving, punching, etc.) in a semi-custom way, taking orders over the web. I know that locally, most of the "sheet metal" shops really do almost nothing but HVAC ducts. I know that you already got your milling machine and don't want to sink money into sheet-metal stuff, but I think there would be a real market for custom sheet metal stuff in the same style as frontpanelexpress and expresspcb. You'd definitely have to sink several thousand dollars in tools and (particularly) punches/dies but at least to me this would be far more satisfying than spending hours milling boxes out of ingots. (How many have you done? Gotta be dull. Of course if you're doing this on ingots that you melted scrap into, you'd hit the occasional hard chunk and void just to liven things up!)

Tim.

1897. Re: What do you call these devices?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-17 17:51:12 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dvesug$re3$2@engnntp2.cig.mot.com>
Source record: 12998

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> wrote in message
news:121dt7d6b1mpha0@corp.supernews.com...
> Hi Rex,
>
> "Rex" <me@hotmail.invalid> wrote in message
> news:451d12psikgo37pu10ko4ef7lumbk50g14@4ax.com...
> > Here's a link to one manufacturer
> > http://www.microlab.fxr.com/pdf/HX,HY,Hzseries.pdf
>
> Yep, that's them alright. The one we have is the electrostatic version.
>
> I took a closer look over a wider frequency range at its response and --
not
> too surprisingly -- it's a straight line on a log-log plot (i.e., the
coupling
> is almost purely capacitive).
>
> Thanks for everyone's help,
> ---Joel
>
>

I don't know what Butches point was....

I think I was close, no? Don't they have a number and name stamped on them?
Usually uLab does that. Google is mighty powerful in this regard.
73, Steve, K9DCI

1898. sb-1000 tuned input coils or al-80a

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-17 19:10:54 UTC
From: hamshack@gmail.com
Message-ID: <1142622654.184318.233060@p10g2000cwp.googlegroups.com>
Source record: 12999

I am trying to copy the sb-1000 input circuit on an amp project. Can someone tell me the dimensions of the coil forms and the wire size used in the coils. Thanks, Gary

1899. Re: Optical Communications? RSCB Irrelevance? (Was : Re: The smallest Baird Televisor?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-17 21:12:11 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <441b25d8.272135830@news.blueyonder.co.uk>
Source record: 13000
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On Tue, 14 Mar 2006 21:50:29 GMT, microwaves@blueyonder.co.uk (Peter)
wrote:

>The current UK laser record is around 73km I believe... held by G0MFR
>and G8LSD.

Whooops! G0MFR should read G0MRF ... sorry Dave!

peter, G3PHO

1900. Re: Crystal replacement

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-17 22:05:18 UTC
From: James Thompson <jtech7@alltel.net>
Message-ID: <e417a$441b3295$438c83b0$16076@ALLTEL.NET>
Source record: 13001

> area. We would do the crystal route, but crystals seem to be in the $12.50
> or more range (If you can even find them) That means it would be about 25
> buck/channel. The price quickly makes conversion cost prohibitive compared
> to a new 2 meter radio.
What crystal do you need? Digikey sells most crystals for .60 to 1.50 each
, where did you look to find them costing 12 bucks each? curious.... Jim

1901. Data needed on RF2065 MMIC - similar to MAR-3

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-17 23:48:51 UTC
From: TW <kilocycles**@**yahoo.com>
Message-ID: <m6im12pmnjka7hqt3m8cv34qi3pm6h5beb@4ax.com>
Source record: 13002

I need a datasheet on the RF2065 MMIC, or more specifically, RF2065TR7M. Supposed to be similar to the MAR-3, but I can't prove it. The guy I bought some from tested it as if it were a MAR-3, he says.

I want to use it in the circuit of Fig. 11.14 of EMRFD (U4). Note that the part type designations for the MMICs in that figure are inconsistent with the block diagram of Fig 11.13...U4 should be a MAR-3 or MSA-0385 (I guess), not an MSA-0685

Yes, I've Goggled to the max, did all of the datasheetcatalog.com-type and we-may-have-it-but-you-to-buy-the-info.com-type places, and called and wrote RF Microdevices sales support. No joy. This device must have been either been developed specifically for a US Gov't Tippy-Top Secret, Burn Before Reading project, or was the subject of a massive recall; both pure speculation on my part.

Tnx,

1902. Re: focus group question for new products

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-18 01:04:30 UTC
From: eternalsquire@comcast.net
Message-ID: <1142643870.029569.240860@u72g2000cwu.googlegroups.com>
Source record: 13003

Haven't done any yet.

I mean, right now I am still exploring ideas of what I can do with a combined milling/electronics/embedded capability as a one person mail order business.

I think there's plenty, so long as I do sufficient market research while asking stupid questions on homebrew or metalworking.

I am learning that it wouldn't make sense to forge my own ingots. I have thought of
a custom chassis system made of interlocking standard parts milled out of reliable ingots made by someone else. I can elaborate privately.

Ironically, I have a potentially infinite source of cheap AL sheetmetal, that wrecker I mentioned that people mentioned wasn't worth donkey dung for making ingots of. I could explore things there. But I really want to keep the few remaining $ that I have in reserve for elex parts and software tools.

The Eternal Squire

1903. APRSPoint new version sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-18 06:14:59 UTC
From: "hxc98@yahoo.com" <hxc98@yahoo.com>
Message-ID: <1142662499.432824.54460@u72g2000cwu.googlegroups.com>
Source record: 13004

A new version of APRSPoint is released, new features include,

1. Implemented APRS server filter setting,
2. Enabled auto connect for TCP connection,
3. Customization of track line width and style,

and numerous other fixes and enhancements. Please visit
http://www.aprspoint.com for details of this new release and sale.
Thanks.

1904. Interested? Here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-18 07:39:14 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142667554.414942.269330@g10g2000cwb.googlegroups.com>
Source record: 13005
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

A necessary preface.....

(It is becoming increasingly difficult to fly the flag for
decency and for civilised behaviour in Radio Hammery. Even
the Usenet newsgroups dedicated to the cause have degenerated
into a hotbed of abusive onslaughts by those who ought to know
better; the Nugatory Numpties who boast of an interest
exceeding 10, 20, 30, 40 or even 50 years and yet who have
proved themselves incapable of even meeting the trivial exam
standards set for 6-year-olds. However, there still exists
the fundamental basis on which Ham Radio is based, and
that will never die. This FAQ ("What Is Ham Radio?") will
be regularly published and will not be shouted or bullied
down. It is important that those of a technical bent, who
are the natural seed-corn of Radio Hammery and who
gravitate towards us to be the real novitiate, can
still find us, (and know that we are still here), their fellows.)

-----ooooo-----

So,.....What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then

operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line

telephone, whilst continuing to regard Ham Radio as a separate technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between a Ham Radio licence and a CB Radio licence. To him, they are sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then tries to classify himself as the equal of the Radio Ham when, in fact, he is nothing of the kind.

Ham Radio is not CB Radio and has no common ground with it! Ham Radio is _THE_ technical pursuit for gentlemen; CB Radio is the operating hobby for those who buy their rigs and equipment off the shelf.

-----ooooo-----

If you are the sort of person who is motivated by a technical interest in how things work; if you took apart malfunctioning clocks, toasters and the like and put them right despite never having seen them working, then a Ham Radio licence is your traditional route! There has never been a shortage of such people, and those who gravitate towards such an interest have always been welcomed into our shacks and their interests fostered. There is not today, nor has there ever been, a need to go out and encourage and press children, children who have never expressed an interest in Ham Radio, to come into our shacks. Such an activity should cause eyebrows to be raised - what normal well-adjusted adults seek the social acquaintance of children?!

-----ooooo-----

Please remember that this FAQ is a _POSITIVE EXHORTATION_ to you to exert yourselves to join our fraternity! (If you find otherwise, then perhaps you are already classing yourself in the mediocre groups of those who are criticised in the FAQ and from whom we _MUST_ dissociate? If so - it's never too late for a re-taxonomisation on your part - there's nothing elitist about us, and we welcome all those who are prepared to put themselves out in order to join our ranks!)

1905. Re: Crystal replacement

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-18 11:49:23 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <qISdnaA6CuNbbobZRVn-qQ@bright.net>
Source record: 13006

Oh, oops...didn't realize they were a mobile rig! I would think you
might be able to find a suitable schematic for the PLL circuitry by
looking at the data sheets for some of the PLL ICs...such as...

http://www.jameco.com/wcsstore/Jameco/Products/ProdDS/246713MOT.pdf

Have you investigated using a DDS (Direct Digital Synthesizer) with a
PIC to control it?

Scott

Joel wrote:

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> ----= East and West-Coast Server Farms - Total Privacy via Encryption =----

1906. Return Loss Bridge Accuracy Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-18 13:09:52 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1142687392.568430.122110@e56g2000cwe.googlegroups.com>
Source record: 13007

I have just built an HF return loss bridge according to the info in "Solid State design for the Radio Amateur". While it works ok, I was hoping for a bit better performance. Clearly the "balun" doesn't have enough inductance to operate well below 10 MHz or so (10 turns bifilar #30 AWG enamelled wire on Amidon T23-43, as specified in the book - twisted pair, which isn't specified one way or the other in the book). This can probably be largely fixed by using a larger ferrite core (T37-43's available in junkbox). I am interested primarily in the 1.8-50 MHz range, though I wouldn't complain if it worked on 2m too.

But even at 30 MHz a reasonably good microwave 50 ohm load gives only about 28 dB apparent return loss...Not bad, but I might have expected a bit more.

And an open and short give about 2 dB different signal levels at 30 MHz. That is with big pads (>20 dB attenuation) on both the signal generator and detector. The detector is an HF receiver with a step attenuator used to maintain a constant S-meter reading.

The circuit is built on a small PC board using construction techniques typical for the UHF or low microwave range (except that the test port connector is an SO-239), and is enclosed in a shielded box. Each of the three 50 ohm resistors is made of two 100 ohm 1206 chip resistors in parallel and measures between 50.0 and 50.3 ohms at DC.

Has anyone with experience with this circuit any suggestions for how to tweak it for best performance ? What accuracy level have you achieved ? Do you know where I might find an error analysis for this circuit ? Or if I am to think about errors myself, does anyone know how to model the balun in SPICE ?

73,
Steve VE3SMA

1907. Re: Solid state vhf and UHF amplifier designs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-18 13:48:33 UTC
From: noexqs <noexqs@noexqs.demon.nl>
Message-ID: <121o3tjb17lkt25@corp.supernews.com>
Source record: 13008

Mike, have a look at:
http://www.qsl.net/yu1aw/VHFPower.htm

A simple design with MRF317 (28V):
http://hjem.get2net.dk/ole_nykjaer/oz2oe/mrf317/317.html

You may find some of the transistors used to be obsolete

regards,

Willem
PE2WDO
Holland

"VK3XL" <VK3XL.24nka8@news.radiobanter.com> schreef in bericht
news:VK3XL.24nka8@news.radiobanter.com...
>
> Hi all, Im looking for solid state amplifier designs for use on 144 MHZ
> SSB of about 100 W output for up to 20 watts drive. Does anyone have
> links to suitable circuit diagrams?
> I am also interested to increase my output power on 432 SSB as well. I
> currently have 10 w drive and would like to increase that to 100w or
> there abouts. Solid state amp circuits only please
> Thanks for looking
> Mike VK3XL
>
>
> --
> VK3XL

1908. could you be honest enough to call what it is an editorial you answer any question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-18 16:14:05 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1142698445.335781.138020@v46g2000cwv.googlegroups.com>
Source record: 13009
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Plod's Conscience wrote:
> A necessary preface.....
>
> (It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery. Even
> the Usenet newsgroups dedicated to the cause have degenerated
> into a hotbed of abusive onslaughts by those who ought to know
> better; the Nugatory Numpties who boast of an interest
> exceeding 10, 20, 30, 40 or even 50 years and yet who have
> proved themselves incapable of even meeting the trivial exam
> standards set for 6-year-olds. However, there still exists
> the fundamental basis on which Ham Radio is based, and
> that will never die. This FAQ ("What Is Ham Radio?") will
> be regularly published and will not be shouted or bullied
> down. It is important that those of a technical bent, who
> are the natural seed-corn of Radio Hammery and who
> gravitate towards us to be the real novitiate, can
> still find us, (and know that we are still here), their fellows.)
you do not behave decently yourself and exert nothing ut a clear for
the of the ARS

1909. Re: could you be honest enough to call what it is an editorial you answer any question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-18 16:36:23 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142699783.763969.281540@z34g2000cwc.googlegroups.com>
Source record: 13010
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Parlez-vous Anglais mon ami?

Etes-vous un CBer?

an_old_friend wrote:
> you do not behave decently yourself and exert nothing ut a clear for
> the of the ARS

1910. Re: could you be honest enough to call what it is an editorial you answer any question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-18 16:40:21 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1142700021.099689.267350@i40g2000cwc.googlegroups.com>
Source record: 13011
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

```
Plod's Conscience wrote:
> Parlez-vous Anglais mon ami?
>
> Etes-vous un CBer?
>
so the answer is no you can be honest thanks for clearing that up
```

1911. Re: could you be honest enough to call what it is an editorial you answer any question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-18 17:00:24 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1142701224.326685.30930@i40g2000cwc.googlegroups.com>
Source record: 13012
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Parlez-vous Anglais mon ami?

an_old_friend wrote:
> so the answer is no you can be honest thanks for clearing that up

1912. Re: could you be honest enough to call what it is an editorial you answer any question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-18 18:32:00 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1142706719.970023.82960@g10g2000cwb.googlegroups.com>
Source record: 13013
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Plod's Conscience wrote:

so the answer is no you can be honest thanks for clearing that up

1913. Re: Interested? Here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-18 18:39:45 UTC
From: Unknown <nope@way.cc>
Message-ID: <pan.2006.03.18.18.39.49.531787@way.cc>
Source record: 13014
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Just fuck off and get a life ..... please ....

1914. Re: Return Loss Bridge Accuracy Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-18 19:28:15 UTC
From: CA <no@mail.com>
Message-ID: <jbZSf.48870$d5.204995@newsb.telia.net>
Source record: 13015

My homebrew RLB uses a current balun. Some turns of thin 50 Ohm coax on a ferrite core. The core is from a scrapped Siemens inductor. I have acheived good performance between 0,1 to 200 MHz with this technique. I first tried the twisted pair winding approach but the current balun was far better.

Chris SM6PXJ

skavanagh72nospam@yahoo.ca wrote:
> I have just built an HF return loss bridge according to the info in
> "Solid State design for the Radio Amateur". While it works ok, I was
> hoping for a bit better performance. Clearly the "balun" doesn't have
> enough inductance to operate well below 10 MHz or so (10 turns bifilar
> #30 AWG enamelled wire on Amidon T23-43, as specified in the book -
> twisted pair, which isn't specified one way or the other in the
> book). This can probably be largely fixed by using a larger ferrite
> core (T37-43's available in junkbox). I am interested primarily in
> the
> 1.8-50 MHz range, though I wouldn't complain if it worked on 2m too.
>
> But even at 30 MHz a reasonably good microwave 50 ohm load gives only
> about 28 dB apparent return loss...Not bad, but I might have expected
> a bit more.
>
> And an open and short give about 2 dB different signal levels at 30
> MHz. That is with big pads (>20 dB attenuation) on both the signal
> generator and detector. The detector is an HF receiver with a step
> attenuator used to maintain a constant S-meter reading.
>
> The circuit is built on a small PC board using construction techniques
> typical for the UHF or low microwave range (except that the test port
> connector is an SO-239), and is enclosed in a shielded box. Each of
> the three 50 ohm resistors is made of two 100 ohm 1206 chip resistors
> in parallel and measures between 50.0 and 50.3 ohms at DC.
>
> Has anyone with experience with this circuit any suggestions for how
> to tweak it for best performance ? What accuracy level have you
> achieved ? Do you know where I might find an error analysis for this
> circuit ? Or if I am to think about errors myself, does anyone know
> how to model the balun in SPICE ?
>
> 73,
> Steve VE3SMA

1915. Re: Return Loss Bridge Accuracy Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-18 20:05:23 UTC
From: Bob <bobXstein@sbcglobal.net>
Message-ID: <7KZSf.45026$2O6.20183@newssvr12.news.prodigy.com>
Source record: 13016

skavanagh72nospam@yahoo.ca wrote:
> I have just built an HF return loss bridge according to the info in
> "Solid State design for the Radio Amateur". While it works ok, I was
> hoping for a bit better performance. Clearly the "balun" doesn't have
> enough inductance to operate well below 10 MHz or so (10 turns bifilar
> #30 AWG enamelled wire on Amidon T23-43, as specified in the book -
> twisted pair, which isn't specified one way or the other in the book).
> This can probably be largely fixed by using a larger ferrite core
> (T37-43's available in junkbox). I am interested primarily in the
> 1.8-50 MHz range, though I wouldn't complain if it worked on 2m too.
>
> But even at 30 MHz a reasonably good microwave 50 ohm load gives only
> about 28 dB apparent return loss...Not bad, but I might have expected a
> bit more.
>
> And an open and short give about 2 dB different signal levels at 30
> MHz. That is with big pads (>20 dB attenuation) on both the signal
> generator and detector. The detector is an HF receiver with a step
> attenuator used to maintain a constant S-meter reading.
>
> The circuit is built on a small PC board using construction techniques
> typical for the UHF or low microwave range (except that the test port
> connector is an SO-239), and is enclosed in a shielded box. Each of
> the three 50 ohm resistors is made of two 100 ohm 1206 chip resistors
> in parallel and measures between 50.0 and 50.3 ohms at DC.
>
> Has anyone with experience with this circuit any suggestions for how to
> tweak it for best performance ? What accuracy level have you achieved
> ? Do you know where I might find an error analysis for this circuit ?
> Or if I am to think about errors myself, does anyone know how to model
> the balun in SPICE ?
>
> 73,
> Steve VE3SMA
>
Directivity plays a large part in the accuracy of return-loss
measurements. Do some research on how to determine the directivity of
the bridge. If the directivity is less than 30 dB, the return-loss
accuracy will be impacted substantially.

Bob, w6nbi

--
When replying direct, remove the X from my address.

1916. Re: Crystal replacement

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-18 21:09:49 UTC
From: Joel <Joel@cyberbest.com>
Message-ID: <1142716054_11637@sp6iad.superfeed.net>
Source record: 13017

Interestingly, that's exactly what I did.. I revered engineered the Maxon 3010 and have them working fine. Take a look at http://www.w4fhu.org/maxon-3010.htm The Maxon 4010 looks the same from the outside and it appears they started using them because they were probably cheaper. But the 4010's are crystal controlled and that's where I began. Yup, I DO plan on using a PIC and PLL or DDS. Actually the 3010's have the same chip you referenced at Jamco (As you can see from my webpage, above).. I was hoping to use a more modern chip but they all seem to be in the TTSOP format. Actually, I would love to use the AD9835 DDS but again, it's in this TTSOP format and not conductive to homebrewing. Sure I can solder the chip to a ckt board, but I'm not about to have a cktboard made up for a few copies and then find out I made a mistake because I can't really try it before hand. Sort of a catch-22. I am now starting to think about creating a pc board for just the chip to be able to bring out the leads to make them more available for breadboarding. I like the idea of them being in small packages as it cuts down on stray inductances and so on, so sure I'll use them once I have a proven ckt. Ah, lets see what else I can whine about.. LOL
Joe Loucka AG4QC

"Scott" <acepilot@bloomer.net> wrote in message news:qISdnaA6CuNbbobZRVn-qQ@bright.net...
> Oh, oops...didn't realize they were a mobile rig! I would think you might
> be able to find a suitable schematic for the PLL circuitry by looking at
> the data sheets for some of the PLL ICs...such as...
>
> http://www.jameco.com/wcsstore/Jameco/Products/ProdDS/246713MOT.pdf
>
> Have you investigated using a DDS (Direct Digital Synthesizer) with a PIC
> to control it?
>
> Scott
>
>
> Joel wrote:
>
>> Scott,
>> I hear your point.. These are not HT's but 40 watt mobiles. I understand
>> how cheap HT's are and that's why I can't see spending much resources on
>> the conversion. But I'm always looking for new uses to implement PIC
>> chips and interfacing one to a synthesizer seemed like an inexpensive
>> idea. PIC and synthesizer cost together is barely 12 bucks.
>>
>> Joe Loucka AG4QC

>>
>> "Scott" <acepilot@bloomer.net> wrote in message
>> news:jJ-dncrEDuwYN4fZnZ2dnUVZ_vmdnZ2d@bright.net...
>>
>>>Here's another idea...instead of making these radios to hand out to new
>>>hams, maybe you could remove the transmit crystal and just replace the
>>>receive crystal, lowering the conversion cost. You could hand these out
>>>to NON-HAMS so they could listen in on the local repeater or simplex
>>>channel. Maybe they would be interested in becoming hams. 2M HTs are so
>>>cheap these days, just about any new ham can afford one with a lot of
>>>bells and whistles built in.
>>>
>>>Scott
>>>N0EDV
>>>
>>>Joel wrote:
>>>
>>>>The idea is we have a few dozen crystallized Maxon 4010's here and
>>>>figured we could get them converted to 2 meters to give to the new ham's
>>>>in the area. We would do the crystal route, but crystals seem to be in
>>>>the $12.50 or more range (If you can even find them) That means it would
>>>>be about 25 buck/channel. The price quickly makes conversion cost
>>>>prohibitive compared to a new 2 meter radio.
>>>>
>>>> I reversed engineered the Maxon 3010 as they are synthesized and by
>>>> cutting diodes we have them working on 2 meters. Of course, having a
>>>> schematic for either radio would make things a lot easer.. (hint)..
>>>>
>>>>Joe Loucka AG4QC
>>>>
>>>>
>>>>
>>>>"Richard Hosking" <richardh@iinet.net.au> wrote in message
>>>>news:441a5c11$0$18561$5a62ac22@per-qv1-newsreader-01.iinet.net.au...
>>>>
>>>>
>>>>>If its for commercial use it would probably be easiest just to get the
>>>>>crystals.
>>>>>Otherwise designing a PLL system is possible - particularly if you want
>>>>>to learn about them for your own education. But the work involved is
>>>>>not trivial - probably not worth it for a few old radios. The other
>>>>>issue will be how the radio achieves FM - if it does it swinging the
>>>>>crystal, then this will impose another restriction on the PLL. While it
>>>>>is possible to do (keep loop filter BW below min audio freq) I tried
>>>>>doing this on a 2M design once - couldnt get it stable. Some radios
>>>>>phase modulate one of the multipliers, which would avoid this issue.
>>>>>
>>>>>R
>>>>>
>>>>>Joel wrote:

>>>>>
>>>>>
>>>>>>I have a couple 6 channel public service radios that are in the 155Mhz
>>>>>>range. Some are synthesized and require cutting diodes to change the
>>>>>>frequency and that works out well.
>>>>>>But some are crystal controlled and with the cost and availability of
>>>>>>crystals it's cost prohibitive to re-crystal these radios. It looks
>>>>>>like these crystals are in the X9 mode so that puts them in the
>>>>>>16-16.5 MHz range. I am considering building a VCO to inject a signal
>>>>>>into the old crystal socket to get around the crystal issue. Actually
>>>>>>I figure a PIC to program the PLL would be great. I'm just not sure
>>>>>>what frequency to inject into the old crystal socket. Should I build a
>>>>>>16mhz VCO or some harmonic? Will injecting a signal into a
>>>>>>crystal-less oscillator even work? I'm going to use a ADF4110 PLL and
>>>>>>a 16F89 PIC. Any suggestions for the VCO? Schematic for a 16 MHz VCO?
>>>>>>
>>>>>>Joe Loucka AG4QC ----== Posted via Newsfeeds.Com -
>>>>>>Unlimited-Unrestricted-Secure Usenet News==----
>>>>>>http://www.newsfeeds.com The #1 Newsgroup Service in the World!
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1917. Re: Return Loss Bridge Accuracy Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-18 21:20:47 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <suto12tlk2qfg0bkfh2dqpb19bmdl37eva@4ax.com>
Source record: 13018

On 18 Mar 2006 05:09:52 -0800, skavanagh72nospam@yahoo.ca wrote:

>I have just built an HF return loss bridge according to the info in
>"Solid State design for the Radio Amateur". While it works ok, I was
>hoping for a bit better performance. Clearly the "balun" doesn't have
>enough inductance to operate well below 10 MHz or so (10 turns bifilar
>#30 AWG enamelled wire on Amidon T23-43, as specified in the book -
>twisted pair, which isn't specified one way or the other in the book).
> This can probably be largely fixed by using a larger ferrite core
>(T37-43's available in junkbox). I am interested primarily in the
>1.8-50 MHz range, though I wouldn't complain if it worked on 2m too.
>
>But even at 30 MHz a reasonably good microwave 50 ohm load gives only
>about 28 dB apparent return loss...Not bad, but I might have expected a
>bit more.
>
>And an open and short give about 2 dB different signal levels at 30
>MHz. That is with big pads (>20 dB attenuation) on both the signal
>generator and detector. The detector is an HF receiver with a step
>attenuator used to maintain a constant S-meter reading.
>
>The circuit is built on a small PC board using construction techniques
>typical for the UHF or low microwave range (except that the test port
>connector is an SO-239), and is enclosed in a shielded box. Each of
>the three 50 ohm resistors is made of two 100 ohm 1206 chip resistors
>in parallel and measures between 50.0 and 50.3 ohms at DC.
>
>Has anyone with experience with this circuit any suggestions for how to
>tweak it for best performance ? What accuracy level have you achieved
>? Do you know where I might find an error analysis for this circuit ?
>Or if I am to think about errors myself, does anyone know how to model
>the balun in SPICE ?

I don't have the book and haven't used the design. However, the
minute you say "SO-239", all bets are off. You must have used an
adapter to connect your "reasonably good microwave load" to the
SO-239. You measure 28 dB RL, that sounds optimistic to me, other
things considered.

I have a link to a must read paper at:

http://www.k6mhe.com/n7ws/

Note No. 11.

Make particular note of the part, "The Curse of Adapters."

1918. Any receiver IC's?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-18 21:23:57 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <4db24$441c7a6d$d135c4af$17969@MDI.CA>
Source record: 13019

What are some modern IC's to build a sensitive and strong HAM receiver?
Mixers and IF amps recommended?
Not looking for NE602 but higher performance.

JJ

1919. Re: Any receiver IC's?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-18 22:28:31 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1142720911.911739.64900@g10g2000cwb.googlegroups.com>
Source record: 13020

JJ wrote:
> What are some modern IC's to build a sensitive and strong HAM receiver?
> Mixers and IF amps recommended?
> Not looking for NE602 but higher performance.

Bus switches like the FST3125 make very good mixers and quadrature
sampling detectors, as in the SoftRock SDRs.

Leon

1920. Re: Any receiver IC's?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-18 23:32:36 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <1cc48$441c9894$d135c4af$31146@MDI.CA>
Source record: 13021

"Leon" <leon.heller@bulldoghome.com> wrote in news:1142720911.911739.64900@
>
> Bus switches like the FST3125 make very good mixers and quadrature
> sampling detectors, as in the SoftRock SDRs.
>
> Leon
>
>

And how about the IF amp? And VFO?
DDS like AD9850 look interesting.

JJ

1921. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-18 23:33:45 UTC
From: Gian <i7swx@yahoo.com>
Message-ID: <1142724825.475143.34810@v46g2000cwv.googlegroups.com>
Source record: 13022

>
> GM Ed. Certainly a better choice when it comes to conversion loss. I've
> built a half dozen SD5000 mixers and although at least one of them managed a
> measured +50 dBm Ip3, (G3SBI measured it not me!) I never managed to get the
> conversion loss below 9 dB and more often 10. Conversely, the 3125/ family
> readily does 4.8 dB conversion loss thanks to the very respectable Rds on.
> REALLY simplifies things in the front end department, to at least 30 MHz,
> with attention paid to the front end filters, you can get away without an RF
> amplifier.
>
> Regards
> W4ZCB

Hi all,

Harold, W4ZCB, has given some "comments" on the H-Mode Mixer that are
REAL and TRUE.
G3SBI has removed the mixer from the stages that are critical on a
receiver and in the CDG2000 project it was demonstrated the IMD due to
passive components like core of coils. The FST3125 fast bus switch has
lowered the conversion loss of the H-Mode Mixer and made the RX front
end "hot", although not reaching the IP3 of +50dBm it still has plenty
of +dBm to give ...around +40dBm!You can permit yourself to add a xtal
filter behind the h-mode mixer and still getting high numbers on IP3.

If you are looking for a low consumption and simple mixer you may go OK
with the classic NE/SA602 and similar ones. BUT ... if you are looking
for high performance you need the H-Mode Mixer in the 3 transformer
G3SBI or the 2 transformer I7SWX configurations.
The H-Mode Mixer has been tested on downconversion (CDG2000, STAR
projects) and also on upconversion projects (I7SWX). For upconversion I
have devised a new squarer using LVDS and test it at IF of 35 to 70 MHz
(and 100MHz) with conversion loss around -5dbm and IP3 between +35 to
+40dBm (3.3V FST3125).
The H-Mode Mixer has been tested for RF input up to 50MHz in RX and
converter to 27-28MHz IF.
At 144MHz it performs like a standard diode db mixer having a conv loss
around -8dB. The input limit is due to the internal gates timing and
unbalancing as the FST3125 may have a bandwidth between 300 to 400MHz.
For those interested I may suggest a visit to JA9TTT web page where he
has reported measurement on both G3SBI and I7SWX versions using the
74AC86 squarer with balance adjustment. The comments are in japanese
but a translator is making the reading understandable :
ja9ttt.homedns.org/. I have posted a copy in my web page
www.qsl.net/i7swx in the subdirectory homebrewing. JA9TTT page permits

to enlarge the spectrum analyzer screen pictures.
I have also developed a 1 transformer double balance
mixer/demodulator/modulator using the FST3125 and 74AC/HC86 squarer
with an IP3 of around +25dBm.
Notes on the H-Mode Mixers and 1T DBM have been reported in RadCom,
G3VA's Technical Topics column.
For those interested on more detailed information I can make available
notes in English and Italian. Please write to my e-mail address:.

73

Gian
I7SWX
F5VGU
W1-I7SWX
G-QRP #10241
I QRP #571

1922. Re: Return Loss Bridge Accuracy Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-18 23:48:33 UTC
From: Chris Jones <lugnut808@nospam.yahoo.com>
Message-ID: <121p71ulqb3i8b3@corp.supernews.com>
Source record: 13023

CA wrote:

> My homebrew RLB uses a current balun. Some turns of thin 50 Ohm coax on a
> ferrite core. The core is from a scrapped Siemens inductor. I have
> acheived good performance between 0,1 to 200 MHz with this technique. I
> first tried the twisted pair winding approach but the current balun was
> far better.
>
> Chris SM6PXJ
>
> skavanagh72nospam@yahoo.ca wrote:
>> I have just built an HF return loss bridge according to the info in
>> "Solid State design for the Radio Amateur". While it works ok, I was
>> hoping for a bit better performance. Clearly the "balun" doesn't have
>> enough inductance to operate well below 10 MHz or so (10 turns bifilar
>> #30 AWG enamelled wire on Amidon T23-43, as specified in the book -
>> twisted pair, which isn't specified one way or the other in the
>> book). This can probably be largely fixed by using a larger ferrite
>> core (T37-43's available in junkbox). I am interested primarily in
>> the
>> 1.8-50 MHz range, though I wouldn't complain if it worked on 2m too.
>>
>> But even at 30 MHz a reasonably good microwave 50 ohm load gives only
>> about 28 dB apparent return loss...Not bad, but I might have expected
>> a bit more.
>>
>> And an open and short give about 2 dB different signal levels at 30
>> MHz. That is with big pads (>20 dB attenuation) on both the signal
>> generator and detector. The detector is an HF receiver with a step
>> attenuator used to maintain a constant S-meter reading.
>>
>> The circuit is built on a small PC board using construction techniques
>> typical for the UHF or low microwave range (except that the test port
>> connector is an SO-239), and is enclosed in a shielded box. Each of
>> the three 50 ohm resistors is made of two 100 ohm 1206 chip resistors
>> in parallel and measures between 50.0 and 50.3 ohms at DC.
>>
>> Has anyone with experience with this circuit any suggestions for how
>> to tweak it for best performance ? What accuracy level have you
>> achieved ? Do you know where I might find an error analysis for this
>> circuit ? Or if I am to think about errors myself, does anyone know
>> how to model the balun in SPICE ?
>>
>> 73,

>> Steve VE3SMA

If you could give more details of how to build your circuit, or a photo of it, I'd appreciate that.

Chris

1923. Re: Any receiver IC's?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-19 03:40:04 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1142739604.228527.151510@e56g2000cwe.googlegroups.com>
Source record: 13024

JJ wrote:
> "Leon" <leon.heller@bulldoghome.com> wrote in news:1142720911.911739.64900@
> >
> > Bus switches like the FST3125 make very good mixers and quadrature
> > sampling detectors, as in the SoftRock SDRs.
> >
> > Leon
> >
> >
>
> And how about the IF amp? And VFO?
> DDS like AD9850 look interesting.

ADI makes some very nice VCAs, like the AD603. They are probably the
best IF devices available, now. Racal was using FETs for IF amplifiers
in their military radios when I worked for them a few years ago.

PLLs are better than DDSs, but it can be diificult to make a good one.
A DDS may be used to provide a reference for a PLL, of course, for fine
tuning.

Leon

1924. Re: In the interests of historical accuracy: Case White

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-19 06:56:54 UTC
From: "Dr. Anton T. Squeegee" <SpammersShouldImplode@dev.null>
Message-ID: <MPG.1e86a0901a3603ca9896c3@192.168.42.131>
Source record: 13025

In article <4oq712df168pnt2pqt68ujg19hulruu7ts@4ax.com>,
Aero.Spike@S&T.invalid (known to some as Spike) scribed...

> Invasion of Poland (Fall Weiss)

<drivelectomy>

You have the wrong newsgroup(s). This is
rec.radio.amateur.homebrew, a forum for discussing the design,
construction, and troubleshooting of home-built electronic widgets
relating to the amateur radio service.

Nowhere in your missive did I detect anything that would remotely
relate to that topic.

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute
(Known to some as Bruce Lane, KC7GR)
http://www.bluefeathertech.com -- kyrrin a/t bluefeathertech d-o=t calm
"Salvadore Dali's computer has surreal ports..."

1925. MHW707-2 is it linear ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-19 09:15:54 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1142759754.023586.94940@i40g2000cwc.googlegroups.com>
Source record: 13026

Hi All,

I have just found my small stash of these devices along with the Mot
data book. It isn't clear reading the datasheet if this is capable of
linear, or is only class C.

Any ideas ?

Thanks,

Mark.

1926. Re: MHW707-2 is it linear ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-19 13:02:31 UTC
From: Norm Mann <folder0735@hotmail.com>
Message-ID: <HDcTf.10299$bu.2561@trnddc04>
Source record: 13027

"MarkAren" <markaren10@yahoo.com> wrote in message
news:1142759754.023586.94940@i40g2000cwc.googlegroups.com...
> Hi All,
>
> I have just found my small stash of these devices along with the Mot
> data book. It isn't clear reading the datasheet if this is capable of
> linear, or is only class C.
>
> Any ideas ?
>

If it's in the same family as MHW710-x, modulating the input with a linear signal will produce a linear signal at the output, but keep an eye on the drive level and watch for self-oscillations. The MHW710 has been used in ATV applications, which is AM and often has an FM subcarrier too.

-NM

1927. Re: Return Loss Bridge Accuracy Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-19 13:29:16 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1142774956.124462.162830@e56g2000cwe.googlegroups.com>
Source record: 13028

Chris:

Thanks....I have been wondering about this option. At least you know
that the differential-mode impedance is 50 ohms. I am not sure my box
has room for the much larger core needed to wind coax on, though.

73,
Steve VE3SMA

1928. Re: Return Loss Bridge Accuracy Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-19 13:34:48 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1142775288.246241.209760@i40g2000cwc.googlegroups.com>
Source record: 13029

Wes Stewart wrote:

> the minute you say "SO-239", all bets are off.

I did some SPICE modelling of an ideal bridge (with resistive detector) and came to the same conclusions....that the higher-than-50 ohm-impedance UHF connector and adapter may be a limiting factor in the performance on a good SMA- or N- connectored load. It has virtually no effect on the difference in level between open and short terminations though.

> I have a link to a must read paper at:
>
> http://www.k6mhe.com/n7ws/
>
> Note No. 11.
>
> Make particular note of the part, "The Curse of Adapters."

Thanks...the original Wiltron app note has been a favourite of mine for many years, but have never seen the updated version.

73,
Steve VE3SMA

1929. Re: focus group question for new products

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-19 20:48:06 UTC
From: eternalsquire@comcast.net
Message-ID: <1142801286.340107.220430@u72g2000cwu.googlegroups.com>
Source record: 13030

Tim,

Would the following cover most of my entry level needs for sheet metal fab, for getting sheet metal in small enough shapes for my taig? I'll 'punch' holes by using the mill.

The Eternal Squire

18'' SHEET METAL FABRICATION TOOL KIT CUTTER ROLLER

Description

Cut, form, roll beads, and make perfect flanges with one bench top tool. Saves money and shop space. Comes with 1/4'', 3/8'', and 1/2'' bead mandrels; 1/16'', 1/8'', and 1/4'' flange mandrels; and one 18-1/4'' shearing mandrel.

Perfect for auto body workers: make your own wheel tubs, battery trays, dashboards, fire walls, floor pans, and other sheet metal parts and accessories. (Vise sold separately.)

Sheet metal capacity: 18 gauge

Throat depth: 18-1/4"

Andrew

Tim Shoppa wrote:
> eternalsquire@comcast.net wrote:
> > Tim,
> >
> > After studying this, I have a question:
> >
> > It seems to me that I should basically have a standard design with
> > options. I could then post the drawings as a webpage for people to
> > look at and specify those options. It will be a while before I can
> > consider making one-of-a-kinds for people, but standard specs and
> > stackable configurations I could do on a JIT basis.
> >
> > Would that be acceptable for now until I could afford greater
> > sophistication?
>
> I actually found your aluminum scrap thread on rec.crafts.metalworking,
> and I think it's pretty much hopeless to mill "standard" boxes out of
> aluminum ingots and make money.
>

> I mean, frontpanelexpress has the advantage that they start with a
> sheet of the final thickness. Even a front panel with a lot of holes is
> still 50% of the original material - enough of a difference to matter
> for large scale production but truly negligible for small-volume stuff.
> OTOH you will be milling away 99% of the original block and you truly
> have to be creating unique value to make this worthwhile. At that point
> the energy cost of melting down all the scraps to start over again are
> probably more than the inflated retail cost of a die-cast or extruded
> box.
>
> I think you've got to concentrate on quick-turnaround custom stuff.
> Just my opinion. And think about doing more than just boxes (although
> boxes with holes is probably a not-too-hard-place to start from.)
>
> Or think about a way to do custom sheet-metal operations (shearing,
> bending, curving, punching, etc.) in a semi-custom way, taking orders
> over the web. I know that locally, most of the "sheet metal" shops
> really do almost nothing but HVAC ducts. I know that you already got
> your milling machine and don't want to sink money into sheet-metal
> stuff, but I think there would be a real market for custom sheet metal
> stuff in the same style as frontpanelexpress and expresspcb. You'd
> definitely have to sink several thousand dollars in tools and
> (particularly) punches/dies but at least to me this would be far more
> satisfying than spending hours milling boxes out of ingots. (How many
> have you done? Gotta be dull. Of course if you're doing this on ingots
> that you melted scrap into, you'd hit the occasional hard chunk and
> void just to liven things up!)
>
> Tim.

1930. Re: Any receiver IC's?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 00:17:04 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <btmTf.2279$Ef2.24@bignews4.bellsouth.net>
Source record: 13031

Leon wrote:
> JJ wrote:
>
>>"Leon" <leon.heller@bulldoghome.com> wrote in news:1142720911.911739.64900@
>>
>>>Bus switches like the FST3125 make very good mixers and quadrature
>>>sampling detectors, as in the SoftRock SDRs.
>>>
>>>Leon
>>>
>>>
>>
>>And how about the IF amp? And VFO?
>>DDS like AD9850 look interesting.
>
>
> ADI makes some very nice VCAs, like the AD603. They are probably the
> best IF devices available, now. Racal was using FETs for IF amplifiers
> in their military radios when I worked for them a few years ago.
>
> PLLs are better than DDSs, but it can be diificult to make a good one.
> A DDS may be used to provide a reference for a PLL, of course, for fine
> tuning.
>
> Leon
>
Actually there is nothing really wrong with a DDS all by itself.
They are capable of very low phase noise. The new AD995x series
have 14 bit D/A's and are therefore VERY clean. They are rated at
up to 400mhz clock, but if you don't use the built in clock multiplier
and provide a 1:1 external clock they have been over clocked to
as high as 600mhz! Running with a clock rate of 10x the desired
output frequency this chip should have VERY low spurs!

Instead of using the DDS as a reference for a PLL, consider using it
AS the divider in a pll. This will give fractional N divide ability
allowing you to tune to the nearest hertz without using dual loops.
The math to calculate the DDS tuning word, might be a bit heavy on
a pic though....

1931. FA: Lots of old and new parts for BA gear

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 02:05:48 UTC
From: "Jim, KK1W" <kk1w@charter.net>
Message-ID: <16oTf.162$ny5.20@fe07.lga>
Source record: 13032
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Hi,

Take a look at these auctions: http://search.ebay.com/_W0QQsassZkk1w2000.

Lots of old and new parts, caps, resistors, pots, coils, meters, crystals
and more. Low starting bids and good feedback rating.

Jim, KK1W

1932. Re: Solid state vhf and UHF amplifier designs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 03:00:21 UTC
From: VK3XL <VK3XL.24y7mh@news.radiobanter.com>
Message-ID: <VK3XL.24y7mh@news.radiobanter.com>
Source record: 13033

Thanks Willem, i had already looked at the YU1AW site and have collected a bit of info , but I had not seen the OZ2OE amp design, thanks for your trouble.
By the way I did find another interesting web page with a 2 meter amp design using a MRF245
http://perso.wanadoo.fr/f6itv/p2032001.htm
Regards
Mike

--
VK3XL

1933. Re: Any receiver IC's?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 03:48:10 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1142826490.358187.217360@e56g2000cwe.googlegroups.com>
Source record: 13034

Ken Scharf wrote:
> Leon wrote:
> > JJ wrote:
> >
> >>"Leon" <leon.heller@bulldoghome.com> wrote in news:1142720911.911739.64900@
> >>
> >>>Bus switches like the FST3125 make very good mixers and quadrature
> >>>sampling detectors, as in the SoftRock SDRs.
> >>>
> >>>Leon
> >>>
> >>>
> >>
> >>And how about the IF amp? And VFO?
> >>DDS like AD9850 look interesting.
> >
> >
> > ADI makes some very nice VCAs, like the AD603. They are probably the
> > best IF devices available, now. Racal was using FETs for IF amplifiers
> > in their military radios when I worked for them a few years ago.
> >
> > PLLs are better than DDSs, but it can be diificult to make a good one.
> > A DDS may be used to provide a reference for a PLL, of course, for fine
> > tuning.
> >
> > Leon
> >
> Actually there is nothing really wrong with a DDS all by itself.
> They are capable of very low phase noise. The new AD995x series
> have 14 bit D/A's and are therefore VERY clean. They are rated at
> up to 400mhz clock, but if you don't use the built in clock multiplier
> and provide a 1:1 external clock they have been over clocked to
> as high as 600mhz! Running with a clock rate of 10x the desired
> output frequency this chip should have VERY low spurs!
>
> Instead of using the DDS as a reference for a PLL, consider using it
> AS the divider in a pll. This will give fractional N divide ability
> allowing you to tune to the nearest hertz without using dual loops.
> The math to calculate the DDS tuning word, might be a bit heavy on
> a pic though....

I was thinking of the spurs on the older devices. The newer one are
better.

Leon

1934. Re: Ink

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 04:27:48 UTC
From: Dave Turner <not@dave>
Message-ID: <441e2f14@quokka.wn.com.au>
Source record: 13035
Cross-posted to: rec.ponds,rec.puzzles,rec.puzzles.crosswords,rec.pyrotechnics,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

> whois imagraphix.com

Registrant:
Murphey Shaw
12 Blackwatch Trail Fairport, NY 14450
,
United States

Registered through: GoDaddy.com
Domain Name: IMAGRAPHIX.COM
Created on: 09-Dec-04
Expires on: 09-Dec-07
Last Updated on: 14-Feb-06

Administrative Contact:
Shaw, Murphey mshawjr@frontiernet.net
12 Blackwatch Trail Fairport, NY 14450
,
United States
5854148735

Technical Contact:
DNS, Administrator administrator@siteprotect.com
1 N State Street 12th Floor Chicago, IL 60602
,
United States
+1.3122362132 Fax -- +1.3122361958

Domain servers in listed order:
NS3.SECURESERVER.NET
NS4.SECURESERVER.NET

1935. Re: Ink

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 11:59:53 UTC
From: HankG <hank@invalid.com>
Message-ID: <4M-dnWhbLY6rBIPZRVn-tQ@comcast.com>
Source record: 13036
Cross-posted to: rec.ponds,rec.puzzles,rec.puzzles.crosswords,rec.pyrotechnics,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

<mshawjr@frontiernet.net> wrote in message
news:F6qTf.1018$tT.243@news01.roc.ny...
> Man I have found this site that has the cheapest ink for any printer.
> You can compare prices and then review the companies on service and
> quality. <http://www.imagraphix.com> Let me know what you think

I think you are a spammer. So far, found in six (of six) NG's.

HankG

1936. Re: Ink

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 13:02:17 UTC
From: Dave Turner <not@dave>
Message-ID: <441ea7aa@quokka.wn.com.au>
Source record: 13037
Cross-posted to: rec.ponds,rec.puzzles,rec.puzzles.crosswords,rec.pyrotechnics,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

<mshawjr@frontiernet.net> wrote in message
news:JTwTf.2739$tT.1678@news01.roc.ny...
> Sorry guys. The spam stuff was not my intent.
Yes it was, your header is still the same, and you've now re-spammed every
newsgroup again with your 'apology'. It doesn't get any dumber.

> I have never been on newsgroups before and not sure how to
> work them.
Yet you know how to spam them. Did you also learn to run before you could
walk?

> I hope you guys can forgive a bad choice.
"You go to hell! You go to hell and you die!" - Mr Garrison

1937. Re: Any receiver IC's?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 14:29:06 UTC
From: "Giancarlo Gian Moda, I7SWX" <i7swx@yahoo.com>
Message-ID: <1142864946.548229.300970@u72g2000cwu.googlegroups.com>
Source record: 13038

Hi,

if you like to see a very good DDS application using AD9954 visits:

http://www.radioamatore.it/i0cg/add9951.html

73

Gian
I7SWX

1938. Re: focus group question for new products

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 14:49:13 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1142866153.445666.80410@i39g2000cwa.googlegroups.com>
Source record: 13039

eternalsquire@comcast.net wrote:
> Tim,
>
> Would the following cover most of my entry level needs for sheet metal
> fab, for getting sheet metal in small enough shapes for my taig? I'll
> 'punch' holes by using the mill.
>
> The Eternal Squire
> ----------
>
> 18'' SHEET METAL FABRICATION TOOL KIT CUTTER ROLLER

That tools claims 18gauge capacity, and probably is thinking of steel
and could do some operations on thicker aluminum.

Not sure what kind of aluminum sheet you have, but 18gauge aluminum is
a bit wimpy for many electronic enclosures. It's OK for a small
mini-box, but very much less than ideal for anything larger.

That tool you point out is OK for a lot of work, but IMHO you'd also
need a "real" shear and a brake to do any sort of box fabrication. Some
of the bending can be done with a homebrew brake made out of 2x4's and
hinges but you'll get tired of this real quick.

If you think you can cut arbitrary shaped holes in large sheet metal
boxes with a milling machine, you have skills I do not have. But I
think it's more likely that you've never done much sheet metal
fabrication. A mill is not the best tool for cutting holes in sheet
metal (although clamping to sacrificial flat pieces of wood does help.)

Tim.

1939. Re: focus group question for new products

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 15:20:08 UTC
From: eternalsquire@comcast.net
Message-ID: <1142868008.916654.67200@g10g2000cwb.googlegroups.com>
Source record: 13040

> If you think you can cut arbitrary shaped holes in large sheet metal
> boxes with a milling machine, you have skills I do not have.

Not planning on large sheets anyway. But thanks for your comments,
they're helping me abandon overly expensive possibilities.

I'm thinking my best niche would be to custom mill boxes up to 2X2X1
with walls at least 1/4 inch thick, with top panel either 1/4 or 1/8
plate up to 2X2. That's plenty for QRP, subsystems, microcontroller
boxes, and some scientific apps.

The Eternal Squire

1940. Re: Any receiver IC's?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 16:23:16 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2006.03.20.16.23.16.257005@oceanfree.net>
Source record: 13041

On Mon, 20 Mar 2006 06:29:06 -0800, Giancarlo Gian Moda, I7SWX wrote:

> http://www.radioamatore.it/i0cg/add9951.html

I am not the OP, but thanks Leon and Gian. That DDS looks
like the final building block for my new rig.

73, Ed. EI9GQ.

--
Linux 2.6.15
Remove 'X' to reply by e-mail.
Yes, my username really is: nospam

1941. Re: focus group question for new products

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 16:30:07 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1142872207.674651.51130@g10g2000cwb.googlegroups.com>
Source record: 13042

eternalsquire@comcast.net wrote:
> > If you think you can cut arbitrary shaped holes in large sheet metal
> > boxes with a milling machine, you have skills I do not have.
>
> Not planning on large sheets anyway. But thanks for your comments,
> they're helping me abandon overly expensive possibilities.

If you think it's do-able, don't stop just because I said that I tried it and it didn't work for me :-).

Working sheet metal in a mill or a drill press has caused some, um, near-disasters in many amateur shops. Poor clamping resulting in spinning sheets with sharp edges are the most common but I've personally put one dent in a cement wall with some thick sheet in a belt sander :-).

> I'm thinking my best niche would be to custom mill boxes up to 2X2X1
> with walls at least 1/4 inch thick, with top panel either 1/4 or 1/8
> plate up to 2X2. That's plenty for QRP, subsystems, microcontroller
> boxes, and some scientific apps.

For sizes that small I think you ought to price out some common aluminum extrusions.

2"x2"x1" is really tiny for any experimenting. Not so bad for a small already-known-quantity project with a tiny tiny circuit board. But too small for most homebrew projects and it just barely accomodates a connector or switch or two on each side. And at that size you're smaller than most existing die-cast and miniboxes. Heck, you're smaller than an altoids box :-).

Or maybe you mean 2feet x 2feet x 1 feet? Even then you might want to see what standard size extrusions are around. Quarter inch walls will make a box that large be pretty heavy (not as heavy as the solid aluminum block that big though! By my calculation that'll be 700 pounds of aluminum as a solid block...)

Take a look at some of your competition:

http://www.globalspec.com/FeaturedProducts/Detail/RoseBoplaEnclosures/Aluminum_Extrusions_Custom_BuildABox/9443/0

I think you could one-up them by making a web tool for design/spec/order submittal. Having a selection of common extrusions to start with and then specifying the customizations (mostly holes!, maybe something about end panels, heck in my wish list I'd put painting and anodizing and lettering), punch in my credit card number, hit "order

now", and a couple days later the UPS guy brings a finished box. Seems feasible and a step beyond "fax us your diagram and we'll send you a quote". expresspcb.com and frontpanelexpress.com show that there is a real market for this sort of stuff, both "professional" and "amateur" customers buy from each.

The goal is not to be cheaper than the mass-producers are, but to offer true value in customization and ease of specifying/ordering.

Tim.

1942. Re: focus group question for new products

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 17:16:51 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1142875011.270322.252240@t31g2000cwb.googlegroups.com>
Source record: 13043

To elaborate a little bit about my typical needs and wants:

NEEDS:

3" x 4" x 5" box. Not too picky if it's die-cast or sheet metal or milled out of ingot. Front cover needs a rectangular hole about 2" x 3/4" to let a LCD show through. A couple of square buttons stick through the front panel. A couple of toggle switches stick through the front panel. A PCB is attached behind the front panel (where all these LCD's and switches are mounted).

Internally maybe a transformer. Two D-sub connectors on the sides, so I need nice D-sub holes.

Back panel has several BNC's and other stuff mounted in D-shape holes. Also a IEC line input connector (rectangular hole).

I'd happily pay $50 and maybe $100 for something like this fabbed in single quantities. I might make 2 or 3 orders a year. I'd expect a web or PC-based tool (for free) to help me specify the order, and a web order form that'd let me submit an order at 3AM on Saturday night when the kids are asleep and I have an hour to spec what I want. I'd expect delivery in a week or so. I'd expect the resulting box to be flawless and everything within tolerance and all the holes to be "clean".

WANTS:

Painted (powder-coated?) or anodized cabinet and/or panels.

Lettering on front/back/sides.

Internal threaded bosses or maybe slots for mounting PCB's and stuff.

These could add another $30-$100 to what I'd pay.

My standards about what I'd be willing to pay have little to do with retail prices of existing boxes or what I could hack out with a file and a nibbler but more to do with what typical prototyping services (expresspcb, frontpanelexpress) charge per job and a perceived value in a really finished custom box.
(And a little bit in the cost of specialty punches. I actually have a couple of D-subs and D cutters that I've picked up over the years.)

Some people will tell you that what I'm willing to pay is too high by a factor of ten. These are not your potential customers (and I don't think you'd ever make money by selling to them. No disrespect, I understand those who don't want to pay any money to have other people do work for them.) At the same time what I'm saying that I'm willing to

pay is a fraction (maybe 1/4 or 1/8th) what a local machine shop would charge for a one-off job. I'm not paying because I'm incapable of doing a shoddy job at putting all these holes in an off-the-shelf box, I'm paying because I want a really professionally customized box with nice holes made using punches I don't already own :-).

Tim.

1943. Re: website

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 18:20:07 UTC
From: safemale <safemale@earthlink.net>
Message-ID: <shst12hfh90tpcq8fkqs31d4h6fndlk3vm@4ax.com>
Source record: 13044

thanks for the web site

On Mon, 6 Jun 2005 06:23:11 -0500, "steve carey" <scarey@tds.net>
wrote:

>www.k9yk.com
>

1944. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 18:24:28 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <a7745$441ef35c$d135c4af$29949@MDI.CA>
Source record: 13045

What is the IP3 of a typical dual gate MOSFET mixer?
One can also use HC4066 or 4053 as the switching element at lower freqs.

JJ

1945. Re: Looking for 12V tube Rx project info

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 18:31:45 UTC
From: safemale <safemale@earthlink.net>
Message-ID: <c6tt12hpaa0m1hmu6bpo6cl9ho7mu2aarr@4ax.com>
Source record: 13046

hay dont forget the r392 it was a 24 volt plates
On 23 Jun 2005 12:56:12 -0700, LenAnderson@ieee.org wrote:

>
> Setchell-Carlson managed to do it with loctal-base tubes running
> off of a 24/28 VDC aircraft bus back in WW2 times. No dynamotor,
> just that cute little box referred to as a "range receiver" or
> BC-1206.
>
> I bought a couple of them many years ago, surplus, principally
> to get the nice compact 3-gang variable capacitor. Fired one
> up in the company lab at 26 VDC and it was still in-spec although
> those specs weren't the best. At 24 VDC the spec rating was
> marginal. At 22 VDC it was below spec...but then the filaments
> were also running cooler at 11 V each.
>
> Don't remember what the IF (135 KHz) BW was, but, running with
> a crystal-controlled converter ahead of it, the 195 to 500 KHz
> tuning range could cover 75 or 40 meters no problem. A thought.
>
> LenAnderson@ieee.org

1946. Re: Parts at Hamfests

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 18:53:23 UTC
From: safemale <safemale@earthlink.net>
Message-ID: <kutt12lk4teqnsad6esfk1cgf2scg35nfa@4ax.com>
Source record: 13047

are you thinking of Jim Pembleton
Pembleton Electronics fort wayne ind

On Sun, 31 Jul 2005 16:53:38 GMT, Richard
<"\"delete.this.\"rf.gillette"@ieee.org> wrote:

>At Midwest hamfests there is a guy that has a large collection of
>semiconductors. Anybody know his name or email address?
try
pemparts@ctlnet.com

phone: (260) 484-1812
fax: (260) 484-0163
addy on web site is out or date he moved 5 or 5 blocks one black north
and 2-3 west

pemparts@ctlnet.com
http://yellowpages.superpages.com/profile~SRC_google~T_Fort+Wayne~S_IN~PP_N~L_Fort+Wayne+I
N~C_Televisions+Retail~CID_00000515778~LID_eLY3b+kM29Cy82pCa%2FpnXw%3D%3D.htm

1947. Re: Remote Car Battery Voltage Monitoring

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 19:40:29 UTC
From: safemale <safemale@earthlink.net>
Message-ID: <d71u12t51he7eektbkknp1pmi4v2uq7gu0@4ax.com>
Source record: 12948
Cross-posted to: comp.home.automation,rec.autos.misc,rec.radio.amateur.homebrew

hay would 2 of the vw solar panel.s help charge the wheel chair
battery?????????????????
safe male
On Fri, 10 Mar 2006 02:43:25 -0500, "Robert Green"
<ROBERT_GREEN1963@YAH00.COM> wrote:

>"Scott" <acepilot@bloomer.net> wrote in message
>news:441019FA.20604@bloomer.net...
>> Why go through all that bother? Look on ebay for a solar panel. There
>> are a ton on small units that VW uses to keep the batteries topped off
>> while the cars are in transit. They are small 5-10 Watt units. Usually
>> go for about $10. Lay one on the dash and park the vehicle so the
>> windshield is facing south. The unit has a cigarette lighter adapter
>> and you just plug it in.
>
>That's the plan for now. Hopefully it will end the problem of run-down
>batteries. I may still need to go the "plug in" route because I want to
>also be able to charge my Dad's 24VDC scooter while it's loaded in the van.

1948. Amateur Radio Control Shifts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 20:14:19 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <RYydnfEOUpGIkILZnZ2dnUVZ_tidnZ2d@web-ster.com>
Source record: 12949
Cross-posted to: rec.models.rc.air,rec.radio.amateur.homebrew

For radio control on 6 meters using PPM -- what is the amount of
frequency shift, and which direction is it (please don't just say
'positive' or 'negative' -- I need to know which direction is 'pulse'
and which direction is 'not pulse').

Yes, I know there's no standard -- what do manufacturer's do these days?

Thanks in advance.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

1949. Re: Amateur Radio Control Shifts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 20:29:53 UTC
From: dougmc@frenzy.com
Message-ID: <5hETf.6838$1Z5.4822@tornado.texas.rr.com>
Source record: 12950
Cross-posted to: rec.models.rc.air,rec.radio.amateur.homebrew

In article <RYydnfEOUpGIkILZnZ2dnUVZ_tidnZ2d@web-ster.com>,
Tim Wescott <tim@seemywebsite.com> wrote:

| For radio control on 6 meters using PPM -- what is the amount of
| frequency shift, and which direction is it (please don't just say
| 'positive' or 'negative' -- I need to know which direction is 'pulse'
| and which direction is 'not pulse').

http://www.nobugs.org/engineer/uav/futaba-rx.html and
http://users.belgacom.net/TX2TX/tx2tx/english/tx2txgb1.htm may be of
some assistance, or at least there will be some pretty pictures.

Positive shift means that the frequency increases during a pulse, and
negative means it decreases. I don't think the exact amount of the
frequency change really matters, but I think it's normally around 1.5
KHz to 2.5 KHz.

Or, to make it really simple, for positive shift, `pulse' is about 2
KHz higher than `not pulse', and reverse it for negative shift. And
modern 6m stuff is positive shift.

| Yes, I know there's no standard -- what do manufacturer's do these days?

From http://www.fmadirect.com/detail.htm?item=1739&section=1 --

SPECIAL NOTE CONCERNING HAM BAND TRANSMITTERS: All current
transmitters use positive shift modulation. When you order for current
transmitters, your invoice will list the purchased item as 805FM50V2FJ
or 805FM53V2FJ. This receiver will work with all recently manufactured
transmitters. If you have an ACE transmitter or an old Futaba (prior
to around 1990), you will require an ACE version. Your invoice will
list the 805FM50V2ACE or 805FM53V2ACE. Please be advised, it is
unclear when Futaba changed from negative to positive shift
modulation. Unfortunately, unless you have access to test equipment,
you may not know if your old Futaba requires negative or positive
shift.

... so it looks like there IS a standard now, at least on the six
meter band stuff. I've heard some say that this isn't true, that
brand X 6m RX didn't workt with brand Y 6m TX, but details were never
really given.

--
Doug McLaren, dougmc@frenzy.com
Nine out of ten doctors agree that one out of ten doctors is an idiot.

1950. Re: Amateur Radio Control Shifts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 21:09:32 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <2ZCdnfE214aah4LZ4p2dnA@web-ster.com>
Source record: 12951
Cross-posted to: rec.models.rc.air,rec.radio.amateur.homebrew

Doug McLaren wrote:

> In article <RYydnfEOUpGIkILZnZ2dnUVZ_tidnZ2d@web-ster.com>,
> Tim Wescott <tim@seemywebsite.com> wrote:
-- snip --

> ... so it looks like there IS a standard now, at least on the six
> meter band stuff. I've heard some say that this isn't true, that
> brand X 6m RX didn't workt with brand Y 6m TX, but details were never
> really given.
>
That was useful, but I forgot to ask:

Is the space (no pulse) frequency the nominal frequency, or is it (more sensibly IMHO) 1/2 the shift below -- or at least _some_ amount below the nominal?

If I were designing such a rig I would have the space frequency (off, no pulse, whatever) be 1/2 of the shift _below_ the nominal frequency, and the mark frequency be 1/2 of the shift _above_. I may shade the space frequency to be a bit closer to the nominal frequency to balance out the spectrum, but I doubt that I'd stick it right onto the nominal frequency.

Thanks again.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

1951. Re: Amateur Radio Control Shifts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 21:20:46 UTC
From: dougmc@frenzy.com
Message-ID: <O0FTf.5434$uX5.2902@tornado.texas.rr.com>
Source record: 12952
Cross-posted to: rec.models.rc.air,rec.radio.amateur.homebrew

In article <2ZCdnfE214aah4LZ4p2dnA@web-ster.com>,
Tim Wescott <tim@seemywebsite.com> wrote:

| That was useful, but I forgot to ask:
|
| Is the space (no pulse) frequency the nominal frequency, or is it (more
| sensibly IMHO) 1/2 the shift below -- or at least _some_ amount below
| the nominal?

Do not know.

--
Doug McLaren, dougmc@frenzy.com
We can hike anytime. This is our chance to see cars driving. --Homer Simpson

1952. Re: Amateur Radio Control Shifts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 23:16:05 UTC
From: IFLYJ3 <wb4guk@speedbeam.com>
Message-ID: <1142896565.068434.327590@v46g2000cwv.googlegroups.com>
Source record: 12953
Cross-posted to: rec.models.rc.air,rec.radio.amateur.homebrew

The shift for the FM (frequency shift keying) is up to +1500 and -1500
about the nominal frequency. This is true for 72 MHz or 50 MHz. This is
used on 53 MHz but is not mandated on this band since the channels are
100 KHz wide.

Dan Thompson

Tim Wescott wrote:
> Doug McLaren wrote:
>
> > In article <RYydnfEOUpGIkILZnZ2dnUVZ_tidnZ2d@web-ster.com>,
> > Tim Wescott <tim@seemywebsite.com> wrote:
> -- snip --
>
> > ... so it looks like there IS a standard now, at least on the six
> > meter band stuff. I've heard some say that this isn't true, that
> > brand X 6m RX didn't workt with brand Y 6m TX, but details were never
> > really given.
> >
> That was useful, but I forgot to ask:
>
> Is the space (no pulse) frequency the nominal frequency, or is it (more
> sensibly IMHO) 1/2 the shift below -- or at least _some_ amount below
> the nominal?
>
> If I were designing such a rig I would have the space frequency (off, no
> pulse, whatever) be 1/2 of the shift _below_ the nominal frequency, and
> the mark frequency be 1/2 of the shift _above_. I may shade the space
> frequency to be a bit closer to the nominal frequency to balance out the
> spectrum, but I doubt that I'd stick it right onto the nominal frequency.
>
> Thanks again.
>
> --
>
> Tim Wescott
> Wescott Design Services
> http://www.wescottdesign.com
>
> Posting from Google? See http://cfaj.freeshell.org/google/

1953. Re: Amateur Radio Control Shifts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-20 23:53:36 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <JvGdnd-HadLn3YLZnZ2dnUVZ_tWdnZ2d@web-ster.com>
Source record: 12954
Cross-posted to: rec.models.rc.air,rec.radio.amateur.homebrew

IFLYJ3 wrote:
> The shift for the FM (frequency shift keying) is up to +1500 and -1500
> about the nominal frequency. This is true for 72 MHz or 50 MHz. This is
> used on 53 MHz but is not mandated on this band since the channels are
> 100 KHz wide.
>
> Dan Thompson
>
Thanks Dan. It has to be fairly close in to meet the spectral
requirements, of course -- I just didn't know what the relationship was
between nominal and reality.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

1954. Re: focus group question for new products

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-21 01:23:14 UTC
From: eternalsquire@comcast.net
Message-ID: <1142904194.667767.253450@i39g2000cwa.googlegroups.com>
Source record: 12955

Tim,

Thank you for making your wants and need crystal clear. You've
been a great help!

The Eternal Squire

Tim Shoppa wrote:
> To elaborate a little bit about my typical needs and wants:
>
> NEEDS:
>
> 3" x 4" x 5" box. Not too picky if it's die-cast or sheet metal or
> milled out of ingot. Front cover needs a rectangular hole about 2" x
> 3/4" to let a LCD show through. A couple of square buttons stick
> through the front panel. A couple of toggle switches stick through the
> front panel. A PCB is attached behind the front panel (where all these
> LCD's and switches are mounted).
>
> Internally maybe a transformer. Two D-sub connectors on the sides, so I
> need nice D-sub holes.
>
> Back panel has several BNC's and other stuff mounted in D-shape holes.
> Also a IEC line input connector (rectangular hole).
>
> I'd happily pay $50 and maybe $100 for something like this fabbed in
> single quantities. I might make 2 or 3 orders a year. I'd expect a web
> or PC-based tool (for free) to help me specify the order, and a web
> order form that'd let me submit an order at 3AM on Saturday night when
> the kids are asleep and I have an hour to spec what I want. I'd expect
> delivery in a week or so. I'd expect the resulting box to be flawless
> and everything within tolerance and all the holes to be "clean".
>
> WANTS:
>
> Painted (powder-coated?) or anodized cabinet and/or panels.
>
> Lettering on front/back/sides.
>
> Internal threaded bosses or maybe slots for mounting PCB's and stuff.
>
> These could add another $30-$100 to what I'd pay.
>
> My standards about what I'd be willing to pay have little to do with
> retail prices of existing boxes or what I could hack out with a file

> and a nibbler but more to do with what typical prototyping services
> (expresspcb, frontpanelexpress) charge per job and a perceived value in
> a really finished custom box.
> (And a little bit in the cost of specialty punches. I actually have a
> couple of D-subs and D cutters that I've picked up over the years.)
>
> Some people will tell you that what I'm willing to pay is too high by a
> factor of ten. These are not your potential customers (and I don't
> think you'd ever make money by selling to them. No disrespect, I
> understand those who don't want to pay any money to have other people
> do work for them.) At the same time what I'm saying that I'm willing to
> pay is a fraction (maybe 1/4 or 1/8th) what a local machine shop would
> charge for a one-off job. I'm not paying because I'm incapable of doing
> a shoddy job at putting all these holes in an off-the-shelf box, I'm
> paying because I want a really professionally customized box with nice
> holes made using punches I don't already own :-).
>
> Tim.

1955. Re: Amateur Radio Control Shifts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-21 02:04:19 UTC
From: David Hopper <no-spam0879@mindspring.com>
Message-ID: <ahmu129e0ps5iajb88m4bcc3cdh2blh2ms@4ax.com>
Source record: 12956
Cross-posted to: rec.models.rc.air,rec.radio.amateur.homebrew

On Mon, 20 Mar 2006 13:09:32 -0800, Tim Wescott <tim@seemywebsite.com>
wrote:

>That was useful, but I forgot to ask:
>
>Is the space (no pulse) frequency the nominal frequency, or is it (more
>sensibly IMHO) 1/2 the shift below -- or at least _some_ amount below
>the nominal?
>
>If I were designing such a rig I would have the space frequency (off, no
>pulse, whatever) be 1/2 of the shift _below_ the nominal frequency, and
>the mark frequency be 1/2 of the shift _above_. I may shade the space
>frequency to be a bit closer to the nominal frequency to balance out the
>spectrum, but I doubt that I'd stick it right onto the nominal frequency.
>

You got my curiosity up so I dragged in the ol' service monitor to see
what my 9C was doing. All of the pix were with the freq error meter on
the 1.5KHz range and the scope scale was on the +/-1.5KHz range.

The first was using a FP-TP-FM module on 08 (50.960MHz):

http://www.mindspring.com/~sbhopper/FP-TP-FM_08.jpg

Modulation is +/-1500Hz. The freq error meter is showing about 1KHz
low, but I am assuming it is the service monitor adjusting to the
non-symetrical deviation.

The second pic is with a FT-TP-FM module on 60 (72.990MHz):

http://www.mindspring.com/~sbhopper/FP-TP-FM_60.jpg

Inverted from the 6 meter.

The third pic is with the TP-FSM syntesized module set to channel 60:

http://www.mindspring.com/~sbhopper/TP-FSM_60.jpg

Same as the crystal module except the modulation is just a tad lower.

FWIW,
David - WD4JKH

--
David - WD4JKH

Valid email: no-spam0879@mindspring.com

1956. Re: Amateur Radio Control Shifts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-21 02:27:11 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <aeqdnXuvq8Xk-YLZnZ2dnUVZ_sadnZ2d@web-ster.com>
Source record: 12957
Cross-posted to: rec.models.rc.air,rec.radio.amateur.homebrew

David Hopper wrote:

> On Mon, 20 Mar 2006 13:09:32 -0800, Tim Wescott <tim@seemywebsite.com>
> wrote:
>
>
>
>>That was useful, but I forgot to ask:
>>
>>Is the space (no pulse) frequency the nominal frequency, or is it (more
>>sensibly IMHO) 1/2 the shift below -- or at least _some_ amount below
>>the nominal?
>>
>>If I were designing such a rig I would have the space frequency (off, no
>>pulse, whatever) be 1/2 of the shift _below_ the nominal frequency, and
>>the mark frequency be 1/2 of the shift _above_. I may shade the space
>>frequency to be a bit closer to the nominal frequency to balance out the
>>spectrum, but I doubt that I'd stick it right onto the nominal frequency.
>>
>
>
> You got my curiosity up so I dragged in the ol' service monitor to see
> what my 9C was doing. All of the pix were with the freq error meter on
> the 1.5KHz range and the scope scale was on the +/-1.5KHz range.
>
> The first was using a FP-TP-FM module on 08 (50.960MHz):
>
> http://www.mindspring.com/~sbhopper/FP-TP-FM_08.jpg
>
> Modulation is +/-1500Hz. The freq error meter is showing about 1KHz
> low, but I am assuming it is the service monitor adjusting to the
> non-symetrical deviation.
>
>
> The second pic is with a FT-TP-FM module on 60 (72.990MHz):
>
> http://www.mindspring.com/~sbhopper/FP-TP-FM_60.jpg
>
> Inverted from the 6 meter.
>
>
> The third pic is with the TP-FSM syntesized module set to channel 60:
>

> http://www.mindspring.com/~sbhopper/TP-FSM_60.jpg
>
> Same as the crystal module except the modulation is just a tad lower.
>
> FWIW,
> David - WD4JKH
>
>
>
That pretty much says it all. I guessed that +/-1500 was the number to
shoot for -- apparently your TX (Futaba?) agrees with me.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

1957. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-21 09:41:49 UTC
From: "Giancarlo Gian Moda, I7SWX" <i7swx@yahoo.com>
Message-ID: <1142934109.266286.184930@e56g2000cwe.googlegroups.com>
Source record: 12958

What is the IP3 of a typical dual gate MOSFET mixer?
One can also use HC4066 or 4053 as the switching element at lower freqs.

JJ

I really do not know what is the IP3 of a DG Mosfet as I never have seen any value reported. I hope some readers may have data on this. Certainly we have to look at IIP3 and OIP3 as the DGM mixer may have high conversion gain 15-20dB and is somewhat limited in dynamic range. Maybe it could have an OIP3 around +5dBm equivalent to an IIP3 of -10 to -20dBm .... more or less similar to the NE602.
The DGM mixer was a common mixer in the first series of transistorized RTX with valves PA (FT101Z, TS820 etc). The DGM has a good square law, better than JFET.

74HC4066 is OK at low frequency conversion but it has a haigh conversion loss, around 8-10dB and so associated noise figure.

Today the switched mixer should use fast bus switches like the FST3125 family when looking at high performance mixers. The examples are the CDG 2000 and STAR (Pic-A-Star) projects with IP3 around +40dBm and +36dBm, where the H-Mode Mixer with FST3125 is used.

73

Gian
I7SWX

1958. Re: Ink

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-21 12:31:29 UTC
From: HankG <hank@invalid.com>
Message-ID: <arydneEmFZSAb4LZnZ2dnUVZ_uqdnZ2d@comcast.com>
Source record: 12959
Cross-posted to: rec.ponds,rec.puzzles,rec.puzzles.crosswords,rec.pyrotechnics,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

<mshawjr@frontiernet.net> wrote in message
news:%WwTf.3014$tT.1641@news01.roc.ny...
> Sorry guys. The spam stuff was not my intent. I do oppoligies and won't
> happen again. I have never been on newsgroups before and not sure how to
> work them. I hope you guys can forgive a bad choice. Murphey

So how come I'm seeing repeat posts by you today? Your 'response' smacks of lies. You really have to work on your English. Next time, choose not to crosspost to a dozen groups. Murphey? Really!

HankG

1959. Re: Amateur Radio Control Shifts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-21 14:14:30 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1142950470.816333.111280@i39g2000cwa.googlegroups.com>
Source record: 12960
Cross-posted to: rec.models.rc.air,rec.radio.amateur.homebrew

Tim Wescott wrote:
> Doug McLaren wrote:
>
> > In article <RYydnfEOUpGIkILZnZ2dnUVZ_tidnZ2d@web-ster.com>,
> > Tim Wescott <tim@seemywebsite.com> wrote:
> -- snip --
>
> > ... so it looks like there IS a standard now, at least on the six
> > meter band stuff. I've heard some say that this isn't true, that
> > brand X 6m RX didn't workt with brand Y 6m TX, but details were never
> > really given.
> >
> That was useful, but I forgot to ask:
>
> Is the space (no pulse) frequency the nominal frequency, or is it (more
> sensibly IMHO) 1/2 the shift below -- or at least _some_ amount below
> the nominal?

With 2kHz shifts I'm not sure that this is particularly relevant. Most of the receivers probably have bandwidths of 10kHz or more.

Ideally the center frequency would fall in the center of the passband of the receiver, following your "1/2 the shift below" if the center frequency were truly accurately calibrated. And the receiver bandwidth would be simlar to the FSK spacing. But things have always been much looser than this.

> If I were designing such a rig I would have the space frequency (off, no
> pulse, whatever) be 1/2 of the shift _below_ the nominal frequency, and
> the mark frequency be 1/2 of the shift _above_. I may shade the space
> frequency to be a bit closer to the nominal frequency to balance out the
> spectrum, but I doubt that I'd stick it right onto the nominal frequency.

1kc at 50MHz is 20 ppm, and 30 or 40 years ago when I did 6M remote control I'm pretty sure that most of the crystals would've truly struggled to meet this spec. Some of the transmitters used LC circuits for tuning (I am not kidding!) and receive bandwidths were as wide as 100kHz or more. But that kind of slop was going away as the tube transmitters disappeared :-).

Of course the Gonset portable sets (transmitter and regen receiver both tuned only by LC's) set truly abysmal standards for stabilities and bandwidths. Maybe I'm being too pessimistic in extrapolating their specs to today!

Tim.

1960. Re: Amateur Radio Control Shifts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-21 15:49:00 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <U9ydnUJdLbD5vb3ZnZ2dnUVZ_t6dnZ2d@web-ster.com>
Source record: 12961
Cross-posted to: rec.models.rc.air,rec.radio.amateur.homebrew

Tim Shoppa wrote:

> Tim Wescott wrote:
>
>>Doug McLaren wrote:
>>
>>
>>>>In article <RYydnfEOUpGIkILZnZ2dnUVZ_tidnZ2d@web-ster.com>,
>>>>Tim Wescott <tim@seemywebsite.com> wrote:
>>
>>-- snip --
>>
>>
>>>>... so it looks like there IS a standard now, at least on the six
>>>>meter band stuff. I've heard some say that this isn't true, that
>>>>brand X 6m RX didn't workt with brand Y 6m TX, but details were never
>>>>really given.
>>>
>>
>>That was useful, but I forgot to ask:
>>
>>Is the space (no pulse) frequency the nominal frequency, or is it (more
>>sensibly IMHO) 1/2 the shift below -- or at least _some_ amount below
>>the nominal?
>
>
> With 2kHz shifts I'm not sure that this is particularly relevant. Most
> of the receivers probably have bandwidths of 10kHz or more.
>
> Ideally the center frequency would fall in the center of the passband
> of the receiver, following your "1/2 the shift below" if the center
> frequency were truly accurately calibrated. And the receiver bandwidth
> would be simlar to the FSK spacing. But things have always been much
> looser than this.
>
>
>>If I were designing such a rig I would have the space frequency (off, no
>>pulse, whatever) be 1/2 of the shift _below_ the nominal frequency, and
>>the mark frequency be 1/2 of the shift _above_. I may shade the space
>>frequency to be a bit closer to the nominal frequency to balance out the
>>spectrum, but I doubt that I'd stick it right onto the nominal frequency.
>
>

> 1kc at 50MHz is 20 ppm, and 30 or 40 years ago when I did 6M remote
> control I'm pretty sure that most of the crystals would've truly
> struggled to meet this spec. Some of the transmitters used LC circuits
> for tuning (I am not kidding!) and receive bandwidths were as wide as
> 100kHz or more. But that kind of slop was going away as the tube
> transmitters disappeared :-).
>
> Of course the Gonset portable sets (transmitter and regen receiver both
> tuned only by LC's) set truly abysmal standards for stabilities and
> bandwidths. Maybe I'm being too pessimistic in extrapolating their
> specs to today!
>
> Tim.
>
Current spec is 20kHz channels, so you have to be better than that.

You are correct that I should expect significant offsets, however -- I
should have been thinking in those terms.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

1961. Re: Amateur Radio Control Shifts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-21 16:05:59 UTC
From: dougmc@frenzy.com
Message-ID: <HvVTf.7551$1Z5.5156@tornado.texas.rr.com>
Source record: 12962
Cross-posted to: rec.models.rc.air,rec.radio.amateur.homebrew

In article <U9ydnUJdLbD5vb3ZnZ2dnUVZ_t6dnZ2d@web-ster.com>,
Tim Wescott <tim@seemywebsite.com> wrote:

| Current spec is 20kHz channels, so you have to be better than that.

Current spec is _10_ KHz channels. Sure, our (72 MHz) channels are 20
KHz apart, but that's because there's channels for other things
(pagers, industrial R/C, wireless microphones) in between our
channels.

--
Doug McLaren, dougmc@frenzy.com
"Give me ambiguity, or give me something else!"

1962. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-21 16:18:27 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <49b6d44202753d135c4af$21489@MDI.CA>
Source record: 12963

Anyone remember the CA3028 singly balanced mixer?
It was just 2 transistors as difference amp and current source transistor.
What would the IP3 be for it?

JJ

1963. Re: Amateur Radio Control Shifts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-21 17:15:46 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <mqKdnZiVZ4Enqb3ZRVn-og@web-ster.com>
Source record: 12964
Cross-posted to: rec.models.rc.air,rec.radio.amateur.homebrew

Doug McLaren wrote:

> In article <U9ydnUJdLbD5vb3ZnZ2dnUVZ_t6dnZ2d@web-ster.com>,
> Tim Wescott <tim@seemywebsite.com> wrote:
>
> | Current spec is 20kHz channels, so you have to be better than that.
>
> Current spec is _10_ KHz channels. Sure, our (72 MHz) channels are 20
> KHz apart, but that's because there's channels for other things
> (pagers, industrial R/C, wireless microphones) in between our
> channels.
>
The hazelnuts (or something) are blooming in Oregon, and I'm getting the
early spring allergies.

I had my head stuck in the 6m band, which gives exclusive 20kHz
channels. Yes, 72MHz RC is 10kHz.

I think I need to start tattooing this to my forearms.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

1964. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-21 19:53:33 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <d4939$442059bd$d135c4af$10136@MDI.CA>
Source record: 12965

For completeness what are the IP3 for a single BJT and single FET mixer?
The ARRL handbook recommended a source resistor voltage of 1V as optimum
bias.

JJ

1965. Re: Data needed on RF2065 MMIC - similar to MAR-3

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-21 22:37:07 UTC
From: Ted <kilocycles**@**yahoo.com>
Message-ID: <s6v022pro7jlqo7c8lseomgif9usas1nlc@4ax.com>
Source record: 12966

Allison,
I got the RF2065s as substitutes for the MAR-3/MSA-0385, so that's my problem. I was able to actually get some real MAR-6s, but I need a couple of the MAR-3 or substitutes. Not a bad deal on the RF2065s; 25 of them for $9.95 plus a little for shipping. I needed the data sheet just to convince myself that they'll really work.

I have another problem...now I can't find the ten MAR-6s that I bought earlier! Creeping old age, or something I guess! Unfortunately, they were shipped in a plain white business envelope, and they could very well be hiding in plain sight.

I like your point on the discrete transistor substitution as well. I'll keep that in mind. I have plenty of room on the board, as I'm building only the transmitter and PA chain (for 21 MHz), not the VFO and receiver as shown in the figure.

Thanks,
Ted

On Sat, 18 Mar 2006 03:58:30 GMT,
Allison-nospam@nouce.bellatlantic.net wrote:

>On Fri, 17 Mar 2006 18:48:51 -0500, TW <kilocycles**@**yahoo.com>
>wrote:
>
>>I need a datasheet on the RF2065 MMIC, or more specifically,
>>RF2065TR7M. Supposed to be similar to the MAR-3, but I can't prove
>>it. The guy I bought some from tested it as if it were a MAR-3, he
>>says.
---snip---
>
>For that application at 18mhz there is plenty of room for subs. The
>mar3 or something reasonably close will be fine. You only need
>enough gain to set the noise figure byb offsetting the losses in the
>DBMs and image stripping filters.
>
--snip---
>Or it's so old everyone forgot they made it! Really, it does
>happen!!!
>
>For circuits in EMRFD using MIMICs all you need to substitue them is:
>
> Gain
> Max power out
> Noise figure

>
>Then order the nearest MAR or ERA part from Minicircuits.
>
>Or as I've done in many cases is use a 2n3904 (2n5109
>if more bandwidth is needed) in a broadband 50ohm amp
>circuit (from earlier in the book). Same performance
>and I can build from my parts bin and tweek it for my usage.
>I save the mmics for where space or frequencies greater than
>100mhz are important to me.
>
>Most cases the lattitue is fairly wide and the specific circuit
>details will call out the needed info to apply it.
>
>
>Allison

1966. Re: Any receiver IC's?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-21 22:50:18 UTC
From: Ted <kilocycles**@**yahoo.com>
Message-ID: <ij0122dqts1ub6fj7uscdbk2djvajvd8gf@4ax.com>
Source record: 12967

You might take a look at the National LMH6502, LMH6720, and LMH6657 trio. The are the recommended replacement IF/AGC components for the obsolete CLC520 shown in the 2005 ARRL Handbook.

Ted

1967. Re: focus group question for new products

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-21 23:47:21 UTC
From: David Harmon <source@netcom.com>
Message-ID: <444a8f1b.17577250@news.east.earthlink.net>
Source record: 12968

On 20 Mar 2006 08:30:07 -0800 in rec.radio.amateur.homebrew, "Tim Shoppa" <shoppa@trailing-edge.com> wrote,
>Working sheet metal in a mill or a drill press has caused some, um,
>near-disasters in many amateur shops. Poor clamping resulting in
>spinning sheets with sharp edges are the most common

That is deadly true; but I would think if you are going to make a business of it that you would set up some _good_ clamping fixture that would hold your sheet with no slipping. How is PC Board milling done?

1968. New Program. Transmission Line Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-22 00:41:27 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <dvq6fm$h0$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 12969

There are two transmission lines in cascade plus a load impedance.

The first line can be considered to be the main line from the
transmitter.

The second line can be considered to be an impedance matching
transformer between the first line and the antenna.

What is the impedance and length of line in the transformer if the
antenna feedpoint impedance is not purely resistive?

What are the input impedances of the two lines, R+jX ?

What percentage of transmitter power is dissipated in the two lines?
What is the overall power efficiency?

The answers can be found in new program TWOLINES.

SWR is not involved.

Download program TWOLINES from website below in a few seconds and run
immediately.
--
....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

1969. SK-506 chimney clips

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-22 05:05:50 UTC
From: jack leishman <k8xx@chartermi.net>
Message-ID: <OW4Uf.87644$Fw6.4190@tornado.tampabay.rr.com>
Source record: 12970

I am trying to locate the "U" shaped spring clips that properly space the SK 506 chimney and ground the base of the 4-1000A tube. If anyone knows a source, I would like to hear from you. Thanks jack k8xx.

1970. Dual gate mosfet

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-22 10:24:49 UTC
From: John Wilkinson <john.wilkinson@philips.com>
Message-ID: <123y36rrc4q8f.v0odur2lszz6$.dlg@40tude.net>
Source record: 12971

Hi,
Is there any problem using a 50 Ohm resistor to set the input impedance of
a BF998 dual gate mosfet, at 45MHz.
Will this degrade noise etc?

Thanks,
John.

1971. 45MHz crystal filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-22 10:29:56 UTC
From: John Wilkinson <john.wilkinson@philips.com>
Message-ID: <z6i44v3psxuj$.xssrilru40qt.dlg@40tude.net>
Source record: 12972

Hi,
I am using a couple of 45MHz crystal filters in my first IF amp.
Has anyone any experience of using these, and give me any advice on
problems they encountered.
I think I have a problem with screening, as they require 700 Ohms
termination resisistance.

When the manufacturers spec a termination resistance, do the filters
themselves look like say 700 Ohms, or do I need to set this externally with
a resistance?

Best regards,
John.

1972. Re: 45MHz crystal filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-22 12:32:23 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <j8g222t89j0tkma3ckm94aegd457apjk17@4ax.com>
Source record: 12973

On Wed, 22 Mar 2006 10:29:56 +0000, John Wilkinson
<john.wilkinson@philips.com> wrote:

>Hi,
>I am using a couple of 45MHz crystal filters in my first IF amp.
>Has anyone any experience of using these, and give me any advice on
>problems they encountered.
>I think I have a problem with screening, as they require 700 Ohms
>termination resisistance.
>
>When the manufacturers spec a termination resistance, do the filters
>themselves look like say 700 Ohms, or do I need to set this externally with
>a resistance?

The filters -do not- look like 700 ohm, at least not in the stopband.
Unless a filter has a dissipative loss, the only way it can attenuate
is by reflecting out-of-band signal(s). To do this, it must be highly
mismatched.

The termination impedance is what the filter needs to see to perform
as specified. You must set this either with a resistance and/or an
amplifier designed to present this impedance to the filter.

1973. Re: Dual gate mosfet

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-22 13:21:46 UTC
From: John Wilkinson <john.wilkinson@philips.com>
Message-ID: <1k0uiegvyrme$.mw1lzf8i0ysc$.dlg@40tude.net>
Source record: 12974

On Wed, 22 Mar 2006 12:32:09 GMT, Allison-nospam@nouce.bellatlantic.net
wrote:

> On Wed, 22 Mar 2006 10:24:49 +0000, John Wilkinson
> <john.wilkinson@philips.com> wrote:
>
>>Hi,
>>Is there any problem using a 50 Ohm resistor to set the input impedance of
>>a BF998 dual gate mosfet, at 45MHz.
>>Will this degrade noise etc?
>>
>>Thanks,
>>John.
>
> Yes, 50 ohms is well below optimum for gain and noise.
> For best noise and gain the fet seems to be in the 2k region.
>
> Allison

Thanks for the help so far.
So, I was hoping to make this a good 50 Ohms input match. Looking at the
Philips datasheet for the BF998, for the agc and cross mod test, they show
a fully biased Mosfet, and an ac coupled 50 Ohm resistor across the input.
the input is from a 50 Ohm sig gen.

So does this mean if I set the gate resistance to say 2K, and ac couple a
50 Ohm input resistance, is that better? If so why?

Best regards,
John.

1974. Re: 45MHz crystal filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-22 16:25:24 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <dIednXF8YKL057zZ4p2dnA@web-ster.com>
Source record: 12975

Allison-nospam@nouce.bellatlantic.net wrote:

> On Wed, 22 Mar 2006 10:29:56 +0000, John Wilkinson
> <john.wilkinson@philips.com> wrote:
>
>
>>Hi,
>>I am using a couple of 45MHz crystal filters in my first IF amp.
>>Has anyone any experience of using these, and give me any advice on
>>problems they encountered.
>>I think I have a problem with screening, as they require 700 Ohms
>>termination resisistance.
>>
>>When the manufacturers spec a termination resistance, do the filters
>>themselves look like say 700 Ohms, or do I need to set this externally with
>>a resistance?
>>
>>Best regards,
>>John.
>
>
> It means looking from the filter into the next stage it should see a
> 700ohm resistive load.
>
> How you get from 700 to the optimum for the stage is up to you
> but FETs are higher input impedence for noise and gain and
> transistors (BJT) are generally lower. Devices like NE602,
> MC1350 and similar differential inputs are around 1.5k.
>
> Allison
>
It means that the source impedance of the amplifier driving the filter,
as well as the input impedance of the amplifier following need to be
700 ohms, resistive. Get this wrong and the filter shape will be off.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

1975. OCEAN STATE ELECTRONICS?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-22 17:13:38 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <6BfUf.5199$I7.481@trnddc03>
Source record: 12976

Anyone else having difficulty getting these folks on the phone? Been
busy for 3 days now.
A friend ordered via the net 6 weeks ago and never has been billed nor parts
received.
Tnx,

Dale W4OP

1976. Re: OCEAN STATE ELECTRONICS?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-22 17:42:04 UTC
From: - exray - <exray@coqui.net>
Message-ID: <122333da7ejbg2a@corp.supernews.com>
Source record: 12977

Dale Parfitt wrote:

> Anyone else having difficulty getting these folks on the phone? Been
> busy for 3 days now.
> A friend ordered via the net 6 weeks ago and never has been billed nor parts
> received.
> Tnx,
>
> Dale W4OP
>
>

They have a nasty habit of simply cancelling an order without
notification if the item is not in stock.
Been there, done that.

-Bill

1977. Eddystone dial

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-22 17:47:16 UTC
From: Doc <lemerson@juno.com>
Message-ID: <1143049636.448285.24980@j33g2000cwa.googlegroups.com>
Source record: 12978

Does anyone in the group have any idea of what an Eddystone dial, Model 898, is worth. I bought a new one, along with the parts for the Ted Crosby HBR receiver many years ago, but never got around to building it. The XYL is pushing me to downsize and I need to start somewhere. I may have an interested party, but can list it on e-Bay if this falls through. I'd like to get some idea of where to start.
Doc, W4ITJ

1978. Eddystone dial

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-22 17:47:18 UTC
From: Doc <lemerson@juno.com>
Message-ID: <1143049638.368412.25100@j33g2000cwa.googlegroups.com>
Source record: 12979

Does anyone in the group have any idea of what an Eddystone dial, Model 898, is worth. I bought a new one, along with the parts for the Ted Crosby HBR receiver many years ago, but never got around to building it. The XYL is pushing me to downsize and I need to start somewhere. I may have an interested party, but can list it on e-Bay if this falls through. I'd like to get some idea of where to start.
Doc, W4ITJ

1979. Re: OCEAN STATE ELECTRONICS?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-22 18:35:14 UTC
From: gagnonrchrd@netscape.net
Message-ID: <1143052514.035354.209460@e56g2000cwe.googlegroups.com>
Source record: 12980

Yes O.S. can be difficult. Unless you try to call around the local time
they open, forget getting through via telephone. They are a small
operation.

Been there done that for me also.

Richard

- exray - wrote:
> Dale Parfitt wrote:
>
> > Anyone else having difficulty getting these folks on the phone? Been
> > busy for 3 days now.
> > A friend ordered via the net 6 weeks ago and never has been billed nor parts
> > received.
> > Tnx,
> >
> > Dale W4OP
> >
> >
>
> They have a nasty habit of simply cancelling an order without
> notification if the item is not in stock.
> Been there, done that.
>
> -Bill

1980. Re: Eddystone dial

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-22 19:16:51 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <DohUf.4878$hC.187@trnddc08>
Source record: 12981

"Doc" <lemerson@juno.com> wrote in message
news:1143049636.448285.24980@j33g2000cwa.googlegroups.com...
> Does anyone in the group have any idea of what an Eddystone dial, Model
> 898, is worth. I bought a new one, along with the parts for the Ted
> Crosby HBR receiver many years ago, but never got around to building
> it. The XYL is pushing me to downsize and I need to start somewhere. I
> may have an interested party, but can list it on e-Bay if this falls
> through. I'd like to get some idea of where to start.
> Doc, W4ITJ
>
If this is the 898:
http://www.parelectronics.com/pics/w7zoi14.jpg

I bought mine on EBay for around $10.

Dale W4OP

1981. Re: 45MHz crystal filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-22 19:22:32 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <Y8KdnSBsV-hwPrzZnZ2dnUVZ_tWdnZ2d@web-ster.com>
Source record: 12982

Allison-nospam@nouce.bellatlantic.net wrote:

> On Wed, 22 Mar 2006 08:25:24 -0800, Tim Wescott <tim@seemywebsite.com>
> wrote:
>
>
>>Allison-nospam@nouce.bellatlantic.net wrote:
>>
>>
>>>On Wed, 22 Mar 2006 10:29:56 +0000, John Wilkinson
>>>><john.wilkinson@philips.com> wrote:
>>>
>>>
>>>
>>>>Hi,
>>>>I am using a couple of 45MHz crystal filters in my first IF amp.
>>>>Has anyone any experience of using these, and give me any advice on
>>>>problems they encountered.
>>>>I think I have a problem with screening, as they require 700 Ohms
>>>>termination resisistance.
>>>>
>>>>When the manufacturers spec a termination resistance, do the filters
>>>>themselves look like say 700 Ohms, or do I need to set this externally with
>>>>a resistance?
>>>>
>>>>Best regards,
>>>>John.
>>>
>>>
>>>It means looking from the filter into the next stage it should see a
>>>700ohm resistive load.
>>>
>>>How you get from 700 to the optimum for the stage is up to you
>>>but FETs are higher input impedence for noise and gain and
>>>transistors (BJT) are generally lower. Devices like NE602,
>>>MC1350 and similar differential inputs are around 1.5k.
>>>
>>>Allison
>>>
>>
>>It means that the source impedance of the amplifier driving the filter,
>>_as well as_ the input impedance of the amplifier following need to be
>>700 ohms, resistive. Get this wrong and the filter shape will be off.
>

>
> Ah, I've done a few filters in life. While your right your way to
> fast to audit.
>
>
>>>It means looking from the filter into the next stage it should see a
>>>700ohm resistive load.
>
>
> Maybe that should have been for the pendantic.
>
> It means looking from the filter into the adjacent stages it should
> see a 700ohm resistive load.
>
> There the use of "adjacent" rather than "next" should satisfy.
>
>
> Allison
>
Yes, I think you have more experience than me, and I suppose I was being pedantic -- but they do want good termination on both ends.

I forgot to add the part that would always happen in my lab: make sure to do a few sweeps, because no matter what my design looks like on paper I always get it wrong the first few times.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

1982. Re: Eddystone dial

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-23 01:43:29 UTC
From: w8ji@akorn.net
Message-ID: <1143078209.572601.98310@i40g2000cwc.googlegroups.com>
Source record: 12983

Doc wrote:
> Does anyone in the group have any idea of what an Eddystone dial, Model
> 898, is worth. I bought a new one, along with the parts for the Ted
> Crosby HBR receiver many years ago, but never got around to building
> it. The XYL is pushing me to downsize and I need to start somewhere. I
> may have an interested party, but can list it on e-Bay if this falls
> through. I'd like to get some idea of where to start.

If you have all the parts, I'd be interested in them all. I have lots
of dials, but would like to recreate the HBR receiver I built in the
early 60's.

As for the dial, expect about 30-50 dollars. You might do better, but
most fall in that range.

73 Tom

1983. Re: OCEAN STATE ELECTRONICS?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-23 03:09:23 UTC
From: Tom Coates <tecoatesHatesSpam@comcast.net>
Message-ID: <p8udnUb0PqMujL_ZRVn-vA@comcast.com>
Source record: 12984

Earlier this month, I ordered on a Sunday and the goods arrived the
following Sunday, in the hands of a neighbor, to whom they had been
misdelivered. When I ran the UPS tracking number, I found that he had
received the box on Wednesday. So, apparently OSE had shipped the first
business day after receiving the order. Ya never know.

Tom

<gagnonrchrd@netscape.net> wrote in message
news:1143052514.035354.209460@e56g2000cwe.googlegroups.com...
> Yes O.S. can be difficult. Unless you try to call around the local time
> they open, forget getting through via telephone. They are a small
> operation.
>
> Been there done that for me also.
>
> Richard
>
>
> - exray - wrote:
> > Dale Parfitt wrote:
> >
> > > Anyone else having difficulty getting these folks on the phone?
Been
> > > busy for 3 days now.
> > > A friend ordered via the net 6 weeks ago and never has been billed nor
parts
> > > received.
> > > Tnx,
> > >
> > > Dale W4OP
> > >
> > >
> >
> > They have a nasty habit of simply cancelling an order without
> > notification if the item is not in stock.
> > Been there, done that.
> >
> > -Bill
>

1984. 45 MHz IF breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-23 07:50:41 UTC
From: John Wilkinson <john.wilkinson@philips.com>
Message-ID: <1jimvb5qzpfuz.eqwrplvmo554$.dlg@40tude.net>
Source record: 12985

Hi,
OK I have a 45MHz crystal filter for my first IF.
The first LO ranges from 45-75MHz.
To test I am using a 45.455MHz LO, which is a pll design.
When I connect up the LO to the mixer, with no input signal I get a -80dBm level out of my IF stage!!
The PLL is clocked off 1MHz ref divided down to 5KHz. The 1MHz ref is a TTL signal. Could this be the cause of the problem, and if so how do I get around it?

Thanks,
John.

1985. Re: 45MHz crystal filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-23 09:08:01 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1143104881.443830.24440@e56g2000cwe.googlegroups.com>
Source record: 12986

Hi John:
terminations are an integral part of a filter design. there are a few
usual or widespread impedances in use. actually the impedance has a
marked effect on the filter's bandwidth, more than on shape. the
narrower the filter, the lower the impedance.
much more critical is the screening problem: the filters's cases must
be very well grounded! any leakage here goes around the filter.it's not
enough to solder to ground the relevant lead: you have to add a strap
from the case to ground.
Saandy 4Z5KS

John Wilkinson wrote:
> Hi,
> I am using a couple of 45MHz crystal filters in my first IF amp.
> Has anyone any experience of using these, and give me any advice on
> problems they encountered.
> I think I have a problem with screening, as they require 700 Ohms
> termination resisistance.
>
> When the manufacturers spec a termination resistance, do the filters
> themselves look like say 700 Ohms, or do I need to set this externally with
> a resistance?
>
> Best regards,
> John.

1986. Re: 45 MHz IF breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-23 11:54:29 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2006.03.23.11.54.28.739213@oceanfree.net>
Source record: 12987

On Thu, 23 Mar 2006 07:50:41 +0000, John Wilkinson wrote:

> Hi,
> OK I have a 45MHz crystal filter for my first IF. The first LO ranges from
> 45-75MHz.
> To test I am using a 45.455MHz LO, which is a pll design. When I connect
> up the LO to the mixer, with no input signal I get a -80dBm level out of
> my IF stage!!

-80 dBm at the IF output sounds pretty good. Are you using a
high gain, wide bandwidth IF amplifier? How good is the stopband
rejection of your IF filter? Two pole roofing filters are often
not much better than -20 to -25dB.

What kind of mixer are you using? A well balanced or double-balanced
mixer will help to keep the local oscillator signal out of the IF.

> The PLL is clocked off 1MHz ref divided down to 5KHz. The 1MHz ref is a
> TTL signal. Could this be the cause of the problem, and if so how do I get
> around it?
>
> Thanks,
> John.

PLL oscillators can be very noisy, but it would take a very poor
design to produce strong spurious signals at +/- several hundred
kHz. Designing a PLL from scratch is not easy unless you have a
spectrum analyser or a good receiver that covers the VCO frequency
+/- a few MHz. Pay careful attention to grounding and screening,
especially around the VCO and loop filter. You must keep those
nasty TTL square waves away from the VCO. Make sure the DC supply
to the VCO and loop filter is very clean and stable.

73, Ed. EI9GQ.

--
Linux 2.6.15
Remove 'X' to reply by e-mail.
Yes, my username really is: nospam

1987. Re: 45 MHz IF breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-23 15:16:58 UTC
From: eternalsquire@comcast.net
Message-ID: <1143127018.329411.87140@j33g2000cwa.googlegroups.com>
Source record: 12988

I've been seeing your postings for a while now. How you thought of
writing a book?
Seriously.

The Eternal Squire

1988. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-23 17:35:41 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <dd0c9$4422dc6d$d135c4af$22446@MDI.CA>
Source record: 12989

Allison-nospam@nouce.bellatlantic.net wrote in
news:grd022teq37o91uead7rd0tt44pdcj56v4@4ax.com:

> I've used it and have a box load of them (3028, 3026 and related
> parts) still. IP3 depends on bias applied and load it's decent and
> far above the single transistor mixer. If the input and output are
> balanced the IP3 is around the -10 to 0dbm range depending on
> bias current and specific circuit. It's advantage is the LO power
> needed is quite low as well as low DC power needs.
>
> It's still possible to find the parts or related differential pair
> with current source parts (RCA had a whole series of them).
>
> They also make decent AGC If amps.
>
> Allison

The singly balanced mixer using 2 DG MOSFETs seem to be better still.
Does it have a higher IP3 than a single ended mixer?

Why use a AD831 if the noise figure is 10dB?

JJ

1989. FA: XR IC's, old parts, Sprague caps, builders stuff & more!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-24 03:07:50 UTC
From: "Jim, KK1W" <kk1w@charter.net>
Message-ID: <boJUf.708$VA1.382@fe04.lga>
Source record: 12990
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Hi,

Just a few days left on some good stuff cheap! Low starting bids, no minimums, good feedback rating. A super chance to stock the parts bin and save space in the landfills for more deserving stuff.

Take a look at these auctions: http://search.ebay.com/_W0QQsassZkk1w2000.

Lots of old and new parts, caps, resistors, pots, coils, meters, crystals and more. Low starting bids and good feedback rating.

Thanks for looking,

Jim, KK1W

1990. Aprspoint version 3.1 available

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-24 07:25:57 UTC
From: "hxc98@yahoo.com" <hxc98@yahoo.com>
Message-ID: <1143185157.803616.64210@i39g2000cwa.googlegroups.com>
Source record: 12991

Fixed several issues raised by users regarding 3.0, Specifically

1. How the server filter setting is handled,
2. Server report path correction,
3. Position dialog default values,
4. Persisted settings for station and gps tracking,

Check http://www.aprspoint.com/ for details. Thanks.

1991. Homebuilt NBFM Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-24 07:43:15 UTC
From: zaffle@gmail.com
Message-ID: <1143186195.616553.91900@i40g2000cwc.googlegroups.com>
Source record: 12992

I'm hoping I can get some ideas and guidance here...

Here's the story so far:
I'm trying to build a Narrow Band (and/or Super Narrow Band) FM Receiver, targetted primarily at frequencies around 75MHz (The band our Fire service operates on here).
Now, I know the MC16136 IC would be almost perfect, and I can find many circuit diagrams for it, as well as for the famous TDA7000 (and children of the TDA7000), however, I can't find a reliable source in New Zealand for these two ICs.

So what I am looking for is, a circuit diagram for a NFM receiver that uses current production chips, that I can get my hands on. (I am considered building a few of these, but not enough that I can order these chips from overseas).

If anyone has any ideas, or places I can try, etc I would very much appreciate the input.

I do have some electronic skills, and can build basic single layer PCBs, so I'm not a total novice.

Obviously what-ever I eventually come up with, I will be posting such circuit diagrams on the Internet, share and enjoy, etc.\

Thanks,

Nick

1992. Re: Homebuilt NBFM Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-24 09:32:02 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1143192722.820392.8430@i39g2000cwa.googlegroups.com>
Source record: 12993

Farnell sells the TDA7000, you should be able to get some from them.
It's the easiest way to build a simple FM Rx.

Leon

1993. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-24 16:36:11 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <b08e3$44241ffb$d135c4af$8665@MDI.CA>
Source record: 12994

>>Why use a AD831 if the noise figure is 10dB?
>
> It has gain, high IP3 and 10db my mixer standard is not that bad.
> A low gain RFamp with low noise figure will override mixer noise.
> Of course the RFamp must have a good IP3 as well.
>
> Allison
Ok, I like to try the AD831.
When is dual supply better than single ended?
There must be a socket to fit the package but is it all right to solder
tiny leads to it for prototyping?

JJ

1994. SolderSmoke#18: AB amps, HW-8, LTSpice, Aurora, Antennas, Mars, Saturn

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-24 18:38:23 UTC
From: bill.meara@gmail.com
Message-ID: <1143225503.206516.80380@e56g2000cwe.googlegroups.com>
Source record: 12995
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.basics,sci.astro.amateur

SolderSmoke!
A SHOW FOR ELECTRONICS HOMEBREWERS!

http://www.ourmedia.org/node/191977

Topics discussed in SolderSmoke #18:

-- Designing class AB amps with LT Spice
-- Solar Max and aurora in New York (1969)
-- Fishing Pole rotateable dipoles
-- Fixing HW-8 with field expedient soldering iron
-- Hack-A-Day
-- Homebrew MP-3 player
-- Shacktopus
-- Work benches
-- Mars Orbiter, Water on Saturn's moon
-- Video from Alps http://www.ourmedia.org/user/36170
-- MAILBAG: G4GOY, NT7S, Mark in NJ, Michael in
Australia, RSGB

Listen at: http://www.ourmedia.org/node/191977

Background:
Tired of listening to Led Zepplin or NPR on your
I-Pod? Wouldn't you like to be able to carry with
you the kinds of ham radio conversations that you
listen to while in your radio shack?
Mike, KL7R, in Juneau, Alaska, and Bill, M0HBR, in
London, England meet regularly on the ECHOLINK system
to discuss their homebrew radio projects. We are
making them available as PODCASTS.

You can subscribe to the program, have them downloaded
to your MP-3 player, and listen to them at your
convenience. To subscribe, just cut and paste this URL
into your I-poder (or similar) software. (There have
been some problems with this subscription URL.)

http://www.ourmedia.org/mediarss/user/36170

If you don't have an MP3 player you can just go to the
site below and listen to the latest program (and
earlier editions) using the audio software on your
computer.

http://www.ourmedia.org/node/191977

Here's the homepage for our show. All our programs are available here. There are also some videos, a blog and links to some of the sites and documents we've been discussing:
http://www.ourmedia.org/user/36170

We hope you enjoy the program. Please send us feedback.

73 from London
Bill M0HBR N2CQR CU2JL
http://www.qsl.net/n2cqr

1995. Freq selective VM

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-25 13:45:17 UTC
From: Ralph Lane <rlane7301@comcast.net>
Message-ID: <vuSdnfaknpt61bjZnZ2dnUVZ_vGdnZ2d@comcast.com>
Source record: 12996

I have a Philco/ Sierra mod 127C that I wish to repair and need a schematic.
Decaying batteries has done a number on it.

Thanks,
Ralph

1996. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-25 17:10:39 UTC
From: "Giancarlo Gian Moda, I7SWX" <i7swx@yahoo.com>
Message-ID: <1143306639.128205.81900@g10g2000cwb.googlegroups.com>
Source record: 12997

Hi all,

Allison has given important information on mixers data.

His comments are very usefull.

I would like to underscore the last note:

> All of that is good but unless the post mixer amp, IF and filters
following it are up to the task and well matched the results can be
very disappointing. When going to that level of performance one
needs to look at the recieving system and examine carefully.

It is right to relook at a receiver design when selecting a high
performance mixer. The limiting problems will show up in other stages
as the improuvements may not be very detectable.... amplifiers,
filters, l.o. phase noise...

Well one need to start from somewhere to improuve a receiver. If the
non mixer stages have a maximum IP3 of around +15dBm, certainly a
+35/40dBm mixer may not make much of a difference, unless it is
replacing a NE602. In this case you may use the I7SWX 1 transformer
double balanced mixer using the FST3125 (half of an H-Mode mixer) with
an IP3 of +25dBm.

As an example, I defined with afriend of mine a mod on the Elekraft K2.
The 1st mixer (TUF) was replaced by an I7SWX 2T H-Mode Mixer followed
by a 10kHz BW 2 xtal roofing filter . Two tones at 7.050 and 7.070 MHz

IP3 Results of the K2 were:

Original mixer: +15dBm
with H-Mode Mixer: +27dBm

as you may see these are important differences. The actual limiting
stage is the original post mixer amplifier.

73

Gian
I7SWx

1997. New program. TRANCOIL

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-25 17:33:00 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <9uidnbvxuaV947jZRVnyrg@bt.com>
Source record: 12898

A loading coil inserted in an antenna, or a close-wound helical, can
be considered to be a transmission line. It behaves as such.

From a coil's physical dimensions, program TRANCOIL calculates the
line's distributed Inductance, Capacitance and Resistance including
radiation resistance.

Also Characteristic Impedance, Phase-shift, Propagation Velocity and
Attenuation.

Should the coil be used as an antenna, the resonant frequencies are
found, also the feedpoint impedance, R+jX, versus test frequency.

Input data can be varied via the keyboard to observe how the coil
performs versus length, diameter, number of turns and frequency.

The program is both educational and practical.

Download program TRANCOIL in a few seconds from website below and run
immediately.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

1998. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-25 17:48:23 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <b1c68$44258267$d135c4af$829@MDI.CA>
Source record: 12899

"Giancarlo Gian Moda, I7SWX" <i7swx@yahoo.com> wrote in
news:1143306639.128205.81900@g10g2000cwb.googlegroups.com:

> Well one need to start from somewhere to improuve a receiver. If the
> non mixer stages have a maximum IP3 of around +15dBm, certainly a
> +35/40dBm mixer may not make much of a difference, unless it is
> replacing a NE602. In this case you may use the I7SWX 1 transformer
> double balanced mixer using the FST3125 (half of an H-Mode mixer) with
> an IP3 of +25dBm.
> >
> Gian
> I7SWx
>
That is a very interesting suggestion. Where can I find the 1 transformer
DBM using the FST3125?

JJ

1999. New program. TRANCOIL

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-25 17:55:16 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <O9GdnXhDM_eHGbjZRVnyrQ@bt.com>
Source record: 12900

A loading coil inserted in an antenna, or a close-wound helical, can
be considered to be a transmission line. It behaves as such.

From a coil's physical dimensions, program TRANCOIL calculates the
line's distributed Inductance, Capacitance and Resistance including
radiation resistance.

Also Characteristic Impedance, Phase-shift, Propagation Velocity and
Attenuation.

Should the coil be used as an antenna, the resonant frequencies are
found, also the feedpoint impedance, R+jX, versus test frequency.

Input data can be varied via the keyboard to observe how the coil
performs versus length, diameter, number of turns and frequency.

The program is both educational and practical.

Download program TRANCOIL in a few seconds from website below and run
immediately.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

2000. OT: Hamming along the Alcan Highway

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-25 18:11:18 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <316ba$442587c3$4251297f$24613@DIALUPUSA.NET>
Source record: 12901

Gail (KB9MII) and I (WX6RST) are going up the Alcan to Wasilla by way of Seattle in June. Can anybody shed light on whether there is any activity along this route, especially on 2 meters. We can jury-rig anything from 80 meters to 1 Gig if we have to, but 2 would work exceptionally well.

Jim

2001. Re: OT: Hamming along the Alcan Highway

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-25 18:52:33 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-6B4526.09524325032006@netnews.worldnet.att.net>
Source record: 12902

In article <316ba$442587c3$4251297f$24613@DIALUPUSA.NET>,
"RST Engineering" <jim@rstengineering.com> wrote:

> Gail (KB9MII) and I (WX6RST) are going up the Alcan to Wasilla by way of
> Seattle in June. Can anybody shed light on whether there is any activity
> along this route, especially on 2 meters. We can jury-rig anything from 80
> meters to 1 Gig if we have to, but 2 would work exceptionally well.
>
> Jim
>
>

9:30Am Pacific 14292.0Khz Alaska Pacific Net

Me

2002. Re: Connection for clock distribution

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-25 20:43:25 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <NXhVf.9224$6%2.4606@trnddc08>
Source record: 12903

John,
How about a miniature stereo phono plug? These have 2 signal circuits plus a ground. They're common, they're available in many PCB configurations, and they're cheap.

Joe
W3JDR

"John Wilkinson" <johnwilkinson@clara.co.uk> wrote in message news:pz9hqkfgbjzv$.bt57lm5w2m2p$.dlg@40tude.net...
> Hi,
> I have a 1MHz clock that I need to disribute to several boards. I am using
> RS485 drivers and receivers to do this, along with twisted screened
> cable.
>
> The question is that I need a 2 pole pcb connector that is screened.
> Does anyone know of such a beast?
>
> Thanks,
> John.

2003. Re: Eddystone dial

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-25 21:23:52 UTC
From: dkelly42@cox.net
Message-ID: <1143321832.545680.142220@g10g2000cwb.googlegroups.com>
Source record: 12904

> Dale W4OP,

Dale,

I believe you posted an e-mail and a link to QRP-L a while back to show your receiver. Should have said this before but better late than never. Nice job.

If I remember correctly you used a basic 160M receiver with multiple front end convertors. Also I believe you used blue backlighting?

Don,

K5UOS

2004. Re: Hamming along the Alcan Highway

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-25 21:29:48 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <dDiVf.14203$6a1.500@fed1read04>
Source record: 12905

See BC Repeater lists at URL;
http://www.bcarcc.org/

Also
http://www.bcarcc.org/bcnorth.pdf

--
CL -- I doubt, therefore I might be !

"RST Engineering" <jim@rstengineering.com> wrote in message
news:316ba$442587c3$4251297f$24613@DIALUPUSA.NET...
> Gail (KB9MII) and I (WX6RST) are going up the Alcan to Wasilla by way of
> Seattle in June. Can anybody shed light on whether there is any activity
> along this route, especially on 2 meters. We can jury-rig anything from
> 80 meters to 1 Gig if we have to, but 2 would work exceptionally well.
>
> Jim
>

2005. Re: Eddystone dial

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-25 23:54:28 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <UKkVf.5060$ES3.3207@trnddc02>
Source record: 12906

<dkelly42@cox.net> wrote in message
news:1143321832.545680.142220@g10g2000cwb.googlegroups.com...
>> Dale W4OP,
>
> Dale,
>
> I believe you posted an e-mail and a link to QRP-L a while back to show
> your receiver. Should have said this before but better late than never.
> Nice job.
>
> If I remember correctly you used a basic 160M receiver with multiple
> front end convertors. Also I believe you used blue backlighting?
>
> Don,
>
> K5UOS

Hi Don,
Thanks for the kind words. The receiver is based on W7ZOI's Progressive RX
from the late 80's. To Wes's excellent design I added,
S meter
AM detection
LM386 for loudspeaker w/ tone control
audio notch filter
Homebrew 5/2.5/.5 xtal filters
fast/slow/off AGC

80M RX with xtal controlled converters for 160/49/40/20/15/10ABC
The VFO drifts a little over 150Hz in the 1st 5 minutes then settles down to
+/- 20Hz in a 5 minute period. Wonderful sound and gets more use than the
PRO II
73,

Dale W4OP
>

2006. Re: 45 MHz IF breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-26 02:09:08 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <4425f7c4$0$21305$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 12907

Unless you have to move the IF osc around, why not use a crystal?
With a 5 KHz PLL reference, you might have some sidebands from this.
What is the cutoff of the loop filter?

R

John Wilkinson wrote:
> Hi,
> OK I have a 45MHz crystal filter for my first IF.
> The first LO ranges from 45-75MHz.
> To test I am using a 45.455MHz LO, which is a pll design.
> When I connect up the LO to the mixer, with no input signal I get a -80dBm
> level out of my IF stage!!
> The PLL is clocked off 1MHz ref divided down to 5KHz. The 1MHz ref is a TTL
> signal. Could this be the cause of the problem, and if so how do I get
> around it?
>
> Thanks,
> John.

2007. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-26 09:34:28 UTC
From: "Giancarlo Gian Moda, I7SWX" <i7swx@yahoo.com>
Message-ID: <1143365668.224763.298690@i40g2000cwc.googlegroups.com>
Source record: 12908

Hi JJ,

the note on the 1T DBM was reported in RadCom, Technical Topics column, June 2004.

I asked a friend to insert all mixer infos in my web page www.qsl.net/i7swx but I do not know when he will be able to do it. In my web page in homebrewing you my read the experiences and measuremnts done by JA9TTT on both versions (3T & 2T) of the H-Mode Mixer. This is a software package translation from japanese but it is understandable. You will be able to see Spectrum Analyzer measurents too.

If you send me (callsignatyahoo.com) your e-mail address I can send you the complete 1T DBM note in english (more stuff than in TT).

A NOTE for ALLISON ... I see you have been fiddling with DEC stuff. Were you working for DEC or a customer? I was with DEC for a quarter of a century ...hi

73

Gian
I7SWX

2008. Re: Eddystone dial and custom dial plates

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-26 15:00:39 UTC
From: dkelly42@cox.net
Message-ID: <1143385239.766015.160760@i39g2000cwa.googlegroups.com>
Source record: 12909

Well Dale it looks very nice and obviously works well too. I thought I remembered you saying the Progressive Receiver. I am glad I had a chance to compliment you.

Since the subject was the Eddiestone dial I expect that was probably a chore to install. I usually build homebrew dial chord and drum mechanisms and more recently use the flange type Jackson Brothers and Oren Elliot drives. I just figured out a way to make custom dial plates. Probably an old idea but new to me.

I just finished a 40M receiver for a SSB transceiver. I thought about using a small blank CD for the dial plate. What I ended up doing was getting a piece of brass sheet from ACE Hardware and using a 2 1/4" hole saw (my chassis panel is 3") I cut a round disc. I had a small amount of deburring to do but the brass is way tougher than aluminum and a simple file removed the burrs. The 3/8" drill bit also provided a true center for the dial plate. I polished it with super fine auto rubbing compound. I ended up with a nice dial plate.

I need to mount it to a small shaft section of a vernier capacitor from Ocean State Electronics. I took a shaft coupler, the type with removable couplings on both sides, and using very tiny scews mounted this removable portion of the coupling to the plate.

Its hard to describe. But I am pleased with myself as I a mechanically weak.

This is a good method for making custom dial plates. I had to use a good chord type drill as my cordless was getting warm. I also mounted the plate for drilling using two wood screws and fastening the uncut plate to a scrap 2 x 4 by drilling holes slightly above and below my cut.

Now I gotta figure out how to mark the plate. Well maybe I will catch you on the air sometime Dale.

K5UOS

Dale Parfitt wrote:
> <dkelly42@cox.net> wrote in message
> news:1143321832.545680.142220@g10g2000cwb.googlegroups.com...
> >> Dale W4OP,
> > >
> > > Dale,
> > >
> > > I believe you posted an e-mail and a link to QRP-L a while back to show
> > > your receiver. Should have said this before but better late than never.

> > Nice job.
> >
> > If I remember correctly you used a basic 160M receiver with multiple
> > front end convertors. Also I believe you used blue backlighting?
> >
> > Don,
> >
> > K5UOS
>
> Hi Don,
> Thanks for the kind words. The receiver is based on W7ZOI's Progressive RX
> from the late 80's. To Wes's excellent design I added,
> S meter
> AM detection
> LM386 for loudspeaker w/ tone control
> audio notch filter
> Homebrew 5/2.5/.5 xtal filters
> fast/slow/off AGC
>
> 80M RX with xtal controlled converters for 160/49/40/20/15/10ABC
> The VFO drifts a little over 150Hz in the 1st 5 minutes then settles down to
> +/- 20Hz in a 5 minute period. Wonderful sound and gets more use than the
> PRO II
> 73,
>
> Dale W4OP
> >

2009. Re: Connection for clock distribution

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-26 19:08:05 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <ue-dnVd2J4vVebvZRVn-vQ@comcast.com>
Source record: 12910

Problem with a phono-plug and a clock signal is that you will get reflection back -- probably much better off with a BNC or SMA connector.

"W3JDR" <joe@roccis.com> wrote in message news:NXhVf.9224$6%2.4606@trnddc08...
> John,
> How about a miniature stereo phono plug? These have 2 signal circuits plus a
> ground. They're common, they're available in many PCB configurations, and
> they're cheap.
>
> Joe
> W3JDR
>
>
> "John Wilkinson" <johnwilkinson@clara.co.uk> wrote in message
> news:pz9hqkfgbjzv$.bt57lm5w2m2p$.dlg@40tude.net...
> > Hi,
> > I have a 1MHz clock that I need to disribute to several boards. I am using
> > RS485 drivers and receivers to do this, along with twisted screened
> > cable.
> >
> > The question is that I need a 2 pole pcb connector that is screened.
> > Does anyone know of such a beast?
> >
> > Thanks,
> > John.
>
>

2010. Re: Connection for clock distribution

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-26 21:19:01 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <9zDVf.5214$ES3.888@trnddc02>
Source record: 12911

The author said it was RS-485. This is a 2-wire differential signalling system. He also wants to use a shield. Hence the need for 3 circuits. I doubt that reflections will play any part in the performance, especially considering that he's using twisted-pair for the signals. This is how CAT5 RS-485 distribution works.

Besides, he's talking about a1 MHz presumably steady-state square-wave clock and presumably short board-to-board connection lengths.

Joe
W3JDR

"jack" <jdwalton@comcast.net> wrote in message
news:ue-dnVd2J4vVebvZRVn-vQ@comcast.com...
> Problem with a phono-plug and a clock signal is that you will get
> reflection
> back -- probably much better off with a BNC or SMA connector.
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> "W3JDR" <joe@roccis.com> wrote in message
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>> How about a miniature stereo phono plug? These have 2 signal circuits
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>> ground. They're common, they're available in many PCB configurations, and
>> they're cheap.
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>> Joe
>> W3JDR
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>> news:pz9hqkfgbjzv$.bt57lm5w2m2p$.dlg@40tude.net...
>> > Hi,
>> > I have a 1MHz clock that I need to disribute to several boards. I am
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>> > RS485 drivers and receivers to do this, along with twisted screened
>> > cable.
>> >
>> > The question is that I need a 2 pole pcb connector that is screened.
>> > Does anyone know of such a beast?
>> >
>> > Thanks,
>> > John.
>>

>>
>
>

2011. Info needed on Motorola 2 tube RF deck

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 02:17:17 UTC
From: Ken <VHFNUT@whoknows.net>
Message-ID: <DZOdnQg-Ut621rrZRVn-uQ@adelphia.com>
Source record: 12912

I have a Motorola amplifier from a working remote base. The only number I can find TLD6612A on the PA deck. It is a two tube, conduction cooled amplifier that was operating on 161 mhz. The tubes are 65-82282D02 (Eimac 8560AS I am told is the same tube). I would like to know if anyone has converted one of these PAs to 2 meter SSB and any hints of how to do so. I don't have the manual for the remote base or the PA.

Please reply to the group.

Thanks guys,
Ken

2012. Need Info 4 Midland 70-1526B UHF Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 03:24:03 UTC
From: Dave Hildebrand <dave@cahuenga.com>
Message-ID: <Pine.LNX.4.58.0603261916030.26312@torquay.cahuenga.com>
Source record: 12913
Cross-posted to:
alt.ham-radio.mods,rec.radio.amateur.equipment,alt.ham-radio.vhf-uhf,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

I recently bought a Midland 70-1526B UHF radio, and I would like greatly
appreciative of any information on it (e.g. schematic, etc.), including
where I might find programming software for it. 73s...

...Dave, N6BHU

2013. 1000+ Members - Group for Radio Shack DX-394 Users

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 04:07:17 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <WxJVf.448$u15.105252@news20.bellglobal.com>
Source record: 12914
Cross-posted to:
rec.radio.shortwave,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

This group has the most complete collection of modifications, usage tips, links to related websites, documentation, and photos along with a user survey and a message forum (4000+ messages archived) to help you get the most
fun and DX out of your Realistic / Radio Shack DX-394, DX394, DX 394.

Over 90 mods and tips now listed plus a dozen on the To Do or Wish List. More mods than for any other general coverage receiver! Thoroughly documented with a Master Index. If you like to tinker with radios, I know of no other recent model that lends itself to as much fun in this arena as the DX-394. Great platform for learning radio-electronics. Always 1 or more FA on eBay.

Active & friendly user community now with over 1000 members. Some members are
keen short wave listeners; others are into AM DXing and a few enjoy long wave. Many experiment with antennas and some are ardent modifiers - customising and souping up the rig as hot rodders would do with cars. You'll find lots to interest you and help get the most out of your radio.

All here at:
http://groups.yahoo.com/group/�RADIOSHACKDX394/

Subscribe on line (for full access privileges to the extensive collection of Files, Photos and Links) or by email:
RADIOSHACKDX394-subscribe@yaho�ogroups.com (for message posting/receipt only).

73, Tom

2014. Re: 1000+ Members - Group for Radio Shack DX-394 Users

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 05:00:10 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1143435610.292379.127810@i40g2000cwc.googlegroups.com>
Source record: 12915
Cross-posted to:
rec.radio.shortwave,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

TH - The Group's Link/URL got truncated/cut.

Radio Shack DX-394 User's Group
RadioShack DX394 {DX 394}
DX-394 => http://tinyurl.com/o6rgr

Radio Shack DX-394 User's Group
RadioShack DX394 {DX 394}
http://groups.yahoo.com/group/RADIOSHACKDX394/

Radio Shack DX-394 User's Group
RadioShack DX394 {DX 394}
<http://groups.yahoo.com/group/RADIOSHACKDX394/>

RigPix DataBase listing for the
Radio Shack DX-394 [DX394 DX 394]
http://www.rigpix.com/rs-realistic/realistic_dx394.htm

ABOUT - Radio Shack DX-394 Shortwave Radio
http://groups.google.com/group/rec.radio.shortwave/msg/73a2da4123a74125

just my two cents worth - jm2cw ~ RHF
.
.
. .
.

2015. Re: Connection for clock distribution

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 08:01:01 UTC
From: John Wilkinson <john.wilkinson@philips.com>
Message-ID: <1w48tu8v4g7cx.1bt9ir1638gsb.dlg@40tude.net>
Source record: 12916

On Sun, 26 Mar 2006 21:19:01 GMT, W3JDR wrote:

> The author said it was RS-485. This is a 2-wire differential signalling
> system. He also wants to use a shield. Hence the need for 3 circuits. I
> doubt that reflections will play any part in the performance, especially
> considering that he's using twisted-pair for the signals. This is how CAT5
> RS-485 distribution works.
>
> Besides, he's talking about a1 MHz presumably steady-state square-wave clock
> and presumably short board-to-board connection lengths.
>
>
> Joe
> W3JDR
>
>
> "jack" <jdwalton@comcast.net> wrote in message
> news:ue-dnVd2J4vVebvZRVn-vQ@comcast.com...
>> Problem with a phono-plug and a clock signal is that you will get
>> reflection
>> back -- probably much better off with a BNC or SMA connector.
>>
>> "W3JDR" <joe@roccis.com> wrote in message
>> news:NXhVf.9224$6%2.4606@trnddc08...
>>> John,
>>> How about a miniature stereo phono plug? These have 2 signal circuits
>>> plus
>> a
>>> ground. They're common, they're available in many PCB configurations, and
>>> they're cheap.
>>>
>>> Joe
>>> W3JDR
>>>
>>>
>>> "John Wilkinson" <johnwilkinson@clara.co.uk> wrote in message
>>> news:pz9hqkfgbjzv$.bt57lm5w2m2p$.dlg@40tude.net...
>>> > Hi,
>>> > I have a 1MHz clock that I need to disribute to several boards. I am
>> using
>>> > RS485 drivers and receivers to do this, along with twisted screened
>>> > cable.
>>> >
>>> > The question is that I need a 2 pole pcb connector that is screened.

>>> > Does anyone know of such a beast?
>>> >
>>> > Thanks,
>>> > John.
>>>
>>>
>>
>>

HI,
Yes this is a differential signale, so needs 2 connections plus ground for the shield.

I have looked for these stereo phono plugs, but to no avail, any idea who stocks them, RS/Farnell numbers.

Thanks,
John.

2016. Re: 1000+ Members - Group for Radio Shack DX-394 Users

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 08:13:11 UTC
From: Han <websitehan@yahoo.com>
Message-ID: <1143447191.920823.207000@j33g2000cwa.googlegroups.com>
Source record: 12917
Cross-posted to:
rec.radio.shortwave,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Congratulations Tom

that is an impressibe amount of subscribers. i think mostly US in
europe this is not the most poppular receiver.

With kind regards

Han The Netherlands.

You can also visit my website with a lot of recordings of rediostations
under 30 MHz.

http://home.wanadoo.nl/hanhardonk/indexengels.html

2017. Re: Connection for clock distribution

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 10:28:21 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <97PVf.4287$Od7.4222@trnddc06>
Source record: 12918

John,

Over here we'd just run down to the nearest Radio Shack store, or if we had to mail-order them we'd go to Digikey (www.digikey.com) or Mouser www.mouser.com). Here is a link to a digikey catalog page that shows the different types they carry:
http://dkc3.digikey.com/PDF/T061/0304.pdf

Also, here is a link to a Digikey search page from which you can narrow your search down to a specific type and stock number:
http://www.digikey.com/scripts/DkSearch/dksus.dll?Criteria?Ref=4998&Site=US&Cat=32440884

If you follow the above link to a specific connector, you'll eventually get to a page that has the manufacturer's web sites and datasheet information. This might help you at least pick a connector type, then go to the manufacturer's web page and find out who stocks the part in your area.

Joe
W3JDR

"John Wilkinson" <john.wilkinson@philips.com> wrote in message news:1w48tu8v4g7cx.1bt9ir1638gsb.dlg@40tude.net...
> On Sun, 26 Mar 2006 21:19:01 GMT, W3JDR wrote:
>
>> The author said it was RS-485. This is a 2-wire differential signalling
>> system. He also wants to use a shield. Hence the need for 3 circuits. I
>> doubt that reflections will play any part in the performance, especially
>> considering that he's using twisted-pair for the signals. This is how
>> CAT5
>> RS-485 distribution works.
>>
>> Besides, he's talking about a1 MHz presumably steady-state square-wave
>> clock
>> and presumably short board-to-board connection lengths.
>>
>>
>> Joe
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>>
>>
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>>> Problem with a phono-plug and a clock signal is that you will get
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>>>>
>>>>
>>>
>>>
>
> HI,
> Yes this is a differential signale, so needs 2 connections plus ground for
> the shield.
>
> I have looked for these stereo phono plugs, but to no avail, any idea who
> stocks them, RS/Farnell numbers.
>
> Thanks,
> John.

2018. Re: Connection for clock distribution

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 10:57:46 UTC
From: MadEngineer <glenn.b.dixon@gmail.com>
Message-ID: <1143457066.021802.286210@v46g2000cwv.googlegroups.com>
Source record: 12919

Hi

I would use a USB connector and cable. These contain two (possibly three) twisted pair with a shield around them. They are controlled to 93 ohms differential impedance, and do not have significant reflections below 1 Ghz when terminated properly. They are cheap and plentiful, and available in a variety of sizes for PCB mount.

Mouser sells a good assortment--I usually go for the 'B' size for PCBs. I use these for an RF differential probe I designed, with good results.

There are also lines of shielded telephone connectors and cable available. For a 1 Mhz clock these would do well, and do not have as low an impedance, which might be easier for your 485 drivers to work into.

Regards,
Glenn

2019. Re: 1000+ Members - Group for Radio Shack DX-394 Users

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 12:52:00 UTC
From: Jack Ricci <ricci@mnsi.net>
Message-ID: <e08n5h02vrm@enews4.newsguy.com>
Source record: 12920
Cross-posted to:
rec.radio.shortwave,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

The addresses to subscribe to this group do not work from Canada. Any mistakes? I get the message that this group does not exist...

Jack

"Tom Holden" <holden_family@sympatico.ca> wrote in message news:WxJVf.448$u15.105252@news20.bellglobal.com...
> This group has the most complete collection of modifications, usage tips,
> links to related websites, documentation, and photos along with a user
> survey and a message forum (4000+ messages archived) to help you get the
> most
> fun and DX out of your Realistic / Radio Shack DX-394, DX394, DX 394.
>
> Over 90 mods and tips now listed plus a dozen on the To Do or Wish List.
> More mods than for any other general coverage receiver! Thoroughly
> documented with a Master Index. If you like to tinker with radios, I know
> of
> no other recent model that lends itself to as much fun in this arena as
> the
> DX-394. Great platform for learning radio-electronics. Always 1 or more FA
> on eBay.
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> Active & friendly user community now with over 1000 members. Some members
> are
> keen short wave listeners; others are into AM DXing and a few enjoy long
> wave. Many experiment with antennas and some are ardent modifiers -
> customising and souping up the rig as hot rodders would do with cars.
> You'll
> find lots to interest you and help get the most out of your radio.
>
> All here at:
> http://groups.yahoo.com/group/RADIOSHACKDX394/
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> Subscribe on line (for full access privileges to the extensive collection
> of Files, Photos and Links) or by email:
> RADIOSHACKDX394-subscribe@yahoogroups.com (for message posting/receipt
> only).
>
> 73, Tom
>

2020. 1000+ Members - Radio Shack DX-394 User Group

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 13:42:06 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <NYRVf.512$u15.138359@news20.bellglobal.com>
Source record: 12922
Cross-posted to:
rec.radio.shortwave,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

(Let's try again with the URL hopefully corrected - I don't understand how they got corrupted in distribution - looks alright leaving here and on screen but the actual properties show an extra character)

This group has the most complete collection of modifications, usage tips, links to related websites, documentation, and photos along with a user survey and a message forum (4000+ messages archived) to help you get the most fun and DX out of your Realistic / Radio Shack DX-394, DX394, DX 394.

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All here at:
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RADIOSHACKDX394-subscribe@yahoogroups.com (for message posting/receipt only).

73, Tom

2021. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 13:48:37 UTC
From: "Giancarlo Gian Moda, I7SWX" <i7swx@yahoo.com>
Message-ID: <1143467317.326966.226250@e56g2000cwe.googlegroups.com>
Source record: 12921

Hi Allison,

thanks for the update. I was with DEC from 69 till 93 ... serial #
7133 ...hi

My #1 machine (FS) was PDP9 , also PDP series and alittle bit PDP11 and
15... I applied several mods in the field that made crazy many people
in DEC ... but we were working in he field without spare parts ...I
replaced transistros, transformers (core mem drivers) ICs...etc.... The
day I was told not to do on my way...I saw something wrong.. the
largest PDP9 installation in the world (I3) went into smoke ... then my
boss changed mind...hiu

Glad you got your 6m SSB rig working nicely.

BTW if you are in Mass and you do hear my good friend Art, K1GBX, on 6
meters please say hallo for me... he will get crazy...hi I also have
some other good friends from the old DEC Ham club and others...

73

Gian
I7SWX

2022. Re: 1000+ Members - Group for Radio Shack DX-394 Users

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 13:52:27 UTC
From: Jack Ricci <ricci@mnsi.net>
Message-ID: <e08qms028ea@enews3.newsguy.com>
Source record: 12924
Cross-posted to:
rec.radio.shortwave,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

TH - The Group's Link/URL got truncated/cut.

Radio Shack DX-394 User's Group
RadioShack DX394 {DX 394}
DX-394 => http://tinyurl.com/o6rgr

Radio Shack DX-394 User's Group
RadioShack DX394 {DX 394}
http://groups.yahoo.com/group/RADIOSHACKDX394/

OOOoooopps! Correction noted. Thanks.

Jack

"Jack Ricci" <ricci@mnsi.net> wrote in message
news:e08n5h02vrm@enews4.newsguy.com...
> The addresses to subscribe to this group do not work from Canada. Any
> mistakes? I get the message that this group does not exist...
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> Jack
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>> You'll
>> find lots to interest you and help get the most out of your radio.
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>> All here at:
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>> Subscribe on line (for full access privileges to the extensive collection
>> of Files, Photos and Links) or by email:
>> RADIOSHACKDX394-subscribe@yahoogroups.com (for message posting/receipt
>> only).
>>
>> 73, Tom
>>
>
>

2023. Re: 1000+ Members - Group for Radio Shack DX-394 Users

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 14:05:07 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <giSVf.14367$6a1.6434@fed1read04>
Source record: 12923
Cross-posted to:
rec.radio.shortwave,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

```
Just FYI: I see a lot of these mods to increase sensitivity -- resulting in
trashing the dynamic range

Remember some of these mods are made by amateurs

The factory engineers designed the sensitivity for very good reasons
--
CL -- I doubt, therefore I might be !
```

"Tom Holden" <holden_family@sympatico.ca> wrote in message
news:WxJVf.448$u15.105252@news20.bellglobal.com...
> This group has the most complete collection of modifications, usage tips,
> links to related websites, documentation, and photos along with a user
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>
> Subscribe on line (for full access privileges to the extensive collection
> of Files, Photos and Links) or by email:
> RADIOSHACKDX394-subscribe@yahoogroups.com (for message posting/receipt
> only).
>

> 73, Tom
>

2024. D104 distortion

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 15:50:38 UTC
From: pdrunen@aol.com
Message-ID: <1143474638.836258.56200@v46g2000cwv.googlegroups.com>
Source record: 12925

Hi All,

I picked up a D104 Silver Eagle and was observing the output of my scope.

I see that it appears to clip out the negative peaks which makes the on the air sound distorted. I checked the audio with the output terminated into 100K and also tried various settings and battery voltage levels.

Any thoughts?

de KJ4UO

2025. Re: 45 MHz IF breakthrough (Ultimate attenuation issues)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 16:21:15 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <e093dr$5e0$2@engnntp2.cig.mot.com>
Source record: 12928

> On Thu, 23 Mar 2006 07:50:41 +0000, John Wilkinson
> <john.wilkinson@philips.com> wrote:
>
> >Hi,
> >OK I have a 45MHz crystal filter for my first IF.
> >The first LO ranges from 45-75MHz.
> >To test I am using a 45.455MHz LO, which is a pll design.
> >When I connect up the LO to the mixer, with no input signal I get
a -80dBm
> >level out of my IF stage!!
> >The PLL is clocked off 1MHz ref divided down to 5KHz. The 1MHz ref is a
TTL
> >signal. Could this be the cause of the problem, and if so how do I get
> >around it?
> >
> >Thanks,
> >John.
>

John,

When working toward the best ultimate attenuation (in the stop band) for filters and high gain IF stages in general, you also need to pay attention to ground currents for the input and output of the filter as well as (applying the same principles to) the related stages-- And the stages well before and after the filter.

I often say; "A grounds a ground the world around.", but this is a play on words with the old saying "a pound's a pound the world around" as well as a tongue-in-cheek (reverse) reference (more specifically irony) to the fact that an RF ground can be elusive if not properly understood. [[in other words, an RF ground is NOT necessarily an RF ground...or the concept of "any ground in a storm" will NOT "do" for RF]]

Make it so the ground current path for the input has as little in common with the ground current path for the output. DO NOT just make a ground plane and expect it to be better the bigger and more complete it is. Consider ground current exactly as you do the "real" signal path. If the filter has only one ground pin, make separate ground planes for the input and output and have them connect __right at__ the pin...and ONLY _AT_ the pin --- AND from opposite directions. If there are two pins, cut the ground plane so the two pins have NO connection directly between, but only via mass quantities of other routes, via far distant lands from the filter. You must force the ground currents to go where the schematic says they should go as thought you can not use the ground symbol. Any small amount of

conductor which has both the input and output ground return currents is a source of coupling. Sometimes MAKING CUTS in a ground plane improves spurious responses---been there--done that.

Hope that is clear. However, if the ultimate of the filter is only 50 dB, you're screwed. You need to do what others do, use two or more filters separated by stages, space and, of course, ground.

ALSO, random capacitive coupling (technically referred to as "spray" by those in the profession) must be reduced by physical separation and shields. AND don't allow a shields to provide a ground current path that is not following the above ground recommendations.

Hope this helps

73, Steve, K9DCI

2026. Re: D104 distortion

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 16:43:37 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <TCUVf.14386$6a1.5913@fed1read04>
Source record: 12926

Just a guess -- but maybe an impedance matching problem
See URL:
http://www.kb2ljj.com/data/mic/D-104.htm

--
CL -- I doubt, therefore I might be !

<pdrunen@aol.com> wrote in message
news:1143474638.836258.56200@v46g2000cwv.googlegroups.com...
> Hi All,
>
> I picked up a D104 Silver Eagle and was observing the output of my
> scope.
>
> I see that it appears to clip out the negative peaks which makes the on
> the air sound distorted. I checked the audio with the output
> terminated into 100K and also tried various settings and battery
> voltage levels.
>
> Any thoughts?
>
> de KJ4UO
>

2027. Re: D104 distortion

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 16:50:59 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <MJUVf.14390$6a1.11862@fed1read04>
Source record: 12927

Another thought - the Silver Eagle is an amplified D-104.
Bypass the amp and see what you get.
A friend had a bad amp in the base of the D-104

--
CL -- I doubt, therefore I might be !

"Caveat Lector" <UALLBeware@9984reader.com> wrote in message
news:TCUVf.14386$6a1.5913@fed1read04...
> Just a guess -- but maybe an impedance matching problem
> See URL:
> http://www.kb2ljj.com/data/mic/D-104.htm
>
> --
> CL -- I doubt, therefore I might be !
>
>
>
>
>
>
> <pdrunen@aol.com> wrote in message
> news:1143474638.836258.56200@v46g2000cwv.googlegroups.com...
>> Hi All,
>>
>> I picked up a D104 Silver Eagle and was observing the output of my
>> scope.
>>
>> I see that it appears to clip out the negative peaks which makes the on
>> the air sound distorted. I checked the audio with the output
>> terminated into 100K and also tried various settings and battery
>> voltage levels.
>>
>> Any thoughts?
>>
>> de KJ4UO
>>
>
>

2028. Re: 1000+ Members - Group for Radio Shack DX-394 Users

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 17:19:55 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <_8VVf.620$u15.160963@news20.bellglobal.com>
Source record: 12929
Cross-posted to:
rec.radio.shortwave,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

"Caveat Lector" <UALLBeware@9984reader.com> wrote in message
news:giSVf.14367$6a1.6434@fed1read04...
>
> Just FYI: I see a lot of these mods to increase sensitivity -- resulting
> in trashing the dynamic range

Which of these mods do you think increase sensitivity at the expense of
dynamic range?

> Remember some of these mods are made by amateurs

Many of whom are electronics professionals. That's not to say that novices
at electronics do not carry out some mods. One of the virtues of the DX-394
is that it can be readily modified and doing so is a great educational
activity for someone getting into radio and electronics.

> The factory engineers designed the sensitivity for very good reasons

And made some mistakes in other areas, e.g., decoupling around the IF
filters, AGC time constant for SSB (factory corrected in the revised
versions), and some design trade-offs or decisions that owners want to
correct. That is true of every product.

> --
> CL -- I doubt, therefore I might be !

And I was named after the biblical doubter.

Tom

2029. Re: D104 distortion

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 17:45:08 UTC
From: - exray - <exray@coqui.net>
Message-ID: <122g956qcsq04ce@corp.supernews.com>
Source record: 12930

Caveat Lector wrote:

> Another thought - the Silver Eagle is an amplified D-104.
> Bypass the amp and see what you get.
> A friend had a bad amp in the base of the D-104
>
They're also prone to be affected by rf. I had a coiled cord on mine
and had to run a direct wire inside the cord from the base to the mic
plug to get rid of the rf.

-Bill

2030. Re: Need Info 4 Midland 70-1526B UHF Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 17:47:17 UTC
From: Backfire Bob <Backfire@twicepipes.org>
Message-ID: <FyVVf.63563$dW3.43304@newssvr21.news.prodigy.com>
Source record: 12931
Cross-posted to:
alt.ham-radio.mods,rec.radio.amateur.equipment,alt.ham-radio.vhf-uhf,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

"Dave Hildebrand" <dave@cahuenga.com> wrote in message
news:Pine.LNX.4.58.0603261916030.26312@torquay.cahuenga.com...
>I recently bought a Midland 70-1526B UHF radio, and I would like greatly
> appreciative of any information on it (e.g. schematic, etc.), including
> where I might find programming software for it. 73s...
>
> ...Dave, N6BHU

Why would anyone want to help *you*?

2031. Re: Need Info 4 Midland 70-1526B UHF Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 18:04:33 UTC
From: Jim Chandler <n427c@gte.net>
Message-ID: <ROVVf.14151$W75.6809@trnddc07>
Source record: 12932
Cross-posted to:
alt.ham-radio.mods,rec.radio.amateur.equipment,alt.ham-radio.vhf-uhf,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Dave Hildebrand wrote:

> I recently bought a Midland 70-1526B UHF radio, and I would like greatly
> appreciative of any information on it (e.g. schematic, etc.), including
> where I might find programming software for it. 73s...
>
> ...Dave, N6BHU

Dave, try a Google search using the brand and model. I was able to get the service manual for the old (70's) CDR TR-44 rotator that way. It's amazing what's out there.

Jim Chandler, N5COT

2032. Re: 1000+ Members - Group for Radio Shack DX-394 Users

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 18:25:03 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <Y5WVf.14396$6a1.13272@fed1read04>
Source record: 12933
Cross-posted to:
rec.radio.shortwave,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I refer you to the Elecraft page
http://www.elecraft.com/K2_perf.htm

Sez
MDS = Minimum Discernible Signal (3db increase above noise floor). Larger
negative numbers are generally better, but too much sensitivity can reduce
strong signal dynamic range and Ip3. Pre-Amp On MDS numbers of -130 dBm or
more are more than adequate for most HF band operating, since band noise is
typically above this number. (Lower frequencies need less MDS (more +number)
due to an increase in atmospheric noise.)

--
CL -- I doubt, therefore I might be !

"Tom Holden" <holden_family@sympatico.ca> wrote in message
news:_8VVf.620$u15.160963@news20.bellglobal.com...
> "Caveat Lector" <UALLBeware@9984reader.com> wrote in message
> news:giSVf.14367$6a1.6434@fed1read04...
>>
>> Just FYI: I see a lot of these mods to increase sensitivity -- resulting
>> in trashing the dynamic range
>
>
> Which of these mods do you think increase sensitivity at the expense of
> dynamic range?
>
>> Remember some of these mods are made by amateurs
>
> Many of whom are electronics professionals. That's not to say that novices
> at electronics do not carry out some mods. One of the virtues of the
> DX-394 is that it can be readily modified and doing so is a great
> educational activity for someone getting into radio and electronics.
>
>> The factory engineers designed the sensitivity for very good reasons
>
> And made some mistakes in other areas, e.g., decoupling around the IF
> filters, AGC time constant for SSB (factory corrected in the revised
> versions), and some design trade-offs or decisions that owners want to
> correct. That is true of every product.
>
>> --
>> CL -- I doubt, therefore I might be !
>

> And I was named after the biblical doubter.
>
> Tom
>

2033. FS: Microphone Element for Working DX

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 18:51:11 UTC
From: Norm VE3CZI <ve3czi@arrl.net>
Message-ID: <CuWVf.41752$fd.18831@read2.cgocable.net>
Source record: 12934
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.swap

I have Mic Elements that came from another piece of Equipment that might be
of interest to the HF DXers
>Frequency Response has a 10dB rise at 2,000 Hz, which will help to cut
>through the DX Pile ups
>Freq: 300 Hz to 8000 Hz with 10 dB rise at 2,000 Hz
> Has very good Sensitivity
>Size: 7/8"L X 9/16"W X 1/4"D
>Have had on-the-air reports that this Mic Element has a loss of Lows (ie:
>more highs) compared to the Heil HC-5 Capsule.
>This Element is used, but has been tested to be operational. SEE The
>pictures and Audio Repsonse Graph are listed here.

Rear View :
http://home.cogeco.ca/~rodemi/images/DX%20Mic%20Capsule%20Rear..SM.jpg

Top View :
http://home.cogeco.ca/~rodemi/images/DX%20Mic%20Capsule%20Front..SM.jpg

Graph: http://home.cogeco.ca/~rodemi/images/Redi-Code%20Capsule%20Plot.jpg

PRICE: $15 USD + $5 USD Shipping.

Tnx for looking....Norm VE3CZI
$VE3CZI$ at %rac.ca%

2034. Coax Connectors & Adapters, new catalog now available

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 19:03:08 UTC
From: AAA RF Products <sales@aaarfproducts.com>
Message-ID: <UDWVf.382$CL6.69@fed1read11>
Source record: 12935
Cross-posted to: rec.boats.electronics,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

For your free copy of our new catalog,

please email sales@AAARFProducts.com

or see www.aaarfproducts.com

or call 949 481 3154 (San Clemente, CA, USA)

No minimum order.

No handling charges.

2035. FS: COMMERCIAL & AMATEUR Service Manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 19:08:56 UTC
From: Norm VE3CZI <ve3czi@arrl.net>
Message-ID: <eLWVf.41753$fd.35117@read2.cgocable.net>
Source record: 12936
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Have a quantity of Radio Communications Service Manuals, both Commercial & Amateur that I have rescued from the Dumpster. Most ot them are in Like New Condition.

Please check my site: www.rodemi.com for what is available. I am updating the site as time allows.
I recently retired from the Commercial 2-way radio business and have a "goal" to clean up the Garage & Basement.

Thanks for looking....Norm VE3CZI
Email me Directly: <insert Call Sign> at rac.ca....<call sign> is ve3czi

2036. Re: Coax Connectors & Adapters, new catalog now available

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 19:14:37 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <xQWVf.2640$qm2.2422@trnddc03>
Source record: 12937
Cross-posted to: rec.boats.electronics,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

AAA RF Products wrote:
> For your free copy of our new catalog,
>
> please email sales@AAARFProducts.com
>
> or see www.aaarfproducts.com
>
> or call 949 481 3154 (San Clemente, CA, USA)
>
> No minimum order.
>
> No handling charges.
>
>

Your prices suck.

2037. Re: 1000+ Members - Group for Radio Shack DX-394 Users

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 19:29:12 UTC
From: clifto <clifto@gmail.com>
Message-ID: <81rlf3-v9u.ln1@remote.clifto.com>
Source record: 12938
Cross-posted to:
rec.radio.shortwave,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Caveat Lector wrote:
> Just FYI: I see a lot of these mods to increase sensitivity -- resulting in
> trashing the dynamic range
>
> Remember some of these mods are made by amateurs
>
> The factory engineers designed the sensitivity for very good reasons

Problem is, many times those reasons have more to do with cost than
with performance.

--
All relevant people are pertinent.
All rude people are impertinent.
Therefore, no rude people are relevant.
-- Solomon W. Golomb

2038. Re: 1000+ Members - Group for Radio Shack DX-394 Users

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 20:25:52 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <jTXVf.736$u15.176249@news20.bellglobal.com>
Source record: 12939
Cross-posted to:
rec.radio.shortwave,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

"Caveat Lector" <UALLBeware@9984reader.com> wrote in message
news:Y5WVf.14396$6a1.13272@fed1read04...
>I refer you to the Elecraft page
> http://www.elecraft.com/K2_perf.htm
>
> Sez
> MDS = Minimum Discernible Signal (3db increase above noise floor). Larger
> negative numbers are generally better, but too much sensitivity can reduce
> strong signal dynamic range and Ip3. Pre-Amp On MDS numbers of -130 dBm or
> more are more than adequate for most HF band operating, since band noise
> is typically above this number. (Lower frequencies need less MDS (more
> +number) due to an increase in atmospheric noise.)
>
>
> --
> CL -- I doubt, therefore I might be !

I have no dispute with that. Rather with your first comment:

>>> Just FYI: I see a lot of these mods to increase sensitivity -- resulting
>>> in trashing the dynamic range
>>
>>
>> Which of these mods do you think increase sensitivity at the expense of
>> dynamic range?

You did not answer the question. The answer may well be 'none'. I'm not
aware of any aimed at increased sensitivity, unless adding an amplified
preselector counts as a mod. And that could arguably be for improved dynamic
range and sensitivity by improving front-end selectivity and noise figure.
Most regard the DX-394 as a very sensitive receiver that is outperformed in
that spec by few others. But itcould do with improved overload threshold and
IP3.

Methinks you might be trashing imagined mods rather than the ones
well-documented in the user group.

Tom

2039. Re: 1000+ Members - Group for Radio Shack DX-394 Users

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 20:57:54 UTC
From: dxAce <dxAce@milestones.com>
Message-ID: <442851D2.983D961B@milestones.com>
Source record: 12940
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Never anonymous Bud wrote:

> On Mon, 27 Mar 2006 13:29:12 -0600, clifto <clifto@gmail.com> wrote:
>
> >Caveat Lector wrote:
> >> Just FYI: I see a lot of these mods to increase sensitivity -- resulting in
> >> trashing the dynamic range
> >>
> >> Remember some of these mods are made by amateurs
> >>
> >> The factory engineers designed the sensitivity for very good reasons
> >>
> >Problem is, many times those reasons have more to do with cost than
> >with performance.
>
> My question would be...
>
> WHAT does this have to do with scanning,
> and WHY was it cross-posted to 6 newsgroups??

Because the original poster is a Canuck, and doesn't know any better?

>
>
> Lumber Cartel (tinlc) #2063. Spam this account at your own risk.
>
> This sig censored by the Office of Home and Land Insecurity...
>
> Remove XYZ to email me

2040. Re: 1000+ Members - Group for Radio Shack DX-394 Users

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 21:11:33 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <2yYVf.14403$6a1.1504@fed1read04>
Source record: 12941
Cross-posted to:
rec.radio.shortwave,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Aplogies for the cross posting - I was just responding to the original
post'Gotta be more careful

--
CL -- I doubt, therefore I might be !

"Never anonymous Bud" <newskat@katxyzkave.net> wrote in message
news:06kg229qmd9mikh334mh43qnhsuh3abi6i@4ax.com...
> On Mon, 27 Mar 2006 13:29:12 -0600, clifto <clifto@gmail.com> wrote:
>
>>Caveat Lector wrote:
>>> Just FYI: I see a lot of these mods to increase sensitivity -- resulting
>>> in
>>> trashing the dynamic range
>>>
>>> Remember some of these mods are made by amateurs
>>>
>>> The factory engineers designed the sensitivity for very good reasons
>>
>>Problem is, many times those reasons have more to do with cost than
>>with performance.
>
> My question would be...
>
> WHAT does this have to do with scanning,
> and WHY was it cross-posted to 6 newsgroups??
>
>
>
>
>
>
> Lumber Cartel (tinlc) #2063. Spam this account at your own risk.
>
> This sig censored by the Office of Home and Land Insecurity...
>
> Remove XYZ to email me

2041. Re: 1000+ Members - Group for Radio Shack DX-394 Users

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 21:30:01 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <tPYVf.772$u15.181036@news20.bellglobal.com>
Source record: 12943
Cross-posted to:
rec.radio.shortwave,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

"Never anonymous Bud" <newskat@katxyzkave.net> wrote in message
news:06kg229qmd9mikh334mh43qnhsuh3abi6i@4ax.com...
>
> My question would be...
>
> WHAT does this have to do with scanning,
> and WHY was it cross-posted to 6 newsgroups??

The DX-394 is a scanning receiver, reviews have described its user interface
as reflecting a scanner heritage, it has been a topic in all the newsgroups
to which I posted the notice, and similar notices have been crossposted a
few times in all these newsgroups informing potentially interested parties
about http://groups.yahoo.com/group/RADIOSHACKDX394/, without objection.

Are there any other newsgroups for which it would be relevant? The ones I
posted to are:
rec.radio.shortwave, alt.radio.scanner, alt.radio.scanner.uk,
rec.radio.amateur.equipment, rec.radio.amateur.homebrew

73, Tom

2042. Re: Info needed on Motorola 2 tube RF deck

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 21:35:42 UTC
From: Ken <VHFNUT@whoknows.net>
Message-ID: <n6Cdne0WR983x7XZnZ2dnUVZ_sCdnZ2d@adelphia.com>
Source record: 12942

Thanks Allison for your info. Looks like another one for the trash can. I figured that the tubes which I figured would do as much as 4CX250s would get me to 300-500 watts SSB. Oh well we can't get lucky every time.
73,
Ken, WS4V

<Allison-nospam@nouce.bellatlantic.net> wrote in message news:3k2g229vv9j81mkoaafq3fc0q19nfe0rfq@4ax.com...
> On Sun, 26 Mar 2006 21:17:17 -0500, "Ken" <VHFNUT@whoknows.net> wrote:
>
>>I have a Motorola amplifier from a working remote base. The only number I
>>can find TLD6612A on the PA deck. It is a two tube, conduction cooled
>>amplifier that was operating on 161 mhz. The tubes are 65-82282D02 (Eimac
>>8560AS I am told is the same tube). I would like to know if anyone has
>>converted one of these PAs to 2 meter SSB and any hints of how to do so. I
>>don't have the manual for the remote base or the PA.
>>
>>Please reply to the group.
>>
>>Thanks guys,
>>Ken
>
> IF it's the one I remember just retune it. For SSB you will have to
> run different bias and accept lower power. The original design ran
> Class C FM and is totally unsuited for SSB without different bias.
>
> As memory serves for FM that was either a 40 or 60W package and
> for SSB you cant run that hard. Also the input power limit was very
> low (well under 1W).
>
> Allison
>
>
> Allison
>

2043. Re: Coax Connectors & Adapters, new catalog now available

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 21:47:33 UTC
From: Larry <noone@home.com>
Message-ID: <Xns9793AAE00F8C0noonehomecom@208.49.80.253>
Source record: 12944
Cross-posted to: rec.boats.electronics,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"AAA RF Products" <sales@aaarfproducts.com> wrote in news:UDWVf.382
$CL6.69@fed1read11:

> For your free copy of our new catalog,
>
> please email sales@AAARFProducts.com
>
> or see www.aaarfproducts.com
>
> or call 949 481 3154 (San Clemente, CA, USA)
>
> No minimum order.
>
> No handling charges.
>
>

www.mouser.com

You can order ONE resistor, if you like.....3c + shipping...(c;

Great prices on millions of parts. I use them all the time.

They don't need to spam the internet....

He won't, either, after Cox Cable gets done with him....abuse@cox.net
Include this header below...Adios!
Send a copy to abuse@giganews.com, too, just for kicks. He's easy to
find with his IP ass hangin' out like that (64.58.167.76 in every
header). I did...(c;

Path: be02!atl-c01.usenetserver.com!news.usenetserver.com!atl-
c05.usenetserver.com!news.usenetserver.com!postnews.google.com!
news3.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!peer01.cox.net!cox.net!
p01!fed1read11.POSTED!53ab2750!not-for-mail
From: "AAA RF Products" <sales@aaarfproducts.com>
Newsgroups:
rec.boats.electronics,rec.radio.amateur.antenna,rec.radio.amateur.homebre
w
Subject: Coax Connectors & Adapters, new catalog now available
Lines: 13
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180

X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
Message-ID: <UDWVf.382$CL6.69@fed1read11>
Date: Mon, 27 Mar 2006 11:03:08 -0800
NNTP-Posting-Host: 64.58.167.76
X-Complaints-To: abuse@cox.net
X-Trace: fed1read11 1143486068 64.58.167.76 (Mon, 27 Mar 2006 14:01:08
EST)
NNTP-Posting-Date: Mon, 27 Mar 2006 14:01:08 EST
Organization: Cox Communications
Xref: usenetserver.com rec.boats.electronics:159807
rec.radio.amateur.antenna:322471 rec.radio.amateur.homebrew:196504
X-Received-Date: Mon, 27 Mar 2006 14:01:11 EST (be02)

2044. Re: OT: Hamming along the Alcan Highway

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 23:33:21 UTC
From: sailtamarack@yahoo.ca
Message-ID: <1143502401.388388.291670@i40g2000cwc.googlegroups.com>
Source record: 12945

If you want to be popular work 6M as you travel. You should have some Es openings in June and you will be travelling through rare grid squares. You will have lots of pileups and lots of fun. Have a grid square map and announce your square when calliing CQ. It is amazing how much better people hear you whe calling from a grid square that is usually uninhabited.

I envy you - I have travelled in that area and it is amazing countryside and the folks are pretty friendly along the route.

Regards - Roger

2045. Re: 1000+ Members - Group for Radio Shack DX-394 Users

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-27 23:42:58 UTC
From: Butch Magee <lynyrd@cableone.net>
Message-ID: <122gtjhbdq58m2c@corp.supernews.com>
Source record: 12946
Cross-posted to:
rec.radio.shortwave,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Caveat Lector wrote:
> Just FYI: I see a lot of these mods to increase sensitivity -- resulting in
> trashing the dynamic range
>
> Remember some of these mods are made by amateurs
>
> The factory engineers designed the sensitivity for very good reasons

Thank you Mr. Lector for reminding the wannabe multi-year experienced
EEs that it is best to leave well enough alone.

Butch KF5DE

2046. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-28 00:10:51 UTC
From: Dan Andersson <dan@andersson.co.uk>
Message-ID: <4JidnWzMToGW4rXZSa8jmw@karoo.co.uk>
Source record: 12947

aadu.adok@gmail.com wrote:

> hello,
>
> I'm building my first reciver. I can't choose what kind of mixers
> should I use. I have read that diode ring mixers are far superior
> compared to dual gate mosfet mixers.
>
> Is this true for both - first (RF / VFO) and second (IF / BFO) stages?
> Or is there any real difference at all?
>
> thanks

There are a lot of historical chips and solutions around on the market and in the litterature. I use the Analog Devices AD8343 mixer, good for DC to 2.5GHz and with a IP3 of 16.5 dBm.

The 602 is now replaced with the 612 but is still an old design.

If you design your mixer (/doubler) with AD8343 and use proper RF transformers from CoilCraft, it just cannot go wrong... (well, Murphy et al of course...)

Cheers

Da / M0DFI

2047. DSP Speaker

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-28 00:18:28 UTC
From: Paul Proefrock <proefrock@heartlandREMOVEgroup.com>
Message-ID: <oh%Vf.43009$_S7.28644@newssvr14.news.prodigy.com>
Source record: 12848

Does anyone know of a site or info to build a DSP speaker similar to the Hear It by Gap Antenna?

Tried Google but in a bazillion pages, don't see any homebrew items. Probably a terminology error

???

Thanks

Paul P
K0PRP

2048. Re: 1000+ Members - Group for Radio Shack DX-394 Users

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-28 01:27:08 UTC
From: Jack Ricci <ricci@mnsi.net>
Message-ID: <e0a3kv0r54@enews3.newsguy.com>
Source record: 12851
Cross-posted to:
rec.radio.shortwave,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

> WHAT does this have to do with scanning,
> and WHY was it cross-posted to 6 newsgroups??

I was intrigued by that post and joined the group. DX 394 is quite a bit
part of a listening hobby.

The DX 394 scans a slightly different breed of frequencies...or does it?
My Yupiteru MVT 7100 picks up all those same frequencies also, and then
some. Does that mean my Yupi is technically NOT a scanner because I can also
use it as an AM/FM/SW/SSB/Weather/TV audio/
CB/Communications/Marine/Police/Fire/Ambulance radio receiver as well?

Jack

"Never anonymous Bud" <newskat@katxyzkave.net> wrote in message
news:06kg229qmd9mikh334mh43qnhsuh3abi6i@4ax.com...
> On Mon, 27 Mar 2006 13:29:12 -0600, clifto <clifto@gmail.com> wrote:
>
>>Caveat Lector wrote:
>>> Just FYI: I see a lot of these mods to increase sensitivity -- resulting
>>> in
>>> trashing the dynamic range
>>>
>>> Remember some of these mods are made by amateurs
>>>
>>> The factory engineers designed the sensitivity for very good reasons
>>
>>Problem is, many times those reasons have more to do with cost than
>>with performance.
>
> My question would be...
>
> WHAT does this have to do with scanning,
> and WHY was it cross-posted to 6 newsgroups??
>
>
>
>
>
>
>
> Lumber Cartel (tinlc) #2063. Spam this account at your own risk.
>
> This sig censored by the Office of Home and Land Insecurity...
>

> Remove XYZ to email me

2049. Re: 1000+ Members - Group for Radio Shack DX-394 Users

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-28 01:29:17 UTC
From: Jack Ricci <ricci@mnsi.net>
Message-ID: <e0a3kv1r54@enews3.newsguy.com>
Source record: 12850
Cross-posted to:
rec.radio.shortwave,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

The DX-394 is a scanning receiver, reviews have described its user interface
as reflecting a scanner heritage...

I agree...and I'm a Canuck...

"Tom Holden" <holden_family@sympatico.ca> wrote in message
news:tPYVf.772$u15.181036@news20.bellglobal.com...
> "Never anonymous Bud" <newskat@katxyzkave.net> wrote in message
> news:06kg229qmd9mikh334mh43qnhsuh3abi6i@4ax.com...
>>
>> My question would be...
>>
>> WHAT does this have to do with scanning,
>> and WHY was it cross-posted to 6 newsgroups??
>
> The DX-394 is a scanning receiver, reviews have described its user
> interface as reflecting a scanner heritage, it has been a topic in all the
> newsgroups to which I posted the notice, and similar notices have been
> crossposted a few times in all these newsgroups informing potentially
> interested parties about http://groups.yahoo.com/group/RADIOSHACKDX394/,
> without objection.
>
> Are there any other newsgroups for which it would be relevant? The ones I
> posted to are:
> rec.radio.shortwave, alt.radio.scanner, alt.radio.scanner.uk,
> rec.radio.amateur.equipment, rec.radio.amateur.homebrew
>
> 73, Tom
>

2050. Re: Eddystone dial and custom dial plates

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-28 01:46:56 UTC
From: Ted <kilocycles**@**yahoo.com>
Message-ID: <8h3h22582psr78h3n6iq7q3thdgr628c1d@4ax.com>
Source record: 12849

Don (and Dale, if you're still listening),
I apologize in advance for not snipping this reply, but I want to preserve the whole thread and file it to my Hints and Kinks folder on the hard drive, for that dial mechanism.

Speaking of the Progressive Receiver, I was thinking about building one myself a couple of months ago. At the end of the article in the November '81 QST, Wes shows the math to figure out capacitor values for the VFO. Well, I spreadsheeted that, and I may have found an error. I check for errata on the ARRL site, and didn't find any further references.

Everything checks out perfectly until the last step, where he solves for C3. Wes's example yields C3 = 127.02 X 10E-12 F.

My values show C3= 355 -(1/50 + 1/126.8) quantity to the -1 power, which is 355 - 35.85 or 319.1 pF, not 127.02 pF. Did I mess up with the math?

This is fairly significant to me, because I can see use for this calculation beyond this particular project, never seeming to have the right variable cap on hand. I floated this problem to the local NoGa QRP math gurus, but it turns out I guess we don't have any :) . I didn't really want to put it on qrp_tech.

Dale, I've commented to you previously on your magnificent receiver, and Don, that's a nice idea on the dial plate. One thing you could do is design the markings in a drawing program to fit your brass disk, and then iron on a Press-n-Peel image to the brass, and etch it. Then you could apply a layer of black paint to the disk, and carefully wipe it off until only the etched areas remained with paint. Alternatively, If your image is clear enough (reversed this time), you could simply use that after ironing it on, and spray it with a fixative to protect the toner and the brass. A couple of the guys were doing that for panel legends.

Some of the guys in the homebrew_pcb Yahoo group have built their own CNC milling machines, and the do their PC boards that way. That would be good for this, as well.

72/73 to you both,
Ted KX4OM

On 26 Mar 2006 07:00:39 -0800, dkelly42@cox.net wrote:

>Well Dale it looks very nice and obviously works well too. I thought I
>remembered you saying the Progressive Receiver. I am glad I had a

>chance to compliment you.
>
>Since the subject was the Eddiestone dial I expect that was probably a
>chore to install. I usually build homebrew dial chord and drum
>mechanisms and more recently use the flange type Jackson Brothers and
>Oren Elliot drives. I just figured out a way to make custom dial
>plates. Probably an old idea but new to me.
>
>I just finished a 40M receiver for a SSB transceiver. I thought about
>using a small blank CD for the dial plate. What I ended up doing was
>getting a piece of brass sheet from ACE Hardware and using a 2 1/4"
>hole saw (my chassis panel is 3") I cut a round disc. I had a small
>amount of deburring to do but the brass is way tougher than aluminum
>and a simple file removed the burrs. The 3/8" drill bit also provided a
>true center for the dial plate. I polished it with super fine auto
>rubbing compound. I ended up with a nice dial plate.
>
>I need to mount it to a small shaft section of a vernier capacitor from
>Ocean State Electronics. I took a shaft coupler, the type with
>removable couplings on both sides, and using very tiny scews mounted
>this removable portion of the coupling to the plate.
>
>Its hard to describe. But I am pleased with myself as I a mechanically
>weak.
>
>This is a good method for making custom dial plates. I had to use a
>good chord type drill as my cordless was getting warm. I also mounted
>the plate for drilling using two wood screws and fastening the uncut
>plate to a scrap 2 x 4 by drilling holes slightly above and below my
>cut.
>
>Now I gotta figure out how to mark the plate. Well maybe I will catch
>you on the air sometime Dale.
>
>K5UOS
>
>Dale Parfitt wrote:
>> <dkelly42@cox.net> wrote in message
>> news:1143321832.545680.142220@g10g2000cwb.googlegroups.com...
>> >> Dale W4OP,
>> >
>> > Dale,
>> >
>> > I believe you posted an e-mail and a link to QRP-L a while back to show
>> > your receiver. Should have said this before but better late than never.
>> > Nice job.
>> >
>> > If I remember correctly you used a basic 160M receiver with multiple
>> > front end convertors. Also I believe you used blue backlighting?
>> >

>> > Don,
>> >
>> > K5UOS
>>
>> Hi Don,
>> Thanks for the kind words. The receiver is based on W7ZOI's Progressive RX
>> from the late 80's. To Wes's excellent design I added,
>> S meter
>> AM detection
>> LM386 for loudspeaker w/ tone control
>> audio notch filter
>> Homebrew 5/2.5/.5 xtal filters
>> fast/slow/off AGC
>>
>> 80M RX with xtal controlled converters for 160/49/40/20/15/10ABC
>> The VFO drifts a little over 150Hz in the 1st 5 minutes then settles down to
>> +/- 20Hz in a 5 minute period. Wonderful sound and gets more use than the
>> PRO II
>> 73,
>>
>> Dale W4OP
>> >

2051. Re: 1000+ Members - Group for Radio Shack DX-394 Users

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-28 03:28:43 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <L32Wf.1089$m35.102384@news20.bellglobal.com>
Source record: 12852
Cross-posted to:
rec.radio.shortwave,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

"Never anonymous Bud" <newskat@katxyzkave.net> wrote in message
news:targ22hvqpg1j7i0jsot6mbs8ipt6ktbqn@4ax.com...
> On Mon, 27 Mar 2006 16:30:01 -0500, "Tom Holden"
> <holden_family@sympatico.ca> wrote:
>
>>The DX-394 is a scanning receiver,
>
> It is a SHORTWAVE receiver, and any posts about it belong
> in rec.radio.shortwave and NOT in any scanner newsgroup.

It is a LW, MW, SW receiver that scans. Is alt.radio.scanner restricted to
discussion of scanning receivers that can tune only above 30 MHz?

Do a search in alt.radio.scanner:
http://groups.google.com/group/alt.radio.scanner/search?q=DX-394+OR+DX394+or+%22DX+394%22&
start=50&
- 66 threads found, dating from 1996.

>
> It's also NOT amateur equipment any more than it is a scanner,
> and CERTAINLY not 'homebrew'.

Why is the DX-394 NOT amateur equipment (I assume you mean 'amateur radio')?
It tunes the HF ham bands and does a credible job receiving the popular ham
modes on its own and is used with software to receive many digital modes. It
is found in many hamshacks. My first SW receiver was a 5-tube Heathkit AR-3
general coverage radio - it doesn't hold a candle to the DX-394 - but it was
the receiving part of my ham radio station.

I agree that the DX-394 itself is not 'homebrew' but the many mods are of
interest to some homebrewers as have the design discussions carried out in
rec.radio.amateur.homebrew.

When did you become the self-appointed policer of these newsgroups? As far
as I can tell, my original post was in the spirit of guidelines about
cross-posting. Your carrying on with this nonsensical criticism by
cross-posting replies is not.

End of discussion.

Tom

2052. Re: Need Info 4 Midland 70-1526B UHF Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-28 04:16:50 UTC
From: Dave Hildebrand <dave@cahuenga.com>
Message-ID: <Pine.LNX.4.58.0603272015300.18560@torquay.cahuenga.com>
Source record: 12853
Cross-posted to:
alt.ham-radio.mods,rec.radio.amateur.equipment,alt.ham-radio.vhf-uhf,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Hey -- haven't heard you in a while -- how's Texas?

On Mon, 27 Mar 2006, Backfire Bob wrote:

>
> "Dave Hildebrand" <dave@cahuenga.com> wrote in message
> news:Pine.LNX.4.58.0603261916030.26312@torquay.cahuenga.com...
> >I recently bought a Midland 70-1526B UHF radio, and I would like greatly
> > appreciative of any information on it (e.g. schematic, etc.), including
> > where I might find programming software for it. 73s...
> >
> > ...Dave, N6BHU
>
> Why would anyone want to help *you*?
>
>
>
>

2053. Simplified G2 Regulator for a 4CX250B amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-28 08:15:10 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1143533709.809955.34130@u72g2000cwu.googlegroups.com>
Source record: 12854

Hi All,

I have been toying with the idea of building a 4CX amp for some while now but keep being put off by the relative complexity of the protection circuitry associated with G2.

I (think) that I have read cover to cover the G3SEK and GW4FRX articles on the subject, and hope that I have ended up with a usable if not simplified version of the work done by G4JZQ.

I am not trying to compete with any of these guys, I am just trying to offer another view on the subject.

Take a peek
http://www.geocities.com/markaren10/RF_amp/Simplified_G2_Regulator.pdf
and let me know your thoughts.

This is about 2 hrs work from "engage brain" to "publish first ideas for comment" so don't be too harsh.

Regards,

Mark.

2054. Need info about pyramid antenna and it's performance

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-28 10:24:30 UTC
From: shan_rish@yahoo.com
Message-ID: <1143541470.722234.301130@e56g2000cwe.googlegroups.com>
Source record: 12855

Hi All,

I am a SWL from India and hope to get a ticket soon. I am constructing a simple receiver and i would like to construct a good antenna for my receiver and in future for my transmitter as well. I came across a design in a souvenir released by Hamfest India where an antenna called "Pyramid Antenna" is described. The author gave reference to one design published in Radio Magazibe 1982 by Steve Bauer,DJIUS. I came across another similar design described in http://www.warc.org.uk/clubmag/qsx13.pdf . I would like to know more about this antenna and the experience of using it, about it's performance. My house is near a 11KV power line and my antenna will be less than 15 feet from the above said power line.

Thanks in advance.

Regards
Shan
SWL

2055. Re: D104 distortion

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-28 10:32:26 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1143541946.657164.296210@j33g2000cwa.googlegroups.com>
Source record: 12856

OK. Have you checked with varying the settings of the 5k pot in the amp section? - have you checked that the battery volatge is correct (ie, measured it?). If that doesnt work, connect your CRO across the mic. capsule and see if its the cause of the problem..... If its the amp, shouldnt be too hard to troubleshoot - even if you shotgun replace EVERY component on the board its a simple job. For schematic, just Google for it - for some reason, I cant copy the link to this reply.

Andrew VK3BFA.

2056. Re: Simplified G2 Regulator for a 4CX250B amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-28 11:20:44 UTC
From: w8ji@akorn.net
Message-ID: <1143544844.710948.235190@v46g2000cwv.googlegroups.com>
Source record: 12857

What are you trying to do?

TR1 looks like a current limiter for the FET. Why are you doing that?

The source voltage looks like 425 volts, the series resistor 10k 2W,
the shunt regulator threshold 340-350 volts.

that's about 75 volts differential, so the 10k would have about 7.5 mA
of current. If the screen loaded more than 7mA it would fall out of
regulation.

The FET dissipation would be 2.5 watts assuming no negative screen
current.

What holds the screen to ground when the overload opens?

Why is the VDR on the screen side of the screen current meter?

Maximum screen dissipation would be around 21 mA when the screen was at
about 200 volts. Maximum screen current about 40mA.

73 Tom

2057. Re: D104 distortion

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-28 15:00:40 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <kccWf.14433$6a1.4248@fed1read04>
Source record: 12858

Good advice -- here is a D104 Schematic - Doesn't say Silver Eagle but think
it applies

http://www.astatic.com/cb/pdf/d104_schematic.pdf

Or

http://www.ronharter.com/documents/d104_schematic.pdf

--
CL -- I doubt, therefore I might be !

"Andrew VK3BFA" <ablight@alphalink.com.au> wrote in message
news:1143541946.657164.296210@j33g2000cwa.googlegroups.com...
> OK. Have you checked with varying the settings of the 5k pot in the amp
> section? - have you checked that the battery volatge is correct (ie,
> measured it?). If that doesnt work, connect your CRO across the mic.
> capsule and see if its the cause of the problem..... If its the amp,
> shouldnt be too hard to troubleshoot - even if you shotgun replace
> EVERY component on the board its a simple job. For schematic, just
> Google for it - for some reason, I cant copy the link to this reply.
>
> Andrew VK3BFA.
>

2058. Re: Need info about pyramid antenna and it's performance

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-28 15:57:20 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <e0bmd0ajl2@puck.litech.org>
Source record: 12859

shan_rish@yahoo.com wrote:
> Hi All,

> I am a SWL from India and hope to get a ticket soon. I am constructing
> a simple receiver and i would like to construct a good antenna for my
> receiver and in future for my transmitter as well. I came across a
> design in a souvenir released by Hamfest India where an antenna called
> "Pyramid Antenna" is described. The author gave reference to one design
> published in Radio Magazibe 1982 by Steve Bauer,DJIUS. I came across
> another similar design described in
> http://www.warc.org.uk/clubmag/qsx13.pdf . I would like to know more
> about this antenna and the experience of using it, about it's
> performance. My house is near a 11KV power line and my antenna will be
> less than 15 feet from the above said power line.

While I don't know anything about the pyramid antenna, I do think that
I'd want any antenna _MUCH_ farther away from a 11KV power line than
15 feet. That's uncomfortably, even dangerously close.

Best of luck on getting your ticket.

--
Mike Andrews W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

2059. Re: Need info about pyramid antenna and it's performance

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-28 16:01:06 UTC
From: eternalsquire@comcast.net
Message-ID: <1143561666.896508.88920@i39g2000cwa.googlegroups.com>
Source record: 12860

shan_rish@yahoo.com wrote:
> Hi All,
>
> I am a SWL from India and hope to get a ticket soon. I am constructing
> a simple receiver and i would like to construct a good antenna for my
> receiver and in future for my transmitter as well. I came across a
> design in a souvenir released by Hamfest India where an antenna called
> "Pyramid Antenna" is described. The author gave reference to one design
> published in Radio Magazibe 1982 by Steve Bauer,DJIUS. I came across
> another similar design described in
> http://www.warc.org.uk/clubmag/qsx13.pdf . I would like to know more
> about this antenna and the experience of using it, about it's
> performance. My house is near a 11KV power line and my antenna will be
> less than 15 feet from the above said power line.
>
> Thanks in advance.
>
> Regards
> Shan
> SWL

Regardless of the antenna, you don't EVER want to place an antenna anywhere near a power line! Not only is this a safety hazard (a still wind could blow your antenna into the line), but you will experience a large amount of noise from the line.

My general advice:

1) Keep antennas at least 100 feet away from power lines.
2) If you can't create a horizontal antenna that obeys the above rule, consider creating a vertical.

Questions so our group can give you specific advice:

1) Do you live in a crowded city, or a wide open rural area, in the suburbs?
2) How highly regulated is the community in which you live?
3) Would your nieghbors allow the extension of your antenna to thier property?
4) Are there any common features near your house (ravine, fence, tree, bridge, railroad) that would give you extra possibilities for space or mounting.

Good Luck,

The Eternal Squire

2060. Re: Info needed on Motorola 2 tube RF deck

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-28 16:06:13 UTC
From: eternalsquire@comcast.net
Message-ID: <1143561973.060361.274380@v46g2000cwv.googlegroups.com>
Source record: 12861

That tube might even be worth money on Ebay!

The Eternal Squire

Allison-nospam@nouce.bellatlantic.net wrote:
> Dont trash it, find someone that wants it for a repeater or something.
>
> Allison
>
>
> On Mon, 27 Mar 2006 16:35:42 -0500, "Ken" <VHFNUT@whoknows.net> wrote:
>
> >Thanks Allison for your info. Looks like another one for the trash can. I
> >figured that the tubes which I figured would do as much as 4CX250s would get
> >me to 300-500 watts SSB. Oh well we can't get lucky every time.
> >73,
> >Ken, WS4V
> >
> >
> ><Allison-nospam@nouce.bellatlantic.net> wrote in message
> >news:3k2g229vv9j81mkoaafq3fc0q19nfe0rfq@4ax.com...
> >> On Sun, 26 Mar 2006 21:17:17 -0500, "Ken" <VHFNUT@whoknows.net> wrote:
> >>
> >>>I have a Motorola amplifier from a working remote base. The only number I
> >>>can find TLD6612A on the PA deck. It is a two tube, conduction cooled
> >>>amplifier that was operating on 161 mhz. The tubes are 65-82282D02 (Eimac
> >>>8560AS I am told is the same tube). I would like to know if anyone has
> >>>converted one of these PAs to 2 meter SSB and any hints of how to do so. I
> >>>don't have the manual for the remote base or the PA.
> >>>
> >>>Please reply to the group.
> >>>
> >>>Thanks guys,
> >>>Ken
> >>
> >> IF it's the one I remember just retune it. For SSB you will have to
> >> run different bias and accept lower power. The original design ran
> >> Class C FM and is totally unsuited for SSB without different bias.
> >>
> >> As memory serves for FM that was either a 40 or 60W package and
> >> for SSB you cant run that hard. Also the input power limit was very
> >> low (well under 1W).
> >>
> >> Allison
> >>

> >>
> >> Allison
> >>
> >

2061. Re: Simplified G2 Regulator for a 4CX250B amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-28 18:36:00 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1143570960.535526.159230@g10g2000cwb.googlegroups.com>
Source record: 12862

Hi Tom,

"I have been toying with the idea of building a 4CX amp for some while now but keep being put off by the relative complexity of the protection circuitry associated with G2"

Basically, just simplification. See http://www.ifwtech.co.uk/g3sek/boards/tetrode/tetrode-manual.pdf for the whole of Ian's manual (chosen starting point)

There is a bunch more protection stuff on the base of the tube, I forgot to mention this in the posting. I should have also said that the starting point for the review should be topological.

I will look at your detailed comments when I wake up (it's 3am :).

Thanks very much for taking a look.

Regards,

Mark.

2062. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-28 20:36:21 UTC
From: "Giancarlo Gian Moda, I7SWX" <i7swx@yahoo.com>
Message-ID: <1143578181.356316.130880@j33g2000cwa.googlegroups.com>
Source record: 12863

Hi Allison,

>From '83 to '93. Had a 6digit number as I was part of CSSE and
central engineering for high end printing systems. I really liked the
Mill.

Ah..OK CSSE ... I sold a PDP11/10 with a card reader from CSS to the
Italian Goverment as a donation to a University in Peru'...the highest
PDP11 installation on the world at that time...hi

> Ah, the plastics fire if memory serves. Never played with any of the
15bit hardware or the controls. Just PDP-8, 10, 11 and VAX.

OK. PDP9 and 15 wer 18bits .. >I did some work on DEC10, 11 and when
the VAX came out I was in sales... I made some of the first sales in
Italy and most of my VAXes were linked in Decnet to PDP11/70 and 45.

Just finishing up a 85W brick for it now.

> Nice power. On 6 meters I have an FT726 with the 50MHz converter (RX) supermodified ...
the only original pieces are 1x Jfet and 2 IFTs ...hi.
I also have an FT920 a Xmas gift (a few years ago) from my good FRIEND
(with capital letters !!!) Art (and his wife)...hi

>Just talked to him this weekend! He's about 30miles NE of me. Next
net I'll mention you name and say HI.. One of his project was to
restart the old AM nets, he's got maybe 6-8 regulars.

How nice... Too bad we did not get in touch during my business
quarterly trips in W1 (for confessions with my boss 2000 to 2003...hi).
I was usually at K1GBX house at weekends ... eating lobsters and other
good stuff...hi.When I took my wife and my daugther Luisa for her first
trip we even had a story in a local newspaper and picture...hi
I m sure when you will tell him we had this kbd chatting he will jump
on his chair and get crazy...hi For a jike tell him we had a QSO on 6
meter SSB... than you will tell him the true story...hi

>Small world, smaller if we get some propagation.

Yes, amateur radio makes the world really small, some time ... hi

Sorry for this non Mixers conversation for our friends.... I will
comment on the following...

73

Gian
I7SWX

Allison
KB1GMX ,

2063. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-28 20:44:09 UTC
From: "Giancarlo Gian Moda, I7SWX" <i7swx@yahoo.com>
Message-ID: <1143578649.353302.141180@i39g2000cwa.googlegroups.com>
Source record: 12864

>The 602 is now replaced with the 612 but is still an old design.

>If you design your mixer (/doubler) with AD8343 and use proper RF
transformers from CoilCraft, it just cannot go wrong... (well, Murphy
et
al of course...)

>Da / M0DFI

Hi Dan,

Yes the AD8343 is an interesting mixer... but for me it may be too
noisy (10dB). THe IP3 is certainly much better (+15dBm) than the
602/612 (-15dBm), but this one has a lower NF of 5dB.
If you build my 1 homebrew transformer (50c) FST2125 DBM you do get am
IP3 of +25dBm NF 5dB ... adding a post mixer 10dB LNA you probably get
a 3dB NF.
Certainly you have to select the most valid mixer for the specific
project as always we have to compromise and give priority to one of the
many parameters.

73

Gian
I7SWX

2064. Heterodyne Mixer for FFT Spectrum Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-28 22:24:20 UTC
From: Ted <kilocycles**@**yahoo.com>
Message-ID: <qtcj221vj9cppdmslrkfmgfjt2l5fj2rtf@4ax.com>
Source record: 12865

I have a PC-based oscilloscope/spectrum analyzer that covers up to 16 MFz. I can see the second harmonic of a 40 meter signal, but that's about the maximum extent of its utility. I recently came across an idea where a set of local oscillators and a mixer could be used to extend the range, with the 0 to 16 MHz input of the FFT SA being the IF, essentially. I can't recall where I saw that, unfortunately.

I figure I could use 4 or 5 LOs in a shielded compartment, outputs matched for gains, and switch them into the mixer to produce frequency ranges in 16 MHz increments. I have some wideband MAR-8 MMICs that I could use (attenuated) for the RF to make up for the Mixer loss; i.e., deliver the same signal level I currently get at 50 ohms with 0 to 16 MHz signals.

Anyone have any suggestions on this idea? The unit I have is pretty neat, being able to store the o-scope and SA plots digitally, with positionable cursors for readouts of points on the waveforms.

73,
Ted KX4OM

2065. Re: Info needed on Motorola 2 tube RF deck

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-29 00:39:48 UTC
From: Ken <VHFNUT@whoknows.net>
Message-ID: <4dmdnc28NbHQSrTZnZ2dnUVZ_tednZ2d@adelphia.com>
Source record: 12866

Ebay is an option although it weighs a ton if the entire amp was shipped,
maybe 40 pounds. It is in perfect condition and I feel like it could go to
good use somewhere. Thanks for your input.
Ken

<eternalsquire@comcast.net> wrote in message
news:1143561973.060361.274380@v46g2000cwv.googlegroups.com...
> That tube might even be worth money on Ebay!
>
> The Eternal Squire
>
> Allison-nospam@nouce.bellatlantic.net wrote:
>> Dont trash it, find someone that wants it for a repeater or something.
>>
>> Allison
>>
>>
>> On Mon, 27 Mar 2006 16:35:42 -0500, "Ken" <VHFNUT@whoknows.net> wrote:
>>
>> >Thanks Allison for your info. Looks like another one for the trash can.
>> >I
>> >figured that the tubes which I figured would do as much as 4CX250s would
>> >get
>> >me to 300-500 watts SSB. Oh well we can't get lucky every time.
>> >73,
>> >Ken, WS4V
>> >
>> >
>> ><Allison-nospam@nouce.bellatlantic.net> wrote in message
>> >news:3k2g229vv9j81mkoaafq3fc0q19nfe0rfq@4ax.com...
>> >> On Sun, 26 Mar 2006 21:17:17 -0500, "Ken" <VHFNUT@whoknows.net> wrote:
>> >>
>> >>>I have a Motorola amplifier from a working remote base. The only
>> >>>number I
>> >>>can find TLD6612A on the PA deck. It is a two tube, conduction cooled
>> >>>amplifier that was operating on 161 mhz. The tubes are 65-82282D02
>> >>>(Eimac
>> >>>8560AS I am told is the same tube). I would like to know if anyone has
>> >>>converted one of these PAs to 2 meter SSB and any hints of how to do
>> >>>so. I
>> >>>don't have the manual for the remote base or the PA.
>> >>>
>> >>>Please reply to the group.
>> >>>

>> >>>Thanks guys,
>> >>>Ken
>> >>
>> >> IF it's the one I remember just retune it. For SSB you will have to
>> >> run different bias and accept lower power. The original design ran
>> >> Class C FM and is totally unsuited for SSB without different bias.
>> >>
>> >> As memory serves for FM that was either a 40 or 60W package and
>> >> for SSB you cant run that hard. Also the input power limit was very
>> >> low (well under 1W).
>> >>
>> >> Allison
>> >>
>> >>
>> >> Allison
>> >>
>> >
>

2066. Re: Coax Connectors & Adapters, new catalog now available

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-29 01:01:02 UTC
From: safemale <safemale@earthlink.net>
Message-ID: <aumj225ugtdacg94hs4kolfavccj7rktdm@4ax.com>
Source record: 12867
Cross-posted to: rec.boats.electronics,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

UNLIKE YOU I CAN OVER LOOK A MESSAGE IF I DONT CARE FOR IT
and yes i was bellowing at the top of my lungs at you
safe male

On Mon, 27 Mar 2006 16:47:33 -0500, Larry <noone@home.com> wrote:

>"AAA RF Products" <sales@aaarfproducts.com> wrote in news:UDWVf.382
>$CL6.69@fed1read11:
>
>> For your free copy of our new catalog,
>>
>> please email sales@AAARFProducts.com
>>
>> or see www.aaarfproducts.com
>>
>> or call 949 481 3154 (San Clemente, CA, USA)
>>
>> No minimum order.
>>
>> No handling charges.
>>
>>
>
>www.mouser.com
>
>You can order ONE resistor, if you like.....3c + shipping...(c;
>
>Great prices on millions of parts. I use them all the time.
>
>They don't need to spam the internet....
>
>He won't, either, after Cox Cable gets done with him....abuse@cox.net
>Include this header below...Adios!
>Send a copy to abuse@giganews.com, too, just for kicks. He's easy to
>find with his IP ass hangin' out like that (64.58.167.76 in every
>header). I did...(c;
>
>
>
>Path: be02!atl-c01.usenetserver.com!news.usenetserver.com!atl-
>c05.usenetserver.com!news.usenetserver.com!postnews.google.com!
>news3.google.com!border1.nntp.dca.giganews.com!
>border2.nntp.dca.giganews.com!nntp.giganews.com!peer01.cox.net!cox.net!
>p01!fed1read11.POSTED!53ab2750!not-for-mail

>From: "AAA RF Products" <sales@aaarfproducts.com>
>Newsgroups:
>rec.boats.electronics,rec.radio.amateur.antenna,rec.radio.amateur.homebre
>w
>Subject: Coax Connectors & Adapters, new catalog now available
>Lines: 13
>X-Priority: 3
>X-MSMail-Priority: Normal
>X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
>X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
>X-RFC2646: Format=Flowed; Original
>Message-ID: <UDWVf.382$CL6.69@fed1read11>
>Date: Mon, 27 Mar 2006 11:03:08 -0800
>NNTP-Posting-Host: 64.58.167.76
>X-Complaints-To: abuse@cox.net
>X-Trace: fed1read11 1143486068 64.58.167.76 (Mon, 27 Mar 2006 14:01:08
>EST)
>NNTP-Posting-Date: Mon, 27 Mar 2006 14:01:08 EST
>Organization: Cox Communications
>Xref: usenetserver.com rec.boats.electronics:159807
>rec.radio.amateur.antenna:322471 rec.radio.amateur.homebrew:196504
>X-Received-Date: Mon, 27 Mar 2006 14:01:11 EST (be02)

2067. Re: Eddystone dial

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-29 02:23:17 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <f9mWf.163$L6.24@bignews5.bellsouth.net>
Source record: 12868

w8ji@akorn.net wrote:
> Doc wrote:
>
>>Does anyone in the group have any idea of what an Eddystone dial, Model
>>898, is worth. I bought a new one, along with the parts for the Ted
>>Crosby HBR receiver many years ago, but never got around to building
>>it. The XYL is pushing me to downsize and I need to start somewhere. I
>>may have an interested party, but can list it on e-Bay if this falls
>>through. I'd like to get some idea of where to start.
>
>
>
> If you have all the parts, I'd be interested in them all. I have lots
> of dials, but would like to recreate the HBR receiver I built in the
> early 60's.
>
> As for the dial, expect about 30-50 dollars. You might do better, but
> most fall in that range.
>
> 73 Tom
>
If you are referring to the slide rule dial they are now as rare
as hen's teeth. I had one in the junk box that I found at a flea
market years ago but never used it. I put it up on ebay and was
a bit surprised to get over $100 for it. These dials are prized
by HBR builders! Millen also made a few sliderule dials, one
used a toothed belt to drive the pointer.

2068. Re: Simplified G2 Regulator for a 4CX250B amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-29 03:00:34 UTC
From: w8ji@akorn.net
Message-ID: <1143601234.194348.278660@z34g2000cwc.googlegroups.com>
Source record: 12869

Allison-nospam@nouce.bellatlantic.net wrote:
> I'm also collecting the bits to build a 6m 4xc250 amp. I'm planning
> a fairly stiff clamp circuit (zeners and transistor) and simple series
> resistance to insure not more than max screen power can be
> dissapated.. Minimal parts. The real effort is power sequencing
> Fills, Bias, then HV/Screen with an all off if any supply fails.
> Fuses for overcurrent and protection(diodes) for metering.
> The HV has to be well filtered so getting enough caps and bleeders
> to insure decent power is next effort.

Actually if you derive screen voltage with a dropping resistor to a shunt regulator, and set the standing dissipation of the regulator at rated screen dissipation, there is absolutely no other protection required.

All you need to do is have a screen supply that is twice or more the end voltage you need and that simple shunt circuit and the screen can NEVER be over dissipated, even with loss of bias and HV.

The only exception would be a tube that operates with high levels of negative screen current, but that is a very rare amplifier and not likely a situation that could be protected by any system.

73 Tom

2069. Re: D104 distortion

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-29 04:10:08 UTC
From: pdrunen@aol.com
Message-ID: <1143605408.519641.159140@t31g2000cwb.googlegroups.com>
Source record: 12870

Thanks for the Schematic link.

The D104 is connected to the Oscope and terminated into a 100K resistor. It is not connected to the radio so RF is out.

The Oscope shows clipping on the negative peaks, the postive peaks are OK.

I tried removing the battery and powering off a power supply where I could vary the voltage to see if the distortion disappeared with voltage, it did not. The affect was a lower audio output.

the best thing to do is to replace the two NPN and see what happens.

de KJ4UO

2070. Re: Need info about pyramid antenna and it's performance

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-29 05:59:39 UTC
From: shan_rish@yahoo.com
Message-ID: <1143611979.270879.248430@t31g2000cwb.googlegroups.com>
Source record: 12871

Hi All,
Thanks for the posts. I live in Bangalore, a very crowded city. My dad
is a HAM and his call sign is VU3SMX. He is not active on the band
nowadays because of his age, 70 years. I used to help him erect
antennas and we had experience with inverted V antennas. In our
previous QTH we didnt have any problems with the erection of antennas,
because we had ample space.
Regards
Shan

eternalsquire@comcast.net wrote:
> shan_rish@yahoo.com wrote:
> > Hi All,
> >
> > I am a SWL from India and hope to get a ticket soon. I am constructing
> > a simple receiver and i would like to construct a good antenna for my
> > receiver and in future for my transmitter as well. I came across a
> > design in a souvenir released by Hamfest India where an antenna called
> > "Pyramid Antenna" is described. The author gave reference to one design
> > published in Radio Magazibe 1982 by Steve Bauer,DJIUS. I came across
> > another similar design described in
> > http://www.warc.org.uk/clubmag/qsx13.pdf . I would like to know more
> > about this antenna and the experience of using it, about it's
> > performance. My house is near a 11KV power line and my antenna will be
> > less than 15 feet from the above said power line.
> >
> > Thanks in advance.
> >
> > Regards
> > Shan
> > SWL
>
> Regardless of the antenna, you don't EVER want to place an antenna
> anywhere near a power line! Not only is this a safety hazard (a
> still wind could blow your antenna into the line), but you will
> experience a large amount of noise from the line.
>
> My general advice:
>
> 1) Keep antennas at least 100 feet away from power lines.
> 2) If you can't create a horizontal antenna that obeys the above rule,
> consider creating a vertical.
>
> Questions so our group can give you specific advice:

>
> 1) Do you live in a crowded city, or a wide open rural area, in the
> suburbs?
> 2) How highly regulated is the community in which you live?
> 3) Would your nieghbors allow the extension of your antenna to thier
> property?
> 4) Are there any common features near your house (ravine, fence, tree,
> bridge, railroad) that would give you extra possibilities for space or
> mounting.
>
> Good Luck,
>
> The Eternal Squire

2071. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-29 09:36:06 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1143624966.858167.39970@v46g2000cwv.googlegroups.com>
Source record: 12872

go with the simplest one! something like a dual gate FET: that's going
to ease problems with the local oscillator.
But build it as a separate module on a small PCB, and wire it in. that
way you'll be able to experimwnt later on by replacing the module. that
way you can go from easy and simple to complex and high perfoemance.
for a first it hard to beat the method. i see you're getting too much
info, especially for a newcomer!
stay in touch, I'll try to help you to the limit of my abilities.
Saaandy 4Z5KS

2072. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-29 09:49:32 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1143625772.202158.47600@i40g2000cwc.googlegroups.com>
Source record: 12873

guys, bear in mind that the intercept point is primarily a function of the operating quiescent poit. you cam make it high, really high and get superlative mixers, even single ended. i designed one aroun the now defunct VMP4 from Siliconix with an Id of 500mA!!! the damned thing had nearly +50dB IP#. About the same went with the LNA. All in all 24W power dissipated in the front end. How many of us can afford that or need that for the matter?
drop it! what the guy needs is some reasonable value of dynamic range and around 10-12 dB for IP3. he isn't going to build a radio telescope receiver on his first attempt. Be reasonable!
with FET's the thing to ensure is that the operating point is setablished with Vgs set at about half of the pinchoff voltage to ensure maximum dynamic range. a noise figure under 10dB is adequate for HF. it's not the galactic noise that limits your reception!
Saandy 4Z5KS

2073. HP8443A Tracking Generator Counter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-29 10:59:18 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <12qk22dmpveon39dcu3es6g0uerl8upsqg@4ax.com>
Source record: 12874

Hi,

I would very much like to hear from anyone who has had any
experience in repairing the HP8443A as I'm looking for a few
pointers, source of spares, etc. I have one in good condition
except for a fault in the ALC/Video Amp (A8) - possibly either the
output or preamp hybrid. Together these items have 52dB of gain
giving +10dBm of output from 100kHz to 110MHz. If I could get
hold of just the spec or internal schematic/block diagram of these
items (5086-7099 [U2] and 5086-7010 [U1]), that would help me to
lash-up substitutes but the correct spares would be real nice as
so would a complete working A8.

TIA - Joe, G3LLV

2074. Re: D104 distortion

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-29 12:09:12 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <4P2dnT7VrdV05bfZRVn-uQ@bright.net>
Source record: 12875

Maybe one of the transistor's biasing network is at fault. I'll assume the transistors are biased class A, which means the collector voltage (assuming common emitter circuit) should be at about 1/2 of the supply voltage. It sounds like one of them might have the collector voltage running below 1/2 of Vcc. Check the resistor values with an ohmmeter. Transistors are usually the last thing to replace...

Scott
N0EDV

pdrunen@aol.com wrote:
> Thanks for the Schematic link.
>
> The D104 is connected to the Oscope and terminated into a 100K
> resistor. It is not connected to the radio so RF is out.
>
> The Oscope shows clipping on the negative peaks, the postive peaks are
> OK.
>
> I tried removing the battery and powering off a power supply where I
> could vary the voltage to see if the distortion disappeared with
> voltage, it did not. The affect was a lower audio output.
>
> the best thing to do is to replace the two NPN and see what happens.
>
> de KJ4UO
>

2075. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-29 13:17:03 UTC
From: "Giancarlo Gian Moda, I7SWX" <i7swx@yahoo.com>
Message-ID: <1143638223.267103.102180@i39g2000cwa.googlegroups.com>
Source record: 12876

Hi Saandy,

I have some russian power FET similar to the VMP4 and probably better
but there is no sense to use them as they are no more in production and
diffcult to purchase in East Europe.

I believe a discussion on Mixers is important particularly for a
newcomer. He must know all the different kind of mixers than he will
have to decide.... it is like talking about small car or motobykes
because it is better run with a bicycle...one should not know about
racing car or motobykes.... he can putchase a byke tha add a little
mosquito engine or pss to a bigger motobyke or a small car later ...
but he will know what he has (he will have to push a lot with his legs
and then see to push less or not at all).... it is like for a portable
RTX were consumption is at premium... you cannot put (probably an
h-mode mixer has you will have to spend 30-50mA plus an amplifier with
other 20mA versus a NE612 that needs 3mA !!! To hell the IP3... one can
use his brain as a DSP...hi

73

Gian
I7SWX

2076. Re: D104 distortion

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-29 16:21:28 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <8ucl22dckiqnm5585b3kpc9qlljaa27avv@4ax.com>
Source record: 12877

On 28 Mar 2006 20:10:08 -0800, pdrunen@aol.com wrote:

>
>Thanks for the Schematic link.
>
>The D104 is connected to the Oscope and terminated into a 100K
>resistor. It is not connected to the radio so RF is out.
>
>The Oscope shows clipping on the negative peaks, the postive peaks are
>OK.
>
>I tried removing the battery and powering off a power supply where I
>could vary the voltage to see if the distortion disappeared with
>voltage, it did not. The affect was a lower audio output.
>
>the best thing to do is to replace the two NPN and see what happens.
>
>de KJ4UO

First bypass the amp and see what it does. It may be a bad element.
They will sometimes give funny distortion when they go bad.

73
Gary K4FMX

2077. Re: Heterodyne Mixer for FFT Spectrum Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-29 16:25:33 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <74dl22h3695fthkg5erl1d62q0pn9arn2k@4ax.com>
Source record: 12878

Simplest way is to use a double balanced mixer, like a mini circuits
module, and a signal generator for the LO. Works great.

73
Gary K4FMX

On Tue, 28 Mar 2006 17:24:20 -0500, Ted <kilocycles**@**yahoo.com>
wrote:

>I have a PC-based oscilloscope/spectrum analyzer that covers up to 16
>MFz. I can see the second harmonic of a 40 meter signal, but that's
>about the maximum extent of its utility. I recently came across an
>idea where a set of local oscillators and a mixer could be used to
>extend the range, with the 0 to 16 MHz input of the FFT SA being the
>IF, essentially. I can't recall where I saw that, unfortunately.
>
>I figure I could use 4 or 5 LOs in a shielded compartment, outputs
>matched for gains, and switch them into the mixer to produce frequency
>ranges in 16 MHz increments. I have some wideband MAR-8 MMICs that I
>could use (attenuated) for the RF to make up for the Mixer loss; i.e.,
>deliver the same signal level I currently get at 50 ohms with 0 to 16
>MHz signals.
>
>Anyone have any suggestions on this idea? The unit I have is pretty
>neat, being able to store the o-scope and SA plots digitally, with
>positionable cursors for readouts of points on the waveforms.
>
>73,
>Ted KX4OM

2078. "Fan" capacitors for microwave RF design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-29 17:16:04 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <122lg8eg3830g0d@corp.supernews.com>
Source record: 12879

I'm curious... at microwave frequencies often the required capacitance for some matching or tuning network gets down into the "picofaradish" range and it's reasonable to use copper pours to provide that capacitance. Most often these copper pours are in the shape of a fan (see, e.g., the photo in the first page of http://www.downeastmicrowave.com/PDF/PDF10368.pdf -- that guy makes nice stuff!), that is, a quarter-circle. Why that particular shape? My own thoughts are:

-- Well, I suppose that where you branch off of a microstrip you'd certainly want a nice gradual transition in pour width, so that leaves you with at least a "triangularish" shape
-- A "boxier" shape (either a rectangle or a triangle) probably makes a better patch antenna than something with more curved edges?
-- To cover a given area (i.e., to obtain a specified capacitance), a circle of course gives the smallest circumference, hence any resonant (antenna) modes that are created have as high of a frequency as possible (e.g., a circle is the best shape to use to make a copper pour electrically appear as "lumped" as possible at a given frequency)

Opinions?

Thanks(ish),
---Joel Kolstad

2079. Re: "Fan" capacitors for microwave RF design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-29 17:22:21 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <mqOdncpxocPZX7fZRVn-sw@web-ster.com>
Source record: 12880

Joel Kolstad wrote:

> I'm curious... at microwave frequencies often the required capacitance for
> some matching or tuning network gets down into the "picofaradish" range and
> it's reasonable to use copper pours to provide that capacitance. Most often
> these copper pours are in the shape of a fan (see, e.g., the photo in the
> first page of http://www.downeastmicrowave.com/PDF/PDF10368.pdf -- that guy
> makes nice stuff!), that is, a quarter-circle. Why that particular shape? My
> own thoughts are:
>
> -- Well, I suppose that where you branch off of a microstrip you'd certainly
> want a nice gradual transition in pour width, so that leaves you with at least
> a "triangularish" shape
> -- A "boxier" shape (either a rectangle or a triangle) probably makes a better
> patch antenna than something with more curved edges?
> -- To cover a given area (i.e., to obtain a specified capacitance), a circle
> of course gives the smallest circumference, hence any resonant (antenna) modes
> that are created have as high of a frequency as possible (e.g., a circle is
> the best shape to use to make a copper pour electrically appear as "lumped" as
> possible at a given frequency)
>
> Opinions?
>
> Thanks(ish),
> ---Joel Kolstad
>
>

I suspect, without knowing, that the 'fan' is because the wave
propagates from the entry to the capacitor at a constant rate, so you
want to have a constant-radius end for it to reflect from -- otherwise
you won't get a clean reflection.

Someone will tell me how I'm wrong, but in the mean time I'm going to go
drip my tea off my spoon into the exact center of the cup & watch the
pretty patterns.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

2080. Re: D104 distortion

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-29 17:53:15 UTC
From: fmmck@aol.com
Message-ID: <fmmck-2903061253150001@ac888c5f.ipt.aol.com>
Source record: 12881

In article <4P2dnT7VrdV05bfZRVn-uQ@bright.net>, Scott
<acepilot@bloomer.net> wrote:

> Maybe one of the transistor's biasing network is at fault. I'll assume
> the transistors are biased class A, which means the collector voltage
> (assuming common emitter circuit) should be at about 1/2 of the supply
> voltage. It sounds like one of them might have the collector voltage
> running below 1/2 of Vcc. Check the resistor values with an ohmmeter.
> Transistors are usually the last thing to replace...

Scott & PD-

I agree that the transistors are most likely good.

If this microphone had a former life connected to a CB set, it may have
always had the problem. Resistors would have to drift a long way to cause
the problem, but what if one of them was the wrong value to begin with?
Perhaps off by a factor of ten?

Leakage in the 0.1 capacitor is the next likely suspect.

The diagram I downloaded doesn't have a value for one of the resistors. I
would guess its value might be between 500K and 1Meg Ohm at the input to
the first transistor.

Fred

2081. Re: Simplified G2 Regulator for a 4CX250B amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-29 19:17:35 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2006.03.29.19.17.34.755600@oceanfree.net>
Source record: 12882

On Wed, 29 Mar 2006 18:41:00 +0000, Allison-nospam wrote:

> The 4CX250 is a fairly rugged tube compared to 3CX800 and others.

Just keep a spare handy. As long as you have a spare, the
original will never fail. If you sell the spare or give
it away, the original tube will die instantly.

73, Ed. EI9GQ.

--
Linux 2.6.15
Remove 'X' to reply by e-mail.
Yes, my username really is: nospam

2082. Re: Need Info 4 Midland 70-1526B UHF Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-29 19:53:41 UTC
From: Mortimer Schnurd <Mort@aarp.com>
Message-ID: <9BBWf.10191$tN3.4682@newssvr27.news.prodigy.net>
Source record: 12883
Cross-posted to:
alt.ham-radio.mods,rec.radio.amateur.equipment,alt.ham-radio.vhf-uhf,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Have Jack Gerritsen look that up for you.
I hear he has PLENTY of time to do that these days HAHAHAHA....

2083. Re: Heterodyne Mixer for FFT Spectrum Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-30 00:19:07 UTC
From: Ted <kilocycles**@**yahoo.com>
Message-ID: <ev8m225gf2l39hifap2jlol5g2hlcnqaor@4ax.com>
Source record: 12884

Gary,
OK, that rings a bell. I believe a sig gen was mentioned wherevever
it was I saw the idea. The old Heathkit IG-102 is pretty darn stable,
but the resolution leaves a bit to be desired. I wouldn't be sweeping
it though, just using it as the adjustable LO. It's certainly easy
enough to try; I have a few SBL-1's and a return loss bridge.

Tnx,
Ted KX4OM

On Wed, 29 Mar 2006 11:25:33 -0500, Gary Schafer
<gaschafer@comcast.net> wrote:

>
>Simplest way is to use a double balanced mixer, like a mini circuits
>module, and a signal generator for the LO. Works great.
>
>73
>Gary K4FMX
>
>On Tue, 28 Mar 2006 17:24:20 -0500, Ted <kilocycles**@**yahoo.com>
>wrote:
>
>>I have a PC-based oscilloscope/spectrum analyzer that covers up to 16
>>MFz. I can see the second harmonic of a 40 meter signal, but that's
>>about the maximum extent of its utility. I recently came across an
>>idea where a set of local oscillators and a mixer could be used to
>>extend the range, with the 0 to 16 MHz input of the FFT SA being the
>>IF, essentially. I can't recall where I saw that, unfortunately.
>>
>>I figure I could use 4 or 5 LOs in a shielded compartment, outputs
>>matched for gains, and switch them into the mixer to produce frequency
>>ranges in 16 MHz increments. I have some wideband MAR-8 MMICs that I
>>could use (attenuated) for the RF to make up for the Mixer loss; i.e.,
>>deliver the same signal level I currently get at 50 ohms with 0 to 16
>>MHz signals.
>>
>>Anyone have any suggestions on this idea? The unit I have is pretty
>>neat, being able to store the o-scope and SA plots digitally, with
>>positionable cursors for readouts of points on the waveforms.
>>
>>73,
>>Ted KX4OM

2084. Re: D104 distortion

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-30 01:30:57 UTC
From: clifto <clifto@gmail.com>
Message-ID: <ivorf3-mfn.ln1@remote.clifto.com>
Source record: 12885

pdrunen@aol.com wrote:
> The D104 is connected to the Oscope and terminated into a 100K
> resistor. It is not connected to the radio so RF is out.

Wasn't the amplified version supposed to be low impedance?
<http://www.kb2ljj.com/data/mic/D-104.htm> shows a Silver Eagle
"Final Edition" and says "Impedance: 500 ohms max."

I do see stuff on the web that suggests that the high impedance
versions wanted no less than 1 megohm load, one saying that 10 meg
was nearly ideal.

--
All relevant people are pertinent.
All rude people are impertinent.
Therefore, no rude people are relevant.
-- Solomon W. Golomb

2085. Ovenaire 1MHz crystal oven. Model sierra-A02375100

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-30 03:32:06 UTC
From: john_c@tpg.com.au
Message-ID: <442b42d8.16040687@free.teranews.com>
Source record: 12886

Hello All,
I am looking for the pin out details on the eight pin
connector, a tube style connector, that is fitted to
this oven oscillator module.
DC in, Oscillator output, that sort of information.
Regards,
John

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2086. single-ended BJT MIXER design help!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-30 07:13:58 UTC
From: e2 <electromagnetic377@yahoo.com>
Message-ID: <1143702838.852972.73740@g10g2000cwb.googlegroups.com>
Source record: 12887

please help me with my design on metal detector.i need to mix my two sine inputs(few hundreds of KHz)and extract their difference.i opted for the bjt.my questions are:

1.biasing
-- using the buil-in transistor of lm389,how do i bias it such that it operate in "mixing" mode?

2.diode-based
-- can u share any other simple circuit to implement a mixer in the low frequency range?

thanks!!!!

2087. single-ended BJT MIXER design help!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-30 07:14:46 UTC
From: e2 <electromagnetic377@yahoo.com>
Message-ID: <1143702886.680415.151120@t31g2000cwb.googlegroups.com>
Source record: 12888

please help me with my design on metal detector.i need to mix my two sine inputs(few hundreds of KHz)and extract their difference.i opted for the bjt.my questions are:

1.biasing
-- using the buil-in transistor of lm389,how do i bias it such that it operate in "mixing" mode?

2.diode-based
-- can u share any other simple circuit to implement a mixer in the low frequency range?

thanks!!!!

2088. Re: single-ended BJT MIXER design help!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-30 11:10:55 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <31PWf.11650$Od7.6524@trnddc06>
Source record: 12889

There are many, many ways to implement a frequency 'mixer', and the choice of which one to select is based on even more considerations and tradeoffs, so it's a little diccicult to recommend a topology without knowing exactly what the requirements are.

However, from your short description, it sounds like you're trying to make a metal detector that works on the principle of an oscillator whose frequency changes when the search head comes into close proximity of a metal object. The way these usually work is that the search head has a rather large inductive coil that is part of an oscillator tuned circuit (usually at a few hundred KHz). The search-headd oscillator frequency is 'mixed' with a fixed oscillator a few KHz different in frequency, producing an audible beat note. When the search head comes near a metal object, the change in the oscillator frequency produces an audible change in the audio beat note.

For this type of application you can use a very simple digital 'mixer' since there is no useful information in the amplitude of either mixer input - the only thing that matters is the frequency of the beat note. Assuming that your two oscillator signals can be formed into clean square-wave logic levels, I would suggest an HCMOS exclusive-or gate for this application, followed by a simple RC lowpass filter prior to the audio ampliifier.

A little trick you might try is to connect an unused exclusive-or gate as an inverter by connecting one input to the supply. Then connect a large value (100K is fine) from the remaining input to that gate to its output. This will bias the gate into a linear mode and the output DC voltage 'idle' at approx 1/2 Vcc). If you capacitively drive this biased gate with your filtered mixer output, it will have quite a bit of audio gain. You can use the remaining gates as amplifiers in a similar fashion.

I'm sure that this thread will produce many other very good suggestions, But this one is simple and pretty idiot-proof.

Joe
W3JDR

"e2" <electromagnetic377@yahoo.com> wrote in message
news:1143702886.680415.151120@t31g2000cwb.googlegroups.com...
> please help me with my design on metal detector.i need to mix my two
> sine inputs(few hundreds of KHz)and extract their difference.i opted
> for the bjt.my questions are:
>
> 1.biasing
> -- using the buil-in transistor of lm389,how do i bias it such that
> it operate in "mixing" mode?
>

> 2.diode-based
> -- can u share any other simple circuit to implement a mixer in the
> low frequency range?
>
>
> thanks!!!!
>

2089. Re: "Fan" capacitors for microwave RF design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-30 13:37:14 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1143725834.219939.126950@t31g2000cwb.googlegroups.com>
Source record: 12890

Joel:

Don't think of these things as capacitors. They are really a version of an open-ended quarter-wave transmission line stub. The transmission line section (which has varying impedance along its length due to the varying width) transforms the open circuit at the big end to an effective short at the small end.

I believe (though I am not sure) that this shape produces a wider bandwidth short circuit than does a more traditional constant-width quarter wave microstrip stub with the same line width as the small end of the quarter-circle.

A search on "radial stub" is likely to turn up more info (though I haven't tried it).

73,
Steve VE3SMA

2090. Surplus Junkbox Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-30 14:01:01 UTC
From: Brian Murrey <brian@iquest.net>
Message-ID: <xwRWf.1082$i41.872@newsread1.news.atl.earthlink.net>
Source record: 12891

I have moved my surplus junkbox parts to my new website.

If you need anything, just let me know.

A complete listing, that changes about once a week, is now online.

http://www.hamradparts.com

73 de KB9BVN

Brian Murrey

2091. Re: "Fan" capacitors for microwave RF design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-30 17:36:52 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <122o5rn79kgus9c@corp.supernews.com>
Source record: 12892

Hi Steve,

<skavanagh72nospam@yahoo.ca> wrote in message
news:1143725834.219939.126950@t31g2000cwb.googlegroups.com...
> Don't think of these things as capacitors. They are really a version
> of an open-ended quarter-wave transmission line stub.

Ah, thanks, I didn't realize people really were treating them as being
distributed instead of lump! (Since using copper pours as lumped capacitors
is certainly reasonable at lower frequencies.)

> A search on "radial stub" is likely to turn up more info (though I
> haven't tried it).

The first hit is pretty good (now that you're given me the correct search
term) -- the Microwaves 101 web site,
http://www.microwaves101.com/encyclopedia/quarterwave.cfm.

---Joel

2092. Chokes on digital supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-30 18:26:17 UTC
From: John Wilkinson <john.wilkinson@philips.com>
Message-ID: <18f0wz6jnf5c4.1g0kwod5jfsop$.dlg@40tude.net>
Source record: 12893

Hi,
If I have a few TTL chips on the same PCB as all my PLL's (see previous threads). Would it be a good idea to put a little choke in the supply line up against each TTL chip, with cap decoupling either side?

What about 100uH and 2 100nF?

Will that reduce any noise problems I have?

Thanks,
John.

2093. Re: Chokes on digital supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-30 20:22:35 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <e0hembeqa2@engnntp2.cig.mot.com>
Source record: 12894

I don't believe chokes should be necessary. Good 0.1 or 0.01 at each
package should be enough. Parallel bypass caps is not a good idea because
the larger one will go inductive above its self resonant freq and resonate
with the other creating a parallel resonant, high impedance "non-bypass".

HOWEVER...

Make sure your ground paths are isolated from each other. The digital chip
ground path should have nothing in common with the VCO and Phase Det
grounds. The VCO is extremely sensitive to any voltage variations between
ground and its supply and if you have ground variations and a good supply,
it is just like power supply ripple.
All the digital grounds should go directly back to the supple input to
the board and the analog grounds the same and this must be two completely
isolated paths.

Sometimes *cutting* ground paths around a VCO improves spurs.

GOOD:

```
VCO GND ----------------------\
\
-Supply GND
/
/
TTL GND ----------------------
```

BAD:

```
VCO GND --\ This run *HAS* impedance and
\ voltage drop in the form of pulses.
----------------------Supply GND
/ And there fore modulates the VCO.
/
TTL GND --
```

73, Steve, K9DCI

"John Wilkinson" <john.wilkinson@philips.com> wrote in message
news:18f0wz6jnf5c4.1g0kwod5jfsop$.dlg@40tude.net...
> Hi,
> If I have a few TTL chips on the same PCB as all my PLL's (see previous
> threads). Would it be a good idea to put a little choke in the supply line
> up against each TTL chip, with cap decoupling either side?
>
> What about 100uH and 2 100nF?
>

> Will that reduce any noise problems I have?
>
> Thanks,
> John.

2094. Re: "Fan" capacitors for microwave RF design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-30 20:42:24 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <e0hfrgflt2@engnntp2.cig.mot.com>
Source record: 12895

Call him. The phone number is right there. There are most likely 10GHz bypasses. It's hard to tell from the pix. They are all in the center of another line going to two places and all the same size.

73, Steve, K9DCI

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> wrote in message news:122lg8eg3830g0d@corp.supernews.com...
> I'm curious... at microwave frequencies often the required capacitance for
> some matching or tuning network gets down into the "picofaradish" range and
> it's reasonable to use copper pours to provide that capacitance. Most often
> these copper pours are in the shape of a fan (see, e.g., the photo in the
> first page of http://www.downeastmicrowave.com/PDF/PDF10368.pdf -- that guy
> makes nice stuff!), that is, a quarter-circle. Why that particular shape? My
> own thoughts are:
>
> -- Well, I suppose that where you branch off of a microstrip you'd certainly
> want a nice gradual transition in pour width, so that leaves you with at least
> a "triangularish" shape
> -- A "boxier" shape (either a rectangle or a triangle) probably makes a better
> patch antenna than something with more curved edges?
> -- To cover a given area (i.e., to obtain a specified capacitance), a circle
> of course gives the smallest circumference, hence any resonant (antenna) modes
> that are created have as high of a frequency as possible (e.g., a circle is
> the best shape to use to make a copper pour electrically appear as "lumped" as
> possible at a given frequency)
>
> Opinions?
>
> Thanks(ish),
> ---Joel Kolstad
>
>

2095. Re: "Fan" capacitors for microwave RF design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-30 22:14:45 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <122om54kvdl7k8c@corp.supernews.com>
Source record: 12897

"Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
news:e0hfrgflt2@engnntp2.cig.mot.com...
> Call him. The phone number is right there.

I kinda prefer the approach on Usenet here where's it's completely voluntary for people to read your question and provide answers (and there have been a couple good ones).

I met Steve (of Down East Microwave) a couple years ago at Microwave Update in Seattle... great guy!

2096. Re: Chokes on digital supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-30 22:49:43 UTC
From: Chris Jones <lugnut808@nospam.yahoo.com>
Message-ID: <122okj2rncm36a5@corp.supernews.com>
Source record: 12896

Steve Nosko wrote:

> I don't believe chokes should be necessary. Good 0.1 or 0.01 at each
> package should be enough. Parallel bypass caps is not a good idea because
> the larger one will go inductive above its self resonant freq and resonate
> with the other creating a parallel resonant, high impedance "non-bypass".
>
>
> HOWEVER...
>
> Make sure your ground paths are isolated from each other. The digital
> chip ground path should have nothing in common with the VCO and Phase Det
> grounds. The VCO is extremely sensitive to any voltage variations between
> ground and its supply and if you have ground variations and a good supply,
> it is just like power supply ripple.
> All the digital grounds should go directly back to the supple input to
> the board and the analog grounds the same and this must be two completely
> isolated paths.
>
> Sometimes *cutting* ground paths around a VCO improves spurs.
>
>
> GOOD:
>
> VCO GND ------------------------\
> \
> -Supply GND
> /
> /
> TTL GND ------------------------
>
>
> BAD:
>
> VCO GND --\ This run *HAS* impedance and
> \ voltage drop in the form of pulses.
> ----------------------Supply GND
> / And there fore modulates the VCO.
> /
> TTL GND --
>
>
> 73, Steve, K9DCI
>

>
> "John Wilkinson" <john.wilkinson@philips.com> wrote in message
> news:18f0wz6jnf5c4.1g0kwod5jfsop$.dlg@40tude.net...
>> Hi,
>> If I have a few TTL chips on the same PCB as all my PLL's (see previous
>> threads). Would it be a good idea to put a little choke in the supply
>> line up against each TTL chip, with cap decoupling either side?
>>
>> What about 100uH and 2 100nF?
>>
>> Will that reduce any noise problems I have?
>>
>> Thanks,
>> John.

There are two schools of thought on RF grounding of mixed analogue and digital circuits. I have always had good results with a single, complete ground *plane* for all of the analogue and digital circuitry, and separate supplies with their own regulators near the loads (or at least their own decoupling), for the noisy blocks and the sensitive blocks. Others may say that what I do doesn't work for them, but it has worked for me.

Chris

2097. Re: Chokes on digital supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-30 23:57:29 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1143763049.830917.137400@i39g2000cwa.googlegroups.com>
Source record: 12798

I agree with Chris on this one. I'd add some things, though. Because of transmission-line effects, the ground return currents for digital ICs will tend to flow on the ground plane in the region very near the supply lines, so keep the supply lines for the digital section away from the sensitive analog section.

Another way to make the digital stuff quiet is to realize that a great deal of the high frequency currents involved with digital are in the I/O lines that go into, and especially go out of, chips. It helps to pay special attention to all digital signal lines. You can soften the edges by putting small series resistors physically very near each output, so as to limit the current into the capacitance of the trace and inputs it goes to. It can help a lot, too, to use differential signalling even when you don't need to. Just as differential lines in the sensitive analog input end help to reject noise, so differential lines radiate less than single ended ones. Differential outputs also make for quieter power supply lines, since one output turns on whenever another turns off, maintaining constant supply current. Fully differential ECL is particularly quiet on the power supplies, but likely not worth the effort because of how power-hungry it is and how little integration you can get on a single chip.

We do use little ferrites on power supply lines; they provide effective high frequency isolation. 0.1uF bypasses aren't really very good at bypassing 100MHz -- it's nice to also use some smaller values, and to use physically small parts that have low parasitic inductance. It pays to THINK about the layout quite a bit, and understand what you are doing and why.

For sensitive analog circuitry that draws constant current, there's a cute and very effective power supply cleaning circuit and ap note on the Wenzel Associates website. The noise out of a typical linear regulator will significantly add to the phase noise of a PLL. That site also has some good info about low phase noise circuits. (somewhat aside: Wenzel makes some really fine low-noise oscillators, and Charles Wenzel is a very nice, and very interesting, guy.)

I think this all says that what Chris does also DOES work for me, and I can affirm that much of it is in a commercial environment where we are achieving cutting-edge performance.

Cheers,
Tom

2098. Re: single-ended BJT MIXER design help!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-31 03:12:26 UTC
From: e2 <electromagnetic377@yahoo.com>
Message-ID: <1143774746.601785.119400@j33g2000cwa.googlegroups.com>
Source record: 12799

thanks..you hit my application!
actually im targeting either diode or bjt based mixer becoz they're
available for me now.
i tried the single-ended bjt mixer..
i set the oscillators around 460khz...with a few hundred of millivolts
peak to peak..
i use the transistor from lm389n audio chip..what i did was to bias it
in its "active mode"
end then single-fed the two outputs from oscillator to the base of
bjt...
the problem is i cant discern the signal from the spectrum..but in the
oscilloscope,its
close to a cliped periodic wave with fundamentals close to the one of
my oscillator frequency...can you help me with another design
configuration with the bjt?

next i tried the diode based but i could hardly get a differnce
frequency..only harmonics though..my arrangement is each input is fed
to a 1k resistor which is then single fed to the negative side of the
diode...any help?or new configuration?

thanks!!

2099. Illegal Immigration, the Non-Issue of the Week.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-31 03:37:49 UTC
From: TheExpert@ExpertHumor.com
Message-ID: <704048833006@free.teranews.com>
Source record: 12800

Our politicians loved talking about it this week,
but they won't do anything about it. Get the details
from The Expert:

http://www.ExpertHumor.com/

*** Free account sponsored by SecureIX.com ***
*** Encrypt your Internet usage with a free VPN account from http://www.SecureIX.com ***

2100. BJT MIXER QUESTION: should it be used as non-llinear mode or switching mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-31 04:14:10 UTC
From: e2 <electromagnetic377@yahoo.com>
Message-ID: <1143778450.128789.250920@u72g2000cwu.googlegroups.com>
Source record: 12801

very simple application..i have two input frequencies and would like to
use single-fed bjt transistor to get a difference frequency...
any other design recommendation is highly appreciated......thanks!

2101. Re: BJT MIXER QUESTION: should it be used as non-llinear mode or switching mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-31 11:44:29 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1143805469.433986.184740@z34g2000cwc.googlegroups.com>
Source record: 12802

e2 wrote:
> very simple application..i have two input frequencies and would like to
> use single-fed bjt transistor to get a difference frequency...
> any other design recommendation is highly appreciated......thanks!

A balanced switching mixer using two BJTs would be a lot better. Or,
you could use bus switches as in the FST3125 which would be better
still.

Leon

2102. Re: Chokes on digital supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-31 14:16:47 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <O5OdnQfvw9keqrDZRVn-sg@comcast.com>
Source record: 12803

I borrowed 5V from the USB line of a data acquisition card -- it is somewhat noisy so I put a 100uH choke and a small tantalum on the line -- it works.

You can get excellent noise performance (far exceeding the Wetzel modified LM317 circuit) with Linear Technologies LT1763 and LT1964 ultra-low noise regulators -- they will do 100mA on their own and can be used to drive a pass transistor if you need more juice. Unfortunately, post regulating any digital supply for analog circuitry burns up watts.

fwiw -- while dual bypass caps aren't a good idea for digital circuits (because of the ringing aforementioned) -- in analog they are recommended for certain low noise apps because of susceptibility to EMI and RFI.

2103. Re: Chokes on digital supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-31 14:51:41 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1143816701.867616.77470@j33g2000cwa.googlegroups.com>
Source record: 12804

Huh? The LT1763 claims 20uVRMS noise in a 100kHz bandwidth. That's about 63nV/rtHz. The data sheets shows it MUCH worse at low frequencies, and the LT1964 a bit worse yet. I'm not sure who Wetzel is, but the (modified) Wenzel circuit I've used has given me noise down in the very few nanovolts/rtHz region down to 10Hz and below, depending on just how I implement it. Perhaps we're thinking of different circuits for cleaning supplies. The one I'm thinking of is very useful even with "quiet" regulators like the LT parts. Easy implementations get you 20dB improvement in noise, and careful design and parts specification can get you 40dB, with noise as low as a couple nV/rtHz and a 1/f corner well below 100Hz, by using an op amp like the AD797 and low noise precision resistors in what is essentially a bridge circuit to cancel the regulator noise.

Guess the jury is still out on the multiple bypass cap values, too. Xilinx and TI at least both recommend -- strongly recommend -- multiple values. Yes, you want to avoid resonances, but I've had much less trouble with bypass caps in parallel than with chokes resonating with with bypass caps. Now that's something to look out for! The trick with parallel bypass caps is to insure that the Q of any parasitic inductances is low.

Cheers,
Tom

2104. Re: BJT MIXER QUESTION: should it be used as non-llinear mode or switching mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-31 15:31:00 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <e0jhvk$1k1$2@engnntp2.cig.mot.com>
Source record: 12806

Just make sure one signal is large enough to drive the device well into it's
non-linear region.
73, Steve, K9DCI

"e2" <electromagnetic377@yahoo.com> wrote in message
news:1143778450.128789.250920@u72g2000cwu.googlegroups.com...
> very simple application..i have two input frequencies and would like to
> use single-fed bjt transistor to get a difference frequency...
> any other design recommendation is highly appreciated......thanks!
>

2105. Re: Chokes on digital supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-31 16:04:57 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1143821097.868653.236280@u72g2000cwu.googlegroups.com>
Source record: 12805

More on capacitors of differing values in parallel can be found many
places, of course. Here's one web resource that should be of interest:

http://www.ultracad.com/articles/esrbcap.pdf

It has specific ideas beyond the low-Q thought I mentioned, when you
parallel different values.

Cheers,
Tom

2106. The weeekly FAQ - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-31 16:06:05 UTC
From: Plod's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1143821165.443067.147440@e56g2000cwe.googlegroups.com>
Source record: 12807
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

A necessary preface.....

(It is becoming increasingly difficult to fly the flag for
decency and for civilised behaviour in Radio Hammery. Even
the Usenet newsgroups dedicated to the cause have degenerated
into a hotbed of abusive onslaughts by those who ought to know
better; the Nugatory Numpties who boast of an interest
exceeding 10, 20, 30, 40 or even 50 years and yet who have
proved themselves incapable of even meeting the trivial exam
standards set for 6-year-olds. However, there still exists
the fundamental basis on which Ham Radio is based, and
that will never die. This FAQ ("What Is Ham Radio?") will
be regularly published and will not be shouted or bullied
down. It is important that those of a technical bent, who
are the natural seed-corn of Radio Hammery and who
gravitate towards us to be the real novitiate, can
still find us, (and know that we are still here), their fellows.)

-----ooooo-----

So,.....What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then

operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line

telephone, whilst continuing to regard Ham Radio as a separate technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between a Ham Radio licence and a CB Radio licence. To him, they are sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then tries to classify himself as the equal of the Radio Ham when, in fact, he is nothing of the kind.

Ham Radio is not CB Radio and has no common ground with it! Ham Radio is _THE_ technical pursuit for gentlemen; CB Radio is the operating hobby for those who buy their rigs and equipment off the shelf.

-----ooooo-----

If you are the sort of person who is motivated by a technical interest in how things work; if you took apart malfunctioning clocks, toasters and the like and put them right despite never having seen them working, then a Ham Radio licence is your traditional route! There has never been a shortage of such people, and those who gravitate towards such an interest have always been welcomed into our shacks and their interests fostered. There is not today, nor has there ever been, a need to go out and encourage and press children, children who have never expressed an interest in Ham Radio, to come into our shacks. Such an activity should cause eyebrows to be raised - what normal well-adjusted adults seek the social acquaintance of children?!

-----ooooo-----

Please remember that this FAQ is a _POSITIVE EXHORTATION_ to you to exert yourselves to join our fraternity! (If you find otherwise, then perhaps you are already classing yourself in the mediocre groups of those who are criticised in the FAQ and from whom we _MUST_ dissociate? If so - it's never too late for a re-taxonomisation on your part - there's nothing elitist about us, and we welcome all those who are prepared to put themselves out in order to join our ranks!)

2107. get help

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-31 16:17:26 UTC
From: an old freind <kb9rqz_ars@yahoo.com>
Message-ID: <1143821846.111065.201470@z34g2000cwc.googlegroups.com>
Source record: 12808
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Plod's Conscience wrote:
> A necessary preface.....
>
> (It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery. Even
> the Usenet newsgroups dedicated to the cause have degenerated
> into a hotbed of abusive onslaughts by those who ought to know
get help

2108. Re: The weeekly FAQ - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-31 16:50:16 UTC
From: Deadman Walking <DeadMan@thegraveyard.RIP>
Message-ID: <c5dXf.639$BO5.20@newsfe3-win.ntli.net>
Source record: 12809
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Can't you tell its Friday same old s++t of the poor sod. He needs help got a number he can contact.

The Dead Man

2109. get help

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-31 17:14:46 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1143825286.133487.156180@g10g2000cwb.googlegroups.com>
Source record: 12810
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Deadman Walking wrote:
> Can't you tell its Friday same old s++t of the poor sod. He needs help got a
> number he can contact.
>
> The Dead Man

he sure does

2110. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-31 19:39:29 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <tatq22t6ag89air5tt6oc9oaqrpfjomq3c@4ax.com>
Source record: 12811

On 28 Mar 2006 12:36:21 -0800, "Giancarlo Gian Moda, I7SWX"
<i7swx@yahoo.com> wrote:

>Ah..OK CSSE ... I sold a PDP11/10 with a card reader from CSS to the
>Italian Goverment as a donation to a University in Peru'...the highest
>PDP11 installation on the world at that time...hi

By the way, did you have to install extra fans to compensate for the
low air density (and thus lower heat carrying capacity) at high
altitudes ?

Some electronic systems have quite low maximum altitude ratings due to
this. The low air density might also cause problems for amateur radio
equipment if operated at full power at high altitudes.

Paul OH3LWR

2111. Another Parts Update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-31 22:50:16 UTC
From: Brian Murrey <brian@iquest.net>
Message-ID: <ImiXf.1646$i41.741@newsread1.news.atl.earthlink.net>
Source record: 12812

I have moved my junkbox surplus stuff to a new website.
http://www.hamradparts.com

1N4148 Diodes $3.00 for 100, $4.00 for 200
1N4007 - 1 Amp General Purpose Rectifier Diodes - $3.00 for 50

1500pf NPO Caps, SMT 0805, 50V - $3.00 for 100
3300pf NPO Caps, SMT 0805, 25V - $3.00 for 100
220pf NPO Caps, SMT 0805, 50V - $3.00 for 100
150pf NPO Caps, SMT 0805, 50V - $3.00 for 100

2N3704 NPN TO92 - 20 for $2.00
2N2907 PNP TO92 Package - $4.00 for 50
2N3904 NPN TO92 Package - $4.00 for 50
2N2222 NPN TO18 (metal) Package - 5 for $1.00
MMBT4403 PNP SMT transistor - 50 for $4.00

2N2222 NPN TO92 Package - $4.00 for 50
The 2N2222 is a bulk transistor...meaning the part is not labeled.
They ship in a Zip Lock packet and the packet is clearly labeled.

2N3906 PNP TO92 Package - $4.00 for 50
The 2N3906 is a bulk transistor...meaning the part is not labeled.
They ship in a Zip Lock packet and the packet is clearly labeled.

2SC2166 - RF AMP TO220 (8 left) - $4.50 each
IRF510 - MOSFET AMP TO220 - 5 for $1.00

3.575611 Mhz HC49 Crystals - 5 for $2.00
4.9152 Mhz HC49 Crystals - 10 for $3.00
9.830 Mhx Crystals (SS@ package) - 10 for $3.00
LM386N-1 Audio Amp - 6 for $5.00
LM7805ACV 5v Positive Voltage Regulators (TO220) 5 for $2.00

Sticky Back Rubber Feet for your projects, self adhesive - 8 to a strip - 2
Strips for $1.00

Panasonic Wall Warts - 12VDC, 500mA (center negative) $6.00 each
If you need center positiove, cut off the end and reverse it. I use these to
power my
rock mites, my TT2, and all of my homebrew test gear.

NON-SMT Capacitors: 50 for $3.00
==========
8pf NPO Ceramic
11pf NPO Ceramic
12pf NPO Ceramic

22pf Ceramic
470pf Ceramic
560pf Ceramic
.1 uF (104J) Ceramic

Cash or Check or Money Order only.

Prices includes USA shipping, minimum order is $5.00, otherwise add a buck for
shipping. Will ship DX, email for details.

Brian Murrey
47 Grassy Drive
New Whiteland IN 46184

73 de KB9BVN

2112. Parts List Correction

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-03-31 22:57:11 UTC
From: Brian Murrey <brian@iquest.net>
Message-ID: <btiXf.1651$i41.1544@newsread1.news.atl.earthlink.net>
Source record: 12813

In the last message I had IRF510's at 5 for a dollar.

That was a MAJOR typo, I will not be selling them for that price.

The right price is 4 for $5.00

http://www.hamradparts.com

Sorry!

73 de KB9BVN

2113. Re: BJT MIXER QUESTION: should it be used as non-llinear mode or switching mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-01 04:43:47 UTC
From: e2 <electromagnetic377@yahoo.com>
Message-ID: <1143866627.890682.262670@z34g2000cwc.googlegroups.com>
Source record: 12814

can you give me a simple configuration?or schematic?
thanks!

2114. Re: BJT MIXER QUESTION: should it be used as non-llinear mode or switching mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-01 04:45:56 UTC
From: e2 <electromagnetic377@yahoo.com>
Message-ID: <1143866756.663477.211380@t31g2000cwb.googlegroups.com>
Source record: 12815

using fixed bias, i will connect each frequency input to the bjt's base
which is emitter couple then how will i combine them?
thalks

2115. FA: Two 6 position coax switches & other stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-01 05:15:48 UTC
From: "Jim, KK1W" <kk1w@charter.net>
Message-ID: <90oXf.86$qP2.48@fe02.lga>
Source record: 12816
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Ending tomorrow, reasonable minimums, good feedback rating. Two 6 position coax switchs, assortement of IC's including XR's and even some FRS talkies.

http://search.ebay.com/_W0QQsassZkk1w2000

Thanks for looking,

Jim, KK1W

2116. Re: Need info about pyramid antenna and it's performance

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-01 07:33:18 UTC
From: eternalsquire@comcast.net
Message-ID: <1143876798.489018.245710@i40g2000cwc.googlegroups.com>
Source record: 12817

Your best bet would be a succession of rooftops or balconies. From what I understand, homes in Bangalore have flat roofts rather than peaked. I bet if you ask permission from half a dozen neighbors in both directions, that you can put up a dipole.

Your other possibility would be to put up a 1/4 wave vertical for 40 meters. There is some outstanding telescoping fiberglass pole on the market, just put copper tape along the side as the radiating element.

Good Luck,

The Eternal Squire

shan_rish@yahoo.com wrote:
> Hi All,
> Thanks for the posts. I live in Bangalore, a very crowded city. My dad
> is a HAM and his call sign is VU3SMX. He is not active on the band
> nowadays because of his age, 70 years. I used to help him erect
> antennas and we had experience with inverted V antennas. In our
> previous QTH we didnt have any problems with the erection of antennas,
> because we had ample space.
> Regards
> Shan
>
> eternalsquire@comcast.net wrote:
> > shan_rish@yahoo.com wrote:
> > > Hi All,
> > >
> > > I am a SWL from India and hope to get a ticket soon. I am constructing
> > > a simple receiver and i would like to construct a good antenna for my
> > > receiver and in future for my transmitter as well. I came across a
> > > design in a souvenir released by Hamfest India where an antenna called
> > > "Pyramid Antenna" is described. The author gave reference to one design
> > > published in Radio Magazibe 1982 by Steve Bauer,DJIUS. I came across
> > > another similar design described in
> > > http://www.warc.org.uk/clubmag/qsx13.pdf . I would like to know more
> > > about this antenna and the experience of using it, about it's
> > > performance. My house is near a 11KV power line and my antenna will be
> > > less than 15 feet from the above said power line.
> > >
> > > Thanks in advance.
> > >
> > > Regards
> > > Shan
> > > SWL

> >
> > Regardless of the antenna, you don't EVER want to place an antenna
> > anywhere near a power line! Not only is this a safety hazard (a
> > still wind could blow your antenna into the line), but you will
> > experience a large amount of noise from the line.
> >
> > My general advice:
> >
> > 1) Keep antennas at least 100 feet away from power lines.
> > 2) If you can't create a horizontal antenna that obeys the above rule,
> > consider creating a vertical.
> >
> > Questions so our group can give you specific advice:
> >
> > 1) Do you live in a crowded city, or a wide open rural area, in the
> > suburbs?
> > 2) How highly regulated is the community in which you live?
> > 3) Would your nieghbors allow the extension of your antenna to thier
> > property?
> > 4) Are there any common features near your house (ravine, fence, tree,
> > bridge, railroad) that would give you extra possibilities for space or
> > mounting.
> >
> > Good Luck,
> >
> > The Eternal Squire

2117. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-01 08:40:31 UTC
From: "Giancarlo Gian Moda, I7SWX" <i7swx@yahoo.com>
Message-ID: <1143880831.700873.159020@g10g2000cwb.googlegroups.com>
Source record: 12818

Hi Paul,

This installation was somewhere on the Andes were there was a
astronomic site.

We did not need to use extra fans or other "helping" devices. Certainly
this set-up
was not on an open air site, it was in an building. So "air" presence
was OK for humans.

BTW, in 1966 while working in UK for a small specialized company, I was
involved in a project were we were producing the Eidofor Colour TV
Projectors (Philips Group). Philips had sold 3 of these units to be
used in Mexico City for the Olympic Games. To be sure we would not have
problems with the 3 colour tubes for explosion (I forgot M.C. height
a.s.l.) we tested the system in the BAC UK air chamber (vy expensive
tubes...hi).

73

Gian
I7SWX

2118. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-01 08:42:18 UTC
From: "Giancarlo Gian Moda, I7SWX" <i7swx@yahoo.com>
Message-ID: <1143880938.395291.136640@e56g2000cwe.googlegroups.com>
Source record: 12819

Hi Allison,

OK for everything.

Please keep me updated on Art's reaction...hi

73

Gian
I7SWX

2119. Re: BJT MIXER QUESTION: should it be used as non-llinear mode or switching mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-01 09:01:33 UTC
From: "Giancarlo Gian Moda, I7SWX" <i7swx@yahoo.com>
Message-ID: <1143882093.889030.250940@j33g2000cwa.googlegroups.com>
Source record: 12820

Hi e2,

I built a 2x bjt mixer as published by DJ2LR in the 70-80s. I had no instrumentation so I could not guess what it was wrong. It was mixing OK but it was noisy. probably not enough drive.

As suggested by Leon you could use the FST3125 and I can send you a note in english with circuit diagram and other infos on my 1 transformer double balanced mixer (demodulator-modulator) using the FST3125. A note was published in RadCom, TT column, June 04.

Pse send me an email to i7swxatyahoo.com

73

Gian
I7SWX

2120. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-01 11:07:19 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <1bns22tov5838pb8u5628sc41oi5bp2hvf@4ax.com>
Source record: 12821

On 1 Apr 2006 00:40:31 -0800, "Giancarlo Gian Moda, I7SWX"
<i7swx@yahoo.com> wrote:

>Hi Paul,
>
>This installation was somewhere on the Andes were there was a
>astronomic site.

Apparently this was much before the Atacama site in Chile became
popular.

>We did not need to use extra fans or other "helping" devices. Certainly
>this set-up
>was not on an open air site, it was in an building. So "air" presence
>was OK for humans.

At sea level, the air density is about 1.2 kg/mï¿½ and at altitudes of
4000 m (La Paz?), the air density is only 0,8 kg/mï¿½. In a forced
cooled system, the critical parameter is the _mass_ flowing though the
system and the amount of degrees the air is heated.

In order to run the same mass of air through the system, you would
have to use 1.2:0.8 or 1.5 times the air volume in the mountains.

>BTW, in 1966 while working in UK for a small specialized company, I was
>involved in a project were we were producing the Eidofor Colour TV
>Projectors (Philips Group). Philips had sold 3 of these units to be
>used in Mexico City for the Olympic Games. To be sure we would not have
>problems with the 3 colour tubes for explosion (I forgot M.C. height
>a.s.l.) we tested the system in the BAC UK air chamber (vy expensive
>tubes...hi).

Wasn't Eidophores used during the Apollo flights to show the orbits in
Huston ?

Paul OH3LWR

2121. Re: Optical Communications?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-01 13:16:16 UTC
From: Plod's Conscience <aiyr.r.bean@lycos.co.uk>
Message-ID: <1143897376.447367.200840@g10g2000cwb.googlegroups.com>
Source record: 12822
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Just had a chance to disassemble it and remove the
plastic lens that creates the line-of-light, and other
optical obstructions and it produces a nice little spot
focussable with a hand magnifying glass to a very
fine spot that is uncomfortable to look at, so
presumably with a dual-lens arrangement will
give a decent parallel and non-divergent beam.

So, even if you've got no immediate use for it, a small
laser that is already mounted in a plastic housing
can't be bad for a couple of quid for future
experiments.

Anybody seen inside those devices that project
laser writing - are they just a couple of rotating mirrors
with suitable synchronising pulses being generated?

Plod's Conscience wrote:
> Powered as it is by AAA cells, it seems to have
> a greater power, and a greater reserve of power, than
> those laserpointers powered by watch batteries.
>
> Allowing for the lens that is used to produce the
> straight line beam, the spot from the end was
> easily picked out on a gravestone 1/4 mile away,
> thus suggesting that a tight beam is being produced.

2122. Re: Chokes on digital supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-01 14:08:27 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <YN-dnQaKhOuWGrPZRVn-jQ@comcast.com>
Source record: 12823

Yes, you are right -- my recollection was faulty and I apologize.

I was just looking at the "clean up" portion of the Wenzel (not Wetzel) regulator with an LM317 -- later on in the article (Finesse Voltage Regulator Noise) they use an LM833 which is cited as a limiting factor.

Jung used an AD797 in the Super-Regulator series of articles, but I believe that they switched to an AD817 or AD825 later on as there were some problems. The Jung article can be found on EDN's website: www.ednmag.com -- Just put "Jung" in the search engine. Some people reported that the Jung super-regulator could be made to oscillate pretty easily. I didn't have this problem.

I built the super-regulator and used it with a low noise preamp, but found the Linear Parts to be much easier to implement, as long as I used a tantalum bypass !

"K7ITM" <k7itm@msn.com> wrote in message
news:1143816701.867616.77470@j33g2000cwa.googlegroups.com...
> Huh? The LT1763 claims 20uVRMS noise in a 100kHz bandwidth. That's
> about 63nV/rtHz. The data sheets shows it MUCH worse at low
> frequencies, and the LT1964 a bit worse yet. I'm not sure who Wetzel
> is, but the (modified) Wenzel circuit I've used has given me noise down
> in the very few nanovolts/rtHz region down to 10Hz and below, depending
> on just how I implement it. Perhaps we're thinking of different
> circuits for cleaning supplies. The one I'm thinking of is very useful
> even with "quiet" regulators like the LT parts. Easy implementations
> get you 20dB improvement in noise, and careful design and parts
> specification can get you 40dB, with noise as low as a couple nV/rtHz
> and a 1/f corner well below 100Hz, by using an op amp like the AD797
> and low noise precision resistors in what is essentially a bridge
> circuit to cancel the regulator noise.
>
> Guess the jury is still out on the multiple bypass cap values, too.
> Xilinx and TI at least both recommend -- strongly recommend -- multiple
> values. Yes, you want to avoid resonances, but I've had much less
> trouble with bypass caps in parallel than with chokes resonating with
> with bypass caps. Now that's something to look out for! The trick
> with parallel bypass caps is to insure that the Q of any parasitic
> inductances is low.
>
> Cheers,
> Tom
>

2123. Re: Chokes on digital supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-01 15:24:46 UTC
From: w8ji@akorn.net
Message-ID: <1143905086.767074.304930@v46g2000cwv.googlegroups.com>
Source record: 12824

K7ITM wrote:

> values. Yes, you want to avoid resonances, but I've had much less
> trouble with bypass caps in parallel than with chokes resonating with
> with bypass caps. Now that's something to look out for!

You've got that right!

I'd be very careful sticking a choke, especially one without a swamping resistance in parallel, in series with a supply line! Unless you hve a specific frequency range you have to block an L/C filter can be big problems.

2124. Re: The weeekly FAQ - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-01 15:57:14 UTC
From: Plod's Conscience <aiyr.r.bean@lycos.co.uk>
Message-ID: <1143907034.553864.108030@v46g2000cwv.googlegroups.com>
Source record: 12825
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.amateur.misc

The shortness of the list of responses is good and would
seem to suggest that the Nugatory Numpties have at long
last desisted from their rather silly and infantile tirades and
that the field is left open for _REAL_ Radio Hams to
congregate here once again.

Plod's Conscience wrote:
> A necessary preface.....
>
> (It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery. Even
> the Usenet newsgroups dedicated to the cause have degenerated
> into a hotbed of abusive onslaughts by those who ought to know
> better; the Nugatory Numpties who boast of an interest
> exceeding 10, 20, 30, 40 or even 50 years and yet who have
> proved themselves incapable of even meeting the trivial exam
> standards set for 6-year-olds. However, there still exists
> the fundamental basis on which Ham Radio is based, and
> that will never die. This FAQ ("What Is Ham Radio?") will
> be regularly published and will not be shouted or bullied
> down. It is important that those of a technical bent, who
> are the natural seed-corn of Radio Hammery and who
> gravitate towards us to be the real novitiate, can
> still find us, (and know that we are still here), their fellows.)
>
> -----ooooo-----
>
> So,.....What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>
> Ham Radio awakens in its aficionados a whole-life
> fascination with all things technical and gives
> an all-abiding curiosity to improve one's scientific
> knowledge. It's a great swimming pool, please dive in!
>
> This excitement causes a wish to share the experience
> with ones fellow man, and shows itself in the

> gentlemanly traditions of Ham Radio.
>
> Radio Hams are in a unique privileged position in that
> they can construct and operate their own equipment! No-one
> else has this privilege. Users, such as broadcasters,
> the po lice and armed farces, CBers and mobile phone
> users have to purchase ready-made gear. Manufacturers
> are not licensed to operate their gear. Radio Hams
> are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment. This is a privilege well worth the effort
> to gain, and one to be jealously guarded.
>
> The excitement that drives a Radio Ham starts with
> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to
> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.
>
> -----OOOOO----
>
> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;
> they are free with rather silly personal insults.
>
> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.
>
> No _REAL_ Radio Hams are deceived by such people!

>
> -----ooooo-----
>
> One infallible way to disambiguate the CB Radio Hobbyist
> from the _REAL_ Radio Ham is to solicit their view of the
> difference between CB Radio and Ham Radio. A Radio Ham will
> perceive Ham Radio to be a technical pursuit and will
> perceive CB Radio to be a social communications facility
> no different in essence to a land-line telephone or a
> GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
> could also hold a CB licence safe in the knowledge that
> such a licence says no more about him than having a land-line
> telephone, whilst continuing to regard Ham Radio as a separate
> technical pursuit.
>
> A CB Radio hobbyist, on the other hand, sees no difference between
> a Ham Radio licence and a CB Radio licence. To him, they are
> sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
> tries to classify himself as the equal of the Radio
> Ham when, in fact, he is nothing of the kind.
>
> Ham Radio is not CB Radio and has no common ground with it!
> Ham Radio is _THE_ technical pursuit for gentlemen; CB Radio
> is the operating hobby for those who buy their rigs and
> equipment off the shelf.
>
> -----ooooo-----
>
> If you are the sort of person who is motivated by
> a technical interest in how things work; if you took apart
> malfunctioning clocks, toasters and the like and put them
> right despite never having seen them working, then
> a Ham Radio licence is your traditional route! There has
> never been a shortage of such people, and those who gravitate
> towards such an interest have always been welcomed into
> our shacks and their interests fostered. There is not today,
> nor has there ever been, a need to go out and encourage
> and press children, children who have never expressed an
> interest in Ham Radio, to come into our shacks. Such an
> activity should cause eyebrows to be raised - what
> normal well-adjusted adults seek the social acquaintance
> of children?!
>
> -----ooooo-----
>
> Please remember that this FAQ is a _POSITIVE EXHORTATION_
> to you to exert yourselves to join our fraternity! (If you find
> otherwise, then perhaps you are already classing yourself in the
> mediocre groups of those who are criticised in the FAQ and from
> whom we _MUST_ dissociate? If so - it's never too late for

> a re-taxonomisation on your part - there's nothing elitist about
> us, and we welcome all those who are prepared to put themselves
> out in order to join our ranks!)

2125. Re: The weeekly FAQ - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-01 17:01:10 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <442eb15c$0$16132$dbd4b001@news.wanadoo.nl>
Source record: 12826
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Plod's Conscience wrote:
> The shortness of the list of responses is good and would
> seem to suggest that the Nugatory Numpties have at long
> last desisted from their rather silly and infantile tirades and
> that the field is left open for _REAL_ Radio Hams to
> congregate here once again.

Loads of BS snipped....

I see you are also short on responses to this list of questions that
were asked of you earlier today. Care to answer them or are you going
to be a hypocrite all your life?

Plods Reunited wrote:
> Do you shag sheep?
> Have you ever shagged a sheep?
> Do you entertain thoughts of shagging a sheep?
> Does wearing a wooly jumper give you a hard-on?
> Do you masturbate wearing said jumper?
> How many times a week are you sober?

And your answers are? Simple "yes" or "no" answers (sound familiar?)
will be fine, except for the last one where a simple figure will
suffice. Or are you going to run away with your tail between you legs
like you accuse Brian of doing?

2126. Re: The weeekly FAQ - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-01 17:20:21 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1143912020.997435.191410@t31g2000cwb.googlegroups.com>
Source record: 12827
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Plod's Conscience wrote:
> The shortness of the list of responses is good and would
> seem to suggest that the Nugatory Numpties have at long
> last desisted from their rather silly and infantile tirades and
> that the field is left open for _REAL_ Radio Hams to
> congregate here once again.
indeed

now run and play since you are not a real ham

2127. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-01 19:32:49 UTC
From: "Giancarlo Gian Moda, I7SWX" <i7swx@yahoo.com>
Message-ID: <1143919969.938686.44190@i39g2000cwa.googlegroups.com>
Source record: 12828

>Wasn't Eidophores used during the Apollo flights to show the orbits in
>Huston ?

>Paul OH3LWR

Hi Paul,

I do not know but in middle of 60s that was the only TV color
projectors
designed by a Swiss engineer, assembled by Peto Scott Instrument Ltd
for Philips
in Addlestone, Surrey UK.
It was tested in the central lab were we were mainly working on
military equipments.
Many of those big blocks were sold world wide. I do remember the Mexico
Olympics
because we had to do that special test in the chamber room were
airplanes were
tested for all 3 machines.

For Peru', I believe it was somewhere over 2000 meters asl and it was
not later than 1980.

73

Gian
I7SWX

2128. Re: mixer: DBM or dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-01 19:32:54 UTC
From: "Giancarlo Gian Moda, I7SWX" <i7swx@yahoo.com>
Message-ID: <1143919974.891621.93890@g10g2000cwb.googlegroups.com>
Source record: 12829

>Wasn't Eidophores used during the Apollo flights to show the orbits in
>Huston ?

>Paul OH3LWR

Hi Paul,

I do not know but in middle of 60s that was the only TV color
projectors
designed by a Swiss engineer, assembled by Peto Scott Instrument Ltd
for Philips
in Addlestone, Surrey UK.
It was tested in the central lab were we were mainly working on
military equipments.
Many of those big blocks were sold world wide. I do remember the Mexico
Olympics
because we had to do that special test in the chamber room were
airplanes were
tested for all 3 machines.

For Peru', I believe it was somewhere over 2000 meters asl and it was
not later than 1980.

73

Gian
I7SWX

2129. Re: Eddystone dial and Nugatory Numpties?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-01 20:29:49 UTC
From: dkelly42@cox.net
Message-ID: <1143923389.579565.280640@e56g2000cwe.googlegroups.com>
Source record: 12830

Ted, Dale, Ken,

Ken that is true about the hen's teeth. I think that price is worth it though. Dales receiver looks like a 2B. The blue backlighting is really cool.
I just like making homebrew verniers and dials but am getting lazy and have been using Jackson Bros.stuff for the last two projects. I tried what I believe is an Oren Elliot drive but it is so stiff I didn't use it. One of the last projects used a small CD for the dial. Looks clever and homebrewish but kinda tacky too. I am dangerous with certain tools in my hands so I try to use ready made stuff. But the dial on my SSB transceiver needed a little more work due to the way the dial had to mounted. I am pleased with my mechanically challenged self. I'll follow Dales and your advice and create it on my PC. Sharpy usually used here.

Ted, on the VFO I roughly calculate the L and C from a few old DeMaw and Hayward publications. But I generally go for less L more C. I think those calculations are rough approximations anyways. I think the 2nd edition of DeMaws QRP Notebook has the rough equations for Colpitts and Clapp. I haven't seen one for Hartley. I have several old toroids wound that I use for various things like VFO's. I used a number in the Huffpuff circuit Hans Summers designed and substituted for experimentation and optimum performance. I also have a bunch of cut and try capacitors I use when I am building something like a VFO. I am afraid to admit I do a lot of empirical construction on VFO's. Just the opposite on filters and amplifiers. I use my SA when I build LC filters and I measure all my critical L and C with my homebrew LC meter.
One thing I learned was to use ugly construction on my VFO's. I don't know the fellow but W7EL mentioned something somewhere that made me try that method. It simpler at the very least.

Ted maybe I'll catch you on the other site but did you get the VFO working? I knew you were working on a Hartley Huff Puff VFO. I tried link coupling on the output from my Pierce version from the coil and was suprised at how much cleaner the output was. I was going to try the control circuit from a link too but had my grandson over the last two weekends. He is just discovering his feet and rolling over. It is an important time for grandpas.

Its spring yardwork weekend here so not much radio going on. BTW, what is a Nugatory Numptie (see other post)? I could be one. Do we have a website?

K5UOS

2130. Re: Eddystone dial and Nugatory Numpties?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-01 22:45:58 UTC
From: Ted <kilocycles**@**yahoo.com>
Message-ID: <mftt22hrk5f6l61t1spev3q697il74620g@4ax.com>
Source record: 12831

Don, et al,
Comments in-line:

On 1 Apr 2006 12:29:49 -0800, dkelly42@cox.net wrote:

>Ted, Dale, Ken,
>
>Ken that is true about the hen's teeth. I think that price is worth it
>though. Dales receiver looks like a 2B. The blue backlighting is really
>cool.

Dale's receiver looks like it belongs in a hospital, inside the case, anyway...I'm sure an artificial liver or whatever doesn't have any more "tubing" connections! That's taking the art of modular construction to a whole 'nother level! The receiver also looks very "sanitary", as we used to say back in the '70s, or I guess the word would be "sick" in today's vernacular. More hospital tie-ins, yuk-yuk!

>I just like making homebrew verniers and dials but am getting lazy and
>have been using Jackson Bros.stuff for the last two projects. I tried
>what I believe is an Oren Elliot drive but it is so stiff I didn't use
>it. One of the last projects used a small CD for the dial. Looks clever
>and homebrewish but kinda tacky too. I am dangerous with certain tools
>in my hands so I try to use ready made stuff. But the dial on my SSB
>transceiver needed a little more work due to the way the dial had to
>mounted. I am pleased with my mechanically challenged self. I'll follow
>Dales and your advice and create it on my PC. Sharpy usually used here.

I won a door prize at the last NoGa meeting of a National Velvet vernier. I don't have it handy for the number, but it's a fairly small one...the dial area is about 3" wide. The cardboard scale has been humidified somewhere along the way, so I'll need to scan that and redo it in photoshop. The gears are ok, but a bit stiff. It looks like it will be perfect for a VFO, maybe my long-wanted heterodyne VFO for the HT-40.

>Ted, on the VFO I roughly calculate the L and C from a few old DeMaw
>and Hayward publications. But I generally go for less L more C. I think
>those calculations are rough approximations anyways. I think the 2nd
>edition of DeMaws QRP Notebook has the rough equations for Colpitts and
>Clapp. I haven't seen one for Hartley. I have several old toroids wound
>that I use for various things like VFO's. I used a number in the
>Huffpuff circuit Hans Summers designed and substituted for
>experimentation and optimum performance. I also have a bunch of cut and
>try capacitors I use when I am building something like a VFO. I am

>afraid to admit I do a lot of empirical construction on VFO's. Just the
>opposite on filters and amplifiers. I use my SA when I build LC filters
>and I measure all my critical L and C with my homebrew LC meter.
>One thing I learned was to use ugly construction on my VFO's. I don't
>know the fellow but W7EL mentioned something somewhere that made me try
>that method. It simpler at the very least.

From what I understand, all other things being equal, the inductor is more likely to suffer the effects of temperature-induced drift than the capacitors, as long as C0G/NP0 and polystyrene caps are used. Therefore, it makes sense to have a higher C to L ratio, although the configuration of the VFO circuit will probably impose limits, as in failure to oscillate at some point. I generally look at somebody else's design as a prototype, and try to work around the same ratiios.

I went over and over the calculations again, and I'm pretty sure I'm right, and there's a typo in the "Progressive Receiver" appendix. Then it suddenly occurred to me, " Why don't you just lash up the capacitors and the inductor and measure the darn thing?" Duh! I have a grid dip meter, and I'm still making use of my cheap-but-fairly accurate Rainbow capacitance meter, the one from the Handbook, until I get the PIC programmed for the "Everyday Practical Electronics" one that the Columbus QRP club built. This mystery will soon be solved!

>Ted maybe I'll catch you on the other site but did you get the VFO
>working? I knew you were working on a Hartley Huff Puff VFO. I tried
>link coupling on the output from my Pierce version from the coil and
>was suprised at how much cleaner the output was. I was going to try the
>control circuit from a link too but had my grandson over the last two
>weekends. He is just discovering his feet and rolling over. It is an
>important time for grandpas.

One of the Hartley designs I'm looking at for the LO of my EMRFD transceiver project is the Fig. 6.148 4 MHz one, which I would conver to 5 MHz. Now that one is tapped, but what you did Don was to not tap the coil, but to add a coupling winding, as I understand it. In the Figure I just mentioned, Wes has an MV209 on the tap for fine tuning, so I guess that's where the Huff and Puff would attach.

The other circuit I've been studying to the point of actually cadding it, is Figure 12.25 in EMRFD. That one also has the familiar C1 C2 C3 Cvariable issue I've been trying to figure out, as does the Hartley above. This VFO is a Colpitts, though (I guess; the output is off the gate alone, and not the source). I suppose I'd either tap onto the coil or use a coupling winding on that one, similar to what you did. Conveniently, this one is a 5 MHz VFO already.

I just put in the order to Digi-Key a couple of days ago for the chips for the fast stabilizer, so no, I haven't built it yet. I decided not to go ahead with the other 2-chip minimalist one after your suggestion on the fast one. The crystal oscillator I ordered is 66.66 MHz, so it should work.

>Its spring yardwork weekend here so not much radio going on. BTW, what
>is a Nugatory Numptie (see other post)? I could be one. Do we have a
>website?
>
>K5UOS

I've got to go back and look at the other post. Don't know how I
missed that!

Ted KX4OM

2131. Re: Eddystone dial and Nugatory Numpties?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-01 23:55:06 UTC
From: dkelly42@cox.net
Message-ID: <1143935706.908200.190290@z34g2000cwc.googlegroups.com>
Source record: 12832

Using those old verniers is risky to me only because finding replacements if they start to slip or have backlash. I at least try to find or build something I can replace. But the Eddiestone are just so nice looking.

What I did on the HP VFO was like in fig 7.27 EMRFD. The output of the IC is a square wave. I was concerned after I looked at the output on my analyzer. I see why the cmos marker generators are so popular. Strong harmonics way above 100MHz. The output was significantly cleaner from the tap. Right around then I decided to go back and finish my SSB receiver and mount it in the chassis so I didn't have to use so many clip leads while I was playing with it.

I was going to do something similar to the fig 12.25 mixing type LO and I still may. My original receiver had a 9MHz filter but a relatively strong birdy from the LO at 7.2MHz. I decided to just change the filter to 9.216MHz and no birdies. Was hell trying to find closely matched 9.216MHz crystals though. I got 65 ea from Mouser and only got ten within 5%. Mostly a wide discrepancy in ESR. I guess you can make up for a lossy filter but after spending as much time as I did on both filters in measuring crystals I wanted something to show for it.

I was going to try the control circuit on the tap in my HP VFO. I know it will work thiough even though I haven't tried it. Its just getting the correct link and varactor. The fast HP VFO's still amazes me. I get started on too many things so I went back to my SSB rig.

On the inductor drift I agree. I seem to have luck with slightly lower L and using the slight neg temp coefficient of the COG caps. I did that in my tube receiver built with toroids. I ended up using a small silver mica for temp compensation of all things. Like you I look at other circuits and copy. I didn't on this VFO because I was copying my own circuit that worked before from something I am sure I copied. The more I try other things though the less I copy. Right now I am working on a 25 VDC 6AMP power supply for the transceiver. I am going to try power mosfets again as I had good luck in the last low power linear I built. I am only looking for 40W or so. Plenty big for the type of SSB I will work. I have a 28 VDC 3 A supply I made years ago. Just not sure it is big enough for the PA I am going to use. Its not that efficient.

Gosh, typo errors in ham publications! Hard to believe! Not!. Good for you for checking. I have a mess of spreadsheets with most of the common formulas. I also made some for double and triple tuned BP filters, feedback amps, my LC meter calculations, a logarithmic power meter and crystal parameter testing. I check a lot of circuits in books by plugging in the data to my sheets.

EMRFD is a great book. One thing I have been using in my transceiver LO now is the hybrid splitter shown in fig 6.75. The vfo in 12.25 shows a resistive version. I used the hybrid on both my VFO and BFO. That is a nice technique even if it is a few more parts. I guess Wes must be a better Numptie than all of us?

I bet you will really enjoy experimenting with the fast HP VFO. I haven't had that much fun with a simple project in a long time. Once you build a few you start getting alot of ideas on how to use it. Then it starts adding to your list of projects. You start losing sleep, the wife keeps asking you to take the trash out, you stop shaving, grow your hair long and start smoking and drinking too much coffee. Then you are in Nugatory. Thats ham purgatory. My wife calls it the doghouse.

Maybe I will put a picture of my progress on the SSB transceiver on the tech site soon. I never know what Chuck is willing to accept though. So I get a little cautious.

Keep me up on your progress.

2132. Re: Eddystone dial and custom dial plates

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-02 02:20:25 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <JxGXf.2368$qe7.29@trnddc04>
Source record: 12833

Hi Don and Ted,
While it has been over a year now since I did the VFO- I too had some difficulties with the QST values. In talking w/ W7ZOI, Wes indicated that some errors had worked their way into the design over the years. One was on the audio amp- values I had caused severe rolloff below about 2KHz- making SSB very tinny.
The other was on the VFO. Because of the Eddystone dial, I wished to make the VFO as linear as possible- book values led to a highly non linear scale. I do not recall exactly what I did- although I played with the math for a long time- to lienarize it- but I would trust your calcs.
At some point I will open her up again as I want to buffer the VFO and tap off for a TX VFO- the plan is to build a Drake style reciter for the RX- and at that time will better document the changes I made.

Dale W4OP

2133. New program. Coils and Transmission Lines.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-02 04:16:50 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <WeqdnQW1cffCzbLZnZ2dnUVZ8tydnZ2d@bt.com>
Source record: 12834

NOW AVAILABLE ** New Program "TRANCO_1.exe"

This program analyses performance as a transmission line, of a
single-layer solenoid coil which may be inserted in an antenna wire.
The coil itself may be used as a very short vertical antenna at its
1/4-wave resonant frequency.

From the input data of length, diameter and number of turns, the
program calculates inductance, capacitance and resistance of the
equivalent transmission line. The secondary constants of
characteristic impedance Zo, phase shift, velocity factor, and
attenuation are calculated. Also the feedpoint input impedance, R+jX,
for when a coil is used as an antenna.

Because of the sensitivity to the environment of such an antenna and
its high Q it will be necessary to trim antenna length to a particular
wanted resonant frequency.

Download TRANCO_1 in a few seconds from website below and run
immediately. Filesize = 38 Kbytes. (It's at the bottom of the list.)

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

2134. Re: Return Loss Bridge Accuracy Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-02 08:23:31 UTC
From: Paul VK3DIP <pmcmahon@telstra.com>
Message-ID: <7SLXf.22113$dy4.15868@news-server.bigpond.net.au>
Source record: 12835

Hi Steve,
If you are interested I had really good results recently with a homebrew RLB, in fact so good that I doubted the results and had to redo them several times before I was comfortable I hadn't made a mistake, and I probably still have but anyway it works heaps good enough for me. Basically using the non lab standard test equipment I had available it shows a directivity of better than 40db from about 1 to 500MHz. I found the best results by using a more or less current balun with coax, and a balancing extra bit of coax, and paying close attention to keeping everything balanced/symmetrical and having the reference connected with a connector identical to the unknown, rather than just a 50ohm resistor directly connected. See writeup in December issue of Nerg News
http://www.nerg.asn.au/NERGNEWS/NN200512.pdf

73 Paul VK3DIP.

<skavanagh72nospam@yahoo.ca> wrote in message
news:1142687392.568430.122110@e56g2000cwe.googlegroups.com...
>I have just built an HF return loss bridge according to the info in
> "Solid State design for the Radio Amateur". While it works ok, I was
> hoping for a bit better performance. Clearly the "balun" doesn't have
> enough inductance to operate well below 10 MHz or so (10 turns bifilar
> #30 AWG enamelled wire on Amidon T23-43, as specified in the book -
> twisted pair, which isn't specified one way or the other in the book).
> This can probably be largely fixed by using a larger ferrite core
> (T37-43's available in junkbox). I am interested primarily in the
> 1.8-50 MHz range, though I wouldn't complain if it worked on 2m too.
>
> But even at 30 MHz a reasonably good microwave 50 ohm load gives only
> about 28 dB apparent return loss...Not bad, but I might have expected a
> bit more.
>
> And an open and short give about 2 dB different signal levels at 30
> MHz. That is with big pads (>20 dB attenuation) on both the signal
> generator and detector. The detector is an HF receiver with a step
> attenuator used to maintain a constant S-meter reading.
>
> The circuit is built on a small PC board using construction techniques
> typical for the UHF or low microwave range (except that the test port
> connector is an SO-239), and is enclosed in a shielded box. Each of
> the three 50 ohm resistors is made of two 100 ohm 1206 chip resistors
> in parallel and measures between 50.0 and 50.3 ohms at DC.
>
> Has anyone with experience with this circuit any suggestions for how to
> tweak it for best performance ? What accuracy level have you achieved

> ? Do you know where I might find an error analysis for this circuit ?
> Or if I am to think about errors myself, does anyone know how to model
> the balun in SPICE ?
>
> 73,
> Steve VE3SMA
>

2135. Z Match

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-02 11:10:18 UTC
From: Rob <robnang34@woh.rr.com>
Message-ID: <uiOXf.71296$9I5.35579@tornado.ohiordc.rr.com>
Source record: 12836

Does anyone have a link to a website for making a high power Z match? I have made the 100 watt version with the toroid core and broadcast caps which really works great. I thought maybe there might be a design out there using heavier toroids for more wattage (500-1000 watts). Thanks for any info, Rob

2136. Re: Z Match

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-02 11:15:09 UTC
From: larry d clark <buddycl@nospam_swbell.net>
Message-ID: <1nOXf.61517$H71.5931@newssvr13.news.prodigy.com>
Source record: 12837

Rob wrote:
> Does anyone have a link to a website for making a high power Z match? I
> have made the 100 watt version with the toroid core and broadcast caps
> which really works great. I thought maybe there might be a design out
> there using heavier toroids for more wattage (500-1000 watts). Thanks
> for any info, Rob
>

http://www4.tpgi.com.au/users/ldbutler/SingleCoilZMatch.htm

larry
kd5foy

2137. Re: The weeekly FAQ - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-02 14:13:26 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1143987206.274921.114650@i40g2000cwc.googlegroups.com>
Source record: 12838
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Plod's Conscience wrote:
> The shortness of the list of responses is good and would
> seem to suggest that the Nugatory Numpties have at long
> last desisted from their rather silly and infantile tirades and
> that the field is left open for _REAL_ Radio Hams to
> congregate here once again.

No - it's because we see the word "FAQ", see who's posted it, and we
all know it's going to be the same deranged drivel that you post every
week.

Now faq off and play on the M4.

73
Mike G4KFK
www.g4kfk.co.uk

2138. Re: The weeekly FAQ - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-02 14:33:51 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <442fe055$0$81653$dbd4b001@news.wanadoo.nl>
Source record: 12839
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.amateur.misc

know code wrote:
> Plod's Conscience wrote:
>> The shortness of the list of responses is good and would
>> seem to suggest that the Nugatory Numpties have at long
>> last desisted from their rather silly and infantile tirades and
>> that the field is left open for _REAL_ Radio Hams to
>> congregate here once again.
>
> Loads of BS snipped....
>
> I see you are also short on responses to this list of questions that
> were asked of you earlier today. Care to answer them or are you going
> to be a hypocrite all your life?
>
> Plods Reunited wrote:
> > Do you shag sheep?
> > Have you ever shagged a sheep?
> > Do you entertain thoughts of shagging a sheep?
> > Does wearing a wooly jumper give you a hard-on?
> > Do you masturbate wearing said jumper?
> > How many times a week are you sober?
>
> And your answers are? Simple "yes" or "no" answers (sound familiar?)
> will be fine, except for the last one where a simple figure will
> suffice. Or are you going to run away with your tail between you legs
> like you accuse Brian of doing?

I see Beanie is a hypocrite who has ran away with his tail between his legs as he still hasn't answered the questions! Was it not Beanie that said something along the lines of you are proven guilty by your silence? Ho hum.

2139. Expanded UTC Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-02 17:47:37 UTC
From: Brian Webb <kd6nrp@earthlink.net>
Message-ID: <Z6UXf.11269$Bj7.9438@newsread2.news.pas.earthlink.net>
Source record: 12840

Hello:

I have recently expanded the Coordinated Universal Time (UTC) page on my web site (http://www.spacearchive.info/utc.htm).

I would appreciate it if you would carefully read the page for technical accuracy and send me your comments.

Regards,

Brian W., KD6NRP

2140. Re: The weeekly FAQ - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-02 20:43:01 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1144010581.082762.41410@i39g2000cwa.googlegroups.com>
Source record: 12841
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.amateur.misc

know code wrote:
> I see Beanie is a hypocrite who has ran away with his tail between his
> legs as he still hasn't answered the questions! Was it not Beanie that
> said something along the lines of you are proven guilty by your silence?

Yes - and also that innocence can be proven by standing in the police
cell all night with a blanket on your head singing
"I'll sing you a song of social justice,
"BROAD-HURST!! BLAKE-LOCK!!,
"Of two deserving deaths, of public justice.
"BROAD-HURST!! BLAKE-LOCK!!"

Lyrics found in
http://groups.google.com/group/uk.radio.amateur/msg/494323df9b610c38?dmode=source

73
Mike G4KFK

2141. Re: The weeekly FAQ - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-02 20:50:34 UTC
From: Woger <CurtainsBoy@Glendale>
Message-ID: <e0pdeqqbd0@pita.alt.net>
Source record: 12842
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Mike G4KFK" <mike@g4kfk.co.uk> wrote in message
news:1144010581.082762.41410@i39g2000cwa.googlegroups.com...

know code wrote:
> I see Beanie is a hypocrite who has ran away with his tail between his
> legs as he still hasn't answered the questions! Was it not Beanie that
> said something along the lines of you are proven guilty by your silence?

Yes - and also that innocence can be proven by standing in the police
cell all night with a blanket on your head singing
"I'll sing you a song of social justice,
"BROAD-HURST!! BLAKE-LOCK!!,
"Of two deserving deaths, of public justice.
"BROAD-HURST!! BLAKE-LOCK!!"

Lyrics found in
http://groups.google.com/group/uk.radio.amateur/msg/494323df9b610c38?dmode=source

73
Mike G4KFK

>
Oh, gee. I'll just run right over and get the lyrics to this "best song
ever". Yup. I'm going to do that right after I take a shit.

2142. Re: The weeekly FAQ - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-02 21:02:48 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1144011768.259104.181510@t31g2000cwb.googlegroups.com>
Source record: 12843
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Woger wrote:
> Oh, gee. I'll just run right over and get the lyrics to this "best song
> ever". Yup. I'm going to do that right after I take a shit.

My apologies - I hadn't noticed that "Plod's Conscience" (Mr Gareth
Alun Evans, G4SDW) had cross-posted that drivel to so many NGs!

2143. Re: Expanded UTC Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-02 21:41:46 UTC
From: MetalHead <WanderingMetalHead@DUMPSPAM.yahoo.com>
Message-ID: <uyXXf.5911$tT.1434@news01.roc.ny>
Source record: 12844

Brian Webb wrote:
> Hello:
>
> I have recently expanded the Coordinated Universal Time (UTC) page on my web
> site (http://www.spacearchive.info/utc.htm).
>
> I would appreciate it if you would carefully read the page for technical
> accuracy and send me your comments.
>
> Regards,
>
> Brian W., KD6NRP
>
>
Brian,
What I read of it looked good. On your section on GPS time, you might
note that GPS time does not include the leap-seconds that clock time
does. I believe that there are now 14 leap seconds difference between
GPS time and clock time, but that should be verified (it might be 16).
The handheld GPS receivers I have seen, correct for the difference
before displaying the time. Industrial units may provide either at your
option. I believe that you can get 50 nS accuracy out of the industrial
units (specifically the old Motorola Oncore series).

Regards,
Bob
KE7FEF

2144. Re: The weeekly FAQ - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-02 21:46:00 UTC
From: Messenger ! <scotland_glasgow@yahoo.co.uk>
Message-ID: <1144014360.441242.314090@i40g2000cwc.googlegroups.com>
Source record: 12845
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Gareth cannot help himself. If he is unable to see how much of a pri*k
he is, well..... god help him.

2145. Re: Expanded UTC Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-02 21:53:47 UTC
From: MetalHead <WanderingMetalHead@DUMPSPAM.yahoo.com>
Message-ID: <LJXXf.5915$tT.2570@news01.roc.ny>
Source record: 12846

MetalHead wrote:
> Brian Webb wrote:
>
>> Hello:
>>
>> I have recently expanded the Coordinated Universal Time (UTC) page on
>> my web
>> site (http://www.spacearchive.info/utc.htm).
>>
>> I would appreciate it if you would carefully read the page for technical
>> accuracy and send me your comments.
>>
>> Regards,
>>
>> Brian W., KD6NRP
>>
>>
> Brian,
> What I read of it looked good. On your section on GPS time, you might
> note that GPS time does not include the leap-seconds that clock time
> does. I believe that there are now 14 leap seconds difference between
> GPS time and clock time, but that should be verified (it might be 16).
> The handheld GPS receivers I have seen, correct for the difference
> before displaying the time. Industrial units may provide either at your
> option. I believe that you can get 50 nS accuracy out of the industrial
> units (specifically the old Motorola Oncore series).
>
> Regards,
> Bob
> KE7FEF

I was curious and looked it up, as of Jan 1, 2006 GPS time leads clock
time (UTC) by 14 seconds. There is a good web page here:
http://tycho.usno.navy.mil/leapsec.html

Regards,
Bob
KE7FEF

2146. kinda off topic, 450000 uF caps on e-bay

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-02 22:14:02 UTC
From: goat pimp <kboyfs@yahoo.com>
Message-ID: <1144016042.535447.121940@u72g2000cwu.googlegroups.com>
Source record: 12847

ok I know it's off topic kinda but I figured some
other geek on here like me may have a use for these.
there in great shape. I just dont have any REAL use
for them, but I HAD to get them when I saw them. LOL
Ohhhhh.... shinny.Hee hee

well it's at:
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=7606418484

or just ebay item # 7606418484 if the link messes up.

Thanks all.

2147. Re: The weeekly FAQ - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-02 22:18:39 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1144016319.002824.286330@e56g2000cwe.googlegroups.com>
Source record: 12748
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Messenger
! wrote:
> Gareth cannot help himself. If he is unable to see how much of a pri*k
> he is, well..... god help him.

he can't see that is why he needs mental help pity he is unlikely to
get it

2148. Re: Eddystone dial and custom dial plates

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-03 00:16:29 UTC
From: Ted <kilocycles**@**yahoo.com>
Message-ID: <mgo032dq2loeg8mkb708qi044rv1nqt70h@4ax.com>
Source record: 12749

Dale & Don,
I haven't had a chance to lash up the components yet, but I checked my spreadsheet using Wes's example on page 4.4. The numbers check out; unfortunately, Wes specifies a value for C3 in the EMRFD example, and in the Progressive Receiver Article, C3 is the unknown; i.e., how much additional capacitance you'd have to add in parallel with the coil to use a specific variable cap in the given configuration.
Now that I can see the "C12v" equation in EMRFD, which is not in the QST article, but I've modified my spreadsheet to include it I can check the resonance using the given values for L.

Dale, when I looked at your jpg's again yesterday, I noticed that you've modified the receiver internals a lot since I first saw the rig. Since the links I had were to a directory on your commercial site, I'm not sure if you have another site where you described what you did.

Early last Spring, I got rid of all my new-fangled ham rigs, like the FT-817 and the not-so-new, but pristine TS-530s and bought an HW-101 and some equipment to restore. Homebrewing and boatanchors is what I'm about now. I did the VFO alignment on the HW-101 and was able to get it within 1kHz, end to end, as indicated on the dial, anyway. That surprised the heck out of me. I've since acquired an LMO from an SB-401 that I'm going to put in a project somewhere along the line. I have a complete set of Heath HFO crystals, and both CW and SSB filters from another source. I might make myself a broadbanded QRP rig out of those.

73,
Ted KX4OM

On Sun, 02 Apr 2006 02:20:25 GMT, "Dale Parfitt"
<par@parelectronics.com> wrote:

> Hi Don and Ted,
>While it has been over a year now since I did the VFO- I too had some
>difficulties with the QST values. In talking w/ W7ZOI, Wes indicated that
>some errors had worked their way into the design over the years. One was on
>the audio amp- values I had caused severe rolloff below about 2KHz- making
>SSB very tinny.
>The other was on the VFO. Because of the Eddystone dial, I wished to make
>the VFO as linear as possible- book values led to a highly non linear scale.
>I do not recall exactly what I did- although I played with the math for a
>long time- to lienarize it- but I would trust your calcs.
>At some point I will open her up again as I want to buffer the VFO and tap
>off for a TX VFO- the plan is to build a Drake style reciter for the RX- and

>at that time will better document the changes I made.
>
>Dale W4OP
>

2149. Re: Eddystone dial and Nugatory Numpties?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-03 01:00:04 UTC
From: Ted <kilocycles**@**yahoo.com>
Message-ID: <6bq032p96ccnalcpo9fimo170mklm3sbpl@4ax.com>
Source record: 12750

On 1 Apr 2006 15:55:06 -0800, dkelly42@cox.net wrote:

>Using those old verniers is risky to me only because finding
>replacements if they start to slip or have backlash. I at least try to
>find or build something I can replace. But the Eddiestone are just so
>nice looking.
Well, maybe this one WILL be nice looking :)
>
>What I did on the HP VFO was like in fig 7.27 EMRFD. The output of the
>IC is a square wave. I was concerned after I looked at the output on my
>analyzer. I see why the cmos marker generators are so popular. Strong
>harmonics way above 100MHz. The output was significantly cleaner from
>the tap. Right around then I decided to go back and finish my SSB
>receiver and mount it in the chassis so I didn't have to use so many
>clip leads while I was playing with it.
Figure 7.27? I don't quite follow that, unless you're talking about
how you've band-switched it.
>
>I was going to do something similar to the fig 12.25 mixing type LO and
>I still may. My original receiver had a 9MHz filter but a relatively
>strong birdy from the LO at 7.2MHz. I decided to just change the filter
>to 9.216MHz and no birdies. Was hell trying to find closely matched
>9.216MHz crystals though. I got 65 ea from Mouser and only got ten
>within 5%. Mostly a wide discrepancy in ESR. I guess you can make up
>for a lossy filter but after spending as much time as I did on both
>filters in measuring crystals I wanted something to show for it.
I'm using that design because I'll need 2 HFO's in two separate rigs
I'm working on. That one is interesting because of the 5 MHz output,
but I won't be using that for the rig itself. I'm using a 74HC4053
switch to mix either of two LOs with the 5 MHz VFO. The transceiver
I'm using EMRFD circuits for is a 15 and 20 meter SSB/CW traansceiver.
I'm using a 9MHz If, with HFO frequencies of 25 and 18 MHz. I'll use
the sums to produce the correct LO frequencies.

The other rig is one I've been working on, off and on, for over a
year. That one is based on G4GXOs Belthorn SSB/IF module. I picked
an IF of 11 MHz for it, because 32 and 25 MHz HFO crystals will allow
me to use a VFO of the toal span of 3.890 4.148 MHz. All of the
crystals are Mouser 39-cent variety.

I didn't realize it, but when I put in my order from Digi-Key last
wee, I stumbled across the ECS 18 MHz crystal, a value I didn't have
in my data base of available frequencies...that allows me to make the
EMRFD rig a 2-bander, adding 20 meters!

>I was going to try the control circuit on the tap in my HP VFO. I know
>it will work thiough even though I haven't tried it. Its just getting
>the correct link and varactor. The fast HP VFO's still amazes me.
>I get started on too many things so I went back to my SSB rig.
>
>On the inductor drift I agree. I seem to have luck with slightly lower
>L and using the slight neg temp coefficient of the COG caps. I did that
>in my tube receiver built with toroids. I ended up using a small silver
>mica for temp compensation of all things. Like you I look at other
>circuits and copy. I didn't on this VFO because I was copying my own
>circuit that worked before from something I am sure I copied. The more
>I try other things though the less I copy. Right now I am working on a
>25 VDC 6AMP power supply for the transceiver. I am going to try power
>mosfets again as I had good luck in the last low power linear I built.
>I am only looking for 40W or so. Plenty big for the type of SSB I will
>work. I have a 28 VDC 3 A supply I made years ago. Just not sure it is
>big enough for the PA I am going to use. Its not that efficient.
>
>Gosh, typo errors in ham publications! Hard to believe! Not!. Good for
>you for checking. I have a mess of spreadsheets with most of the common
>formulas. I also made some for double and triple tuned BP filters,
>feedback amps, my LC meter calculations, a logarithmic power meter and
>crystal parameter testing. I check a lot of circuits in books by
>plugging in the data to my sheets.
>
>EMRFD is a great book. One thing I have been using in my transceiver LO
>now is the hybrid splitter shown in fig 6.75. The vfo in 12.25 shows a
>resistive version. I used the hybrid on both my VFO and BFO. That is a
>nice technique even if it is a few more parts. I guess Wes must be a
>better Numptie than all of us?
I'm not sure I really knew much of anything until I got EMRFD. The
first few weeks, I had a running stream of Q&A emails with Wes, and he
was kind enough to be patient and explain some things. One in
particular was a problem I had in adapting a published L-network to
the actual impedances of my crystal filter in the 30 meter rig I built
for Straight Key Night .

In Fig. 12.25, he's actually using the take-off point from the VFO to
the mixer from the attenuator pad for the 5 MHz output, to get the -10
dBm for 5 MHz for the 20 meter part of the rig.

>I bet you will really enjoy experimenting with the fast HP VFO. I
>haven't had that much fun with a simple project in a long time. Once
>you build a few you start getting alot of ideas on how to use it. Then
>it starts adding to your list of projects. You start losing sleep, the
>wife keeps asking you to take the trash out, you stop shaving, grow
>your hair long and start smoking and drinking too much coffee. Then you
>are in Nugatory. Thats ham purgatory. My wife calls it the doghouse.
Sleep? What's that? Fortunately, my wife is busy getting her business
up and running, and I have plenty of time on my hands (I've inherited
the dog and cat-tending responsibilities).

>Maybe I will put a picture of my progress on the SSB transceiver on the
>tech site soon. I never know what Chuck is willing to accept though. So
>I get a little cautious.
I understand completely. However, why not start a folder anyway?
There's only a couple of them there, and it's not like it's stuff that
belongs in the Smithsonian. Now if Dale had his receiver on the site,
that's certainly Smithsonian-quality!

When I was building the SKN Special, I did running updates to the NoGa
list with the latest photos on my web site. Now that it's finished, I
recently went back and reorganized that page to reflect past tense.
One of the highlights was definitely getting the VFO going. On the
scope, the signal has a weird distortion in the sine wave, like the
trailing edge is partially scooped out; I should post that on the
yahoo group site and see if anyone can figure out what it means. But,
since it's feeding an NE602, and they can take square waves, I guess a
little distortion doesn't matter.

>Keep me up on your progress.
Tomorrow, I lash up a test capacitance circuit. Then, once I can
finally do the math and figure out which variable I can use, I'll
start building. the Digi-Key prts for the Huff and Puff whould be
here mid-week.

72/73,
Ted KX4OM

2150. Re: Eddystone dial and custom dial plates

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-03 01:37:23 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <n%_Xf.3862$qe7.2997@trnddc04>
Source record: 12751

"Ted" <kilocycles**@**yahoo.com> wrote in message
news:mgo032dq2loeg8mkb708qi044rv1nqt70h@4ax.com...
> Dale & Don,
> I haven't had a chance to lash up the components yet, but I checked my
> spreadsheet using Wes's example on page 4.4. The numbers check out;
> unfortunately, Wes specifies a value for C3 in the EMRFD example, and
> in the Progressive Receiver Article, C3 is the unknown; i.e., how much
> additional capacitance you'd have to add in parallel with the coil to
> use a specific variable cap in the given configuration.
> Now that I can see the "C12v" equation in EMRFD, which is not in the
> QST article, but I've modified my spreadsheet to include it I can
> check the resonance using the given values for L.
>
> Dale, when I looked at your jpg's again yesterday, I noticed that
> you've modified the receiver internals a lot since I first saw the
> rig. Since the links I had were to a directory on your commercial
> site, I'm not sure if you have another site where you described what
> you did.
>
> Early last Spring, I got rid of all my new-fangled ham rigs, like the
> FT-817 and the not-so-new, but pristine TS-530s and bought an HW-101
> and some equipment to restore. Homebrewing and boatanchors is what
> I'm about now. I did the VFO alignment on the HW-101 and was able to
> get it within 1kHz, end to end, as indicated on the dial, anyway. That
> surprised the heck out of me. I've since acquired an LMO from an
> SB-401 that I'm going to put in a project somewhere along the line. I
> have a complete set of Heath HFO crystals, and both CW and SSB filters
> from another source. I might make myself a broadbanded QRP rig out of
> those.
>
> 73,
> Ted KX4OM
>
Hi Ted,
I quickly looked at the VFO schematic in my1994 Handbook that had the PR. I
seem to recall in the end I replaced C1 with a short- just eliminating it.
Not 100% positive, but think that was what it came down to in order to get
good linearity out of my VFO.

Dale

2151. QRP 5W HF linear amp transistors and design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-03 13:12:59 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <44311f5c$0$2111$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 12752

Dear all
I want to build a power amp for SSB HF 1.5-30 MHz
Specs
approx 5W out
Cheap/easy to source components
Surface Mount parts/small
Rugged/stable into any/most loads
Gain around 40 dB
Flat gain to 1 dB or so

Thought I would do something like

Class A MMBT2222 -> 2X push pull MMBT2222 -> finals push pull balanced

What to do for the finals?
I looked at the PD55003 RF MOSFETS - can you get these easily?
Will they work down to HF?

What other issues?
What about transformers?
Is this a practical proposition?
I havent seen any similar designs

I would be grateful for some pointers

Thanks
Richard

2152. Re: Return Loss Bridge Accuracy Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-03 13:41:01 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1144071661.354064.32740@z34g2000cwc.googlegroups.com>
Source record: 12753

Paul:

Thanks for the info....that's an interesting balun approach. I was thinking about the two-connector approach and using a good microwave load for the termination, but decided it wasn't likely needed for 50 MHz and below. Though with the results you are getting it's tempting to build another one for VHF/UHF. But I need a good signal generator first !

I have since obtained much better results than I was initially getting, with two main approaches to improvement:
(1) I changed the balun to 12 bifilar turns on an FT37-43 core, which now has enough inductance for reasonable measurement accuracy at the lower frequencies (though the degradation is still pretty noticeable with good loads that read >35 dB return loss at 10-30 MHz showing as 25 dB at 1.8 MHz). A few more turns would probably be better.
(2) I spent lots of time chasing down leakage paths and sensitivity to leakage...grounding cables, reducing attenuator on signal generator, scraping paint from inside front panel of signal generator, removing microphone from transceiver in use as a detector, etc.

I don't really understand the leakage paths, but I was able to get their impact down to a much more usable level. Clearly a high standard of shielding on all components of the test setup is a must. I'm now getting around 0.5 dB change from open to short at 30-50 MHz (insignificant at lower frequencies) and my good loads read 31-34 dB return loss at 50 MHz, which is probably about what should be expected due to the adapters to PL-259 plug. I am not yet quite fully confident when measuring antennas though, due to somewhat greater leakage effects into the receiver.

73,
Steve VE3SMA

2153. Re: QRP 5W HF linear amp transistors and design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-03 14:59:16 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1144076356.884685.77060@g10g2000cwb.googlegroups.com>
Source record: 12754

Richard Hosking wrote:
> Dear all
> I want to build a power amp for SSB HF 1.5-30 MHz
> Specs
> approx 5W out
> Cheap/easy to source components
> Surface Mount parts/small

Usually the largest parts will be the RF transformers for broadband
stuff.

> Rugged/stable into any/most loads
> Gain around 40 dB
> Flat gain to 1 dB or so
>
> Thought I would do something like
>
> Class A MMBT2222 -> 2X push pull MMBT2222 -> finals push pull balanced
>
> What to do for the finals?

Generically you are in the "CB final" transistor class.

They don't sell as many CB's as they used to :-).

Good starting point is RF Parts' webpage:

http://www.rfparts.com/transistorspecs.html

> I havent seen any similar designs

Communication Concepts has many Motorola app notes online from the 70's
that cover this with bipolars. e.g. AN779 with MRF475/476. A lot of
these app notes ended up being repeated almost verbatim as QST
construction articles. In some cases they sell PCB's and component
kits:

http://www.communication-concepts.com/

Tim.

2154. Re: Expanded UTC Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-03 17:35:52 UTC
From: ray13 <ray_psi@yahoo.com>
Message-ID: <1144085752.151373.127510@z34g2000cwc.googlegroups.com>
Source record: 12755

Hallo Brian:

Am I in a time warp of some kind, or is your table all messed up. I'm talking about your conversion of time zones

I believe you are from an alternate reality, where the earth revolves exactly in the wrong direction and defies all our laws of physics.

Towit you have the eastern time zone 7 hours ahead of Zulu time. My gawd man can I get the same time machine you have?

Lastly your conversion table doesn't have all Canadian time zones eh? Guess Newfoundland doesn't exist in your reality eh?

2155. Re: Surplus Junkbox Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-03 17:42:19 UTC
From: ray13 <ray_psi@yahoo.com>
Message-ID: <1144086139.927265.154780@z34g2000cwc.googlegroups.com>
Source record: 12756

You call that a junk box?

>If you need anything, just let me know.

I need a gal that will climb up my tower and adjust my driven element.
Guess you can't help me there?

KC8OJU from 8 land

2156. Re: Expanded UTC Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-03 18:04:29 UTC
From: lawrence@hummer.not-here.net
Message-ID: <87acb2cz82.fsf@hummer.i-did-not-set--mail-host-address--so-shoot-me>
Source record: 12757

"ray13" <ray_psi@yahoo.com> writes:

> Hallo Brian:
>
> Am I in a time warp of some kind, or is your table all messed up. I'm
> talking about your conversion of time zones

Ummmm, no.

> Towit you have the eastern time zone 7 hours ahead of Zulu time. My
> gawd man can I get the same time machine you have?

The version of the page dated 2006 April 2 has the following:

PST PDT MST MDT CST CDT EST EDT UTC
4 p.m. 5 p.m. 5 p.m. 6 p.m. 6 p.m. 7 p.m. 7 p.m. 8 p.m. 00:00

Which is correct, showing the EST as being 5 hours BEHIND UTC (or 19
hours ahead if you think mod24)

> Lastly your conversion table doesn't have all Canadian time zones eh?
> Guess Newfoundland doesn't exist in your reality eh?
>

That is true -- nor does it include time zones for Alaska, Hawaii and
the Aleutians.

-- --
Lawrence Statton - lawrenabae@abaluon.abaom s/aba/c/g
Computer software consists of only two components: ones and
zeros, in roughly equal proportions. All that is required is to
sort them into the correct order.

2157. Re: The weeekly FAQ - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-03 18:13:48 UTC
From: The Magnum <magnum@mag2781.freeserve.co.uk>
Message-ID: <4431747f$0$20106$834e42db@reader.greatnowhere.com>
Source record: 12758
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"G-Whiz" <me@privacy.net> wrote in message
news:BMidnc6Nl9s7rK3ZRVny2w@bt.com...
> On Sun, 02 Apr 2006 16:33:51 +0200, know code wrote:
>
> >>> Plods Reunited wrote:
> >> > Do you shag sheep?
> >> > Have you ever shagged a sheep?
> >> > Do you entertain thoughts of shagging a sheep?
> >> > Does wearing a wooly jumper give you a hard-on?
> >> > Do you masturbate wearing said jumper?
> >> > How many times a week are you sober?
> >>
> >> And your answers are? Simple "yes" or "no" answers (sound familiar?)
> >> will be fine, except for the last one where a simple figure will
> >> suffice. Or are you going to run away with your tail between you legs
> >> like you accuse Brian of doing?
> >
> >
> > I see Beanie is a hypocrite who has ran away with his tail between his
> > legs as he still hasn't answered the questions! Was it not Beanie that
> > said something along the lines of you are proven guilty by your silence?
> > Ho hum.
>
> ISTR The Magnum asked pretty much the same:
>
>
<http://groups.google.co.uk/group/uk.radio.amateur/msg/e36049479f4d2872?hl=e
n&>
>
> also with no answer. Should we presume?
>
> GW

As Mr Evans has often said he never clicks on links to messages then I will
repost my questions for him to see and possibly answer if he finds time away
from Harassing Brian Reay

Quote..

"So tell us Mr Evans...

Have you ever had improper thoughts about sheep?... (No smoke without fire
etc...)
And have you ever sampled the delight that is known as 'Meths' as an

inebriant?
And finally, have you ever 'threatened' little girls in any way?...

These are the things we wish to know... "

End quote,

Graham
--
-.-. -... / .-. .- -.. .. ---

Radio is only a Hobby. Don't let it rule your life...

73/51 - Graham, 26-Golf Charlie-19

2158. 1MHz oscillator modules

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-03 18:31:53 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <tSdYf.5054$0N6.1644@newsfe5-gui.ntli.net>
Source record: 12759

Anyone know of a (ideally) UK source of 1MHz oscillator modules- the little beasts that
are about the size of a 14 or 16 pin DIL package?

Space for a descreet crystal and other bits is a bit tight.

--
73
Brian, G8OSN
www.g8osn.org.uk

2159. SWL Database

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-03 20:11:04 UTC
From: magsimoe@gmail.com
Message-ID: <1144095064.407016.189000@g10g2000cwb.googlegroups.com>
Source record: 12760

Hello everyone!

I have just put my swl frequency database online. Please have a look at
http://www.swldatabase.com

Please send any feedback through the email that is listed on the page.
Thank you very much.

2160. SWL Database

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-03 20:11:42 UTC
From: magsimoe@gmail.com
Message-ID: <1144095102.383594.29460@j33g2000cwa.googlegroups.com>
Source record: 12761

Hello everyone!

I have just put my swl frequency database online. Please have a look at
http://www.swldatabase.com

Please send any feedback through the email that is listed on the page.
Thank you very much.

2161. Re: QRP 5W HF linear amp transistors and design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-03 20:54:11 UTC
From: dplatt@radagast.org
Message-ID: <12332rj5dtv2t10@corp.supernews.com>
Source record: 12762

In article <1ne2325vph1edmktud7pjbdlp7jsgvg1d6@4ax.com>,
<Allison-nospam@nouce.bellatlantic.net> wrote:

>You need a stiffer driver than 2222.
>
>Common CB finals 2sc1971, 1909, 799 and other are all good for that
>power level and easily run to 30mhz (some to 6m!).

FWIW, the Elecraft K2 uses a single 2SC2166 as a driver, feeding a
push-pull pair of 2SC1969s.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2162. Re: QRP 5W HF linear amp transistors and design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-03 21:35:24 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2006.04.03.21.35.24.456834@oceanfree.net>
Source record: 12763

On Mon, 03 Apr 2006 21:12:59 +0800, Richard Hosking wrote:

> Dear all
> I want to build a power amp for SSB HF 1.5-30 MHz Specs
> approx 5W out
> Cheap/easy to source components
> Surface Mount parts/small
> Rugged/stable into any/most loads
> Gain around 40 dB
> Flat gain to 1 dB or so

It is hard to beat CB PA and driver transistors for this job.
2SC2166 makes a great driver. If you only need 5W, you could
use them as the final stage. For slightly higher power levels,
the 2SC1969 or 2SC2312 are a good choice. The 2SC1945 is particularly
attractive because the HS tab is connected to the emitter rather
than the collector. Genuine Mitsubishi are usually better than
unbranded generic transistors. http://www.grandata.co.uk usually
have the best prices for Japanese transistors.

> Thought I would do something like
>
> Class A MMBT2222 -> 2X push pull MMBT2222 -> finals push pull balanced
>
> What to do for the finals?
> I looked at the PD55003 RF MOSFETS - can you get these easily? Will they
> work down to HF?

My experience with modern devices is that you can easily
get them for free as samples but you can't buy them for
love nor money :-)

The Philips BFGxxx series of surface-mount transistors are readily
available on this side of the planet.
BFG235 12V 2W and BFG135A 15V 1W have multi-GHz ft and
are available from Maplin.

> What other issues?

Don't let the smoke out.

> What about transformers?

Broadband ferrite.

> Is this a practical proposition?

Yes.

> I havent seen any similar designs

Thats because we are all using CB transistors.

BTW, It is nice to see you back on r.r.a.h We all missed you.

73, Ed. EI9GQ.

--
Linux 2.6.15
Remove 'X' to reply by e-mail.
Yes, my username really is: nospam

2163. Re: Radio tracking a tortoise - help!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-03 23:12:13 UTC
From: trumpets@hotmen.com
Message-ID: <hZhYf.2655$BO5.350@newsfe3-win.ntli.net>
Source record: 12764

where are you? You would be better with a small receiver and glued to Shelly and a little Ipod booster transmitter you could walk round until you heard the music playing. Get a small cheep FM radio for Shelly and just tune to your own frequency. Totally illegal in the UK of course, but who's going to come looking for you? If your in the UK that would be a cracking project for some interested ham types but they would be unwilling to break any rules. legally You could use 446 PMR about £20 a pair and some of them are tiny.

2164. Re: Surplus Junkbox Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-03 23:51:51 UTC
From: clifto <clifto@gmail.com>
Message-ID: <n1p8g3-mjm.ln1@remote.clifto.com>
Source record: 12765

ray13 wrote:
> I need a gal that will climb up my tower and adjust my driven element.
> Guess you can't help me there?

You'd be disappointed if she wore jeans.

--
All relevant people are pertinent.
All rude people are impertinent.
Therefore, no rude people are relevant.
-- Solomon W. Golomb

2165. Re: Radio tracking a tortoise - help!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-04 00:25:59 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <m2jYf.15039$6a1.6498@fed1read04>
Source record: 12766

Perhaps Shelly is looking for Sheldon
So get another turtle (;-)
All in good fun
A small transmitter and a DF receiver should do it, if you check daily on
Shelly's where abouts
Or do you have a fast tortise (;-) ?

--
CL -- I doubt, therefore I might be !

<trumpets@hotmen.com> wrote in message
news:hZhYf.2655$BO5.350@newsfe3-win.ntli.net...
> where are you? You would be better with a small receiver and glued to
> Shelly
> and a little Ipod booster transmitter you could walk round until you heard
> the music playing. Get a small cheep FM radio for Shelly and just tune to
> your own frequency. Totally illegal in the UK of course, but who's going
> to
> come looking for you? If your in the UK that would be a cracking project
> for some interested ham types but they would be unwilling to break any
> rules. legally You could use 446 PMR about £20 a pair and some of them are
> tiny.
>
>

2166. Re: Surplus Junkbox Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-04 00:48:41 UTC
From: Brian Murrey <brian@iquest.net>
Message-ID: <JnjYf.303$Es3.27@newsread3.news.atl.earthlink.net>
Source record: 12767

Yeah. It's a junkbox. The junk changes every few days though.

Can't help you with the antenna adjustment, have you advertised in QST?

<grin>

73 de KB9BVN

--
==========
Radio Amateurs - Fill your junk box, from my junkbox!
http://www.hamradparts.com
73 de KB9BVN
==========

"ray13" <ray_psi@yahoo.com> wrote in message
news:1144086139.927265.154780@z34g2000cwc.googlegroups.com...
> You call that a junk box?
>
> >If you need anything, just let me know.
>
> I need a gal that will climb up my tower and adjust my driven element.
> Guess you can't help me there?
>
> KC8OJU from 8 land
>

2167. Re: 1MHz oscillator modules

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-04 09:26:36 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1144142795.936822.47190@i39g2000cwa.googlegroups.com>
Source record: 12768

Any of the crystal manufacturers should be able to supply these. It
might be expensive, as they generally have a minimum order amount.
Golledge, for instance, has them as a standard part. I just wanted one
25.175 MHz oscillator once and they sent me a few as free samples. 8-)

Leon

2168. Re: 1MHz oscillator modules

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-04 10:36:42 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <Kc-dnZlGv5li1q_ZRVnyjA@pipex.net>
Source record: 12769

Brian Reay wrote:
> Anyone know of a (ideally) UK source of 1MHz oscillator modules- the little
> beasts that
> are about the size of a 14 or 16 pin DIL package?
>
> Space for a descreet crystal and other bits is a bit tight.
>
======================
Suggest you check the following potential suppliers :

www.modecomponents.co.uk

I-Q Electronic Design tel/fax : 0208 391 0545
e-mail : vincent@jakomin.fsnet.co.uk

www.jabdog.com

Good luck

Frank , GM0CSZ/KN6WH

2169. Re: QRP 5W HF linear amp transistors and design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-04 11:50:54 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <44325d9e$0$2127$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 12770

Thanks all
I will investigate the CB transistors

R

Richard Hosking wrote:
> Dear all
> I want to build a power amp for SSB HF 1.5-30 MHz
> Specs
> approx 5W out
> Cheap/easy to source components
> Surface Mount parts/small
> Rugged/stable into any/most loads
> Gain around 40 dB
> Flat gain to 1 dB or so
>
> Thought I would do something like
>
> Class A MMBT2222 -> 2X push pull MMBT2222 -> finals push pull balanced
>
> What to do for the finals?
> I looked at the PD55003 RF MOSFETS - can you get these easily?
> Will they work down to HF?
>
> What other issues?
> What about transformers?
> Is this a practical proposition?
> I havent seen any similar designs
>
> I would be grateful for some pointers
>
> Thanks
> Richard

2170. Re: Z Match

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-04 13:58:59 UTC
From: Zack <zlau@arrl.org>
Message-ID: <1144159139.556358.198460@i39g2000cwa.googlegroups.com>
Source record: 12771

Rob wrote:
> Does anyone have a link to a website for making a high power Z match? I
> have made the 100 watt version with the toroid core and broadcast caps
> which really works great. I thought maybe there might be a design out
> there using heavier toroids for more wattage (500-1000 watts). Thanks
> for any info, Rob

Assuming a constant Q or quality factor, the power handling of a toroid is proportional to its surface area. Thus, to handle 10x more power, you need 10x more surface area. A double thickness T400 toroid, 4 inches thick and 1.3 inches in diameter, should handle 600 watts, assuming the T157 worked well at 100 watts. A stack of two T520 toroids should handle a kilowatt. In practice, the optimum Q moves lower in frequency as the toroids get larger, which isn't necessarily a problem, since hams tend to need more power on the lower HF bands.

Zack Lau W1VT

2171. Re: Eddystone dial and custom dial plates

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-04 14:06:19 UTC
From: Ted <kilocycles**@**yahoo.com>
Message-ID: <u9v432dso5qnjt426519a5mfln1090htk4@4ax.com>
Source record: 12772

On Mon, 03 Apr 2006 01:37:23 GMT, "Dale Parfitt"
<par@parelectronics.com> wrote:

>Hi Ted,
>I quickly looked at the VFO schematic in my1994 Handbook that had the PR. I
>seem to recall in the end I replaced C1 with a short- just eliminating it.
>Not 100% positive, but think that was what it came down to in order to get
>good linearity out of my VFO.
>
>Dale
>
Dale,
I'll check that out. My value for C3 from the spreadsheet came out to
be 319.1 vs the 127.02 in the magazine. I used the spreadsheet on the
example on page 4.4 of EMRFd and it worked out ok. In the QST
example, setting C1 to a very low value actually increases the
discrepancy with C3, though. More mystery!

Tnx,
Ted KX4OM

2172. Re: 1MHz oscillator modules

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-04 17:15:07 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <vQxYf.30048$Nh7.20060@newsfe4-win.ntli.net>
Source record: 12773

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:Kc-dnZlGv5li1q_ZRVnyjA@pipex.net...
> Brian Reay wrote:
>> Anyone know of a (ideally) UK source of 1MHz oscillator modules- the
>> little beasts that
>> are about the size of a 14 or 16 pin DIL package?
>>
>> Space for a descreet crystal and other bits is a bit tight.
>>
> ======================
> Suggest you check the following potential suppliers :
>
> www.modecomponents.co.uk
>
> I-Q Electronic Design tel/fax : 0208 391 0545
> e-mail : vincent@jakomin.fsnet.co.uk
>
> www.jabdog.com
>
> Good luck

A thank you to you and all who responded, I've now found a source and
(hopefully) bits arrive tomorrow.

--
73
Brian
www.g8osn.org.uk

2173. Question about auto antenna cable and connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-04 19:17:12 UTC
From: Ronnie <rhughes4-removeme@swbell.net>
Message-ID: <YCzYf.64385$Jd.48901@newssvr25.news.prodigy.net>
Source record: 12774
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Hi,

This is not about ham radio, but rather a general question
about the type of cable and connectors that were found
between the antenna and the AM radio in GM cars in the
60's. I'm trying to locate some technical information about
the cable and a source for the cable and connectors.

I have an old airplane autopilot system that uses tuned circuit
to sense changes in the airplane's attitude and the position of
the control servos. Distributed variable inductances and
variable capacitors combine to establish the resonant
operating frequency of the system. The components are
connected together with specific lengths of cable and the
service manual points out that the lengths are critical because
of the added capacitance of the cable and connectors.

The cable is marked as follows:

"I. T. & T. Federal Cable R.E.C."

It is a shielded cable with a spiral wound center conductor
that looks very much like the antenna cable I remember finding
in GM cars in the 60's. It also has the same type of connectors.
There is a center pin for the center conductor and a metal sleve
that extents back over the cable and makes a connection with the
shield and chassis of the radio. Friction holds the connector in
its mating socket - there are no threads, just a couple of splayed out
areas on the sleve.

I was hoping one of you might be able to point me to a source
of technical information about this cable, such as the capacitance
per unit length, etc. The one piece I have measures about 10.5 pF / foot
or 415 pF / meter, but my measurements may not be all that accurate.

Also, a source where the cable and connectors can be found today
would be appreciated.

Thanks in advance for any help.

Ronnie, N5CSE

2174. Codar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-04 21:05:43 UTC
From: Theo <theodore.twyler@ntlworld.com>
Message-ID: <HcBYf.12260$NN4.2495@newsfe7-win.ntli.net>
Source record: 12775

I am looking for an unmodified Codar T28 receiver
in good working order, to pair up with my AT5 transmitter.
Any assistance to locate one would be greatly appreciated.

Theo

2175. Want a Maxcom Antenna Matcher (stop laughing please)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-04 22:13:46 UTC
From: Skipp is here <skipp025NOSPAMPLEASE@yahoo.com>
Message-ID: <e0ur2q$1np$1@skeeter.ucdavis.edu>
Source record: 12776
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Re: Want a Maxom Antenna Matcher

I'm looking for one of the Maxcom Antenna Matcher Units. If you have one you'd like to part with for a fair price... please email me at the below email address, or take out the NOSPAMPLEASE from the reply header above.

I know some of you are laughing because of what the Maxcom really is inside, but I'd like to buy a used one anyway.

Thanks for reading this post

cheers,

skipp

skipp025 at yahoo.com

2176. FA: COLLINS 270G-1, 302C-1, SM-2 +PARTS+MO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-04 22:48:29 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <1JCYf.685540$qk4.262550@bgtnsc05-news.ops.worldnet.att.net>
Source record: 12777

These Collins units are from my own station and can be seen at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

+ Amp parts
+ 1 & 2 watt selected resistors
+ other stuff too.

tnx, heytubeguy

2177. Re: Question about auto antenna cable and connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-04 23:32:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12360g3fgj19iaf@corp.supernews.com>
Source record: 12778
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

The coax used for every car radio of that vintage I ever saw (and I saw a lot) doesn't fit your description. It had a single, small diameter (#28 or so) wire rattling around loosely in a thin polyethylene tube, which was covered by a braided shield. The objective was to minimize the capacitance, but there obviously wasn't any control over Z0 or delay, since the small wire was free to move around inside the much larger diameter PE tube. There was no helically wound conductor. I think you might be looking in the wrong place for what you need. The connector fits your description, though.

Roy Lewallen, W7EL

Ronnie wrote:
> Hi,
>
> This is not about ham radio, but rather a general question
> about the type of cable and connectors that were found
> between the antenna and the AM radio in GM cars in the
> 60's. I'm trying to locate some technical information about
> the cable and a source for the cable and connectors.
>
> I have an old airplane autopilot system that uses tuned circuit
> to sense changes in the airplane's attitude and the position of
> the control servos. Distributed variable inductances and
> variable capacitors combine to establish the resonant
> operating frequency of the system. The components are
> connected together with specific lengths of cable and the
> service manual points out that the lengths are critical because
> of the added capacitance of the cable and connectors.
>
> The cable is marked as follows:
>
> "I. T. & T. Federal Cable R.E.C."
>
> It is a shielded cable with a spiral wound center conductor
> that looks very much like the antenna cable I remember finding
> in GM cars in the 60's. It also has the same type of connectors.
> There is a center pin for the center conductor and a metal sleve
> that extents back over the cable and makes a connection with the
> shield and chassis of the radio. Friction holds the connector in
> its mating socket - there are no threads, just a couple of splayed out
> areas on the sleve.
>
> I was hoping one of you might be able to point me to a source

> of technical information about this cable, such as the capacitance
> per unit length, etc. The one piece I have measures about 10.5 pF / foot
> or 415 pF / meter, but my measurements may not be all that accurate.
>
> Also, a source where the cable and connectors can be found today
> would be appreciated.
>
> Thanks in advance for any help.
>
> Ronnie, N5CSE
>
>
>

2178. Re: Question about auto antenna cable and connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 00:07:36 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <443309E7.D3413253@earthlink.net>
Source record: 12779
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Ronnie wrote:
>
> Hi,
>
> This is not about ham radio, but rather a general question
> about the type of cable and connectors that were found
> between the antenna and the AM radio in GM cars in the
> 60's. I'm trying to locate some technical information about
> the cable and a source for the cable and connectors.
>
> I have an old airplane autopilot system that uses tuned circuit
> to sense changes in the airplane's attitude and the position of
> the control servos. Distributed variable inductances and
> variable capacitors combine to establish the resonant
> operating frequency of the system. The components are
> connected together with specific lengths of cable and the
> service manual points out that the lengths are critical because
> of the added capacitance of the cable and connectors.
>
> The cable is marked as follows:
>
> "I. T. & T. Federal Cable R.E.C."
>
> It is a shielded cable with a spiral wound center conductor
> that looks very much like the antenna cable I remember finding
> in GM cars in the 60's. It also has the same type of connectors.
> There is a center pin for the center conductor and a metal sleve
> that extents back over the cable and makes a connection with the
> shield and chassis of the radio. Friction holds the connector in
> its mating socket - there are no threads, just a couple of splayed out
> areas on the sleve.
>
> I was hoping one of you might be able to point me to a source
> of technical information about this cable, such as the capacitance
> per unit length, etc. The one piece I have measures about 10.5 pF / foot
> or 415 pF / meter, but my measurements may not be all that accurate.
>
> Also, a source where the cable and connectors can be found today
> would be appreciated.
>
> Thanks in advance for any help.
>
> Ronnie, N5CSE

It was RG62 93 ohm coax. The connectors were called "Motorola"
plugs.
--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2179. Re: Question about auto antenna cable and connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 00:27:45 UTC
From: - exray - <exray@coqui.net>
Message-ID: <12363o61bhj7g5e@corp.supernews.com>
Source record: 12780
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Michael A. Terrell wrote:

>
>
> It was RG62 93 ohm coax.

Certainly not in older radios. I don't know what they sell nowadays.

I've seen that 'spiral' type of cable. They basically used the spiral as a means of maintaining the centre conductor in the average 'middle' of the hollow dielectric.

The combined inductance and capacitance of the old cable was somewhat critical but the older radios provided an antenna trimmer to compensate for the variations. The electrical model was essentially a "voltage probe" and doesn't necessarily follow common antenna/feedline rules and thought.

-Bill

2180. Re: Question about auto antenna cable and connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 02:48:33 UTC
From: Ronnie <rhughes4-removeme@swbell.net>
Message-ID: <5eGYf.62116$H71.61164@newssvr13.news.prodigy.com>
Source record: 12781
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Thanks Bill.

The autopilot service manual I have shows a hand
drawn figure of the cable that indicates a curly or spiral twist
to the center conductor which appears as you stated to help
keep the center conductor in the middle of the tube. It also
mentions that the characteristics and length of the cable is part
of the tuned circuit, but doesn't give any data on the cable.

Like you, I'm sure I've seen that type of cable somewhere in
the past and thought it was in an automotive antenna application,
but it could have been elsewhere.

Ronnie

"- exray -" <exray@coqui.net> wrote in message
news:12363o61bhj7g5e@corp.supernews.com...
> Michael A. Terrell wrote:
>
>
>>
>>
>> It was RG62 93 ohm coax.
>
> Certainly not in older radios. I don't know what they sell nowadays.
>
> I've seen that 'spiral' type of cable. They basically used the spiral as
> a means of maintaining the centre conductor in the average 'middle' of the
> hollow dielectric.
>
> The combined inductance and capacitance of the old cable was somewhat
> critical but the older radios provided an antenna trimmer to compensate
> for the variations. The electrical model was essentially a "voltage
> probe" and doesn't necessarily follow common antenna/feedline rules and
> thought.
>
> -Bill

2181. Re: Question about auto antenna cable and connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 02:48:33 UTC
From: Ronnie <rhughes4-removeme@swbell.net>
Message-ID: <5eGYf.62115$H71.16177@newssvr13.news.prodigy.com>
Source record: 12782
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Thanks Roy. Now that you mention it, I do remember
the straight center conductor inside the much larger diameter
PE tube. The autopilot service manual I have shows a hand
drawn figure of the cable that indicates a curly or spiral twist
to the center conductor which appears to help keep the center
conductor in the middle of the tube. I also mentions that the
characteristics and length of the cable is part of the tuned circuit,
but doesn't give any data on the cable.

The connectors are like the connectors that were on the auto
radios back then. I wonder where those could be found today.
I can't seem to find them in any of the distributor catalogs I have.
Maybe a trip to an automobile junk yard.

Ronnie

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:12360g3fgj19iaf@corp.supernews.com...
> The coax used for every car radio of that vintage I ever saw (and I saw a
> lot) doesn't fit your description. It had a single, small diameter (#28 or
> so) wire rattling around loosely in a thin polyethylene tube, which was
> covered by a braided shield. The objective was to minimize the
> capacitance, but there obviously wasn't any control over Z0 or delay,
> since the small wire was free to move around inside the much larger
> diameter PE tube. There was no helically wound conductor. I think you
> might be looking in the wrong place for what you need. The connector fits
> your description, though.
>
> Roy Lewallen, W7EL
>
> Ronnie wrote:
>> Hi,
>>
>> This is not about ham radio, but rather a general question
>> about the type of cable and connectors that were found
>> between the antenna and the AM radio in GM cars in the
>> 60's. I'm trying to locate some technical information about
>> the cable and a source for the cable and connectors.
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>> I have an old airplane autopilot system that uses tuned circuit
>> to sense changes in the airplane's attitude and the position of
>> the control servos. Distributed variable inductances and
>> variable capacitors combine to establish the resonant
>> operating frequency of the system. The components are

>> connected together with specific lengths of cable and the
>> service manual points out that the lengths are critical because
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>> that looks very much like the antenna cable I remember finding
>> in GM cars in the 60's. It also has the same type of connectors.
>> There is a center pin for the center conductor and a metal sleve
>> that extents back over the cable and makes a connection with the
>> shield and chassis of the radio. Friction holds the connector in
>> its mating socket - there are no threads, just a couple of splayed out
>> areas on the sleve.
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>> of technical information about this cable, such as the capacitance
>> per unit length, etc. The one piece I have measures about 10.5 pF / foot
>> or 415 pF / meter, but my measurements may not be all that accurate.
>>
>> Also, a source where the cable and connectors can be found today
>> would be appreciated.
>>
>> Thanks in advance for any help.
>>
>> Ronnie, N5CSE
>>
>>

2182. home made pcb

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 02:58:44 UTC
From: James Thompson <Jackalope7@wontel.net>
Message-ID: <39212$44333267$438c83b0$32223@ALLTEL.NET>
Source record: 12783

Just wanted to share this link for anyone that is thinking of making your own pcb's.
This link is to the web site of tom gootee. It is a very well detailed step through on making pcb's using the toner transfer method, but not with the expensive toner transfer paper. I have tested this (Jet PRINTPHOTO - Multi-project photo paper) with much better results then I got with the high priced ttp.
http://www.fullnet.com/u/tomg/gooteepc.htm
Take a look, I was very impressed with the results.. JTT..kf4huf

2183. filtering of LO signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 07:04:00 UTC
From: John Wilkinson <john.wilkinson@philips.com>
Message-ID: <1bl9r8lwo1ndy$.82388xlnw61j$.dlg@40tude.net>
Source record: 12784

Hi,
In my dual conversion receiver, I have a 45.455MHz second LO and a 45 - 75MHz first LO.
First IF 45MHz second IF 455KHz
Both these feed double balanced diode 7dBm mixers.
Also I have not filtered these signals at all, and the first harmonic is roughly -20dBc - -30dBc.

Is it imperitive that I filter these for my receiver to work?
If so by how much?

Best regards,
John.

2184. Re: Question about auto antenna cable and connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 11:32:51 UTC
From: Jeff <jeff@local.host>
Message-ID: <e109sn$jr0$1@emma.aioe.org>
Source record: 12785
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Those connectors are still in use today in UK & Europe at least. A UK supplier is Maplin electronics.

www.maplin.co.uk part no HHH12N

Reagrds
Jeff

2185. Re: home made pcb

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 11:39:08 UTC
From: Stargatesg1 <nospam@here.net>
Message-ID: <w%NYf.13566$zk4.13518@trnddc05>
Source record: 12786

That is a very good, informative site! I have read it several times in the past few months and finally have tried it. It does work very well.

--
RoD
KD0XX
PG-6-29404

"James Thompson" <Jackalope7@wontel.net> wrote in message news:39212$44333267$438c83b0$32223@ALLTEL.NET...
> Just wanted to share this link for anyone that is thinking of making your
> own pcb's.
> This link is to the web site of tom gootee. It is a very well detailed step
> through on making pcb's using the toner transfer method, but not with the
> expensive toner transfer paper. I have tested this (Jet PRINTPHOTO -
> Multi-project photo paper) with much better results then I got with the
> high priced ttp.
> http://www.fullnet.com/u/tomg/gooteepc.htm
> Take a look, I was very impressed with the results.. JTT..kf4huf
>
>
>

2186. Re: filtering of LO signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 12:47:19 UTC
From: MadEngineer <glenn.b.dixon@gmail.com>
Message-ID: <1144241239.572370.217140@g10g2000cwb.googlegroups.com>
Source record: 12787

Hi John,

If by 'first harmonic' you actually mean the second harmonic of your LO
(the 'first harmonic' usually refers to the fundamental frequency), the
answer depends a lot on how well your input is filtered, and on what
you have after the mixers.

This sounds like a 0-30Mhz shortwave receiver. If your input does not
have a good low pass filter for example, you may find strong FM signals
getting into the first IF passband as a result of the 2nd LO harmonic.
Note that your mixer inherently responds at odd harmonics of the LO
(3rd,5th...) and filtering odd harmonics out at the LO port does
little, so a good low pass filter is necessary anyway.
The second mixer is probably not as critical. Others will probably add
some more information.

Regards,
Glenn AC7ZN

2187. New program. Input Z of loaded line

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 13:25:22 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <FYednd CEmOzjWK7ZnZ2dnUVZ8smdnZ2d@bt.com>
Source record: 12788

NOW AVAILABLE ** New Program "INPUT_Z.exe"

This program calculates the often required input impedance, Z = R+jX,
of a coaxial transmission line when terminated with a load impedance
such as a radio antenna. It uses full classical transmission line
formulae and therefore avoids the errors inherent in the Smith Chart
at the lower radio frequencies.

Also calculated are line attenuation, reflection coefficient, angle of
reflection coefficient, SWR, power efficiency, and the line loss in
decibels in the presence of SWR.

Input data of frequency, line length, load resistance and load
reactance can be varied in small increments from the keyboard to allow
line behaviour to be observed. The diameter of the coaxial inner
conductor is also input, this being needed for calculating loss in the
line which affects input impedance.

Download program INPUT_Z (40 K-bytes) in a few seconds from website
below and run imediately.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

2188. Re: Question about auto antenna cable and connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 13:40:34 UTC
From: Ronnie <rhughes4-removeme@swbell.net>
Message-ID: <mNPYf.55554$F_3.8890@newssvr29.news.prodigy.net>
Source record: 12789
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Thanks for the lead. I see them on their web site.
Ronnie

"Jeff" <jeff@local.host> wrote in message news:e109sn$jr0$1@emma.aioe.org...
> Those connectors are still in use today in UK & Europe at least. A UK
> supplier is Maplin electronics.
>
> www.maplin.co.uk part no HHH12N
>
> Reagrds
> Jeff
>

2189. Re: Question about auto antenna cable and connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 15:36:05 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <1237p0ba92lo86c@corp.supernews.com>
Source record: 12790
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Ronnie wrote:
> Thanks for the lead. I see them on their web site.
> Ronnie
>
> "Jeff" <jeff@local.host> wrote in message news:e109sn$jr0$1@emma.aioe.org...
>
>>Those connectors are still in use today in UK & Europe at least. A UK
>>supplier is Maplin electronics.
>>
>>www.maplin.co.uk part no HHH12N
>>
>>Reagrds
>>Jeff
>>
>
>
>
Jeff and Ronnie;

That type of connector is known as a "Motorola Connector". Developed by
Motorola for their automobile radios.

Dave N

2190. 20A 24v to 12v DC voltage dropper

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 15:42:57 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1144251776.987794.309360@i40g2000cwc.googlegroups.com>
Source record: 12791

Hi all,

Just bought this power supply and it turns out to be 24V as opposed to 12 as I'd hoped. It's a heafty beast and should be good for running my HF mobile if I can drop the voltage down to 13.8 whilst retaining about 20 amps for the rig's TX current draw. I know I can buy a commercial dropper, but that'd be cheating, so can anyone suggest how I might acheive such a device through HB-ing? Which active devices would be best for this purpose? I'd like over-voltage protection built-into any design put forward if possible. Any pointers, please.

Thanks!

2191. Re: 20A 24v to 12v DC voltage dropper

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 16:12:46 UTC
From: Lawrence Statton N1GAK/XE1 <lawrence@hummer.not-here.net>
Message-ID: <87hd58f1c1.fsf@hummer.i-did-not-set--mail-host-address--so-shoot-me>
Source record: 12792

paul@burridge8333.fsbusiness.co.uk writes:
> Hi all,
>
> Just bought this power supply and it turns out to be 24V as opposed to
> 12 as I'd hoped. It's a heafty beast and should be good for running my
> HF mobile if I can drop the voltage down to 13.8 whilst retaining about
> 20 amps for the rig's TX current draw. I know I can buy a commercial
> dropper, but that'd be cheating, so can anyone suggest how I might
> acheive such a device through HB-ing? Which active devices would be
> best for this purpose? I'd like over-voltage protection built-into any
> design put forward if possible. Any pointers, please.
>

What you're saying is: You want to build a 20A 13.8V power supply with
OVP. That it happens to take 24Vdc instead of 120Vac is trivial.

Your options are -- design a nice switching converter (which based on
the tenor of your question is beyond your mettle at the moment) or
build an enormous linear regulator and dissipate a couple hundred
watts making a very nice place for the cat to nap :) Best to set that
24V supply on the shelf, hope some day to find a good use for it, and
either buy or build a 13.8V supply from scratch.

> Thanks!
>

--
-- --
Lawrence Statton - lawrenabae@abaluon.abaom s/aba/c/g
Computer software consists of only two components: ones and
zeros, in roughly equal proportions. All that is required is to
sort them into the correct order.

2192. Re: 20A 24v to 12v DC voltage dropper

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 16:19:03 UTC
From: Lawrence N1GAK/XE2 <lawrence@hummer.not-here.net>
Message-ID: <8764lof11k.fsf@hummer.i-did-not-set--mail-host-address--so-shoot-me>
Source record: 12793

Lawrence Statton N1GAK/XE1 <lawrence@hummer.not-here.net> writes:
> What you're saying is: You want to build a 20A 13.8V power supply with
> OVP. That it happens to take 24Vdc instead of 120Vac is trivial.

Oops, just noticed the .co.uk in the OP - replace that 120 with a 240
:) 73 N1GAK

-- --
Lawrence Statton - lawrenabae@abaluon.abaom s/aba/c/g
Computer software consists of only two components: ones and
zeros, in roughly equal proportions. All that is required is to
sort them into the correct order.

2193. Re: 20A 24v to 12v DC voltage dropper

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 16:26:40 UTC
From: mrhaney <w4pqw@cox.net>
Message-ID: <1144254400.223308.194390@i40g2000cwc.googlegroups.com>
Source record: 12794

paul@burridge8333.fsbusiness.co.uk wrote:
> Hi all,
>
> Just bought this power supply and it turns out to be 24V as opposed to
> 12 as I'd hoped. It's a heafty beast and should be good for running my
> HF mobile if I can drop the voltage down to 13.8 whilst retaining about
> 20 amps for the rig's TX current draw. I know I can buy a commercial
> dropper, but that'd be cheating, so can anyone suggest how I might
> acheive such a device through HB-ing? Which active devices would be
> best for this purpose? I'd like over-voltage protection built-into any
> design put forward if possible. Any pointers, please.
>
> Thanks!

2194. Re: 20A 24v to 12v DC voltage dropper

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 16:29:45 UTC
From: mrhaney <w4pqw@cox.net>
Message-ID: <1144254585.496785.306960@i39g2000cwa.googlegroups.com>
Source record: 12795

Sell the 24 VDC power supply,Boatanchor people still use 24V supplies..
Buy a used 13.8 VDC @20 A for less than $100 ,maybe even $75.00
..Old timer

2195. Re: 20A 24v to 12v DC voltage dropper

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 17:11:22 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <cb8bd$4433fa33$4251290b$15295@DIALUPUSA.NET>
Source record: 12796

Light aircraft switched over to 24 volt electrical systems sometime in the mid 1970s. You can sell that thing for a pretty penny to an avionics repair shop and get what you wanted in the first place.

If there is a small civilian airport near you, inquire about where they get their radios fixed and take a trip to the one that seems most viable.

Jim

<paul@burridge8333.fsbusiness.co.uk> wrote in message news:1144251776.987794.309360@i40g2000cwc.googlegroups.com...
> Hi all,
>
> Just bought this power supply and it turns out to be 24V as opposed to
> 12 as I'd hoped. It's a heafty beast and should be good for running my
> HF mobile if I can drop the voltage down to 13.8 whilst retaining about
> 20 amps for the rig's TX current draw. I know I can buy a commercial
> dropper, but that'd be cheating, so can anyone suggest how I might
> acheive such a device through HB-ing? Which active devices would be
> best for this purpose? I'd like over-voltage protection built-into any
> design put forward if possible. Any pointers, please.
>
> Thanks!
>

2196. making a uhf bandpass filter using semi rigid or hardline?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 17:47:58 UTC
From: "tucker@conninc.com" <tucker@conninc.com>
Message-ID: <1144259278.805899.268620@z34g2000cwc.googlegroups.com>
Source record: 12797

Im trying to build a preamp for the 902-928 band, I bought several
surplus cellular preamps
in a auction, these had 824-855mhz ceramic filters. I took the filter
out and the noise floor
took off, i need to replace the bandpass with one in the 902-928 mhz
range. I have some
semi rigid coax .080 and of various sizes of small hardline .250 -
.540. In the past ive seem articles on making preamps & filters using
semi rigid coax but cant find any now that im ready to start building a
ATV receiver.

2197. Re: Question about auto antenna cable and connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 17:53:50 UTC
From: "pdrahn@coinet.com" <pdrahn@coinet.com>
Message-ID: <1144259630.209135.296490@z34g2000cwc.googlegroups.com>
Source record: 12698
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

We purchased a new 5th wheel trailer a month ago and had to replace the stereo unit. Was I surprised when I pull the old one. It used the old Motorola auto antenna connector and cable to the antenna on the RV roof. So, I guess the antennas, cable and connectors are still being made and used today.

Paul in Redmond, OR

2198. Re: 20A 24v to 12v DC voltage dropper

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 18:02:20 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <e110ndetq2@engnntp2.cig.mot.com>
Source record: 12700

"Lawrence Statton N1GAK/XE1" <lawrence@hummer.not-here.net> wrote in message
news:87hd58f1c1.fsf@hummer.i-did-not-set--mail-host-address--so-shoot-me...
> paul@burridge8333.fsbusiness.co.uk writes:
> > Hi all,
> >
> > Just bought this power supply ... 24V ...It's a heafty beast ...
> > ... if I can drop the voltage down to 13.8 whilst retaining about
> > 20 amps for the rig's TX current draw. ...Any pointers, please.
> >
>
> What you're saying is: You want to build a 20A 13.8V power supply with
> OVP. That it happens to take 24Vdc instead of 120Vac is trivial.
>
> Your options are -- design a nice switching converter (which based on
> the tenor of your question is beyond your mettle at the moment) or
> build an enormous linear regulator and dissipate a couple hundred
> watts making a very nice place for the cat to nap :) Best to set that
> 24V supply on the shelf, hope some day to find a good use for it, and
> either buy or build a 13.8V supply from scratch.

OR...OR...how about ... Unwind about half of the transformer secondary
and fiddle with the regulator (appropriately). You should maintain the
current level it originally had. The potential (sorry for the pun) for a
fault causing a disastrous overvoltage is less as well.
However be aware of the overhead voltage-- that is the difference in filter
output voltage relative to 13.8, so you have enough room for the regulators,
the ripple and mains dips. I did something like this with a 24V 5A supply
long ago to get 5V 25A (5V. TTL logic was big then). I actually rewound the
secondary with bigger wire to get the higher current capacity. (also a
slight tweek on the regulator topology for improved overhead). It had the
common 723 regulator topology, so changing voltage was simply changing a
zener and I must have beefed up the series pass transistors.
Of course not knowing what your regulator topology is, this could be hard.
I also have a 15 amp., Kepco, rack-mount linear hernia generator. Then,
recently, a $99 MFJ 25 amp, hold-it-in-one-hand switcher. The ham fund had
it and it took a lot less time than the re-wind.

73, Steve, K9DCI

2199. Re: Question about auto antenna cable and connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 18:13:54 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <e111d2$fd8$2@engnntp2.cig.mot.com>
Source record: 12701
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Nope. That's where. Autos. A piece of spiral plastic "rod" around the
solid wire center conductor to space it in the center of the over-sized-hole
dielectric. I thought it was also a "Motorola" connector, but didn't want
to sound arrogant (still working at the circle M Ranch, you know). The AM
receiver antenna was (is) nothing more that a capacitive probe hooked to the
input, so the smaller the loading cap the better.
Gee, if I shill have some around, perhaps some experimentation to determine
the Z0 ... OK ... project 9,735, on the list for retirement. (yea, right)

73, Steve, K9DCI

I only saw it referred to as low capacitance cable. Don't know if the Z0
was specified
"Ronnie" <rhughes4-removeme@swbell.net> wrote in message
news:5eGYf.62116$H71.61164@newssvr13.news.prodigy.com...
> Thanks Bill.
>
> The autopilot service manual I have shows a hand
> drawn figure of the cable that indicates a curly or spiral twist
> to the center conductor which appears as you stated to help
> keep the center conductor in the middle of the tube. It also
> mentions that the characteristics and length of the cable is part
> of the tuned circuit, but doesn't give any data on the cable.
>
> Like you, I'm sure I've seen that type of cable somewhere in
> the past and thought it was in an automotive antenna application,
> but it could have been elsewhere.
>
> Ronnie
>
> "- exray -" <exray@coqui.net> wrote in message
> news:12363o61bhj7g5e@corp.supernews.com...
> > Michael A. Terrell wrote:
> >
> >
> >>
> >>
> >> It was RG62 93 ohm coax.
> >
> > Certainly not in older radios. I don't know what they sell nowadays.
> >
> > I've seen that 'spiral' type of cable. They basically used the spiral
as
> > a means of maintaining the centre conductor in the average 'middle' of

the
> > hollow dielectric.
> >
> > The combined inductance and capacitance of the old cable was somewhat
> > critical but the older radios provided an antenna trimmer to compensate
> > for the variations. The electrical model was essentially a "voltage
> > probe" and doesn't necessarily follow common antenna/feedline rules and
> > thought.
> >
> > -Bill
>
>

2200. Re: Question about auto antenna cable and connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 18:28:31 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <44340C37.B9A3788D@earthlink.net>
Source record: 12699
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

```
- exray - wrote:
>
> Michael A. Terrell wrote:
>
> >
> >
> > It was RG62 93 ohm coax.
>
> Certainly not in older radios. I don't know what they sell nowadays.
>
> I've seen that 'spiral' type of cable. They basically used the spiral
> as a means of maintaining the centre conductor in the average 'middle'
> of the hollow dielectric.
>
> The combined inductance and capacitance of the old cable was somewhat
> critical but the older radios provided an antenna trimmer to compensate
> for the variations. The electrical model was essentially a "voltage
> probe" and doesn't necessarily follow common antenna/feedline rules and
> thought.
>
> -Bill

One of the engineers at Delco told me it was RG-62, and 93 ohms when
I was going to their annual car radio training back in the early '70s.
IBM also used RG-62 on their coaxial computer networking, but they used
BNC connectors.
--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida
```

2201. Re: Question about auto antenna cable and connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 19:45:46 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12387jdrj3qgsd8@corp.supernews.com>
Source record: 12702
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Michael A. Terrell wrote:
> . . .
> One of the engineers at Delco told me it was RG-62, and 93 ohms when
> I was going to their annual car radio training back in the early '70s.
> IBM also used RG-62 on their coaxial computer networking, but they used
> BNC connectors.

The automotive coax I'm familiar with isn't RG-62.

Like automotive coax, RG-62 has a thin walled hollow insulating tube. But RG-62 has a polyethylene "string" which is helically wound around the center conductor to keep it centered in the hollow tube. The coax in every old automotive installation I've seen lacks this PE "string", so the center conductor is free to flop around inside the hollow tube. The effect of the "string" is to make RG-62's Z0 constant and predictable, and it will also increase the capacitance somewhat. Constant Z0 isn't important for the automotive application, and low capacitance is important.

It seems to me the center conductor is smaller in the automotive coax than in RG-62, also.

Roy Lewallen, W7EL

2202. Re: Question about auto antenna cable and connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 20:57:14 UTC
From: Ronnie <rhughes4-removeme@swbell.net>
Message-ID: <KaWYf.62330$H71.35160@newssvr13.news.prodigy.com>
Source record: 12703
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Roy is right. I looked up RG62 and this is not the cable I have.
Here's what the autopilot service manual has to say about this
cable.

"The coaxial harness assembly CD-1, 2 and 3 is manufacued to specific
lenghts and since the cable is a part of the tuned circuit, these lengths
must
not be altered. The sensor leads are made of very fine wires that are fed
through a hollow insulator. Note that the fine wire has been coiled to
provide flexibility and reduce the possibility of beaking and causing an
open in the circuit."

The diagram shows a hollow tube with a fine wire that is coiled running
through it, a braid style shield over the hollow tube and an outer jacket
over the braid. It seems to be a variant of the auto coax where the fine
wire center conductor has been coiled instead of being left straight.

Thanks for all the help with this, but don't worry yourselves about it.
I have all the orginal pieces with connectors intact, but I was hoping
to find the technical specs on the cable so I could understand the
cable's impact on the resonant frequency.

Ronnie

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:12387jdrj3qgsd8@corp.supernews.com...
> Michael A. Terrell wrote:
>> . . .
>> One of the engineers at Delco told me it was RG-62, and 93 ohms when
>> I was going to their annual car radio training back in the early '70s.
>> IBM also used RG-62 on their coaxial computer networking, but they used
>> BNC connectors.
>
> The automotive coax I'm familiar with isn't RG-62.
>
> Like automotive coax, RG-62 has a thin walled hollow insulating tube. But
> RG-62 has a polyethylene "string" which is helically wound around the
> center conductor to keep it centered in the hollow tube. The coax in every
> old automotive installation I've seen lacks this PE "string", so the
> center conductor is free to flop around inside the hollow tube. The effect
> of the "string" is to make RG-62's Z0 constant and predictable, and it
> will also increase the capacitance somewhat. Constant Z0 isn't important
> for the automotive application, and low capacitance is important.
>
> It seems to me the center conductor is smaller in the automotive coax than

> in RG-62, also.
>
> Roy Lewallen, W7EL

2203. Re: 20A 24v to 12v DC voltage dropper

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 21:19:03 UTC
From: Leif Holmgren <nobody@nowhere.com>
Message-ID: <44343447.3080508@nowhere.com>
Source record: 12704

mrhaney wrote:
> Sell the 24 VDC power supply,Boatanchor people still use 24V supplies..

I feel offended. I have a pretty new 100W+ 432MHz amp that runs on 24V
and a even newer 100W+ 1296MHz amp that runs on 34V!

2204. Re: 20A 24v to 12v DC voltage dropper

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-05 23:33:14 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <V7OdnaomDcvkzqnZnZ2dnUVZ8qqdnZ2d@pipex.net>
Source record: 12705

> Just bought this power supply and it turns out to be 24V as opposed to
> 12 as I'd hoped. It's a heafty beast and should be good for running my
> HF mobile if I can drop the voltage down to 13.8 whilst retaining about
> 20 amps for the rig's TX current draw. I know I can buy a commercial
> dropper, but that'd be cheating, so can anyone suggest how I might
> acheive such a device through HB-ing? Which active devices would be
> best for this purpose? I'd like over-voltage protection built-into any
> design put forward if possible. Any pointers, please.
==========
Perhaps the transformer secondary winding has some lower voltage taps
which would enable you to use for 13.8 V operation ,having to waste less
energy and coping with the heat sinks and pass transistors fitted.

Another possibility is to connect the PSU transformer's primary 230/240
winding to a step down transformer's 115 V or similar lower voltage
winding ,provided the step down transformer has the same or higher power
rating than the one of the PSU
In principle the stepdown transformer could be an auto-transformer
(including a variac set in fixed position) ,obviously of adequate power
rating.
Some variacs (like the 8 Amperes unit I have) also have a fixed centre
tap , meaning that with 230V input they give a variable output as well
as a fixed 115 V output.

A stepdown transformer could also be a high voltage transformer say 230
to 500 V or similar but reverse connected (again : of adequate power
rating).

In all cases you would have to change the voltage control circuit ,such
that the voltage can be set to 13.8 V . The latter 'might' only involve
changing some resistors and/or a zener diode .

Frank GM0CSZ/KN6WH

2205. Chebyshev low-pass / Amp questions / Etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 01:05:27 UTC
From: KC2PIH@gmail.com
Message-ID: <1144285527.509158.72800@e56g2000cwe.googlegroups.com>
Source record: 12706

Hello - I've got my hands on an HF amp and I just don't know about the quality of the low-pass filter in it. It appears to have a 5-element Chebyshev low pass filter in it. I don't have anyway to measure the values of the inductors or capacitors used in that circuit. When I drive it above 25Mhz (into a dummy load of course), the SWR is low. It has four MRF-454 transitors in it and when I drive it with 25-30 watts, I see 400+ watts out PEP. The SSB audio sounds clear too, so without understanding the circuitry fully, it seems to be biased "above" class C.

However, when I drove it on 14Mhz, the SWR was good when I drove it with 10 watts or below, but when the drive power goes up, so does the SWR.

Any ideas on what is causing that?

Thanks!

Scott McClements

2206. ** FLEA at MIT ** Sunday April 16th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 03:00:28 UTC
From: w1gsl@mit.edu
Message-ID: <4434844c$0$560$b45e6eb0@senator-bedfellow.mit.edu>
Source record: 12707
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

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****
Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754
****

2207. Re: Question about auto antenna cable and connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 03:35:28 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <44348C60.D9909E41@earthlink.net>
Source record: 12708
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Roy Lewallen wrote:
>
> Michael A. Terrell wrote:
> > . . .
> > One of the engineers at Delco told me it was RG-62, and 93 ohms when
> > I was going to their annual car radio training back in the early '70s.
> > IBM also used RG-62 on their coaxial computer networking, but they used
> > BNC connectors.
>
> The automotive coax I'm familiar with isn't RG-62.
>
> Like automotive coax, RG-62 has a thin walled hollow insulating tube.
> But RG-62 has a polyethylene "string" which is helically wound around
> the center conductor to keep it centered in the hollow tube. The coax in
> every old automotive installation I've seen lacks this PE "string", so
> the center conductor is free to flop around inside the hollow tube. The
> effect of the "string" is to make RG-62's Z0 constant and predictable,
> and it will also increase the capacitance somewhat. Constant Z0 isn't
> important for the automotive application, and low capacitance is important.
>
> It seems to me the center conductor is smaller in the automotive coax
> than in RG-62, also.
>
> Roy Lewallen, W7EL

I saw both types on car radio antennas, and some was clearly marked
RG-62. Both types meet the original RG62 specification, they just use
two different methods to minimize dielectric losses, like fused disk
hardline used in CATV and other applications that require low loss
cabling. Also, why would one of the Delco engineers who designed their
car radios lie about the coax they used? He was explaining the then
brand new AM/FM/8-track combo when I asked a number of questions about
the RF front end. As usual, you will continue to believe whatever you
want to.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2208. Re: Question about auto antenna cable and connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 06:50:15 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1239ehalkdecf1c@corp.supernews.com>
Source record: 12709
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Michael A. Terrell wrote:
>
> I saw both types on car radio antennas, and some was clearly marked
> RG-62. Both types meet the original RG62 specification, they just use
> two different methods to minimize dielectric losses, like fused disk
> hardline used in CATV and other applications that require low loss
> cabling. Also, why would one of the Delco engineers who designed their
> car radios lie about the coax they used? He was explaining the then
> brand new AM/FM/8-track combo when I asked a number of questions about
> the RF front end. As usual, you will continue to believe whatever you
> want to.

I happened to find a piece of the automotive cable -- complete with connector -- in my junk box, which I'm pretty sure was cut from a replacement antenna probably purchased in the '70s. This particular cable lacks the PE "string", but the ~#31 center conductor is crimped in a sort of zig-zag shape to keep it in place in the hollow tube. The aviation cable apparently has the center conductor bent into a (presumably loose) helix for the same purpose. I've never seen RG-62 cable without the PE "string", but don't have any trouble believing that someone might manufacture it without the "string". I also don't have trouble believing that some auto manufacturers might use RG-62. Although I saw a lot of auto installations in the '60s, when I moonlighted repairing such things, I never saw RG-62. But I certainly didn't see anywhere near every possibility, and I could have missed seeing a marking.

Roy Lewallen, W7EL

2209. Re: Chebyshev low-pass / Amp questions / Etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 07:13:33 UTC
From: Alan Peake <adpeake@killspam.internode.on.net>
Message-ID: <4434BF9D.7030404@killspam.internode.on.net>
Source record: 12710

> However, when I drove it on 14Mhz, the SWR was good when I drove it
> with 10 watts or below, but when the drive power goes up, so does the
> SWR.

If the amplifier is distorting, you may be getting 2nd or 3rd harmonics of the 14MHz. Perhaps the output impedance of the amplifier is not 50 ohms at the harmonic frequencies and so you will see increased VSWR. I don't know what the topology of your amplifier is but if it's push-pull like many solid-state amps, then it's probable that the harmonics are third order.
Alan
VK2ADB

2210. Re: Chebyshev low-pass / Amp questions / Etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 08:07:46 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <3bi932l6b35bdg6otpfapg63do4kckpsi0@4ax.com>
Source record: 12711

On 5 Apr 2006 18:05:27 -0700, KC2PIH@gmail.com wrote:

>
>However, when I drove it on 14Mhz, the SWR was good when I drove it
>with 10 watts or below, but when the drive power goes up, so does the
>SWR.
>
>Any ideas on what is causing that?

Assuming your SWR instrument is reliable at 10 W (which you should
test with a reliable, say 100 ohm dummy load), an other suggestion is
that there are some flashovers in some reactive components. Is any
capacitor or inductor getting hot after a long test ?

Paul OH3LWR

2211. icom ic-t2h tx expand diode 18 removal mods and findings

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 08:46:37 UTC
From: ramondelapaz@gmail.com
Message-ID: <1144313197.648935.326340@i40g2000cwc.googlegroups.com>
Source record: 12712

after doing the remove diode 18 on my icom ic-t2h to expand tx i
noticed that my reception in the higher (170mhz and above) was
distorted. i also noticed a marked reduction in transmitting power in
the high frequencies, stations i could reach at 140.20 couldn't be
reached at 172.15, they couldn't reach me either at 172.15 though we
easily could reach each other at 140.20

the low (140-148mhz) seemed to work ok.

i am studying the electrical diagram if i also have to remove the other

diode to improve higher VHF freek reception.

what you guys find out so far?

Reply

2212. Re: Return Loss Bridge Accuracy Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 12:19:52 UTC
From: Paul VK3DIP <pmcmahon@telstra.com>
Message-ID: <IH7Zf.528$vy1.160@news-server.bigpond.net.au>
Source record: 12713

Steve,
Yes the connectors can make all the difference, as you would have seen from the write-up I used BNC's and even though they were reasonably good quality at the extremes just wiggling the connectors slightly to vary the contact resistance (and probably capacitance etc.) a bit can make dB's of difference to the measured directivity. Thankfully this is not a big problem under normal usage. Your PL259's would probably have similar effects though possibly not quite as noticeable at the directivities and frequencies you were looking at.

Paul. VK3DIP

2213. Re: Eddystone dial and custom dial plates

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 12:44:39 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <X28Zf.53395$Fc.13180@trnddc08>
Source record: 12714

"Ted" <kilocycles**@**yahoo.com> wrote in message
news:u9v432dso5qnjt426519a5mfln1090htk4@4ax.com...
> On Mon, 03 Apr 2006 01:37:23 GMT, "Dale Parfitt"
> <par@parelectronics.com> wrote:
>
>
>>Hi Ted,
>>I quickly looked at the VFO schematic in my1994 Handbook that had the PR.
>>I
>>seem to recall in the end I replaced C1 with a short- just eliminating it.
>>Not 100% positive, but think that was what it came down to in order to
>>get
>>good linearity out of my VFO.
>>
>>Dale
>>
> Dale,
> I'll check that out. My value for C3 from the spreadsheet came out to
> be 319.1 vs the 127.02 in the magazine. I used the spreadsheet on the
> example on page 4.4 of EMRFd and it worked out ok. In the QST
> example, setting C1 to a very low value actually increases the
> discrepancy with C3, though. More mystery!
>
> Tnx,
> Ted KX4OM
Hi Ted,
No doubt, the VFO could be put on the correct freq range with C3 included-
it was just very nonlinear.

Dale

2214. Re: Chebyshev low-pass / Amp questions / Etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 15:41:21 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <e13cr1$833$2@engnntp2.cig.mot.com>
Source record: 12716

<KC2PIH@gmail.com> wrote in message
news:1144285527.509158.72800@e56g2000cwe.googlegroups.com...
> Hello - I've got my hands on an HF amp and I just don't know about the
> quality of the low-pass filter in it. It appears to have a 5-element
> Chebyshev low pass filter in it.

You don't say if this is on the input or output of said amp - based on
your question the assumption is input. Why do you say Chebyshev if you
don't know values?

I don't have anyway to measure the
> values of the inductors or capacitors used in that circuit. When I
> drive it above 25Mhz (into a dummy load of course), the SWR is low.

How low, (give numbers) and what ate you measuring it with?

It
> has four MRF-454 transitors in it and when I drive it with 25-30 watts,
> I see 400+ watts out PEP. The SSB audio sounds clear too, so without
> understanding the circuitry fully, it seems to be biased "above" class
> C.

This may or may not be any indication of linearity. A better check would be
to listen off channel.

>
> However, when I drove it on 14Mhz, the SWR was good when I drove it
> with 10 watts or below, but when the drive power goes up, so does the
> SWR. ... Thanks! > Scott McClements

Again, how far "UP" give numbers.

73, Steve, K9DCI

2215. How get RF through a sealed window?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 16:06:22 UTC
From: mcalhoun@ksu.edu
Message-ID: <e13e9u$q3u@unix1.cc.ksu.edu>
Source record: 12715
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I gave a presentation on "How Ham Radio Can Help You in an Emergency"
to 70 Emergency Management types last week, and the windows in the
building which hosted the meeting were NOT open-able (so I "made do"
with an inside VHF antenna and didn't even try to demonstrate HF).

But in emergency/expedient situations, it would be really handy if one
could pass at HF, say, 100 watts of RF energy through a window (I
visualize some foil strips and an inductor or two to "tune out" the
capacitance) to an external antenna.

I've been told that the April, 1989, issue of Ham Radio magazine carried
an article "Easy antenna access for urban apartment dwellers" (for 15
meters) by Bryan Bergeron, NU1N, starting on page 18.

I'd sure like to read that article; can anyone send me a copy?
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

2216. Re: making a uhf bandpass filter using semi rigid or hardline?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 16:12:27 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <e13elb$9ds$2@engnntp2.cig.mot.com>
Source record: 12717

Depending on the type of ceramic filter, some can be moved either up or down (yep, down) in frequency with a dremel and diamond wheel. I have done this when designing AMPS transceivers for a different frequency range (lower) when the lead time on sample filters from Murata in a different range was too long. Moving them relatively small amounts, the bandwidth stays quite close. I think I went down something like 15-20 MHz. Moving them as far as you want far may be (probably is) a stretch You are trying to go from the cellular base receive to the ham band. Depending on what the amp is between the filter and output, the amp may need some tweeking for this difference in frequency. IF you had some mobile receive (45 MHz higher) filters, going that far would be easier, but I'm sure you don't.

A Comb-line ceramic filter is a block that has holes in it. It is like a box with 1/4 wave rods in a line except the box is filled with ceramic. It is about 1/4 inch thick, maybe 1/2 inch 'high' and long enough for as many hole-resonators as it has in a line. Each hole is plated inside and is a "shortened quarter wave transmission line" resonator. The "ground" or "shield" equivalent of the transmission line resonators is the two plated sides of the block. It is filed with a high-K dielectric having a very good temperature characteristics and therefore the 1/4 wave is very short -- the virtue of these filters.
Ours typically had three poles (holes-resonators) for the receive and 5 for the exciter filter.
One end (the 'bottom' or the shorted end of the quarter wave resonators) is all metal plating and holes in a line. The opposite end (the resonator open end) has little or no plating and may even show the effects of grinding to tune it. However, some are constructed with this end mounted down and therefore covered by the mounting bracket which will probably be soldered or glued on and allow limited access. Coupling for the desired bandwidth and ripple is achieved by the spacing of the resonator-holes in the solid high-k ceramic dielectric therefore, you can't buck about with coupling and must take what you get after moving.
To move up, you remove resonator from the "open" end, shortening it. To move down, you remove small areas of the ground plating at the base of the resonator-holes. I used the Dishall method and they came right on.

If the filters are comb-line with top coupling for input and output, moving them *up* far (by shortening the resonator -- which *is* the hole), I think will be hard because you will loose coupling between resonator and coupling tab when you shorten the resonator...however you could regain coupling by attaching a wire to the coupling tab and run it down the hole (the "correct" amount) to proper get coupling back.
73, Steve K9DCI

<tucker@conninc.com> wrote in message
news:1144259278.805899.268620@z34g2000cwc.googlegroups.com...
> Im trying to build a preamp for the 902-928 band, I bought several
> surplus cellular preamps
> in a auction, these had 824-855mhz ceramic filters. I took the filter
> out and the noise floor
> took off, i need to replace the bandpass with one in the 902-928 mhz
> range. I have some
> semi rigid coax .080 and of various sizes of small hardline .250 -
> .540. In the past ive seem articles on making preamps & filters using
> semi rigid coax but cant find any now that im ready to start building a
> ATV receiver.
>

2217. Radio-Electronics Sept 89

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 17:29:12 UTC
From: pdrunen@aol.com
Message-ID: <1144344552.349256.25410@e56g2000cwe.googlegroups.com>
Source record: 12718

Hi All,

I am looking for a spectrum monitor article, part 1 which appears in RE
Sept 89.
If you have the issues, would like to get a copy of this article,
either scanned or otherwise.

de KJ4UO

2218. ECG736 or NTE736

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 17:31:41 UTC
From: pdrunen@aol.com
Message-ID: <1144344701.254899.208940@z34g2000cwc.googlegroups.com>
Source record: 12719

Hi all,

I been searching the net for the specification on the ECG/NTE 736 which is an FM gain block 8-pin dip.

I have an old ECG catalog which gives me the pin out, I have tried the NTE website which does not have a downloadable spec sheet.

If you have a spec sheet, would like to get a copy.

de KJ4UO

2219. Re: How get RF through a sealed window?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 17:59:36 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <123alpjhjjbva3@corp.supernews.com>
Source record: 12720
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

<mcalhoun@ksu.edu> wrote in message news:e13e9u$q3u@unix1.cc.ksu.edu...
> But in emergency/expedient situations, it would be really handy if one
> could pass at HF, say, 100 watts of RF energy through a window (I
> visualize some foil strips and an inductor or two to "tune out" the
> capacitance) to an external antenna.

In an emergency I'd say... uh... just leave the window open? :-)

Over on eHam.net there's a recent article on building yourself a simple rectangular wooden panel to stick in the frame of an (open) window. You then just drive holes in the panel as needed to run cables, etc. I've even seen people who didn't have, e.g., a drill or jigsaw do the same thing using a thick-ish chunk of stiff foam (insulation material or even presentation poster board) and an X-acto knife.

2220. Re: How get RF through a sealed window?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 18:30:13 UTC
From: Lawrence Statton N1GAK/XE1 <lawrence@hummer.not-here.net>
Message-ID: <87y7yieeve.fsf@hummer.i-did-not-set--mail-host-address--so-shoot-me>
Source record: 12721
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> writes:
> <mcalhoun@ksu.edu> wrote in message news:e13e9u$q3u@unix1.cc.ksu.edu...
> > But in emergency/expedient situations, it would be really handy if one
> > could pass at HF, say, 100 watts of RF energy through a window (I
> > visualize some foil strips and an inductor or two to "tune out" the
> > capacitance) to an external antenna.
>
> In an emergency I'd say... uh... just leave the window open? :-)

But be sure to bring a hefty brick along to create the opening in the first
place :)

The OP's dilema was that the window COULD NOT open, and therefore some
way to pass RF through glass would have been Useful.

-- --
Lawrence Statton - lawrenabae@abaluon.abaom s/aba/c/g
Computer software consists of only two components: ones and
zeros, in roughly equal proportions. All that is required is to
sort them into the correct order.

2221. Re: How get RF through a sealed window?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 18:44:48 UTC
From: Cecil Moore <mycall@arrl.net>
Message-ID: <AkdZf.12633$tN3.10126@newssvr27.news.prodigy.net>
Source record: 12722
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

<mcalhoun@ksu.edu> wrote:
> But in emergency/expedient situations, it would be really handy if one
> could pass at HF, say, 100 watts of RF energy through a window (I
> visualize some foil strips and an inductor or two to "tune out" the
> capacitance) to an external antenna.

What I have done is plan ahead by drilling two small holes in the glass
and plugging them with nylon screws when not in use. That works best
on the first floor. :-)
--
73, Cecil, W5DXP

2222. Re: How get RF through a sealed window?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 18:46:02 UTC
From: Brian Murrey <brian@iquest.net>
Message-ID: <KldZf.1353$Es3.389@newsread3.news.atl.earthlink.net>
Source record: 12723
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

You'd have better luck with HF than VHF or UHF making it through any solid object. I have used a homebrew mag loop in a hotel room on several ocassions with some luck..on 20 and 40.

I have a 40m dipole in my attic, and I runn less than 5w HF most of the time and I have WAS on several ocassions, I try to WAS every year.

73

--
==========
Radio Amateurs - Fill your junk box, from my junkbox!
http://www.hamradparts.com
73 de KB9BVN
==========

<mcalhoun@ksu.edu> wrote in message news:e13e9u$q3u@unix1.cc.ksu.edu...
> I gave a presentation on "How Ham Radio Can Help You in an Emergency"
> to 70 Emergency Management types last week, and the windows in the
> building which hosted the meeting were NOT open-able (so I "made do"
> with an inside VHF antenna and didn't even try to demonstrate HF).
>
> But in emergency/expedient situations, it would be really handy if one
> could pass at HF, say, 100 watts of RF energy through a window (I
> visualize some foil strips and an inductor or two to "tune out" the
> capacitance) to an external antenna.
>
> I've been told that the April, 1989, issue of Ham Radio magazine carried
> an article "Easy antenna access for urban apartment dwellers" (for 15
> meters) by Bryan Bergeron, NU1N, starting on page 18.
>
> I'd sure like to read that article; can anyone send me a copy?
> --
> --Myron A. Calhoun.
> Five boxes preserve our freedoms: soap, ballot, witness, jury, and
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> PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785)
539-4448
> NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle,
Pistol)

2223. Re: How get RF through a sealed window?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 19:05:48 UTC
From: dplatt@radagast.org
Message-ID: <123apkcflafh49@corp.supernews.com>
Source record: 12724
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

In article <87y7yieeve.fsf@hummer.i-did-not-set--mail-host-address--so-shoot-me>,
Lawrence Statton N1GAK/XE1 <lawrence@hummer.not-here.net> wrote:

>But be sure to bring a hefty brick along to create the opening in the first
>place :)
>
>The OP's dilema was that the window COULD NOT open, and therefore some
>way to pass RF through glass would have been Useful.

A lot of modern buildings have glass windows which not only cannot be
opened, but which have a "low-E" (low thermal emission) coating on the
glass. This is (I believe) a very thin layer of vapor-deposited
metal.

Its RF attenuation is considerable. Some years ago, we had our house
windows (1960s-era glass) replaced with new ones using a low-E-coated
glass. A previously-workable signal path for 802.11 signals, which
got to the back of the house from an access point in the garage by
going through the garage door and a couple of exterior windows,
suddently became quite unusable - I had to install an additional
access point to cover that part of the house.

The more obviously shaded or reflective the glass, the more of a
problem for RF transmission or coupling this stuff is likely to present.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2224. Re: Chebyshev low-pass / Amp questions / Etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 19:23:40 UTC
From: w8ji@akorn.net
Message-ID: <1144351420.521364.100500@g10g2000cwb.googlegroups.com>
Source record: 12725

KC2PIH@gmail.com wrote:
> Hello - I've got my hands on an HF amp and I just don't know about the
> quality of the low-pass filter in it. It appears to have a 5-element
> Chebyshev low pass filter in it. I don't have anyway to measure the
> values of the inductors or capacitors used in that circuit. When I
> drive it above 25Mhz (into a dummy load of course), the SWR is low. It
> has four MRF-454 transitors in it and when I drive it with 25-30 watts,
> I see 400+ watts out PEP. The SSB audio sounds clear too, so without
> understanding the circuitry fully, it seems to be biased "above" class

1.) First of all, the MRF454 gets very non-linear at 80 watts output if you have a full 13.6 volts on the collector. If you are running 400 watts PEP, you are certainly splattering excessively. There is doubt about that. That's just how that device is. That is why Motorola calls it an 80 w device, and why four MRF-454 will barely make 300 w PEP on PEAKS with marginally acceptable IM distortion.

2.) Second, the amp MUST have filters for each range. There isn't any possible way to have that amp meet TA harmonic specs without several switched filters. Harminc have nothing to do with having acceptable IM performance.

3.) How it sounds on frequency, or how a few people tell you it sounds, has little to do with legal linearity and splatter. There isn't a person alive that can tell if an amp has unacceptable bandwidth unless he knows how to tune your signal, has a good noise environment, and your signal has acceptable strength. How you sound "on frequency" does not indicate at all how clean you are with IM distortion or splatter, and anyone checking you off frequency has to have a low noise floor, good receiver, and know how to do it.

I hope this helps. It's very important to know what we are doing with amps and radios!

Bands like 20 meters are just getting ruined by cheap 12 volt solid state amps. Well designed solid state amps are generally bad enough, but the poorly designed CB amps using transistors with poor bias systems and driving the devices into non-linearity are ruining many crowded phone bands.

If a solid state amp will run 150 watts peak power, it is generally only acceptable to 100 watts or less on peaks for SSB. The general rule of thumb for solid state amps is they have acceptable linearity only at 66 % of maximum peak power.

This is why most solid state 100 watt radios will run 150 watts when people turn up internal controls without regard for bandwidth, and why your MRF454's will run a bit over 400w saturated peak power but only be linear to about 300 watts on peaks when power is measured on an accurate peak meter.

73 Tom

2225. Re: icom ic-t2h tx expand diode 18 removal mods and findings

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 19:32:19 UTC
From: dplatt@radagast.org
Message-ID: <123ar638jtmse50@corp.supernews.com>
Source record: 12726

In article <1144313197.648935.326340@i40g2000cwc.googlegroups.com>,
<ramondelapaz@gmail.com> wrote:

>after doing the remove diode 18 on my icom ic-t2h to expand tx i
>noticed that my reception in the higher (170mhz and above) was
>distorted. i also noticed a marked reduction in transmitting power in
>the high frequencies, stations i could reach at 140.20 couldn't be
>reached at 172.15, they couldn't reach me either at 172.15 though we
>easily could reach each other at 140.20
>
>the low (140-148mhz) seemed to work ok.
>
>i am studying the electrical diagram if i also have to remove the other
>
>diode to improve higher VHF freek reception.
>
>
>what you guys find out so far?

The fact that you can persuade the radio's synthesizer to tune
frequencies outside of the 2-meter band, does not mean that either the
transmitter or receiver circuitry is necessarily going to work well on
those frequencies. The transmitter circuit is very probably "tuned"
for operation in the 2-meter band, and forcing it to operate outside
of its tuning range will probably result in degraded performance.

The radio almost certainly has a low-pass filter between the RF
module and the antenna. This is necessary in order to keep
the radio's transmitter from emitting spurs or harmonics in
excess of the FCC limits. This filter is likely to "roll off" any
transmissions above the 2-meter band to some extent, and (if it's in
the receive pathway) will probably reduce the received signal
strength as well.

It's even possible that transmitted at such a high frequency might
damage the radio's power amplifier... the amp's likely to be looking
into a severe impedance mismatch and the high SWR might overstress it.

You don't say where you live, but you should be aware that here in the
U.S. it's illegal to transmit outside of the 2-meter band with a radio
modified in this fashion. Google for "Jack Gerritsen" to understand
some of the potential consequences.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior

I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2226. Re: How get RF through a sealed window?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 20:07:17 UTC
From: mcalhoun@ksu.edu
Message-ID: <e13sdl$f1m@unix1.cc.ksu.edu>
Source record: 12727
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

>> But in emergency/expedient situations, it would be really handy if one
>> could pass at HF, say, 100 watts of RF energy through a window ....

>Over on eHam.net there's a recent article on building yourself a simple
>rectangular wooden panel to stick in the frame of an (open) window. You then
>just drive holes in the panel as needed to run cables, etc....

I can just see me now:
* Drive to the High-n-Mighty Hotel where I'm to provide communications
for the Red Cross (or Salvation Army) shelter
* Ask the desk clerk for someone to help me carry my sledgehammer and
other stuff in my grab-n-go kit to the shelter
* Walk into shelter where x-hundred shelterees are fast asleep
* Take sledgehammer and bash a hole through a window
* ....

Nope, that's just not gonna work!

--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

2227. Re: How get RF through a sealed window?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 20:13:53 UTC
From: mcalhoun@ksu.edu
Message-ID: <e13sq1$fev@unix1.cc.ksu.edu>
Source record: 12728
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

>You'd have better luck with HF than VHF or UHF making it through any solid
>object. I have used a homebrew mag loop in a hotel room on several
>ocassions with some luck..on 20 and 40.

Even in an emergency situation, I just don't think it would be a good idea to string some kind of an antenna above the heads of shelterees and then start soaking them with RF, especially depending on the HF frequency in use. In fact, I suspect the FCC's RF-exposure regulations would frown on one doing so!

--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

2228. Re: Question about auto antenna cable and connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 20:56:34 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4435804C.B3342CE2@earthlink.net>
Source record: 12729
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Roy Lewallen wrote:
>
> Michael A. Terrell wrote:
> >
> > I saw both types on car radio antennas, and some was clearly marked
> > RG-62. Both types meet the original RG62 specification, they just use
> > two different methods to minimize dielectric losses, like fused disk
> > hardline used in CATV and other applications that require low loss
> > cabling. Also, why would one of the Delco engineers who designed their
> > car radios lie about the coax they used? He was explaining the then
> > brand new AM/FM/8-track combo when I asked a number of questions about
> > the RF front end. As usual, you will continue to believe whatever you
> > want to.
>
> I happened to find a piece of the automotive cable -- complete with
> connector -- in my junk box, which I'm pretty sure was cut from a
> replacement antenna probably purchased in the '70s. This particular
> cable lacks the PE "string", but the ~#31 center conductor is crimped in
> a sort of zig-zag shape to keep it in place in the hollow tube. The
> aviation cable apparently has the center conductor bent into a
> (presumably loose) helix for the same purpose. I've never seen RG-62
> cable without the PE "string", but don't have any trouble believing that
> someone might manufacture it without the "string". I also don't have
> trouble believing that some auto manufacturers might use RG-62. Although
> I saw a lot of auto installations in the '60s, when I moonlighted
> repairing such things, I never saw RG-62. But I certainly didn't see
> anywhere near every possibility, and I could have missed seeing a marking.
>
> Roy Lewallen, W7EL

Some of the third party replacement antennas were made with military
surplus RG62, and had hand soldered motorola plugs instead of the OEM
crimped plugs. I cut up a lot of old antenna cables and stripped the
copper braid to use as solder wick by dipping it into liquid rosin. Some
had the plastic spacer for the center conductor, but most didn't. Some
weeks we replaced a half dozen car radio antennas, so I always had
plenty of copper braid at hand. years later I worked for a CATV company
repairing converters. The braid from the control cables was a little
under 1/8" when it was pulled tight and flattened by pulling it around
the blade of a screwdriver.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.

Member of DAV #85.

Michael A. Terrell
Central Florida

2229. OT: Brain pick

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 21:01:53 UTC
From: Bob Liesenfeld <wb0poq@visi.com>
Message-ID: <443581C1.328877BE@visi.com>
Source record: 12730

Hi gang,
I know there are a number of people on this list who work in 2 way and

other RF fields. I used to, but have been out of the loop for a while
so I need your current expertise.
Specifically, I need to determine what transmitting type services
currently (or may soon) use amplitude modulation of the radiated signal
in the 80MHz to 1GHz range. In my day it was restricted to aircraft
comms in the 108MHz to 138MHz range and the video carrier of broadcast
TV. Is this still the case, or have things changed? I don't need to
know about 'closed circuit' paths such as cable TV and the like, only
services that radiate RF.
Also, if anyone has any knowledge of the general picture of frequency
allocations in the same range quoted above in Europe and Asia, I would
appreciate it.
Thanks a lot and please respond off list.

Bob WB0POQ
wb0poq@visi.com

2230. Re: How get RF through a sealed window?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-06 21:49:11 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <123b38gspg7kg65@corp.supernews.com>
Source record: 12731
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Lawrence Statton N1GAK/XE1" <lawrence@hummer.not-here.net> wrote in message
news:87y7yieeve.fsf@hummer.i-did-not-set--mail-host-address--so-shoot-me...
> The OP's dilema was that the window COULD NOT open, and therefore some
> way to pass RF through glass would have been Useful.

Oops, sorry I missed that!

2231. New program. Input Z of Twin-lines.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 02:52:19 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ktCdnTwS67SESajZnZ2dnUVZ8sydnZ2d@bt.com>
Source record: 12732

New program LINE_ZIN, for given frequency and load impedance, for
balanced-twin lines, calculates -

Impedance Zo
Input impedance, R+jX
Attenuation, dB
Power efficiency %
Loss with standing waves, dB
Reflection coefficient
Angle of refl.coeff.
SWR at load end
SWR at input end

Input data can be varied in small increments from the keyboard to
observe how a line behaves. Practical and educational.

Download program LINE_ZIN (40 K-bytes) in a few seconds from website
below and run imediately.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

2232. Re: Radio-Electronics Sept 89

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 04:12:57 UTC
From: James Thompson <Jackalope7@wontel.net>
Message-ID: <23eaa$4435e6ca$438c8615$2065@ALLTEL.NET>
Source record: 12733

<pdrunen@aol.com> wrote in message
news:1144344552.349256.25410@e56g2000cwe.googlegroups.com...
> Hi All,
>
> I am looking for a spectrum monitor article, part 1 which appears in RE
> Sept 89.
> If you have the issues, would like to get a copy of this article,
> either scanned or otherwise.
>
> de KJ4UO
>
I just went through a stack of old mags and that sounds familier. I will
check tomorrow and get back to you on that. JTT kf4huf..

2233. Re: How get RF through a sealed window?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 05:45:28 UTC
From: "Allan R. Batteiger" <arb@rtsi.com>
Message-ID: <Y%mZf.369987$fe6.129198@fe01.news.easynews.com>
Source record: 12734
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

mcalhoun@ksu.edu wrote in news:e13e9u$q3u@unix1.cc.ksu.edu:

> I gave a presentation on "How Ham Radio Can Help You in an Emergency"
> to 70 Emergency Management types last week, and the windows in the
> building which hosted the meeting were NOT open-able (so I "made do"
> with an inside VHF antenna and didn't even try to demonstrate HF).
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> But in emergency/expedient situations, it would be really handy if one
> could pass at HF, say, 100 watts of RF energy through a window (I
> visualize some foil strips and an inductor or two to "tune out" the
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>
> I'd sure like to read that article; can anyone send me a copy?

I do not have the article but one solution that was proposed and tried worked great. Use tinfoin and rubber glue, cut the tin foil to fit the glass. Apply rubber glue to hold the foil to each side of the glass, Thickness of teh glass is not important. In my case I used the metal frame of the glass to carry the gound signal through the window frame. I then used an antenna tuner to adjust out the capacitor I just created. Worked great, no drilling no running coax in and out so I can close the window etc.

Allan
WB5QNG

2234. Re: filtering of LO signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 05:51:30 UTC
From: Pete KE9OA <p.gianako@comcast.net>
Message-ID: <M5Wdncu_gO18YKjZRVn-vg@comcast.com>
Source record: 12735

I have been characterizing some of the new Mini-Circuits LAVI-XXX series mixers. These devices have an IP3 in the +35 to +40dBm range. Using HP 8644 signal generators to characterize IP3, I was only able to achieve +33dBm.......IP2 was only in the low 60s. Return loss at the RF and I.F. ports was only measured at 12 to 13dB.
I spoke to Mr. Lu Chen at Mini-Circuits and he explained that all sources must have all harmonics down by at least -65dBc, and that the 6th and 9th harmonics of the LO can be especially troublesome in degrading the performance.
Using a low-pass filter on the LO improved the return loss to 20dB, while the IP2 improved to +72dBm and the IP3 improved to +40dBm. It is always good to have a clean LO source. If your 2nd harmonic is below -25dBc and higher order terms are below -40dBc, you will have pretty good performance from the receiver. A low-pass filter ahead of the 1st mixer will help reject that 90 to 120MHz image band.

Pete

"MadEngineer" <glenn.b.dixon@gmail.com> wrote in message
news:1144241239.572370.217140@g10g2000cwb.googlegroups.com...
> Hi John,
>
> If by 'first harmonic' you actually mean the second harmonic of your LO
> (the 'first harmonic' usually refers to the fundamental frequency), the
> answer depends a lot on how well your input is filtered, and on what
> you have after the mixers.
>
> This sounds like a 0-30Mhz shortwave receiver. If your input does not
> have a good low pass filter for example, you may find strong FM signals
> getting into the first IF passband as a result of the 2nd LO harmonic.
> Note that your mixer inherently responds at odd harmonics of the LO
> (3rd,5th...) and filtering odd harmonics out at the LO port does
> little, so a good low pass filter is necessary anyway.
> The second mixer is probably not as critical. Others will probably add
> some more information.
>
> Regards,
> Glenn AC7ZN
>

2235. Re: How get RF through a sealed window?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 12:40:12 UTC
From: Brian Murrey <brian@iquest.net>
Message-ID: <M4tZf.4154$i41.3152@newsread1.news.atl.earthlink.net>
Source record: 12736
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Perhaps.

In an emergency situation though, you do what you need to do and try not to let the regulations keep you from saving lives and/or property..while still keeping the regs in mind.

When I use my portable mag loop for 20 and 40, from my hotel room, I try to place it outside my room...but that hasn't always been possible. At my low power I would have to guess the RF I'm bathing in should only be slightly more harmful than the X rays leaking out of my cheap "Made in Turdistan" TV set. I certainly wouldn't attempt using this setup with much more than a few watts of power.

As for my attic dipoles, I have never tried to measure the exposure level in my home. I'll check in to that..but again, at 5w or less it can't be too dangerous.

73

--
==
Radio Amateurs - Fill your junk box, from my junkbox!
http://www.hamradparts.com
73 de KB9BVN
==

<mcalhoun@ksu.edu> wrote in message news:e13sq1$fev@unix1.cc.ksu.edu...
> >You'd have better luck with HF than VHF or UHF making it through any
solid
> >object. I have used a homebrew mag loop in a hotel room on several
> >ocassions with some luck..on 20 and 40.
>
> Even in an emergency situation, I just don't think it would be a good idea
> to string some kind of an antenna above the heads of shelterees and then
> start soaking them with RF, especially depending on the HF frequency in
> use. In fact, I suspect the FCC's RF-exposure regulations would frown on
> one doing so!
>
> --
> --Myron A. Calhoun.
> Five boxes preserve our freedoms: soap, ballot, witness, jury, and
cartridge
> PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785)
539-4448
> NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle,

Pistol)

2236. ** FLEA at MIT ** Sunday April 16th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 13:13:59 UTC
From: "Gian, I7SWX" <i7swx@yahoo.com>
Message-ID: <1144415639.127441.217780@i40g2000cwc.googlegroups.com>
Source record: 12737

GREETINGS TO ALL ORGANIZERS and VISITORS.

>From 2000 to 2003, during my business trips to W1 HQ, I have been
several times at the MIT Flea Market and found interesting material and
at valid prices most of the times.

I bought a lot of components and even some test equipments to take back
to Europe.

Now I miss those trips...hi

73

Gian
I7SWX
F5VGU
W1-I7SWX

G-QRP #10241
I QRP #571
President ARI (Chapter) Sezione Cassano delle Murge BA Italy - IQ7MU
Special Stations: II7JP and II7PAX (QSL now shipping)

2237. Plexi, Lexan or ???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 13:26:30 UTC
From: Rick Mintz <Rmintz@Rochester.rr.com>
Message-ID: <aMtZf.40370$Da7.3033@twister.nyroc.rr.com>
Source record: 12739

Hi.

I am building an amp and will be using a clear plastic over the front panel graphics.

I could use some help in choosing the material, such as Plexi or Lexan. Since I will be drilling couple of 2" holes to mount panel meters, I need some suggestions for which material is the best to work with. A hole saw in Plexi is prone to crack and maybe there is a better choice. There also may be a better method for creating the holes than a standard hole saw. Suggestions???

de Rick W1TY

Email: Rmintz@Rochester.rr.com

2238. Re: How get RF through a sealed window?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 13:37:09 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <7PCdneWp1f8g96vZRVnytQ@pipex.net>
Source record: 12740
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

>> But in emergency/expedient situations, it would be really handy if one
>> could pass at HF, say, 100 watts of RF energy through a window (I
>> visualize some foil strips and an inductor or two to "tune out" the
>> capacitance) to an external antenna.
>
> What I have done is plan ahead by drilling two small holes in the glass
> and plugging them with nylon screws when not in use. That works best
> on the first floor. :-)
==========
Might be OK for single - ,but NOT for double glazed windows.

A solution for HF 'might' be an inductive coupler/matching unit , with
half of it including an inductor on the outside with the other inductor
and 'tuning bits' inside .Both inductors 'in-line' for best possible
coupling. If an outside variable capacitor is to be used ,its shaft
could possibly be magnetically coupled with a manipulator fitted inside
,using strong magnets .
Home-brewing Ham Radio equipment is and remains an interesting
ideas-provoking activity .

Frank GM0CSZ / KN6WH

2239. Drake Panel Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 14:03:33 UTC
From: Rick Mintz <Rmintz@Rochester.rr.com>
Message-ID: <ViuZf.42687$jf2.9753@twister.nyroc.rr.com>
Source record: 12741

Hi.

Looking for the panel meter from a Drake W-4 wattmeter. This is the same meter as used in the MN-4, MN-2000, etc.

Please reply direct.

de Rick W1TY

Rmintz@Rochester.rr.com

2240. Re: How get RF through a sealed window?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 15:55:35 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <123d2sq52jmt2f8@corp.supernews.com>
Source record: 12742
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Brian Murrey" <brian@iquest.net> wrote in message
news:M4tZf.4154$i41.3152@newsread1.news.atl.earthlink.net...
> In an emergency situation though, you do what you need to do and try not to
> let the regulations keep you from saving lives and/or property..while still
> keeping the regs in mind.

Slightly off-topic, but see: http://www.truck.net/showdetail/rec_id/1182.
Bizarre...

2241. Re: Plexi, Lexan or ???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 16:35:28 UTC
From: Heinz Schnait <oe5eep@qsl.net>
Message-ID: <4436989f$0$3893$91cee783@newsreader01.highway.telekom.at>
Source record: 12743

Rick Mintz wrote:

> I could use some help in choosing the material, such as Plexi or Lexan.

Hi Rick,

Lexan has a higher melting point than Plexi. Therefore it's easier to drill or cut. Plexi tends to stick to the drill bit once it becomes hot. Lexan is more robust from a mechanical point of view, while Plexi tends to break. So if you have both available I think Lexan is the better choice.

73 Heinz, OE5EEP

2242. Re: Plexi, Lexan or ???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 17:07:00 UTC
From: - exray - <exray@coqui.net>
Message-ID: <123d71rdq3apq5f@corp.supernews.com>
Source record: 12744

Rick Mintz wrote:
> Hi.
>
> I am building an amp and will be using a clear plastic over the front panel
> graphics.
>
> I could use some help in choosing the material, such as Plexi or Lexan.
> Since I will be drilling couple of 2" holes to mount panel meters, I need
> some suggestions for which material is the best to work with. A hole saw in
> Plexi is prone to crack and maybe there is a better choice. There also may
> be a better method for creating the holes than a standard hole saw.
> Suggestions???
>
> de Rick W1TY
>
> Email: Rmintz@Rochester.rr.com
>
>
In my experience...Lexan is much less prone to cracking but on the other
hand it seems like the surface of Lexan scratches much easier than
Plexiglass. A wipe with a dry cloth or paper towel will leave a 'smudge
If you're gonna use a fairly thin plastic, say 1/8th, I think you'd be
ok with plexi and thats what I would use personally because of that
reason primarily. Some of the cheapo hole cutters can be rather crude
to work with but if you take it slow you should be ok.

2243. Re: ECG736 or NTE736

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 17:14:06 UTC
From: fmmck@aol.com
Message-ID: <fmmck-0704061314060001@aca5f58c.ipt.aol.com>
Source record: 12745

In article <1144344701.254899.208940@z34g2000cwc.googlegroups.com>,
pdrunen@aol.com wrote:

> I been searching the net for the specification on the ECG/NTE 736 which
> is an FM gain block 8-pin dip.
>
> I have an old ECG catalog which gives me the pin out, I have tried the
> NTE website which does not have a downloadable spec sheet.
>
> If you have a spec sheet, would like to get a copy.

KJ4UO-

If you don't find one, I suggest you "reverse look up" the original part number. (Could it be a Fairchild uA736? A National Semiconductor LM736?)

In other words, you may have better luck finding a data sheet for the original manufacturer's part, and trusting that the ECG/NTE part meets the same specs.

73, Fred, K4DII

2244. Re: Plexi, Lexan or ???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 18:19:04 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1144433944.632828.156170@z34g2000cwc.googlegroups.com>
Source record: 12746

Rick Mintz wrote:
> I am building an amp and will be using a clear plastic over the front panel
> graphics.

Wow, getting fancy! All my homebrew amps have front panels that are so primitive, stone age carving in tablets would've been one step up from them :-).

> I could use some help in choosing the material, such as Plexi or Lexan.
> Since I will be drilling couple of 2" holes to mount panel meters, I need
> some suggestions for which material is the best to work with. A hole saw in
> Plexi is prone to crack and maybe there is a better choice. There also may
> be a better method for creating the holes than a standard hole saw.
> Suggestions???

A coping or hacksaw can be used instead of a hole saw. Motor-driven saws like bandsaws or jigsaws, I'm not going to say it's impossible to get good results with them, but I have never had good luck. It's only a couple of holes and soft material so a handsaw will work fine.

Plastic shops and fabricators have special-rake drills and hole saws that make putting holes in plastic sheet much much easier than attempting to use regular metal or wood tools. If you have a lot of little holes, you definitely want to buy the plastic-cutting drill bits for those sizes. If you only have a couple of 2" holes you'll probably have a hard time justifying buying a special plastic-cutting hole saw for that size.

Regular metal and wood tools can also be reground to be less likely to crack plastic sheet. The plastic distributors have little pamphlets that explain the how-to. I have not found this information on a website yet.

For any cut where you can see the edge, you then go back and sand/buff/polish to make it look nice and clear and shiny again.

Tim.

2245. Re: Radio-Electronics Sept 89

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 18:29:34 UTC
From: James Thompson <Jackalope7@wontel.net>
Message-ID: <947e0$4436af92$438c8615$24445@ALLTEL.NET>
Source record: 12747

"jack" <jdwalton@comcast.net> wrote in message
news:p-ednclHqeA2-qvZRVn-tA@comcast.com...
>I have it, will scan it today.
>
> Jack
>
> <pdrunen@aol.com> wrote in message
> news:1144344552.349256.25410@e56g2000cwe.googlegroups.com...
>> Hi All,
>>
>> I am looking for a spectrum monitor article, part 1 which appears in RE
>> Sept 89.
>> If you have the issues, would like to get a copy of this article,
>> either scanned or otherwise.
>>
>> de KJ4UO
>>
>
>
I want that one too. I have the second part of that , oct 89. Let me know
where you have that scan. Thanks..

2246. Re: Chebyshev low-pass / Amp questions / Etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 18:33:37 UTC
From: "g. beat"
Message-ID: <ot2dnW8N1IgWLavZnZ2dneKdnZydnZ2d@comcast.com>
Source record: 12648

<KC2PIH@gmail.com> wrote in message
news:1144285527.509158.72800@e56g2000cwe.googlegroups.com...
> Hello - I've got my hands on an HF amp and I just don't know about the
> quality of the low-pass filter in it. It appears to have a 5-element
> Chebyshev low pass filter in it. I don't have anyway to measure the
> values of the inductors or capacitors used in that circuit. When I
> drive it above 25Mhz (into a dummy load of course), the SWR is low. It
> has four MRF-454 transitors in it and when I drive it with 25-30 watts,
> I see 400+ watts out PEP. The SSB audio sounds clear too, so without
> understanding the circuitry fully, it seems to be biased "above" class
> C.
>
> However, when I drove it on 14Mhz, the SWR was good when I drove it
> with 10 watts or below, but when the drive power goes up, so does the
> SWR.
>
> Any ideas on what is causing that?
>
> Thanks!
>
> Scott McClements
>

Five Element Chebyshev Low Pass filters
(components must be properly sized for power output of amplifiers)
NOTE: CCI has 300 watts maximum for their units
http://www.communication-concepts.com/filters.htm

Quality construction (G3TSO) for solid-state amplifier
http://www.qsl.net/g3tso/HFLinearFrameSet1.html

Schematic of G3TSO filters
http://www.qsl.net/g3tso/images/Schematics/hflpf.pdf

RF Electronics also sells parts for the homebrew amateur, and he has a low
pass filter kit that can handle more power.
http://users.aol.com/rfelectron/faq.htm

g. beat

2247. Re: Plexi, Lexan or ???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 18:50:19 UTC
From: Ted <kilocycles**@**yahoo.com>
Message-ID: <nvcd32d3rg30rfn1k07kkal5vrl224mfqr@4ax.com>
Source record: 12649

Lexan, being polycarbonate, is much tougher than Plexiglass, which is acrylic. Ploycarbonate is used in everything from RC car bodies to soft drink bottles to bullet-resistant windows in aircraft.

Ted

2248. Re: Plexi, Lexan or ???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 18:54:34 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <stmdneuJzIzAKKvZRVn-rA@web-ster.com>
Source record: 12650

Tim Shoppa wrote:
> Rick Mintz wrote:
>
>>I am building an amp and will be using a clear plastic over the front panel
>>graphics.
>
>
> Wow, getting fancy! All my homebrew amps have front panels that are so
> primitive, stone age carving in tablets would've been one step up from
> them :-).
>
>
>>I could use some help in choosing the material, such as Plexi or Lexan.
>>Since I will be drilling couple of 2" holes to mount panel meters, I need
>>some suggestions for which material is the best to work with. A hole saw in
>>Plexi is prone to crack and maybe there is a better choice. There also may
>>be a better method for creating the holes than a standard hole saw.
>>Suggestions???
>
>
> A coping or hacksaw can be used instead of a hole saw. Motor-driven
> saws like bandsaws or jigsaws, I'm not going to say it's impossible to
> get good results with them, but I have never had good luck. It's only a
> couple of holes and soft material so a handsaw will work fine.
>
> Plastic shops and fabricators have special-rake drills and hole saws
> that make putting holes in plastic sheet much much easier than
> attempting to use regular metal or wood tools. If you have a lot of
> little holes, you definitely want to buy the plastic-cutting drill bits
> for those sizes. If you only have a couple of 2" holes you'll probably
> have a hard time justifying buying a special plastic-cutting hole saw
> for that size.
>
> Regular metal and wood tools can also be reground to be less likely to
> crack plastic sheet. The plastic distributors have little pamphlets
> that explain the how-to. I have not found this information on a website
> yet.
>
> For any cut where you can see the edge, you then go back and
> sand/buff/polish to make it look nice and clear and shiny again.
>
> Tim.
>
First you should follow all recommendations from your supplier. In

addition, you should use plenty of lubricant, or better lubricating coolant. I'd flood the thing, and use really slow tool rates (i.e. use your drill press with the slowest gearing).

rec.crafts.metalworking has some folk who will give you good answers, if you don't mind sorting through all the political chaff.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

2249. Re: Radio-Electronics Sept 89

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 18:59:39 UTC
From: James Thompson <Jackalope7@wontel.net>
Message-ID: <c5987$4436b69c$438c8615$27312@ALLTEL.NET>
Source record: 12651

On the subject of electronics mags: Does anyone still publish any for the experimenter or is that all in the past?
Jtt (k4fhuf).

2250. Re: Plexi, Lexan or ???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 19:15:05 UTC
From: James Thompson <Jackalope7@wontel.net>
Message-ID: <a8255$4436ba3a$438c8615$29857@ALLTEL.NET>
Source record: 12652

"Rick Mintz" <Rmintz@Rochester.rr.com> wrote in message
news:aMtZf.40370$Da7.3033@twister.nyroc.rr.com...
> Hi.
>
> I am building an amp and will be using a clear plastic over the front
> panel graphics.
>
> I could use some help in choosing the material, such as Plexi or Lexan.
> Since I will be drilling couple of 2" holes to mount panel meters, I need
> some suggestions for which material is the best to work with. A hole saw
> in Plexi is prone to crack and maybe there is a better choice. There also
> may be a better method for creating the holes than a standard hole saw.
> Suggestions???
>
> de Rick W1TY
>
> Email: Rmintz@Rochester.rr.com
>
>
Why not just use acetate sheet to cover the panel. Like what is used with
overhead projectors. If it is just to protect the graphics and not for
mechanical strength that is. Jtt.

2251. Re: Plexi, Lexan or ???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 19:48:03 UTC
From: Silfax <Silfax@localhost.localdomain>
Message-ID: <slrne3dgfi.10v.Silfax@minimac.linux1.lan>
Source record: 12653

On 2006-04-07, James Thompson <Jackalope7@wontel.net> wrote:
> Why not just use acetate sheet to cover the panel. Like what is used with
> overhead projectors. If it is just to protect the graphics and not for
> mechanical strength that is. Jtt.
>

or just put a good coat of clear lacquer over the front panel graphics

When I have needed to cut holes in plexi in the past, I always created a plywood / plexiglass sandwich. Just place the plexiglas betewwn two thin sheets of plywood and drill thru the whole thing with a hole saw.

On the other hand, you could just mount the plexiglass on top of the meters, this would protect the meter faces from scratches also. This way, you only need to drill holes for switches and knob shafts.

2252. IC756/TL922 keying - Any Suggestion?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 20:40:30 UTC
From: Alex <mail.nospy@libero.it>
Message-ID: <27AZf.72889$A83.1739689@twister1.libero.it>
Source record: 12654

Hi, i'm searching a simply amp keying circuit, just to control a Kenwood
TL922 with an ICOM IC 756 Pro III.
What do you suggest to me?

73 de Alex ik8xir

2253. Re: Plexi, Lexan or ???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 21:15:05 UTC
From: john graesser <graesser@tca.net>
Message-ID: <123dlf5rudmnu81@corp.supernews.com>
Source record: 12655

"Rick Mintz" <Rmintz@Rochester.rr.com> wrote in message
news:aMtZf.40370$Da7.3033@twister.nyroc.rr.com...
> Hi.
>
> I am building an amp and will be using a clear plastic over the front
panel
> graphics.
>
> I could use some help in choosing the material, such as Plexi or Lexan.
> Since I will be drilling couple of 2" holes to mount panel meters, I need
> some suggestions for which material is the best to work with. A hole saw
in
> Plexi is prone to crack and maybe there is a better choice. There also may
> be a better method for creating the holes than a standard hole saw.
> Suggestions???
>
> de Rick W1TY

I seem to recall someone mentioning in the past that glass can be drilled if
it was kept in a bath of kerosene, and drilled while submerged.
thanks, John.
KC5DWD

2254. penetrating glass with rf

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 23:28:22 UTC
From: Butch Magee <lynyrd@cableone.net>
Message-ID: <123dtcnd0ul0tff@corp.supernews.com>
Source record: 12656

Depress the PTT, then just chatter away with mouth 3-4 inches away from mike If this doesn't penetrate the glass,.....check the battery. This should make it through the window pane, however, in the event it doesn't make it through put a through-the-glass-connector on, this capacitive mount outa do it, however, ife'n it don't, shoot it with (the radio) a .22 calibre / caliber (spl chk lists both, I have a very expensive spel chk or a very cheap one that really doesn't know how to spell calibre anyway)pistol which should should disable the broken little piece of crap. If RF made it through before the .22 killed it (if in fact it actually did)load up a 44 magnum 180 grain hydroshock bullita, TexMex pronunciation, be carefull with this one, it'l hurt 'ya big time. Be sure to place this shell into a 44 calibre/caliber fram designed for this shell Like I shoulda said before (this is the disclaimer) you cannot just put the 44 shell in just any 44 frame, ...now shoot the window this time, it should pass rf, if not you probably killed a perfectly good transceiver because you didn't know whut you were doing. Sorry 'bout that rig man!

Butch KF5DE

2255. cover sheet

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-07 23:30:56 UTC
From: Butch Magee <lynyrd@cableone.net>
Message-ID: <123dthgpefurm79@corp.supernews.com>
Source record: 12657

Use some of that glass that McAlhoun likes so much.

Butch

2256. Re: Radio-Electronics Sept 89

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-08 01:23:31 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <p-ednclHqeA2-qvZRVn-tA@comcast.com>
Source record: 12738

I have it, will scan it today.

Jack

<pdrunen@aol.com> wrote in message
news:1144344552.349256.25410@e56g2000cwe.googlegroups.com...
> Hi All,
>
> I am looking for a spectrum monitor article, part 1 which appears in RE
> Sept 89.
> If you have the issues, would like to get a copy of this article,
> either scanned or otherwise.
>
> de KJ4UO
>

2257. Re: ECG736 or NTE736

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-08 04:46:37 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4437400F.4B7681C4@earthlink.net>
Source record: 12658

Fred McKenzie wrote:
>
> In article <1144344701.254899.208940@z34g2000cwc.googlegroups.com>,
> pdrunen@aol.com wrote:
>
> > I been searching the net for the specification on the ECG/NTE 736 which
> > is an FM gain block 8-pin dip.
> >
> > I have an old ECG catalog which gives me the pin out, I have tried the
> > NTE website which does not have a downloadable spec sheet.
> >
> > If you have a spec sheet, would like to get a copy.
>
> KJ4UO-
>
> If you don't find one, I suggest you "reverse look up" the original part
> number. (Could it be a Fairchild uA736? A National Semiconductor LM736?)
>
> In other words, you may have better luck finding a data sheet for the
> original manufacturer's part, and trusting that the ECG/NTE part meets the
> same specs.
>
> 73, Fred, K4DII

ECG published a set of three databooks about 20 years ago that
covered their current product line. My set disappeared about 15 years
ago. You might want to keep an eye out for a set of them.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2258. Re: How get RF through a sealed window?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-08 05:19:11 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <hJHZf.67$QP4.2@fed1read12>
Source record: 12659
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

<mcalhoun@ksu.edu> wrote in message news:e13e9u$q3u@unix1.cc.ksu.edu...
> I gave a presentation on "How Ham Radio Can Help You in an Emergency"
> to 70 Emergency Management types last week, and the windows in the
> building which hosted the meeting were NOT open-able (so I "made do"
> with an inside VHF antenna and didn't even try to demonstrate HF).
>
> But in emergency/expedient situations, it would be really handy if one
> could pass at HF, say, 100 watts of RF energy through a window (I
> visualize some foil strips and an inductor or two to "tune out" the
> capacitance) to an external antenna.
>
> I've been told that the April, 1989, issue of Ham Radio magazine carried
> an article "Easy antenna access for urban apartment dwellers" (for 15
> meters) by Bryan Bergeron, NU1N, starting on page 18.
>
> I'd sure like to read that article; can anyone send me a copy?
> --
> --Myron A. Calhoun.
> Five boxes preserve our freedoms: soap, ballot, witness, jury, and
cartridge
> PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785)
539-4448
> NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle,
Pistol)

I have drilled a hole in a window frame and passed a piece of RG-58 through
it. A 2M rig in my den is that way right now. It's easier to justify doing
it to your own home than to a place you're visiting

2259. Re: Plexi, Lexan or ???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-08 07:05:02 UTC
From: Heinz Schnait <oe5eep@qsl.net>
Message-ID: <4437659c$0$12941$91cee783@newsreader02.highway.telekom.at>
Source record: 12660

john graesser wrote:

> I seem to recall someone mentioning in the past that glass can be drilled
> if it was kept in a bath of kerosene, and drilled while submerged.
> thanks, John.
> KC5DWD

Keep a fire extinguisher ready, when you do this! I would not dare...

73 Heinz, OE5EEP

2260. Re: Expanded UTC Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-08 12:35:37 UTC
From: ray13 <ray_psi@yahoo.com>
Message-ID: <1144499737.244373.175640@v46g2000cwv.googlegroups.com>
Source record: 12663

Ok then I guess your use of both 24 hour desigator for UTC and 12 hour
times for local time zones warped me out, and might be confusing. Towit
if UTC was shown as 12 AM it might have struck me.

73
Raymond Borowiak
KC8OJU

2261. Re: Plexi, Lexan or ???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-08 15:06:45 UTC
From: "John, N9JG" <john@gotwals.XremoveY.com>
Message-ID: <9kQZf.87872$oL.68530@attbi_s71>
Source record: 12664

No, you don't keep it in a "bath" of kerosene. Just take an eyedropper containing kerosene and put a few drops right where the drill contacts the glass. Replenish as needed.

"Heinz Schnait" <oe5eep@qsl.net> wrote in message news:4437659c$0$12941$91cee783@newsreader02.highway.telekom.at...
> john graesser wrote:
>
>> I seem to recall someone mentioning in the past that glass can be drilled
>> if it was kept in a bath of kerosene, and drilled while submerged.
>> thanks, John.
>> KC5DWD
>
> Keep a fire extinguisher ready, when you do this! I would not dare...
>
> 73 Heinz, OE5EEP
>

2262. Re: HP 3709B

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-08 16:17:40 UTC
From: artie <artie.m@gNOSPAMmail.com>
Message-ID: <080420060917401165%artie.m@gNOSPAMmail.com>
Source record: 12665

In article <CoWdnWMltM4RNarZnZ2dnUVZ_vGdnZ2d@comcast.com>, jack
<jdwalton@comcast.net> wrote:

> Excuse my ignorance -- what is a "Constellation Analyzer" --
>
>

Go to the Wikipedia and look up QPSK and QAM -- modlation schemes used
widely in cell phones and dtv.

basicall, it's a modulation analyzer for I-Q modulation schemes.

--
Namaste--

2263. New forum around radio and transmitters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-08 16:35:15 UTC
From: sw monitor <info@alfalima.net>
Message-ID: <4437e802$0$59034$dbd41001@news.wanadoo.nl>
Source record: 12666

```
New forum around radio and transmitters
http://forum.alfalima.net/
```

2264. Re: Radio-Electronics Sept 89

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-09 00:10:01 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <17idnQj-XaNzOqrZnZ2dneKdnZydnZ2d@comcast.com>
Source record: 12661

send me an email and I will send a PDF of the document -- it's 2.4 MB
<pdrunen@aol.com> wrote in message
news:1144344552.349256.25410@e56g2000cwe.googlegroups.com...
> Hi All,
>
> I am looking for a spectrum monitor article, part 1 which appears in RE
> Sept 89.
> If you have the issues, would like to get a copy of this article,
> either scanned or otherwise.
>
> de KJ4UO
>

2265. HP 3709B

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-09 00:12:40 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <CoWdnWMltM4RNarZnZ2dnUVZ_vGdnZ2d@comcast.com>
Source record: 12662

Excuse my ignorance -- what is a "Constellation Analyzer" --

2266. Re: Plexi, Lexan or ???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-09 00:43:08 UTC
From: nothermark <trash@gnomex.cotse.net>
Message-ID: <lclg321a71t67nm81uk6c1qfg44a4i70pu@4ax.com>
Source record: 12667

On Fri, 07 Apr 2006 13:26:30 GMT, "Rick Mintz"
<Rmintz@Rochester.rr.com> wrote:

>Hi.
>
>I am building an amp and will be using a clear plastic over the front panel
>graphics.
>
>I could use some help in choosing the material, such as Plexi or Lexan.
>Since I will be drilling couple of 2" holes to mount panel meters, I need
>some suggestions for which material is the best to work with. A hole saw in
>Plexi is prone to crack and maybe there is a better choice. There also may
>be a better method for creating the holes than a standard hole saw.
>Suggestions???
>
>de Rick W1TY
>
>Email: Rmintz@Rochester.rr.com
>

2 thoughts

1. If you decide to use the plastic water with a bit of detergent
makes a good coolant/lubricant. Keep the cut flooded.

2. I made a lot of panel covers inthe past by laying out the panel in
Autocad then flipping the drawing layer with the graphics on it to get
a reverse image. I then made an overhead transparency of the graphics
and used the transparency over the metal panel. The result was a clear
plastic cover with the printing sandwiched against the metal panel.
It worked quite nicely. You might want to consider it.

2267. Re: OT: Brain pick

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-09 06:39:35 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <4438ACB0.4040603@nettally.com>
Source record: 12668

Whats the context of the question?

I doubt there are too many new AM applications, however if you are concerned about the envelope of an emission for EMC concerns, Quadrature Amplitude Modulation (QAM) is a form which includes "AM". Also Time Division Multplex (TDMA) signals rapidly switch from an off to on state. There are also On Off Keying (OOK) schemes used by remote control key fobs and garage door openeres.

Bob Liesenfeld wrote:

>Hi gang,
> I know there are a number of people on this list who work in 2 way and
>
>other RF fields. I used to, but have been out of the loop for a while
>so I need your current expertise.
> Specifically, I need to determine what transmitting type services
>currently (or may soon) use amplitude modulation of the radiated signal
>in the 80MHz to 1GHz range. In my day it was restricted to aircraft
>comms in the 108MHz to 138MHz range and the video carrier of broadcast
>TV. Is this still the case, or have things changed? I don't need to
>know about 'closed circuit' paths such as cable TV and the like, only
>services that radiate RF.
> Also, if anyone has any knowledge of the general picture of frequency
>allocations in the same range quoted above in Europe and Asia, I would
>appreciate it.
> Thanks a lot and please respond off list.
>
>Bob WB0POQ
>wb0poq@visi.com
>
>
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

2268. Re: Plexi, Lexan or ???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-09 12:20:54 UTC
From: Zombie Wolf <zmbwf@gwi.net>
Message-ID: <zMadncinC5q4YaXZnZ2dnUVZ_tCdnZ2d@giganews.com>
Source record: 12669

Let's talk methodology in the cutting of a decently clean hole. Get a piece of plywood that is slightly larger than the piece of plexi or whatever you are going to work on. Get a couple of C clamps also. Now, lay the plexi on top of the plywood, and clamp the whole thing onto the workbench with the C clamps. (This is why it's better to cut the plexi to size afterwards, since you will have an extra edge to clamp to, so you dont care if you mar it with the clamps.) You can then drill the holes fairly accurately, without making a big mess. Stability of the work pieces is of paramount importance here, if you want a quality job. Another trick commonly used in the woodworking shop to reduce rough edges around the hole is to lay another piece of plywood on TOP of the plexi before drilling it. This reduces the "tear out" and melting around the edges of the hole. Drill small 1/8 inch guide holes in the exact centers of where you want the holes FIRST. This will tend to stabilize and center the hole saw when starting the hole.

If you have a router and circle cutter attachment around the shop, then you can neatly sidestep the entire "hole saw and driill" debacle, since the router, with a straight bit , will cut a MUCH cleaner hole than any hole saw.. Just drill the centering holes, and put the circle cutter on there, and cut the hole, routing out about 1/8 inch of depth on each turn. No burning, no melting. (Clockwise rotation, please) The same discussion on clamping applies here, also. The difference here is that you dont have to apply any pressure to the router when cutting, like you would with a hole saw. The router actually cuts the material out of it's way as it goes. Very little, if any, dressing of the hole edges will be needed afterwards.

"Rick Mintz" <Rmintz@Rochester.rr.com> wrote in message
news:aMtZf.40370$Da7.3033@twister.nyroc.rr.com...
> Hi.
>
> I am building an amp and will be using a clear plastic over the front
> panel graphics.
>
> I could use some help in choosing the material, such as Plexi or Lexan.
> Since I will be drilling couple of 2" holes to mount panel meters, I need
> some suggestions for which material is the best to work with. A hole saw
> in Plexi is prone to crack and maybe there is a better choice. There also
> may be a better method for creating the holes than a standard hole saw.
> Suggestions???
>
> de Rick W1TY
>
> Email: Rmintz@Rochester.rr.com
>
>

2269. Any antenna and propagation programs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-09 22:47:35 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <95955$44398f07$d135c4af$25368@MDI.CA>
Source record: 12670

Anything for HF to UHF propagation programs out there?

thx

JJ

2270. Re: Any antenna and propagation programs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-09 23:36:14 UTC
From: Dan Andersson <dan@andersson.co.uk>
Message-ID: <YEadnbTaZY_-B6TZSa8jmw@karoo.co.uk>
Source record: 12671

JJ wrote:

> Anything for HF to UHF propagation programs out there?
>
> thx
>
> JJ

O yes...

For Linux?

Try Splat.

However, It looks like there are a lot of converted Unix
programs that now run on Linux.

For Windooze?
It looks like many (most actually) are commercial
programs only.

Cheers

Dan / M0DFI

2271. Re: Plexi, Lexan or ???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-10 00:32:48 UTC
From: Alfred Green <nu8i@cox.net>
Message-ID: <UIh_f.345$zf6.180@fed1read08>
Source record: 12672

john graesser enscribed:
>
> I seem to recall someone mentioning in the past that glass can be drilled if
> it was kept in a bath of kerosene, and drilled while submerged.
> thanks, John.

Having the sheet of glass submerged while drilling dampens out the shock
waves and helps to prevent shattering.
However, I don't see what the special attraction would be for using
Kerosene. Plain old water works just fine. Just make sure you use the
correct type of drill bit and a nice slow cutting speed.
Kerosene is not significantly more viscous than water, so if you want to
really damp things out I'd use a heavy grade lube oil, maybe a 20-50
grade motor oil. Far less flammable, as well.

73 Alf NU8I
Scottsdale AZ DM43an

2272. Re: Any antenna and propagation programs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-10 00:46:02 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <9Vh_f.234$bm6.167@fed1read04>
Source record: 12673

Try AC6V's Pages -- see URL's:
http://ac6v.com/propagation.htm#PROPS

AND

http://ac6v.com/antsoftware.htm

--
CL -- I doubt, therefore I might be !
"JJ" <JJ@nowhere.com> wrote in message
news:95955$44398f07$d135c4af$25368@MDI.CA...
> Anything for HF to UHF propagation programs out there?
>
> thx
>
> JJ

2273. Re: Plexi, Lexan or ???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-10 06:00:36 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <123jt4al3a23ke5@corp.supernews.com>
Source record: 12674

"Alfred Green" <nu8i@cox.net> wrote in message
news:UIh_f.345$zf6.180@fed1read08...
> john graesser enscribed:
>>
>> I seem to recall someone mentioning in the past that glass can be
>> drilled if
>> it was kept in a bath of kerosene, and drilled while submerged.

> However, I don't see what the special attraction would be for using
> Kerosene. Plain old water works just fine. Just make sure you use the
> correct type of drill bit and a nice slow cutting speed.
> Kerosene is not significantly more viscous than water, so if you want
> to really damp things out I'd use a heavy grade lube oil, maybe a
> 20-50 grade motor oil.

My experience with Lexan is that oils and/or solvents will cause it to
become very brittle and crack at any machined edges, including drilled
holes.

- Bob W7OV

2274. Hi power diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-10 14:41:52 UTC
From: goat pimp <kboyfs@yahoo.com>
Message-ID: <1144680112.392436.15010@g10g2000cwb.googlegroups.com>
Source record: 12675

please dont let it not sell........
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=7607561412

2275. Interested? Become a Healthy Adult Male, ("Ham", M9ZZZ) and not a Coughing Bird ("CB", H5N1) - here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-10 15:05:55 UTC
From: Plod's Conscience <aiyr.r.bean@lycos.co.uk>
Message-ID: <1144681555.714402.227210@u72g2000cwu.googlegroups.com>
Source record: 12676
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

A necessary preface.....

(It is becoming increasingly difficult to fly the flag for
decency and for civilised behaviour in Radio Hammery. Even
the Usenet newsgroups dedicated to the cause have degenerated
into a hotbed of abusive onslaughts by those who ought to know
better; the Nugatory Numpties who boast of an interest
exceeding 10, 20, 30, 40 or even 50 years and yet who have
proved themselves incapable of even meeting the trivial exam
standards set for 6-year-olds. However, there still exists
the fundamental basis on which Ham Radio is based, and
that will never die. This FAQ ("What Is Ham Radio?") will
be regularly published and will not be shouted or bullied
down. It is important that those of a technical bent, who
are the natural seed-corn of Radio Hammery and who
gravitate towards us to be the real novitiate, can
still find us, (and know that we are still here), their fellows.)

-----ooooo-----

So,.....What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams

are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that

such a licence says no more about him than having a land-line telephone, whilst continuing to regard Ham Radio as a separate technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between a Ham Radio licence and a CB Radio licence. To him, they are sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then tries to classify himself as the equal of the Radio Ham when, in fact, he is nothing of the kind.

Ham Radio is not CB Radio and has no common ground with it! Ham Radio is _THE_ technical pursuit for gentlemen; CB Radio is the operating hobby for those who buy their rigs and equipment off the shelf.

-----ooooo-----

If you are the sort of person who is motivated by a technical interest in how things work; if you took apart malfunctioning clocks, toasters and the like and put them right despite never having seen them working, then a Ham Radio licence is your traditional route! There has never been a shortage of such people, and those who gravitate towards such an interest have always been welcomed into our shacks and their interests fostered. There is not today, nor has there ever been, a need to go out and encourage and press children, children who have never expressed an interest in Ham Radio, to come into our shacks. Such an activity should cause eyebrows to be raised - what normal well-adjusted adults seek the social acquaintance of children?!

-----ooooo-----

Please remember that this FAQ is a _POSITIVE EXHORTATION_ to you to exert yourselves to join our fraternity! (If you find otherwise, then perhaps you are already classing yourself in the mediocre groups of those who are criticised in the FAQ and from whom we _MUST_ dissociate? If so - it's never too late for a re-taxonomisation on your part - there's nothing elitist about us, and we welcome all those who are prepared to put themselves out in order to join our ranks!)

2276. Re: Interested? Become a Healthy Adult Male, ("Ham", M9ZZZ) and not a Coughing Bird ("CB", H5N1) - here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-10 15:17:45 UTC
From: Deadman Walking <DeadMan@thegraveyard.RIP>
Message-ID: <tGu_f.14396$ic1.9648@newsfe5-win.ntli.net>
Source record: 12677
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Definatly lost the plot even as mixed his days up usually get this s+++e on a Friday not Monday.

2277. Re: Plexi, Lexan or ???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-10 15:24:16 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <e1dtb0$dq0$1@puck.litech.org>
Source record: 12678

Bob Headrick <bobh@proaxis.com> wrote:

> "Alfred Green" <nu8i@cox.net> wrote in message
> news:UIh_f.345$zf6.180@fed1read08...
>> john graesser enscribed:
>>>
>>> I seem to recall someone mentioning in the past that glass can be
>>> drilled if
>>> it was kept in a bath of kerosene, and drilled while submerged.

>> However, I don't see what the special attraction would be for using
>> Kerosene. Plain old water works just fine. Just make sure you use the
>> correct type of drill bit and a nice slow cutting speed.
>> Kerosene is not significantly more viscous than water, so if you want
>> to really damp things out I'd use a heavy grade lube oil, maybe a
>> 20-50 grade motor oil.

> My experience with Lexan is that oils and/or solvents will cause it to
> become very brittle and crack at any machined edges, including drilled
> holes.

The _easy_ way to drill glass is to use a piece of copper tubing with
hole-size for its OD, some powered carborundum as an abrasive, and
just enough water to keep it in a slurry. Use a drill press, low
RPMs, and light pressure.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

2278. Re: Interested? Become a Healthy Adult Male, ("Ham", M9ZZZ) and not a Coughing Bird ("CB", H5N1) - here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-10 15:32:09 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <1144683129.745390.274280@g10g2000cwb.googlegroups.com>
Source record: 12679
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Deadman Walking wrote:
> Definatly lost the plot even as mixed his days up usually get this s+++e on
> a Friday not Monday.

did a strom knock powersomewhere in england friday?

2279. Re: ECG736 or NTE736

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-10 21:18:58 UTC
From: mzenier@eskimo.com
Message-ID: <e1gkes$pi0$1@eskinews.eskimo.com>
Source record: 12687

In article <4437400F.4B7681C4@earthlink.net>,
Michael A. Terrell <mike.terrell@earthlink.net> wrote:
>Fred McKenzie wrote:
>>
>> In article <1144344701.254899.208940@z34g2000cwc.googlegroups.com>,
>> pdrunen@aol.com wrote:
>>
>> > I been searching the net for the specification on the ECG/NTE 736 which
>> > is an FM gain block 8-pin dip.
>> >
>> > I have an old ECG catalog which gives me the pin out, I have tried the
>> > NTE website which does not have a downloadable spec sheet.
>> >
>> > If you have a spec sheet, would like to get a copy.
>>
>> KJ4UO-
>>
>> If you don't find one, I suggest you "reverse look up" the original part
>> number. (Could it be a Fairchild uA736? A National Semiconductor LM736?)
>>
>> In other words, you may have better luck finding a data sheet for the
>> original manufacturer's part, and trusting that the ECG/NTE part meets the
>> same specs.
>
> ECG published a set of three databooks about 20 years ago that
>covered their current product line. My set disappeared about 15 years
>ago. You might want to keep an eye out for a set of them.
>

Found it. (I've got the first two ECG books).

BTW, it's really a Sprague ULN-2208M, so

ftp://ftp.eskimo.com/u/m/mzenier/uln2208m.pdf

Mark Zenier mzenier@eskimo.com
Googleproofaddress(account:mzenier provider:eskimo domain:com)

2280. Re: Radio-Electronics Sept 89

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-10 21:24:18 UTC
From: mzenier@eskimo.com
Message-ID: <e1gkg6pnn1@eskinews.eskimo.com>
Source record: 12688

In article <c5987$4436b69c$438c8615$27312@ALLTEL.NET>,
James Thompson <Grin4thecam@happyday.org> wrote:
>On the subject of electronics mags: Does anyone still publish any for the
>experimenter or is that all in the past?

For the US, there are two. Nuts and Volts (www.nutsvolts.com) and Make.
Make is a new magazine from O'Reilly, the computer book publisher.
It's only a year or two old. (Saw it at the local Barnes and Noble.
A rather expensive quarterly, as I remmember). Circuit Cellar Ink
probably could qualify, too, but it's more of a pro embedded microcomputer
hardware/software mag.

Mark Zenier mzenier@eskimo.com
Googleproofaddress(account:mzenier provider:eskimo domain:com)

2281. Re: How get RF through a sealed window?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-10 21:47:21 UTC
From: "n3ox.dan@gmail.com" <n3ox.dan@gmail.com>
Message-ID: <1144705641.418367.163090@i40g2000cwc.googlegroups.com>
Source record: 12680
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Myron,

I built a set of tuned rings to couple a 4MHz signal from an ultrasound transducer to its processing/signal generation box. I used a small copper ring (only about 6") split at one point with a resonating capacitor across the gap on the ultrasound box side. The coax was connected across this gap also.

On the transducer side, use an identical loop and capacitor but make a series resonant circuit (capacitor in series with one of the feedline leads). Loops were separated by about 1/4 inch.

I know this configuration (parallel resonant on the transciever side, series resonant on the "antenna" side) worked the best.

It worked well in terms of passing the signal through undistorted (looked at amplitude and phase on both sides of the circuit, only got a bit of a phase shift, no amplitude loss)

I don't know about power handling. If you use hefty capacitors, there should be no problem. Bandwidth could be quite low with high-Q circuits, but maybe you could use variable caps.

I think your idea with capacitative coupling with inductors to tune out the reactance would work fine too, but I haven't tried that.

Anyway, the inductive thing works OK. I got the idea from a older (1950's?) ARRL antenna book that touted it as a way to allow rotation a parallel-line fed beam.

You'd certainly need a set of coupling rings for each band of interest, or switched or variable capacitors.

Low E glass would get some eddy currents going. I don't know how conductive it really is though, so ... who knows?

73,
Dan
N3OX
www.n3ox.net

2282. Re: How get RF through a sealed window?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-10 22:04:27 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <123lljdreeb148a@corp.supernews.com>
Source record: 12681
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

n3ox.dan@gmail.com wrote:
> . . .
> I think your idea with capacitative coupling with inductors to tune out
> the reactance would work fine too, but I haven't tried that.
> . . .

If you do try that, I recommend keeping the Q as low as possible. Otherwise, voltages will get very high, and you might well end up with greater loss as well as other problems. Minimizing the Q means keeping reactance values low which in turn means making C as large as possible. This leaves you with less reactance to compensate for. In other words, don't make the C small and try to compensate for the large amount of resulting reactance.

Roy Lewallen, W7EL

2283. Parts for Sale - Updated

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-10 22:36:49 UTC
From: Brian Murrey <brian@iquest.net>
Message-ID: <56B_f.2781$sq5.2120@newsread2.news.atl.earthlink.net>
Source record: 12682

I have moved some of my junkbox surplus stuff to a website.
http://www.hamradparts.com

1N4148 Diodes $3.00 for 100, $4.00 for 200
1N4001 - 1 Amp 50v General Purpose Rectifier Diodes - $3.00 for 50

33pf NPO Caps, SMT 0805, 50V - $3.00 for 100
150pf NPO Caps, SMT 0805, 50V - $3.00 for 100
220pf NPO Caps, SMT 0805, 50V - $3.00 for 100
390pf Caps, SMT 1206, 50V - $3.00 for 100
1500pf NPO Caps, SMT 0805, 50V - $3.00 for 100
3300pf Caps, SMT 0805, 25V - $3.00 for 100
.1uF Caps, SMT 0805, 50V - $3.00 for 100

2N3704 NPN TO92 - 20 for $2.00
2N2907 PNP TO92 Package - $4.00 for 50
2N3904 NPN TO92 Package - $4.00 for 50
2N2222 NPN TO18 (metal) Package - 5 for $1.00
MMBT4403 PNP SMT transistor - 50 for $4.00

2N2222 NPN TO92 Package - $4.00 for 50
The 2N2222 is a bulk transistor...meaning the part is not labeled.
They ship in a Zip Lock packet and the packet is clearly labeled.

2N3906 PNP TO92 Package - $4.00 for 50
The 2N3906 is a bulk transistor...meaning the part is not labeled.
They ship in a Zip Lock packet and the packet is clearly labeled.

2SC2166 - RF AMP TO220 (8 left) - $4.50 each
IRF510 - MOSFET AMP TO220 - 4 for $5.00

3.575611 Mhz HC49 Crystals - 5 for $2.00
4.9152 Mhz HC49 Crystals - 10 for $3.00
9.830 Mhz Crystals (SS2 package) - 20 for $3.00
LM7805ACV 5v Positive Voltage Regulators (TO220) 5 for $2.00
LM386N-1 - Audio Amp 6 for $5.00

Sticky Back Rubber Feet for your projects, self adhesive - 8 to a strip - 2
Strips for $1.00

Panasonic Wall Warts - 12VDC, 500mA (center negative) $6.00 each
If you need center positiove, cut off the end and reverse it. I use these to
power my
rock mites, my TT2, and all of my homebrew test gear.

NON-SMT Capacitors: 50 for $3.00
==========

8pf NPO Ceramic
11pf NPO Ceramic
12pf NPO Ceramic
22pf Ceramic
470pf Ceramic
560pf Ceramic
.1 uF (104J) Ceramic

Cash or Check or Money Order only.

Prices includes USA shipping, minimum order is $5.00, otherwise add a buck for
shipping. Will ship DX, email for details.

Brian Murrey
47 Grassy Drive
New Whiteland IN 46184

73 de KB9BVN

--
==========
Radio Amateurs - Fill your junk box, from my junkbox!
http://www.hamradparts.com
73 de KB9BVN
==========

2284. More solid state HF amp questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-11 02:35:07 UTC
From: KC2PIH@gmail.com
Message-ID: <1144722906.952730.211040@v46g2000cwv.googlegroups.com>
Source record: 12683

Hello!

Alright this is my second post on this subject. I appreciate all the other responses I got. I don't think I provided enough information about my problem before. So here it goes with everything I've got. I picked up a HF amp that has four Motorola MRF-454 transistors in it.

I've already determined (in theory) to make it run "clean" enough, I'll have to build a band-switched filter bank for it. It already has a 5-element Chebyshev filter
in it and I am guessing that its tuned for 30Mhz. Also, it shouldn't be driven over about 300 watts (output).

Though I do still have a problem with it and this is what this post is about. When the input power to the amp goes up, so does the SWR. I wasn't able to test it with access to the amp's components when running to check for components heating up (as somebody already asked about). You can see it has some swamping resistors to reduce drive power - keep in mind these readings are taken with all the resistors bypassed (meaning input power to amp is not attenuated). It has a receive pre-amp and a carrier operated relay circuit as well.

Here is what I see:

Configuration:
[FT-890] -> [SWR/Power Meter] -> [AMP] -> [Dummy Load]
(Power listed is the output power from the radio, driving the amp)

Frequency Power(input) SWR

3.900 5 1.8:1
7.200 5 1.6:1
14.20 5 1.6:1
21.20 5 2.7:1
24.90 5 1.7:1
29.99 5 1.0:1

Frequency Power(input) SWR

3.900 10 3.0:1
7.200 10 3.0:1
14.20 10 >3.0:1
21.20 10 >3.0:1
24.90 10 2.9:1
29.99 10 1.3:1

Frequency Power SWR

3.900 15 >3.0:1
7.200 15 >3.0:1
14.20 15 >3.0:1
21.20 15 >3.0:1
24.90 15 >3.0:1
29.99 15 1.5:0

SWR between the AMP and the Dummy Load is perfect in all cases (dummy load rated to 670Mhz). Amp output power goes up as frequency goes down (with constant drive), so I guess this amp doesn't include anytype of network to normalize the gain of the amp across the HF band. I actually tried a couple radios (FT-890 and the FT-100) to make sure the radio wasn't the cause.

A picture is worth a thousand words. Pics (1600x1200 High Resolution):

http://www.chadgatesman.com/scott/P1010078.JPG
http://www.chadgatesman.com/scott/P1010076.JPG
http://www.chadgatesman.com/scott/P1010079.JPG
http://www.chadgatesman.com/scott/P1010080.JPG

Thanks for reading!

Scott, KC2PIH

2285. Re: Plexi, Lexan or ???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-11 03:03:52 UTC
From: Alfred Green <nu8i@cox.net>
Message-ID: <w0F_f.404$zf6.243@fed1read08>
Source record: 12684

Bob Headrick enscribed:
>
>>> I seem to recall someone mentioning in the past that glass can be
>>> drilled if
>>> it was kept in a bath of kerosene, and drilled while submerged.
>
>
>> However, I don't see what the special attraction would be for using
>> Kerosene. Plain old water works just fine. Just make sure you use the
>> correct type of drill bit and a nice slow cutting speed.
>> Kerosene is not significantly more viscous than water, so if you want
>> to really damp things out I'd use a heavy grade lube oil, maybe a
>> 20-50 grade motor oil.
>
>
> My experience with Lexan is that oils and/or solvents will cause it to
> become very brittle and crack at any machined edges, including drilled
> holes.
>

You could well be correct on this, as the lighter weight solvents will have a detrimental effect on the surface of Plexi, etc. I was referring to the comments related to glass, which is not affected at all by such things.

73 Alf NU8I

2286. Re: Any antenna and propagation programs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-11 05:07:38 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <d6ae4$443b399a$d135c4af$5824@MDI.CA>
Source record: 12685

>
> O yes...
>
> For Linux?
>
> Try Splat.
>
> However, It looks like there are a lot of converted Unix
> programs that now run on Linux.
>
> For Windooze?
> It looks like many (most actually) are commercial
> programs only.
>
> Cheers
>
> Dan / M0DFI

Looks interesting.
How about modelling antenna performance in arrays?

JJ

2287. Re: IC756/TL922 keying - Any Suggestion?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-11 13:24:53 UTC
From: on4ahf <hh1@telenet.be>
Message-ID: <F6O_f.366630$gC3.10761248@phobos.telenet-ops.be>
Source record: 12686

"Alex" <mail.nospy@libero.it> schreef in bericht
news:27AZf.72889$A83.1739689@twister1.libero.it...
> Hi, i'm searching a simply amp keying circuit, just to control a Kenwood
> TL922 with an ICOM IC 756 Pro III.
> What do you suggest to me?
>
> 73 de Alex ik8xir

Use an extern relais , otherwise you burn the very little tx relais (my
friend dit it with the tl922)
because the key voltage is 120v
suc6

2288. Re: IC756/TL922 keying - Any Suggestion?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-11 19:20:26 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <De6dnfhbZ9jlnKHZRVny2w@pipex.net>
Source record: 12689

>> Hi, i'm searching a simply amp keying circuit, just to control a Kenwood
>> TL922 with an ICOM IC 756 Pro III.
>> What do you suggest to me?

> Use an extern relais , otherwise you burn the very little tx relais (my
> friend dit it with the tl922)
> because the key voltage is 120v
==========
Would a high voltage switching transistor with/without an opto-coupler
circuit not be more reliable ?
The opto-coupler circuit can be tailored for the transceiver's output
and a cheap High Voltage transistor could excite the amplifier.
Just a thought.

Frank GM0CSZ / KN6WH

2289. Need: Panel Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-12 02:58:24 UTC
From: Rick Mintz <Rmintz@Rochester.rr.com>
Message-ID: <k1__f.21503$Mj.15738@twister.nyroc.rr.com>
Source record: 12690

Hi gang,

I need two matching square analog panel meters for an amplifier project.

0-100 Volts DC - 2 1/2" face (or 150 volt)
0-30 Amps DC (with shunt) - 2 1/2 " face (or 0-50 Amp)

Rick W1TY

W1TY@arrl.net

2290. Re: Return Loss Bridge Accuracy Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-12 11:52:44 UTC
From: CA <no@mail.com>
Message-ID: <gS5%f.52591$d5.207697@newsb.telia.net>
Source record: 12691

Paul VK3DIP wrote:

> If you are interested I had really good results recently with a
> homebrew RLB, in fact so good that I doubted the results and had to...

I have read your article with great interest.
Do you have a specification for the "balun formers" or maybe a Rockby
Electronics stock no.?
I suppose it is www.rockby.com.au. The only 2-hole ferrite core I could find
is stock no. 10967 but I believe this one is too small.

73
Christer SM6PXJ

2291. Regen with spider web coils ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-12 12:35:20 UTC
From: jvereker@wp.pl
Message-ID: <1144845320.775026.160220@i39g2000cwa.googlegroups.com>
Source record: 12692

Anybody built a regenerative receiver (tube or MOSFET :) using
oldschool spider web coils ?
In theory they have a very low amount of parasitic capacitance, and a
high Q.
Is it worth to use them for amateur bands ?

2292. Lowering the noise figure in a preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-12 12:45:41 UTC
From: "tucker@conninc.com" <tucker@conninc.com>
Message-ID: <1144845940.982676.234790@j33g2000cwa.googlegroups.com>
Source record: 12693

Does anyone have any idaes on how to lower the nf in a uhf preamp?

2293. Re: Regen with spider web coils ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-12 13:04:18 UTC
From: - exray - <exray@coqui.net>
Message-ID: <123pumofq556ic8@corp.supernews.com>
Source record: 12694

jvereker@wp.pl wrote:
> Anybody built a regenerative receiver (tube or MOSFET :) using
> oldschool spider web coils ?
> In theory they have a very low amount of parasitic capacitance, and a
> high Q.
> Is it worth to use them for amateur bands ?
>

I've built some some for general coverage use. No problem getting them to work.
http://www.sparkbench.com/swsw.jpg
If there's a complaint to be found it might be that they wouldn't be as thermally stable as a nice tightly wound coil on a form. In my case I used them in a general coverage (0-100) receiver - for a ham band receiver they might be a little sloppy. You also lack the ability to "fine-tune" them the way you can with a solenoid coil where you can squeeze/strech the turns.

-Bill

2294. UG536B/U N-plug Instructions ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-12 14:42:06 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1144852926.744860.264650@e56g2000cwe.googlegroups.com>
Source record: 12695
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Does anyone have the assembly instructions (file, link or just the dimensions) for the UG536B/U Straight N type plug for RG58/U cable ? My web searching efforts have yielded nothing (it's a bit obsolete). I'm trying to make up a cable for 2.3 GHz so I would like to get the dimensions right in the hope of getting a half decent match.

Steve

2295. Re: Regen with spider web coils ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-12 15:14:05 UTC
From: jvereker@wp.pl
Message-ID: <1144854845.624672.120090@z34g2000cwc.googlegroups.com>
Source record: 12696

Does your "0-100" mean 0-100 MHz coverage ? :)
Did you observe increased effect of hand capacity or it has nothing in
common with that kind of coils ?

2296. Re: UG536B/U N-plug Instructions ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-12 15:46:54 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <fu7q32l51eu4591ef088rsbc1qh4idqvmv@4ax.com>
Source record: 12697
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On 12 Apr 2006 07:42:06 -0700, skavanagh72nospam@yahoo.ca wrote:

>Does anyone have the assembly instructions (file, link or just the
>dimensions) for the UG536B/U Straight N type plug for RG58/U cable ?
>My web searching efforts have yielded nothing (it's a bit obsolete).
>I'm trying to make up a cable for 2.3 GHz so I would like to get the
>dimensions right in the hope of getting a half decent match.

That part is an Amphenol P/N 34025-RFX.

Go to:

http://www.amphenolrf.com/search_2_results.asp

and click on "Assembly Instructions"

BTW, it doesn't seem to be obsolete. Click on "Distributor
Inventory" for a surprise. :-)

--
John Fields
Professional Circuit Designer

2297. Re: UG536B/U N-plug Instructions ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-12 16:00:13 UTC
From: Steve Kavanagh <skavanagh72nospam@yahoo.ca>
Message-ID: <1144857613.060111.18820@z34g2000cwc.googlegroups.com>
Source record: 12598
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John:

The body of the UG536B/U looks quite different from the Amphenol
catalog picture and their drawing link is broken...how did you
cross-reference it ?

Steve

2298. Re: UG536B/U N-plug Instructions ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-12 16:10:01 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <829q325s5s9mosprh87n3alppf7682uvpe@4ax.com>
Source record: 12599
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Wed, 12 Apr 2006 10:46:54 -0500, John Fields
<jfields@austininstruments.com> wrote:

>On 12 Apr 2006 07:42:06 -0700, skavanagh72nospam@yahoo.ca wrote:
>
>>Does anyone have the assembly instructions (file, link or just the
>>dimensions) for the UG536B/U Straight N type plug for RG58/U cable ?
>>My web searching efforts have yielded nothing (it's a bit obsolete).
>>I'm trying to make up a cable for 2.3 GHz so I would like to get the
>>dimensions right in the hope of getting a half decent match.
>
>---
>That part is an Amphenol P/N 34025-RFX.
>
>Go to:
>
>http://www.amphenolrf.com/search_2_results.asp
>
>and click on "Assembly Instructions"
>
>BTW, it doesn't seem to be obsolete. Click on "Distributor
>Inventory" for a surprise. :-)

Hmmm...

It appears the RG536B/U is an Amphenol 34025, which has different
cable prep dimensions from the 34025-RFX.

--
John Fields
Professional Circuit Designer

2299. Re: UG536B/U N-plug Instructions ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-12 16:11:49 UTC
From: Steve Kavanagh <skavanagh72nospam@yahoo.ca>
Message-ID: <1144858309.503930.178800@i40g2000cwc.googlegroups.com>
Source record: 12600
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John:

Yup...now the drawing link is working for me and I found that
too...rather roundabout....and not listed in the catalog section....but
it got me there (and I spent a few minutes poking around that website
before posting too !).

Thanks,
Steve

2300. Re: Lowering the noise figure in a preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-12 17:17:39 UTC
From: You <You@shadow.orgs>
Message-ID: <You-88126F.09174812042006@netnews.worldnet.att.net>
Source record: 12601

In article <1144845940.982676.234790@j33g2000cwa.googlegroups.com>,
"tucker@conninc.com" <tucker@conninc.com> wrote:

> Does anyone have any idaes on how to lower the nf in a uhf preamp?
>

1. Lower then temprature of the device, by dumping it in Liquid Nitrogen.
2. Use a device with a lower Noise Figure, as the active element.

Daaa.....

2301. Re: Lowering the noise figure in a preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-12 17:48:21 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1144864101.042830.68540@u72g2000cwu.googlegroups.com>
Source record: 12602

3a. Tune (match) the input for lowest in-system noise figure.
This is in general not a match for maximum power transfer.
3b. Be sure the active device(s) is/are biased for optimum
noise figure: collector/drain voltage and standing current.
4. Be sure there are not any unnecessary noise
contributions from components other than the
active devices in the amplifier.
If you want to consider the system as a whole,
4. Lower the loss between the antenna and the preamp
(eliminate feedline, for example).
5. Be sure that the preamp has enough gain that it
sensibly sets the system noise figure. (Be sure
that its gain gets the signal seen at the next stage
high enough that the next stage contributes
insignificant noise to the system.)
... etc.

But beware of trading other things for noise figure: beware of
poor intermod or desense performance, for example.

Cheers,
"Me" aka Tom

"You" wrote:
> In article <1144845940.982676.234790@j33g2000cwa.googlegroups.com>,
> "tucker@conninc.com" <tucker@conninc.com> wrote:
>
> > Does anyone have any idaes on how to lower the nf in a uhf preamp?
> >
>
> 1. Lower then temprature of the device, by dumping it in Liquid Nitrogen.
> 2. Use a device with a lower Noise Figure, as the active element.
>
> Daaa.....

2302. Re: Regen with spider web coils ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-12 17:58:58 UTC
From: - exray - <exray@coqui.net>
Message-ID: <123qfv7n2242bb9@corp.supernews.com>
Source record: 12603

jvereker@wp.pl wrote:

> Does your "0-100" mean 0-100 MHz coverage ? :)

I wish !....hmmm, no I don't. That would be terribly difficult to tune.

> Did you observe increased effect of hand capacity or it has nothing in
> common with that kind of coils ?
>

No. If anything the hand effect is decreased since its not "360 degrees" like a typical vertically mounted solenoid winding. Of course that depends on the placement of the hand, doesn't it?

I think you should try it. Its easy enough to do - and looks cool also. I can't think of any other reason to do it that way. At SW freqs I suspect the Q is in the same range as toroids or regular coils. I have some specific uh/turn numbers for the spider size that I used if you are interested.

Bill WX4A

2303. Re: Lowering the noise figure in a preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-12 18:07:39 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1144865259.577289.156120@j33g2000cwa.googlegroups.com>
Source record: 12604

As a point of reference, a typical NE3508M04
(http://www.cel.com/pdf/datasheets/ne3508m04.pdf) can give you a device
noise figure under 0.4dB, operated at room temperature, at any
frequency across the entire "UHF" frequency range (300MHz to
3GHz)--better than that at the lower end of the frequency range.

Cheers,
Tom

2304. Re: Regen with spider web coils ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-12 19:19:18 UTC
From: jvereker@wp.pl
Message-ID: <1144869558.093043.141280@t31g2000cwb.googlegroups.com>
Source record: 12605

Of course I am. :)
Especially for lower bands (3.5 and 7 MHz), because, as far as I know,
regens arn't very good on the higher ones.

2305. Re: Regen with spider web coils ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-12 19:27:00 UTC
From: - exray - <exray@coqui.net>
Message-ID: <123ql49hqub4368@corp.supernews.com>
Source record: 12606

jvereker@wp.pl wrote:

> Of course I am. :)
> Especially for lower bands (3.5 and 7 MHz), because, as far as I know,
> regens arn't very good on the higher ones.
>

Tell me how many uH you want.

-Bill

2306. Re: UG536B/U N-plug Instructions ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-12 19:41:58 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <r_udnfY8hemfxaDZRVnyhQ@pipex.net>
Source record: 12607
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

>> Does anyone have the assembly instructions (file, link or just the
>> dimensions) for the UG536B/U Straight N type plug for RG58/U cable ?
>> My web searching efforts have yielded nothing (it's a bit obsolete).
>> I'm trying to make up a cable for 2.3 GHz so I would like to get the
>> dimensions right in the hope of getting a half decent match.
==========
Question ; Would it be sensible to use RG58/U for 2.3 GHz sig (obviously
depending on length of that type of coax) I thought teflon type coax was
almost mandatory for that frequency.
Just curious , wishing to learn .

Frank GM0CSZ / KN6WH

2307. Re: UG536B/U N-plug Instructions ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-12 20:07:27 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1144872447.790403.152690@i39g2000cwa.googlegroups.com>
Source record: 12608
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Highland Ham wrote:

> Question ; Would it be sensible to use RG58/U for 2.3 GHz sig (obviously
> depending on length of that type of coax) I thought teflon type coax was
> almost mandatory for that frequency.

Not really, but it is what I have available at present ! Teflon vs polyethylene isn't reallly that important with regard to frequency...it is more a question of quality of the shield, I think. I suppose polyethylene insulation will tend to melt while soldering connectors so it is more likely that an impedance bump will occur due to the centre conductor being off-centre. Non-solid insulation would have less loss but this has to survive being passed through car-door seals.

It is probably a good thing these things have been discontinued, too. I found it impossible to assemble without special jigging to prevent the insulation from melting and swelling up while soldering the pin, blocking the assembly. Teflon insulation would behave better I suppose.

With one end kluged into shape with a hot knife and the other end soldered with the insulation wrapped with aluminum tape, the return loss of the cable and a good load measures around 27 dB or better (probably beyond the accuracy limits of my test setup), so they work OK regardless of the kluges.

Steve (VE3SMA)

2308. Re: UG536B/U N-plug Instructions ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-12 22:05:47 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <V9mdnRoR2bkk5KDZRVnyvQ@pipex.net>
Source record: 12609
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

skavanagh72nospam@yahoo.ca wrote:

>> Question ; Would it be sensible to use RG58/U for 2.3 GHz sig (obviously
>> depending on length of that type of coax) I thought teflon type coax was
>> almost mandatory for that frequency.
>
> Not really, but it is what I have available at present ! Teflon vs
> polyethylene isn't reallly that important with regard to frequency...it
> is more a question of quality of the shield, I think. I suppose
> polyethylene insulation will tend to melt while soldering connectors so
> it is more likely that an impedance bump will occur due to the centre
> conductor being off-centre. Non-solid insulation would have less loss
> but this has to survive being passed through car-door seals.
>
> It is probably a good thing these things have been discontinued, too.
> I found it impossible to assemble without special jigging to prevent
> the insulation from melting and swelling up while soldering the pin,
> blocking the assembly. Teflon insulation would behave better I
> suppose.
>
> With one end kluged into shape with a hot knife and the other end
> soldered with the insulation wrapped with aluminum tape, the return
> loss of the cable and a good load measures around 27 dB or better
> (probably beyond the accuracy limits of my test setup), so they work OK
> regardless of the kluges.
==========
Thanks Steve for the above . Unless 50 Ohms coax is absolutely
necessary , you might wish to consider 75 Ohms coax as used for domestic
satellite receivers (between the rx and the converter,also called
LNB=Low Noise Block,located at the dish). That type of coax is double
screened with both braid + copper foil and would be superior to RG58/U
coax. It is fitted with socalled F-connectors ,without having to solder
since the solid copper core serves as centre pin. I have been able to
purchase F to N-male adaptors and by using an additional double F-female
union ,this would possibly solve your problem as well .
Sat receivers normally have an input signal between 950-2150 MHz ,with
the dish converter subtracting 10 GHz or about from the actual satellite
signal received .

Frank GM0CSZ / KN6WH

2309. Re: Lowering the noise figure in a preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-13 01:13:14 UTC
From: "tucker@conninc.com" <tucker@conninc.com>
Message-ID: <1144890794.618282.62790@z34g2000cwc.googlegroups.com>
Source record: 12610

Thanks for the website, my problem was i had a factory cellular preamp
from surplus equipment, it had a ceramic filter on the input set
824-850 mhz. When i removed the filter the noise figure was terrible
but the bandwith very wide, im trying to get it to operate in the 33cm
band with decent noise figure. The only thing i can figure is that by
removing the banpass filter i raised the NF?

2310. Re: Lowering the noise figure in a preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-13 02:03:35 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1144893815.055258.323560@i39g2000cwa.googlegroups.com>
Source record: 12611

Well, yes, I can certainly believe that you've messed up the match by removing that part. If you can identify the active device, maybe you can get info about it and use that to design a proper match for low noise. Otherwise, I suppose you can make some educated guesses about a matching network that does the right job. I gather you are not trying for an extremely wide bandwidth, so a matching network with not very many parts should work OK. At a single frequency, it should always be possible to design an "L" network to do the job, and if the impedance ratio from input to output isn't very large, you'll get very decent bandwidth: low Q.

Beware of stability in the amplifier, too...an instability could really mess up the noise figure.

Hope this all makes sense...

Cheers,
Tom

2311. Re: Radio-Electronics Sept 89

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-13 02:27:31 UTC
From: mcalhoun@ksu.edu
Message-ID: <e1kcuj$6ma@unix1.cc.ksu.edu>
Source record: 12612

mzenier@eskimo.com (Mark Zenier) writes:

<<On the subject of electronics mags: Does anyone still publish any for the
<<experimenter or is that all in the past?

<For the US, there are two. Nuts and Volts (www.nutsvolts.com) and Make.
<....[snip]....

Would the ARRL's QEX count?

--Myron.

--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

2312. Re: Lowering the noise figure in a preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-13 02:37:58 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <443DBA19.8030205@nettally.com>
Source record: 12613

How are you measuring noise figure? Describe your setup?

tucker@conninc.com wrote:

> Thanks for the website, my problem was i had a factory cellular preamp
>from surplus equipment, it had a ceramic filter on the input set
>824-850 mhz. When i removed the filter the noise figure was terrible
>but the bandwith very wide, im trying to get it to operate in the 33cm
>band with decent noise figure. The only thing i can figure is that by
>removing the banpass filter i raised the NF?
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

2313. Source of info on old transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-13 03:25:44 UTC
From: Ronnie <rhughes4-removeme@swbell.net>
Message-ID: <Ywj%f.58555$F_3.14821@newssvr29.news.prodigy.net>
Source record: 12614

Hi,

Anybody have a library of transistor databooks
from the early 60's? I'm trying to find technical
info on the following devices:

Power Transistors:
Motorola 48S23 in TO3 Steel case

Signal Transistors:

Motorola 48S45 (624 date code or other marking)
Motorola MA900 (Sort of crossed to NTE 102A or ECG 102)
Mototola SM1824 (612 date code or other marking)
(one schematic I have shows this to be a
PNP type)

2N1192 (Schematic shows as PNP type - one hit shows as
Germanium)
Motorola SM2140 (Schematic shows as PNP type)
GA987 (980425 date code or other marking)

I'm unsure about the manufacturer of the last device. All the other have
the Motorola circle M logo clearly marked, but it is not on that device.
The system these devices are in was manufactured in the fall of 1963
so it is likely that the deisgn is from the 1960 to 1962. I'd like to
browse
through a 1960 to 1963 Motorola data book. I'm suspecting all of these
to be PNP type Germanium devices, but that is just a guess.

Any help appreciated.

Ronnie, N5CSE

2314. New program. COAX_VLF

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-13 04:45:00 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <DMadnQ-pGKIMSqDZRVny2w@bt.com>
Source record: 12615

Now available: Program COAX_VLF

The behaviour of transmission lines at the lower frequencies is more complex than it is at HF and above. The effects set in sooner at higher frequencies on low impedance coaxial transmission lines. They are affected more at higher frequencies than other types of line.

As frequency is reduced below several hundred KHz the impedance Zo increases, its impedance angle becomes more negative, and the propagation velocity decreases. Unusual things happen such as reflection coefficients being greater than unity and the SWR being greater at the input end of a line than it is at the load end.

At power and audio frequencies Zo can be an order of magnitude greater than the nominal HF value, and the angle of Zo aproaches -45 degrees.

It is useful to be aware of the magnitude of such effects. With coax they can be experienced in small ways at frequencies as high as 2 MHz or more.

Download program COAX_VLF in a few seconds from website below and run immediately. Filesize = 48 Kilo-bytes. It is both practical and educational. Try to fathom out how reflection coefficients greater than unity can arise.

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

2315. Re: Regen with spider web coils ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-13 06:32:06 UTC
From: Lynn Coffelt <coffelt2@comcast.net>
Message-ID: <e1kr8rbth1@emma.aioe.org>
Source record: 12616

<jvereker@wp.pl> wrote in message
news:1144845320.775026.160220@i39g2000cwa.googlegroups.com...
> Anybody built a regenerative receiver (tube or MOSFET :) using
> oldschool spider web coils ?
> In theory they have a very low amount of parasitic capacitance, and a
> high Q.
> Is it worth to use them for amateur bands ?

Maybe not worth reading, but in the late 1940's I used a single 01A
regen with homemade spider-web coils on the broadcast band. Probably was the
root factor for Ms. Farnham kicking me out of high school Latin class. (for
sleeping when I was supposed to be listening). From Washington State, XERF
in Warez, Mexico came booming in until the wee morning hours. Oh, for the
days of snake-oil medicines and Bible thumping!
Technical notes: I did find that to find the best orientation for the
antenna (with tickler) coil was critical. Using common masonite front panels
ment that hand-capacitance greatly affected the amount of regeneration.
Usually just left the coil flopping on its leads until the best compromise
position was found, then invent a bracket or sticks and glue to hold it in
position.
Old Chief Lynn..... W7LTQ in 1948

2316. Re: Source of info on old transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-13 15:26:46 UTC
From: fmmck@aol.com
Message-ID: <fmmck-1304061126460001@ac8c1454.ipt.aol.com>
Source record: 12617

In article <Ywj%f.58555$F_3.14821@newssvr29.news.prodigy.net>, "Ronnie"
<rhughes4-removeme@swbell.net> wrote:

> Anybody have a library of transistor databooks
> from the early 60's? I'm trying to find technical
> info on the following devices:

Ronnie-

With the exception of the 2N1192, most of your numbers don't sound like
Motorola numbers.

It may be that Motorola manufactured standard parts for a company, and
marked them with that company's proprietary numbers instead. Under their
agreements, Motorola is unlikely to provide any cross-reference
information, requiring you to purchase replacements from the other
company. Even other divisions of Motorola did this!

There may be some cross-reference information, but it would help to know
the manufacturer of the equipment the Motorola parts were used in.

Have you tried a Google search for each of the numbers?

73, Fred, K4DII

2317. Re: Eddystone dial

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-13 16:15:17 UTC
From: Chris M0HMR <chris.harmer1@v21net.co.uk>
Message-ID: <1144944917.256829.54410@i40g2000cwc.googlegroups.com>
Source record: 12618

Doc wrote:
> Does anyone in the group have any idea of what an Eddystone dial, Model
> 898, is worth. I bought a new one, along with the parts for the Ted
> Crosby HBR receiver many years ago, but never got around to building
> it. The XYL is pushing me to downsize and I need to start somewhere. I
> may have an interested party, but can list it on e-Bay if this falls
> through. I'd like to get some idea of where to start.
> Doc, W4ITJ

Hi Doc:

I bought a good 898 recently for £30 which I guess is around $44.

Regards, Chris M0HMR

2318. Re: Lowering the noise figure in a preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-13 16:40:12 UTC
From: You <You@shadow.orgs>
Message-ID: <You-6C3D71.08402313042006@netnews.worldnet.att.net>
Source record: 12619

In article <1144865259.577289.156120@j33g2000cwa.googlegroups.com>,
"K7ITM" <k7itm@msn.com> wrote:

> As a point of reference, a typical NE3508M04
> (http://www.cel.com/pdf/datasheets/ne3508m04.pdf) can give you a device
> noise figure under 0.4dB, operated at room temperature, at any
> frequency across the entire "UHF" frequency range (300MHz to
> 3GHz)--better than that at the lower end of the frequency range.
>
> Cheers,
> Tom
>

Nothing like a Ruby Maser dumped in Liquid Nitrogen and pumped at
-12 DBm to bring in those extremely small signals........

all it takes is cold......

2319. Re: Source of info on old transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-13 18:52:05 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <e1m6kl$lp1$2@engnntp2.cig.mot.com>
Source record: 12620

"Fred McKenzie" <fmmck@aol.com> wrote in message
news:fmmck-1304061126460001@ac8c1454.ipt.aol.com...
> In article <Ywj%f.58555$F_3.14821@newssvr29.news.prodigy.net>, "Ronnie"
> <rhughes4-removeme@swbell.net> wrote:
>
> > Anybody have a library of transistor databooks
> > from the early 60's? I'm trying to find technical
> > info on the following devices:
>
> Ronnie-
>
> With the exception of the 2N1192, most of your numbers don't sound like
> Motorola numbers.
>
> It may be that Motorola manufactured standard parts for a company, and
> marked them with that company's proprietary numbers instead. Under their
> agreements, Motorola is unlikely to provide any cross-reference
> information, requiring you to purchase replacements from the other
> company. Even other divisions of Motorola did this!
>
> There may be some cross-reference information, but it would help to know
> the manufacturer of the equipment the Motorola parts were used in.
>
> Have you tried a Google search for each of the numbers?
> > 73, Fred, K4DII

Ronnie,
I concurr. Those (non 2N numbers) are not "public" numbers, but
"in-house" numbers belonging to the original equipment's manufacturer. I
have some old references, but there IS stuff on the web.
AllDataSheet gives some specs on the 2N1192:
http://pdf1.alldatasheet.com/datasheet-pdf/view/120668/ETC/2N1192.html

Alloy Junction Germanium Transistor
PNP 200mw.
40 V Vcb
25 V Vce (R) whatever that means
hfe 74 typ
2 MHz Ft
TO-5 case

73, Steve, K9DCI

2320. Re: Lowering the noise figure in a preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-13 21:49:28 UTC
From: "tucker@conninc.com" <tucker@conninc.com>
Message-ID: <1144964968.399623.321100@u72g2000cwu.googlegroups.com>
Source record: 12621

Im guessing at the noise figure, im running a low level >1mv fr0m a
cushman service monitor to the preamp input. Im using a uniden 898t
scanner as a receiver because it has a digital S meter. When i turn on
the preamp jumps up 3-4 bars
but the modulation tone stays the same volume level. By this im
guessing the noise level has increased, the preamp had a ceramic
filter with the 50ohm input going directly into it and its output thur
cap to the 1st amp, the seller on ebay said just remove the filter and
move the input to the filters output trace, thats what i done but
results are poor even thou this is a commercial preamp pulled from
analog cell site. It looks to be a very well made preamp so it should
work if i figure out the
input match?

2321. Re: Lowering the noise figure in a preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-13 22:13:45 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <a8jt3254q2npacm0vs3tbf1dmblvrvc0bb@4ax.com>
Source record: 12622

The device in the preamp may not have the greatest noise figure to start with. Most preamps used in those type installations are usually more concerned with signal handling ability, so as not to produce intermod, rather than the last ounce of signal to noise performance. It is difficult to have a device that will give you maximum signal to noise performance along with excellent intermod performance. Often a preamp is used ahead of power dividers to feed several receivers and it is there to make up for the losses in the power dividers and not necessarily there for the sole purpose of improving signal to noise performance.

When comparing how it is performing you need to actually measure sinadd or quieting of the receiver to tell if it is giving you any improvement. Just looking at stronger noise levels on the receiver and guessing how much the signal is above the noise can be very misleading.

73
Gary K4FMX

On 13 Apr 2006 14:49:28 -0700, "tucker@conninc.com"
<tucker@conninc.com> wrote:

>Im guessing at the noise figure, im running a low level >1mv fr0m a
>cushman service monitor to the preamp input. Im using a uniden 898t
>scanner as a receiver because it has a digital S meter. When i turn on
>the preamp jumps up 3-4 bars
>but the modulation tone stays the same volume level. By this im
>guessing the noise level has increased, the preamp had a ceramic
>filter with the 50ohm input going directly into it and its output thur
>cap to the 1st amp, the seller on ebay said just remove the filter and
>move the input to the filters output trace, thats what i done but
>results are poor even thou this is a commercial preamp pulled from
>analog cell site. It looks to be a very well made preamp so it should
>work if i figure out the
>input match?

2322. Re: Lowering the noise figure in a preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-13 23:17:40 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <443EDCA9.4090006@nettally.com>
Source record: 12623

If your modulation is FM, the receiver audio is going to remain the same. And yes, the S meter will jump due to excess noise output of the preamplifier. The Excess gain will reduce the dynamic range of your receiver system and cause intermodulation (IM).

1. Connect a SINAD meter to your receiver .
2. Connect the Cushman directly to the receiver, adjust for +/- 3.0 KHz deviation with 1000 Hz tone.
3. Adjust Cushman generator for 12 dB SINAD
4. Note the generator output in dBm
5. Install preamplifier between Cushman and receiver
6. Adjust generator again for 12 dB SINAD
7. Note the generator output in dBm (should be more negative value than step 4)
8. The difference in dBm from steps 4 and 7 relate to the improvment (if any) in noise figure between the receiver alone and the receiver with the preamplifier.

9. Install a variable attenuator between output of preamplifier and input of receiver. Set to 0 dB attenuation.
10. Adjust generator for 12 dB SINAD
11. Adjust variable attenuator from step 9 until the 12 dB SINAD degrades slighly (numerically < 12 dB).
12. Readjust attenuator 1 dB per step until 12 dB SINAD is restored.
13. You have optimized your receiver and preamplifier for best intermodulation (IM) performance.
14. Install preamplifier close to antenna with a feedline, replace variable attenuator with fixed value equal to the value from step 12 minu the measured loss of the feedline between preamplifier and receiver.

15. If Cushman doesn't display dBM, use microvolts, fewer microvolts for 12 dB SINAD is the goal!

16. The above assumed an unmodified, properly operating preamplifier. Your preamplifier must have some sort of preselector filter between the antenna and it's input. Removing the stock filter exposes the preamplifier to overload from out of band signals, may affect the impedance (stability) of the preamplifier. Try operating it in its stock configuration and frequency prior to modifieing it. Then replace the stock filter with a properly tuned filter for the frequency you desire. Yes, you might have to retune the preamp if the frequency change is too far. Use the SINAD method and a low level signal to tweak the preamplifier sensitivity. Make sure your generator and cables are 50 ohms. A 10 dB 50 ohm pad between generator output and the system, may improve your results if the generator does not provide a 50 ohm source.

tucker@conninc.com wrote:

>Im guessing at the noise figure, im running a low level >1mv fr0m a
>cushman service monitor to the preamp input. Im using a uniden 898t
>scanner as a receiver because it has a digital S meter. When i turn on
>the preamp jumps up 3-4 bars
>but the modulation tone stays the same volume level. By this im
>guessing the noise level has increased, the preamp had a ceramic
>filter with the 50ohm input going directly into it and its output thur
>cap to the 1st amp, the seller on ebay said just remove the filter and
>move the input to the filters output trace, thats what i done but
>results are poor even thou this is a commercial preamp pulled from
>analog cell site. It looks to be a very well made preamp so it should
>work if i figure out the
>input match?
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

2323. Re: Lowering the noise figure in a preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 01:04:36 UTC
From: "tucker@conninc.com" <tucker@conninc.com>
Message-ID: <1144976676.723830.279070@t31g2000cwb.googlegroups.com>
Source record: 12624

Real good advice, I got the Cushman about a month ago and havent found a sinad meter yet. There is a hamfest in western NC this weekend so if i dont find one there i will scour ebay for one along with a operators manual for the Cushman.

2324. Re: More solid state HF amp questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 02:02:31 UTC
From: w8ji@akorn.net
Message-ID: <1144980151.510037.225630@j33g2000cwa.googlegroups.com>
Source record: 12625

KC2PIH@gmail.com wrote:
> Hello!
>
> Alright this is my second post on this subject. I appreciate all the
> other responses I got. I don't think I provided enough information
> about my problem before. So here it goes with everything I've got. I
> picked up a HF amp that has four Motorola MRF-454 transistors in it.
>
> I've already determined (in theory) to make it run "clean" enough, I'll
> have to build a band-switched filter bank for it. It already has a
> 5-element Chebyshev filter
> in it and I am guessing that its tuned for 30Mhz. Also, it shouldn't be
> driven over about 300 watts (output).

300W That's absolute peak output, which you could see on a true PEP
meter.

Yes, it looks like the filter is tuned for 30MHz. The amp might or
might not work OK on lower bands with a proper filter. You'll just have
to try it.

I'd check it very carefully for splatter on SSB, and for parasitics and
other spurious. But the SWR increase you see could just be because it
has no filtering.

73 Tom

2325. Re: Source of info on old transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 04:09:00 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1144987740.390686.297810@g10g2000cwb.googlegroups.com>
Source record: 12626

As Fred and Steve noted, you have a bunch of "house-numbered"
transistors, and one that's relatively easy. Actually, the MA900 seems
to be from a series of germanium parts. I have numbers on both sides
of it, but not that particular one, in my book. I do have a full
Motorola data sheet on the 2N1192, in my 1969 Motorola "Semiconductor
Data Book." Since I'm about to scan something else, I scanned it into
a PDF (as images, not text). It's not great, but it's legible. Email
me if you'd like a copy.

Cheers,
Tom

2326. Re: Lowering the noise figure in a preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 11:12:38 UTC
From: stargatesg1 <nospam@here.net>
Message-ID: <GsL%f.15172$gy2.1581@trnddc08>
Source record: 12627

Very nice write up dude! Just had to comment:-)

73's
Rod

"**THE-RFI-EMI-GUY**" <rhyolite@nettally.com> wrote in message
news:443EDCA9.4090006@nettally.com...
> If your modulation is FM, the receiver audio is going to remain the
> same. And yes, the S meter will jump due to excess noise output of the
> preamplifier. The Excess gain will reduce the dynamic range of your
> receiver system and cause intermodulation (IM).
>
> 1. Connect a SINAD meter to your receiver .
> 2. Connect the Cushman directly to the receiver, adjust for +/- 3.0 KHz
> deviation with 1000 Hz tone.
> 3. Adjust Cushman generator for 12 dB SINAD
> 4. Note the generator output in dBm
> 5. Install preamplifier between Cushman and receiver
> 6. Adjust generator again for 12 dB SINAD
> 7. Note the generator output in dBm (should be more negative value than
> step 4)
> 8. The difference in dBm from steps 4 and 7 relate to the improvment (if
> any) in noise figure between the receiver alone and the receiver with
> the preamplifier.
>
> 9. Install a variable attenuator between output of preamplifier and
> input of receiver. Set to 0 dB attenuation.
> 10. Adjust generator for 12 dB SINAD
> 11. Adjust variable attenuator from step 9 until the 12 dB SINAD
> degrades slighly (numerically < 12 dB).
> 12. Readjust attenuator 1 dB per step until 12 dB SINAD is restored.
> 13. You have optimized your receiver and preamplifier for best
> intermodulation (IM) performance.
> 14. Install preamplifier close to antenna with a feedline, replace
> variable attenuator with fixed value equal to the value from step 12
> minu the measured loss of the feedline between preamplifier and receiver.
>
> 15. If Cushman doesn't display dBM, use microvolts, fewer microvolts for
> 12 dB SINAD is the goal!
>
> 16. The above assumed an unmodified, properly operating preamplifier.
> Your preamplifier must have some sort of preselector filter between the
> antenna and it's input. Removing the stock filter exposes the
> preamplifier to overload from out of band signals, may affect the

> impedance (stability) of the preamplifier. Try operating it in its stock
> configuration and frequency prior to modifieing it. Then replace the
> stock filter with a properly tuned filter for the frequency you desire.
> Yes, you might have to retune the preamp if the frequency change is too
> far. Use the SINAD method and a low level signal to tweak the
> preamplifier sensitivity. Make sure your generator and cables are 50
> ohms. A 10 dB 50 ohm pad between generator output and the system, may
> improve your results if the generator does not provide a 50 ohm source.
>
>
>
>
> tucker@conninc.com wrote:
>
> >Im guessing at the noise figure, im running a low level >1mv fr0m a
> >cushman service monitor to the preamp input. Im using a uniden 898t
> >scanner as a receiver because it has a digital S meter. When i turn on
> >the preamp jumps up 3-4 bars
> >but the modulation tone stays the same volume level. By this im
> >guessing the noise level has increased, the preamp had a ceramic
> >filter with the 50ohm input going directly into it and its output thur
> >cap to the 1st amp, the seller on ebay said just remove the filter and
> >move the input to the filters output trace, thats what i done but
> >results are poor even thou this is a commercial preamp pulled from
> >analog cell site. It looks to be a very well made preamp so it should
> >work if i figure out the
> >input match?
> >
> >
> >
>
> --
> Joe Leikhim K4SAT
> "The RFI-EMI-GUY"
>
> "Treason doth never prosper: what's the reason?
> For if it prosper, none dare call it treason."
>
> "Follow The Money" ;-P
>

2327. Re: Lowering the noise figure in a preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 12:10:06 UTC
From: Galen Watts <gwatts@frontiernet.net>
Message-ID: <yiM%f.7037$tT.4220@news01.roc.ny>
Source record: 12629

You wrote:
> In article <1144865259.577289.156120@j33g2000cwa.googlegroups.com>,
> "K7ITM" <k7itm@msn.com> wrote:
>
>
>>As a point of reference, a typical NE3508M04
>>(http://www.cel.com/pdf/datasheets/ne3508m04.pdf) can give you a device
>>noise figure under 0.4dB, operated at room temperature, at any
>>frequency across the entire "UHF" frequency range (300MHz to
>>3GHz)--better than that at the lower end of the frequency range.
>>
>>Cheers,
>>Tom
>>
>
>
> Nothing like a Ruby Maser dumped in Liquid Nitrogen and pumped at
> -12 DBm to bring in those extremely small signals........
>
> all it takes is cold...

It still takes cold but InP HEMTs perform much better than ruby masers
these days...

"Extremely Low-Noise Amplification with Cryogenic FET's and HFET's:
1970-2004"
http://www.gb.nrao.edu/electronics/edir/edir314.pdf

Happy reading!
-Galen, W8LNA

2328. Re: Lowering the noise figure in a preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 12:50:27 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <nUM%f.12899$WL4.6857@trnddc07>
Source record: 12628

<tucker@conninc.com> wrote in message
news:1144976676.723830.279070@t31g2000cwb.googlegroups.com...
> Real good advice, I got the Cushman about a month ago and havent found
> a sinad meter yet. There is a hamfest in western NC this weekend so if
> i dont find one there i will scour ebay for one along with a operators
> manual for the Cushman.
>
Where in NC?

Dale W4OP

2329. Does cured Epoxy absorb microwaves?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 12:58:27 UTC
From: "Eike Lantzsch, ZP6CGE" <eikelan@gmx.net>
Message-ID: <slrne3v73j.cte.eikelan@ID-77364.user.individual.net>
Source record: 12630

I know that microwaves are sometimes used to cure epoxy but does
cured epoxy absorb microwaves? More practically put: can I use
epoxy to glue some parts of a double quad for 2.4GHz?

Kind regards, Eike
--
"The adventurs may be mad, but the adventurer must be sane."
- G. K. Chesterton (1908)

2330. Re: Return Loss Bridge Accuracy Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 13:17:09 UTC
From: Paul VK3DIP <pmcmahon@telstra.com>
Message-ID: <phN%f.6362$vy1.4833@news-server.bigpond.net.au>
Source record: 12631

Christer,
It looks like Rockby has sold out and removed them from their catalogue, the one you pointed out is indeed not the correct part. The ones I used are as far as I know a standard/common 14mm balun former as used in TV baluns etc..
The Jaycar (www.jaycar.com.au), or Electus (http://www.electusdistribution.com.au) part number LF1220 looks basically identical to those I used, and there are probably lots of equivalents out there. Electus has some data on the M7 material used here http://www.electusdistribution.com.au/images_uploaded/ferrites.pdf
I hope this helps, and I would be interested in how you get on if you end up building one, let me know at the email address shown below.

73
Paul VK3DIP

pmcmahon@telstra.com

"CA" <no@mail.com> wrote in message
news:gS5%f.52591$d5.207697@newsb.telia.net...
> Paul VK3DIP wrote:
>
>> If you are interested I had really good results recently with a
>> homebrew RLB, in fact so good that I doubted the results and had to...
>
> I have read your article with great interest.
> Do you have a specification for the "balun formers" or maybe a Rockby
> Electronics stock no.?
> I suppose it is www.rockby.com.au. The only 2-hole ferrite core I could
> find is stock no. 10967 but I believe this one is too small.
>
> 73
> Christer SM6PXJ
>
>

2331. Re: Does cured Epoxy absorb microwaves?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 14:21:07 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <e1ob4j$m5b$2@puck.litech.org>
Source record: 12632

Eike Lantzsch, ZP6CGE <eikelan@gmx.net> wrote:
> I know that microwaves are sometimes used to cure epoxy but does
> cured epoxy absorb microwaves? More practically put: can I use
> epoxy to glue some parts of a double quad for 2.4GHz?

Your best source of information here will be the manufacturer.

Next best will be to put a test object (made of things that don't absorb microwaves) glued with the epoxy in your microwave with a cup of water and heat it until the water boils. If the test object isn't uncomfortably hot, the epoxy probably is OK for use in your quad. Microwave ovens here in the US seem to run around 2.45 GHz, which is fairly close to your working frequency, so the test will be a fairly good indication.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

2332. Re: Source of info on old transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 14:27:12 UTC
From: Ronnie <rhughes4-removeme@swbell.net>
Message-ID: <4jO%f.1803$Lm5.1016@newssvr12.news.prodigy.com>
Source record: 12633

Thanks Fred, Steve, Tom:

I think you guys are correct about these being house numbered devices. They are from an old Piper autopilot that was manufactured for Piper by Mitchell Industries of Mineral Wells, TX (now Century Flight Systems). I noticed that 2 of the 12 power transistors had been replaced at some point in time and are marked with "Mitchell Industries MN92". Since this was an avionics application, it is likely that these were marked specifically for Mitchell, initially with the 48S23 device number and then later with Mitchell's name and MN92 marking.

I've made an attempt to see what information Centrury Flight Systems is able and/or willing to provide, but so far they have not been too responsive. I'm also looking for a spare amplifier from the aircraft salvage yards and avionics shops.

My main interest in all of this was to generate a schematic of the amplifier and do a bit of reverse engineering in order to better understand the overall design of the system. The service manual for the autopilot system did not include a schematic or any details of the amplifier.

Thanks again for the help.

Ronnie

"K7ITM" <k7itm@msn.com> wrote in message
news:1144987740.390686.297810@g10g2000cwb.googlegroups.com...
> As Fred and Steve noted, you have a bunch of "house-numbered"
> transistors, and one that's relatively easy. Actually, the MA900 seems
> to be from a series of germanium parts. I have numbers on both sides
> of it, but not that particular one, in my book. I do have a full
> Motorola data sheet on the 2N1192, in my 1969 Motorola "Semiconductor
> Data Book." Since I'm about to scan something else, I scanned it into
> a PDF (as images, not text). It's not great, but it's legible. Email
> me if you'd like a copy.
>
> Cheers,
> Tom
>

2333. Re: Lowering the noise figure in a preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 14:44:05 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <VyO%f.6967$i41.5006@newsread1.news.atl.earthlink.net>
Source record: 12634

"Dale Parfitt" <par@parelectronics.com> wrote in message
news:nUM%f.12899$WL4.6857@trnddc07...
>
> <tucker@conninc.com> wrote in message
> news:1144976676.723830.279070@t31g2000cwb.googlegroups.com...
> > Real good advice, I got the Cushman about a month ago and havent found
> > a sinad meter yet. There is a hamfest in western NC this weekend so if
> > i dont find one there i will scour ebay for one along with a operators
> > manual for the Cushman.
> >
> Where in NC?
>
> Dale W4OP
>

Morganton, NC Saturday April 15.

www.cvhamfest.com

2334. Re: Source of info on old transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 15:14:59 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1145027699.517576.210170@g10g2000cwb.googlegroups.com>
Source record: 12635

>From that era, and from what you know so far (that they are apparently pretty much all germanium parts), it shouldn't be too difficult to deduce how it worked. It's unlikely any of the active parts are particularly esoteric. Usually you can figure out the polarity of the parts from the schematic, and assuming about 0.3V for forward junction bias and current gains typical of the power and signal transistors then in use should get you close to what you need. I suppose nothing in an autopilot needs to be very fast, so it's very unlikely any are RF transistors. It's possible that the circuit requires close tolerance on some feature (like gain), but that's poor circuit design and I'd hope for better of them. Once you have a circuit diagram, maybe you could try "spicing" it, if you're not comfortable with a simple paper analysis.

Good luck with it.

Cheers,
Tom

2335. freeware for determining mixer products?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 15:29:59 UTC
From: Mike Rhoads <a@b.c>
Message-ID: <XdP%f.6978$i41.2958@newsread1.news.atl.earthlink.net>
Source record: 12636

I have a receiver I am considering modifying for other bands outside of what it covers. It is a dual conversion superhet design. Before I modify it, I'd like to see how the new frequencies would affect the mixer output. Is there any decent freeware available that would allow me to see all mixer outputs and to determine if any outputs might be a problem?

Thanks,
Mike

2336. Re: Source of info on old transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 16:04:36 UTC
From: Ronnie <rhughes4-removeme@swbell.net>
Message-ID: <oKP%f.10837$4L1.4249@newssvr11.news.prodigy.com>
Source record: 12637

Tome,

I agree with all you've said. In general the autopliot
amp is a DC circuit and has a slow response time.

However, this system does generate RF signals which
are used to sense the pitch and roll attitude and the postion
of the servos.

This autopilot system uses variable inductors to sense pitch
and bank information from the attitude gyro. Each one consists
of an iron and aluminum metal vane attached to the corresponding
axis of the atitude gyro which moves in front of a iron core coil as a
pick up. I found a test box designed for the system that includes a
jack that provides a dummy AI gyro allowing the substituion of its
inductors in place of the actual gyro for bench testing. It contains
standard looking RF coils with tunable slugs.

The service manual states an operating frequency of 10 MHz, but that is
stated only as an exmaple. I'm not sure it that is the actual freq or not.
The resonant frequency is determined by the inductance in the AI gyro,
air variable caps in the servos and some variable air caps used for trim
and centering adjustments. The circuirt is arranged so that as the airplane
changes pitch or bank, the changes in reactance cause the circuit to change
frequency. A discriminator in the amp detects the frequency change,
produces
a DC voltage which is amplified to drive the servo motor in the appropriate
direction to bring the circuit back into resonnance via the feedback caps
that sense servo postion. This or course moves the control surfaces and
brings the airplane back to level flight attitude.

The components are connected together with specific lengths of low
capacitance cable. The cable and connectors appear to be very similar
to that used in GM automobiles in the 1960s. At least my 1966 Pontiac
had a similar cable and connector from the antenna to the radio. It is a
hollow plastic tube with a very small center conductor that is loosely
coiled
inside the plastic tube. There is a braided shield over the outside of the
plastic
tube, and a outer jacket over that. Some people have pointed out it is very
similar to RG-62, 93 ohm coax without the spirial wound center insulator /
spacer. I measured about 10.5 pF per foot on a 28" piece of this cable with
connectors installed on each end.

This has been quite a project. I basically have seen all the components
work

in the airplane at various times, but the system as a whole is intermittent. Most time the wing leveler funciton works correctly but once in a while it wants to turn right. The pitch circuit has been working but is now acting up. The altitude hold was badly out of adjustment, but I was able to get that setup properly and working, but the climb and descent airspeeds are not right yet. I'm not sure if I've got bad connections, intermittent components
in the amplifier or both. I'm planning to pull the cable assemblies out along
with the amplifier and get it on the bench for testing.

Therefore, it would sure help to have a basic understadning of the amp circuit
during that process. Therefore, I thought learning about the transistors charateristics
and the inductance values would be helpful. I've already measured all the cap
values and ranges. Next step is to generate a schematic for the amp and learn how it is supposed to work.

It might also be fun to design and built a replacement for the amplifier using modern components.

Thanks again for your help.

Ronnie

"K7ITM" <k7itm@msn.com> wrote in message
news:1145027699.517576.210170@g10g2000cwb.googlegroups.com...
> >From that era, and from what you know so far (that they are apparently
> pretty much all germanium parts), it shouldn't be too difficult to
> deduce how it worked. It's unlikely any of the active parts are
> particularly esoteric. Usually you can figure out the polarity of the
> parts from the schematic, and assuming about 0.3V for forward junction
> bias and current gains typical of the power and signal transistors then
> in use should get you close to what you need. I suppose nothing in an
> autopilot needs to be very fast, so it's very unlikely any are RF
> transistors. It's possible that the circuit requires close tolerance
> on some feature (like gain), but that's poor circuit design and I'd
> hope for better of them. Once you have a circuit diagram, maybe you
> could try "spicing" it, if you're not comfortable with a simple paper
> analysis.
>
> Good luck with it.
>
> Cheers,
> Tom
>

2337. Re: Source of info on old transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 16:11:02 UTC
From: hhc314@yahoo.com
Message-ID: <1145031062.684160.271590@i39g2000cwa.googlegroups.com>
Source record: 12638

Hi Ronnie,

As others have already pointed out to you, most of the numbers that you've posted are manufacturer's parts numbers, and not Motorola type numbers. (Unregisted Motorola devices type generally begin with the letter "M" except for some diodes.)

Checking in my 1966 Motorola Semiconductor Device Manual, the MA900 is a high-voltage switch that is usually employed for driving neon readouts, relays etc. The family is Germanium, PNP. The MA900 is not specifically listed, but two other later member's of the MA 900 family are. IIRC, the deviced listed in the book are the MA909 and MA910, which likely have improved parameters over the original MA900. Essentially a 75Volt devices with a current capacity of up to 200-Ma capable of 150-mw.

The 2N1192 is also listed (2N192-2N1194) as PNP germanium transistors for high-gain audio amplifier and switching use.

The book contains data sheets on both the above devices, which I would be happy to scan and email to you if you want them. Can't be of any help on the other devices.

Just let me know. My email address is hhc3141@yahoo.com, not the address shown on the post which is intentionally obsolete to discourage spammers.

73s, Harry C.

2338. Re: Source of info on old transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 16:16:31 UTC
From: hhc314@yahoo.com
Message-ID: <1145031391.175280.315900@e56g2000cwe.googlegroups.com>
Source record: 12639

Ronnie, just as a suggestion, (although you've likely already tried), try and obtain a technical or service manual for the system. Many of these will included a cross-reference from the manufacturer's part ID to a and industry standard.

Even a Sams folder would help you here, if one was ever published. Nice thing about Sams folders is that they almost never go away once published, only become a bit brown with age! :-)

Harry C.

2339. Re: Source of info on old transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 16:46:12 UTC
From: Ronnie <rhughes4-removeme@swbell.net>
Message-ID: <olQ%f.69733$dW3.64843@newssvr21.news.prodigy.com>
Source record: 12640

Thanks Harry.

I do have a service manual for the system published
by Piper, however it has no details of the electronic
compoents, only the electro-mechanical stuff. It does
have enough overall theory of operation information
to help get me started with the electronics. I'm also
trying to find out what help the orginal manufacture
can be. They are still in business, although operating
under a different name. So far, all I'm getting is their
hold message, but if I can ever get someone on the phone
I might get some help there.

Concerning your follow-up post, another gentleman has
already emailed me a scanned datasheet for the 2N1192
and the general info you provided on the MA900 like
devices should get me going there.

Thanks again for the help.
Ronnie

<hhc314@yahoo.com> wrote in message
news:1145031391.175280.315900@e56g2000cwe.googlegroups.com...
> Ronnie, just as a suggestion, (although you've likely already tried),
> try and obtain a technical or service manual for the system. Many of
> these will included a cross-reference from the manufacturer's part ID
> to a and industry standard.
>
> Even a Sams folder would help you here, if one was ever published. Nice
> thing about Sams folders is that they almost never go away once
> published, only become a bit brown with age! :-)
>
> Harry C.
>

2340. APRSPoint special

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 17:05:18 UTC
From: "hxc98@yahoo.com" <hxc98@yahoo.com>
Message-ID: <1145034318.196419.100100@i40g2000cwc.googlegroups.com>
Source record: 12641

APRSPoint is the latest APRS implementation that integrates seamlessly with mappoint to allow you to track anyone on a street level detailed map. It handles imput from RF and internet feeds, and works with Kenwood radios with built-in TNC's in an easy to use interface. It is considered to be the most stable and intuitive, and ideal for first time users. We are offerring a special discount right now. Please visit http://www.aprspoint.com for details. Thanks.

2341. Re: freeware for determining mixer products?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 18:19:56 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1145038796.634811.265160@i39g2000cwa.googlegroups.com>
Source record: 12642

The free RFSim99 package, which has a wonderful set of tools just in the RFSim99 application itself, also includes a separate program called "Spur Search" which should do just what you want. A Google or similar search should turn up several places from which you can download RFSim99.

Cheers,
Tom

2342. Re: freeware for determining mixer products?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 19:36:58 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <e1otkq$ms1$2@engnntp2.cig.mot.com>
Source record: 12646

Oh boy! In the olden days I have seen mixer products charts. I think the
idea was to plot the places where all the harmonics of the two inputs
produced products so you could pick an L.O. and IF which didn't have
problems. However, I'm at a loss to point to anything. I probably have one
buried in the reams of stuff I saved to use in the future...argggg
I'm sure Excel can do this if you want to put in all the formulas (and know
what to calculate)

73, Steve, K9DCI

Perhaps a search on mixing charts or similar terms...

Hmmmm Googling this got nil:
Receiver mixer "mixing charts" -"23-channel"

"Mike Rhoads" <a@b.c> wrote in message
news:XdP%f.6978$i41.2958@newsread1.news.atl.earthlink.net...
> I have a receiver I am considering modifying for other bands outside of
what
> it covers. It is a dual conversion superhet design. Before I modify it,
> I'd like to see how the new frequencies would affect the mixer output. Is
> there any decent freeware available that would allow me to see all mixer
> outputs and to determine if any outputs might be a problem?
>
> Thanks,
> Mike
>
>

2343. Re: Source of info on old transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 19:42:49 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <e1otvp$n61$2@engnntp2.cig.mot.com>
Source record: 12645

"Ronnie" <rhughes4-removeme@swbell.net> wrote in message
news:olQ%f.69733$dW3.64843@newssvr21.news.prodigy.com...
> Thanks Harry.
>
> I do have a service manual for the system published
> by Piper, ... I'm also
> trying to find out what help the orginal manufacture
> can be.

It really helps to know how to throw yourself on the mercy of some marketing type to get to an Engineer who is willing to spill his guts or, give away the keys to the kingdom and send you a schematic and info. Done a lot of that over the many years as a Engineer-Ham...or is that Ham-Engineer.

73, Steve, K9DCI

2344. spamer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 20:02:03 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1145044923.807763.149740@j33g2000cwa.googlegroups.com>
Source record: 12644

Stephan Ducharme wrote:
spam

2345. Re: freeware for determining mixer products?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 20:27:09 UTC
From: Erik Waterhouse <none@nothing.net>
Message-ID: <xAT%f.7104$i41.5716@newsread1.news.atl.earthlink.net>
Source record: 12647

Thanks! Already downloading it!

"K7ITM" <k7itm@msn.com> wrote in message
news:1145038796.634811.265160@i39g2000cwa.googlegroups.com...
> The free RFSim99 package, which has a wonderful set of tools just in
> the RFSim99 application itself, also includes a separate program called
> "Spur Search" which should do just what you want. A Google or similar
> search should turn up several places from which you can download
> RFSim99.
>
> Cheers,
> Tom
>

2346. Re: freeware for determining mixer products?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 21:17:34 UTC
From: dplatt@radagast.org
Message-ID: <12404beks815mb9@corp.supernews.com>
Source record: 12548

In article <e1otkq$ms1$2@engnntp2.cig.mot.com>,
Steve Nosko <suteuve.nosukowicuz@moutouroula.com> wrote:

>Oh boy! In the olden days I have seen mixer products charts. I think the
>idea was to plot the places where all the harmonics of the two inputs
>produced products so you could pick an L.O. and IF which didn't have
>problems. However, I'm at a loss to point to anything. I probably have one
>buried in the reams of stuff I saved to use in the future...argggg
>I'm sure Excel can do this if you want to put in all the formulas (and know
>what to calculate)

Shouldn't be dreadfully hard, I think.

Assuming two frequencies F1 and F2, you'll get mixing products at
the sum (F1+F2) and difference (abs(F1-F2)). To deal with harmonics
and higher-order mixing products, I believe you can generalize this by
including two integer multiplier factors M and N whose values run from
1 up to as high as you care to go. Then, expect mixing products to be
at (M*F1)+(N*F2) and abs((M*F1)-(N*F2)). The amplitudes of the mixing
products will be lower as the multipliers go up... you could probably
kluge in an estimation formula of some sort.

Calculate the various mixing frequencies, and estimated levels in a
square matrix, link the data to a two-column arrangement, and generate
a plot of level vs. frequency.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2347. MILLIONAIRE showers with LADYbug!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-14 21:47:39 UTC
From: Stephan Ducharme <pulsar@weblifeisgreat.com>
Message-ID: <e1ou8oqdc7@ctb-nnrp2.saix.net>
Source record: 12643

Hi,
Stephan Ducharme here,

Here is how to attain freedom with your PC!

This short story will make you realize that you are so close to freedom if you have a PC (which is obviously the case). So let me show you how to reach freedom with it:

This morning, there was a Ladybug in the shower floor.

I looked at it and it made me realize that most people are in the same situation as that Ladybug.

She felt secure on the floor ... until I turned on the shower and water started to fall on the floor. Then she got scared and she flew on top of the shampoo bottle. But her wings could have carried her out of the bathroom window. She could have flown wherever she wanted. But like most people, we simply climb to the closest step.

So what happened to her right after really scared me.

When the water started to bounce off my head onto the shampoo bottle, she panicked and to my amazement, she flew back to the floor where she once found security!!!

Don't we do that?

So that is the reason why you haven't succeeded yet!

The bottle of shampoo simply was not the right destination.

Are you doing the good thing online to make any money? 95% of the websites you have seen don't make money. If you copy them, you won't succeed and first thing you'll know, you'll be back to your 8to5 job, frustrated!

You have seen lots of offers on how to make money with your PC, but for having bought a lot of programs myself and for being online for years, I know that very few teachers will show you the correct and complete way. There exist 9 simple steps and if I don't show you each one, then it may take you years to discover them on your own.

A man called me last week saying he has been online since 1998 and like a lot of people that have been online for many years, he still hasn't figured it out.

Once you have read my 9 steps, you will know where the window to your freedom is.

Click here: http://www.freeadguru.com/cgi-bin/i.pl?c=a&i=32181

Caring for your success,

Stephan Ducharme, The FreeAdGuru

www.MoneyHome.com
www.FreeAdGuru.com
www.MyAffiliateFinder.com

www.ContactThem.com

MAF Anti-Spam ID: 20060401062731C3t6ZxN4

2348. Re: freeware for determining mixer products?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-15 00:57:39 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <iug042l56akjfurrqkaeku17l8fhbk2aap@4ax.com>
Source record: 12549

Hi,

>I have a receiver I am considering modifying for other bands outside of what
>it covers. It is a dual conversion superhet design. Before I modify it,
>I'd like to see how the new frequencies would affect the mixer output. Is
>there any decent freeware available that would allow me to see all mixer
>outputs and to determine if any outputs might be a problem?
>
>Thanks,
>Mike
>
'Electronics' for September 2nd, 1976 had a simple 49-step spur
analysis program for the HP-25 by John R. Coleman of Harris
Electronic Systems which I assume will port to most other HP
calculators using RPN. I haven't tried it myself of late but it
worked fine some years ago. I can email a copy to anyone who wants
it.

Cheers - Joe

2349. Re: Lowering the noise figure in a preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-15 01:03:53 UTC
From: "tucker@conninc.com" <tucker@conninc.com>
Message-ID: <1145063033.597171.113460@i39g2000cwa.googlegroups.com>
Source record: 12550

Burke co fairgrounds, midway between Charlotte and Asheville

2350. Re: Lowering the noise figure in a preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-15 01:07:58 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <44404805.1060709@nettally.com>
Source record: 12551

Thanks!

stargatesg1 wrote:

>Very nice write up dude! Just had to comment:-)
>
>73's
>Rod
>
>"**THE-RFI-EMI-GUY**" <rhyolite@nettally.com> wrote in message
>news:443EDCA9.4090006@nettally.com...
>
>
>>If your modulation is FM, the receiver audio is going to remain the
>>same. And yes, the S meter will jump due to excess noise output of the
>>preamplifier. The Excess gain will reduce the dynamic range of your
>>receiver system and cause intermodulation (IM).
>>
>>1. Connect a SINAD meter to your receiver .
>>2. Connect the Cushman directly to the receiver, adjust for +/- 3.0 KHz
>>deviation with 1000 Hz tone.
>>3. Adjust Cushman generator for 12 dB SINAD
>>4. Note the generator output in dBm
>>5. Install preamplifier between Cushman and receiver
>>6. Adjust generator again for 12 dB SINAD
>>7. Note the generator output in dBm (should be more negative value than
>>step 4)
>>8. The difference in dBm from steps 4 and 7 relate to the improvment (if
>>any) in noise figure between the receiver alone and the receiver with
>>the preamplifier.
>>
>>9. Install a variable attenuator between output of preamplifier and
>>input of receiver. Set to 0 dB attenuation.
>>10. Adjust generator for 12 dB SINAD
>>11. Adjust variable attenuator from step 9 until the 12 dB SINAD
>>degrades slighly (numerically < 12 dB).
>>12. Readjust attenuator 1 dB per step until 12 dB SINAD is restored.
>>13. You have optimized your receiver and preamplifier for best
>>intermodulation (IM) performance.
>>14. Install preamplifier close to antenna with a feedline, replace
>>variable attenuator with fixed value equal to the value from step 12
>>minu the measured loss of the feedline between preamplifier and receiver.
>>
>>15. If Cushman doesn't display dBM, use microvolts, fewer microvolts for
>>12 dB SINAD is the goal!

>>
>>16. The above assumed an unmodified, properly operating preamplifier.
>>Your preamplifier must have some sort of preselector filter between the
>>antenna and it's input. Removing the stock filter exposes the
>>preamplifier to overload from out of band signals, may affect the
>>impedance (stability) of the preamplifier. Try operating it in its stock
>>configuration and frequency prior to modifieing it. Then replace the
>>stock filter with a properly tuned filter for the frequency you desire.
>>Yes, you might have to retune the preamp if the frequency change is too
>>far. Use the SINAD method and a low level signal to tweak the
>>preamplifier sensitivity. Make sure your generator and cables are 50
>>ohms. A 10 dB 50 ohm pad between generator output and the system, may
>>improve your results if the generator does not provide a 50 ohm source.
>>
>>
>>
>>
>>tucker@conninc.com wrote:
>>
>>
>>
>>>>Im guessing at the noise figure, im running a low level >1mv fr0m a
>>>>cushman service monitor to the preamp input. Im using a uniden 898t
>>>>scanner as a receiver because it has a digital S meter. When i turn on
>>>>the preamp jumps up 3-4 bars
>>>>but the modulation tone stays the same volume level. By this im
>>>>guessing the noise level has increased, the preamp had a ceramic
>>>>filter with the 50ohm input going directly into it and its output thur
>>>>cap to the 1st amp, the seller on ebay said just remove the filter and
>>>>move the input to the filters output trace, thats what i done but
>>>>results are poor even thou this is a commercial preamp pulled from
>>>>analog cell site. It looks to be a very well made preamp so it should
>>>>work if i figure out the
>>>>input match?
>>>
>>>
>>>
>>>
>>>
>>--
>>Joe Leikhim K4SAT
>>"The RFI-EMI-GUY"ï¿½
>>
>>"Treason doth never prosper: what's the reason?
>>For if it prosper, none dare call it treason."
>>
>>"Follow The Money" ;-P
>>
>>
>>

>
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

2351. Accurate voltage calibration

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-15 02:47:03 UTC
From: Alfred Green <nu8i@cox.net>
Message-ID: <K8Z%f.597$zf6.181@fed1read08>
Source record: 12552

I have recently aquired a nice 5.1/2 digit DVM, and would like to assess the absolute accuracy. Many years ago I had a 'Standard Cell', but that got lost in one of my several relocations.
What is a good alternative these days? I would think that there is a semiconductor device that has a known threshold. I am familiar with the Wheatstone bridge method to measure voltage without affecting the reference.
Once I have a good DC reference, getting AC & RMS calibration is fairly easy.
Having a GPS locked time and frequency reference, I am used to being at the 1e-10 accuracy level for those, but if I can get to 1e-5 for analog voltage I would be very happy.
Any suggestions gratefully received.

73 Alf NU8I
Scottsdale AZ DM43an
160m - 10 Gigs

2352. Damaged resistor - what happens?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-15 03:29:04 UTC
From: KC2PIH@gmail.com
Message-ID: <1145071744.749424.325970@j33g2000cwa.googlegroups.com>
Source record: 12554

I have a carbon film resistor that got so hot that it melted itself free of the circuit board. Can the resistance (of the resistor) be permanently increased when this happens or does a resistor just become "open" when that happens? The reason I ask is because I have two resistors in parallel that go:

Black | Brown | Black | Gold

I think the resistance should measure ~1/2 Ohm, but my ohm meter reads 33 Ohms. Does this mean they are damage or did I do something wrong?

Thanks,
Scott, KC2PIH

2353. Re: Damaged resistor - what happens?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-15 04:03:54 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <Lv2dnfhDlZ837d3ZRVn-rg@web-ster.com>
Source record: 12555

KC2PIH@gmail.com wrote:

> I have a carbon film resistor that got so hot that it melted itself
> free of the circuit board. Can the resistance (of the resistor) be
> permanently increased when this happens or does a resistor just become
> "open" when that happens? The reason I ask is because I have two
> resistors in parallel that go:
>
> Black | Brown | Black | Gold
>
> I think the resistance should measure ~1/2 Ohm, but my ohm meter reads
> 33 Ohms. Does this mean they are damage or did I do something wrong?
>
> Thanks,
> Scott, KC2PIH
>
Usually when I do that the color code becomes Black | Black | Black | Black.

Yes, if the resistance element burns off a bit without going completely
away the resistance can rise. In your case I suspect that you're
measuring other resistances in the circuit. Even if you're measuring
the actual resistance, 66 times the design value may as well be open.

You need to replace the resistors, and before you do that you need to
find and clear whatever fault it was that made them char.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

2354. Re: Damaged resistor - what happens?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-15 04:39:26 UTC
From: KC2PIH@gmail.com
Message-ID: <1145075966.230160.295460@v46g2000cwv.googlegroups.com>
Source record: 12556

Actually, I did a little more reading and the resistor is about .39" with a blue case. I think its actually a 1/2w metal-film, flameproof resistor (not a carbon film). Learning is fun!

The resistors being measured are unhooked completely from the circuit - so I know its not something else. Finally - I know what smoked these resistors already ;)

-Scott, KC2PIH.

2355. MILLIONAIRE showers with LADYbug!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-15 04:51:32 UTC
From: Stephan Ducharme <pulsar@weblifeisgreat.com>
Message-ID: <e1pn3g$v9$7@ctb-nnrp2.saix.net>
Source record: 12553

Dear Internet Marketer,
Stephan Ducharme here,

Here is how to attain freedom with your PC!

This short story will make you realize that you are so close to freedom if you have a PC (which is obviously the case). So let me show you how to reach freedom with it:

This morning, there was a Ladybug in the shower floor.

I looked at it and it made me realize that most people are in the same situation as that Ladybug.

She felt secure on the floor ... until I turned on the shower and water started to fall on the floor. Then she got scared and she flew on top of the shampoo bottle. But her wings could have carried her out of the bathroom window. She could have flown wherever she wanted. But like most people, we simply climb to the closest step.

So what happened to her right after really scared me.

When the water started to bounce off my head onto the shampoo bottle, she panicked and to my amazement, she flew back to the floor where she once found security!!!

Don&#65533;t we do that?

So that is the reason why you haven&#65533;t succeeded yet!

The bottle of shampoo simply was not the right destination.

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You have seen lots of offers on how to make money with your PC, but for having bought a lot of programs myself and for being online for years, I know that very few teachers will show you the correct and complete way. There exist 9 simple steps and if I don&#65533;t show you each one, then it may take you years to discover them on your own.

A man called me last week saying he has been online since 1998 and like a lot of people that have been online for many years, he still hasn&#65533;t figured it out.

Once you have read my 9 steps, you will know where the window to your freedom is.

Click here: http://www.freeadguru.com/cgi-bin/i.pl?c=a&i=32181

Caring for your success,

Stephan Ducharme, The FreeAdGuru

www.MoneyHome.com
www.FreeAdGuru.com
www.MyAffiliateFinder.com

www.ContactThem.com

MAF Anti-Spam ID: 20060401062731C3t6ZxN4

2356. Re: Accurate voltage calibration

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-15 10:39:05 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1145097545.334257.20180@e56g2000cwe.googlegroups.com>
Source record: 12557

Alfred Green wrote:
> I have recently aquired a nice 5.1/2 digit DVM, and would like to assess
> the absolute accuracy. Many years ago I had a 'Standard Cell', but that
> got lost in one of my several relocations.
> What is a good alternative these days? I would think that there is a
> semiconductor device that has a known threshold. I am familiar with the
> Wheatstone bridge method to measure voltage without affecting the reference.
> Once I have a good DC reference, getting AC & RMS calibration is fairly
> easy.
> Having a GPS locked time and frequency reference, I am used to being at
> the 1e-10 accuracy level for those, but if I can get to 1e-5 for analog
> voltage I would be very happy.
> Any suggestions gratefully received.
>
> 73 Alf NU8I
> Scottsdale AZ DM43an
> 160m - 10 Gigs

I don't think there is an easy to do what you want, otherwise people
wouldn't spend lots of money getting their standards calibrated at
national standards labs like NPL. Your best bet might be to find
someone who has access to a regularly calibrated DVM and check it
against that, or send it away to get it calibrated.

Standard voltage diodes are available and are used as secondary
standards, but are probably quite expensive and difficult to find.

You should have kept your Weston cell. 8-) BTW, NPL even offers a
calibration service for them, the volt is defined using a Josephson
junction, these days.

73, Leon

Leon

2357. Re: Accurate voltage calibration

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-15 14:52:29 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1145112749.276559.84010@u72g2000cwu.googlegroups.com>
Source record: 12558

I'd suggest you either find a calibrator to connect your meter to, or make something you can use as a transfer standard. Maxim, for example, has some reasonably low cost voltage references with good stability (very few ppm/C). Then calibrate the transfer standard against some known in-calibration volt meter or calibrator, at a known temperature, and use it. I'd think in Scottsdale you could find a calibration service that would do the job for you, or maybe you know someone who has access to an accurate voltmeter. Of course, you should really do it for several ranges. You can maybe calibrate a voltage divider yourself, but it would save a lot of trouble if you could just do it directly. If you don't know anyone who works with more accurate instruements regularly and don't want to pay for a calibration, perhaps you could pay a visit to the EE or physics department in Tempe and use one of their instruments.

I've thought of making a secondary standard myself--I have several of the reference boards from HP3455 DMMs that have single specific things wrong with them, but combining them I have at least one good voltage reference, and one good DC 10:1 divider.

Don't EVER expect to get to voltage measurements with accuracy or even repeatability like you can with frequency--you would have to go to extreme measures to avoid thermal EMFs, for example, and even with some care they can give you part per million errors at low voltages. But surely it's rare that you'd need that sort of resolution, let alone accuracy, no?

Cheers,
Tom

2358. Re: Damaged resistor - what happens?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-15 15:06:31 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1145113591.668726.282030@v46g2000cwv.googlegroups.com>
Source record: 12559

If black, brown, black, gold was the original color code--well, it's a pretty strange code for a resistor, starting with black. But sub-10-ohm resistors should have a gold or silver third band, not black, so maybe it didn't change all that much.

My suspicion is that it _might_ be a flameproof resistor as you say, but it's quite likely that it's a metal-oxide resistor. The flameproof ones tend to act like fuses (to keep not only themselves but things around them from flaming!), but the metal-oxides have a long reputation of being able to not only melt the solder but burn a hole clear through the board before they give up as resistors. Most of the ones we use have a pale blue case that gets somewhat paler if they've run very hot for a while. I've done some experiments with them, dissipating up to ten watts in a two watt resistor for long periods, and noting that yes, they do change value some, but nothing like a metal or carbon film would. They will survive a long time (hours at least) at five watts with only a few percent value change. Yours could indeed have been orange-orange-black-gold before they got so hot that the paint changed color. I'm curious if you found a schematic or something else to tell you what the design value really was.

Cheers,
Tom

2359. Re: freeware for determining mixer products?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-15 21:55:07 UTC
From: Dan Andersson <dan@andersson.co.uk>
Message-ID: <1VudnQ84b-Iq9tzZSa8jmw@karoo.co.uk>
Source record: 12560

Mike Rhoads wrote:

> I have a receiver I am considering modifying for other bands outside of
> what
> it covers. It is a dual conversion superhet design. Before I modify it,
> I'd like to see how the new frequencies would affect the mixer output. Is
> there any decent freeware available that would allow me to see all mixer
> outputs and to determine if any outputs might be a problem?
>
> Thanks,
> Mike

Hi,

Check out the software package from Fritz Dellsperger.
http://fritz.dellsperger.net/

He have a IM.zip program, a graphic intermodulation program. Looks a bit
more advanced than what RF99 gives you.

Cheers

Dan / M0DFI

2360. Re: Source of info on old transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-15 22:05:07 UTC
From: Dan Andersson <dan@andersson.co.uk>
Message-ID: <AkSdnedh8a6N89zZSa8jmw@karoo.co.uk>
Source record: 12561

Ronnie wrote:

> Hi,
>
> Anybody have a library of transistor databooks
> from the early 60's? I'm trying to find technical
> info on the following devices:
>
> Power Transistors:
> Motorola 48S23 in TO3 Steel case
>
> Signal Transistors:
>
> Motorola 48S45 (624 date code or other marking)
> Motorola MA900 (Sort of crossed to NTE 102A or ECG 102)
> Mototola SM1824 (612 date code or other marking)
> (one schematic I have shows this to be
> a
> PNP type)
>
> 2N1192 (Schematic shows as PNP type - one hit shows
> as Germanium)
> Motorola SM2140 (Schematic shows as PNP type)
> GA987 (980425 date code or other marking)
>
> I'm unsure about the manufacturer of the last device. All the other have
> the Motorola circle M logo clearly marked, but it is not on that device.
> The system these devices are in was manufactured in the fall of 1963
> so it is likely that the deisgn is from the 1960 to 1962. I'd like to
> browse
> through a 1960 to 1963 Motorola data book. I'm suspecting all of these
> to be PNP type Germanium devices, but that is just a guess.
>
> Any help appreciated.
>
> Ronnie, N5CSE

Ronnie,

I'm not trying to be an arse, but the "health and safety" part of me just
woke up...

What is the regs say about a homegrown repair of the autopilot or is it
classified as a non-essential unit or non-safety unit?

I assume the insurance companies would have a field day if you get a midair flat tyre or decide to make an accidental or sudden parking...

-- Which might be the initial reason for Mitchell to use selected components from Motorola...

I guess that the best way to get access to this info is to try to speak with the supplier. Even if they been taken over, the airplane industry tend to be paranoid on saving all data possible. Talk with the service engineers, if they are more than 5 of them, you have good odds for one of them being a ham!

Cheers

Dan / M0DFI

2361. Re: Damaged resistor - what happens?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-16 00:00:19 UTC
From: KC2PIH@gmail.com
Message-ID: <1145145619.252888.48530@i40g2000cwc.googlegroups.com>
Source record: 12562

I can't get an original schematic. Yeah I guess the colors markings are ruined. There are bunches of this type of resistor in this circuit. They are all baby-blue, with very bright markings. This resistor was HOT. The blue is almost greyish now. Maybe I'll unsolder the two resistors and see if the values match exactly. If so, I guess that *might* be an indication that they are still good.

Scott, KC2PIH

K7ITM wrote:
> If black, brown, black, gold was the original color code--well, it's a
> pretty strange code for a resistor, starting with black. But
> sub-10-ohm resistors should have a gold or silver third band, not
> black, so maybe it didn't change all that much.
>
> My suspicion is that it _might_ be a flameproof resistor as you say,
> but it's quite likely that it's a metal-oxide resistor. The flameproof
> ones tend to act like fuses (to keep not only themselves but things
> around them from flaming!), but the metal-oxides have a long reputation
> of being able to not only melt the solder but burn a hole clear through
> the board before they give up as resistors. Most of the ones we use
> have a pale blue case that gets somewhat paler if they've run very hot
> for a while. I've done some experiments with them, dissipating up to
> ten watts in a two watt resistor for long periods, and noting that yes,
> they do change value some, but nothing like a metal or carbon film
> would. They will survive a long time (hours at least) at five watts
> with only a few percent value change. Yours could indeed have been
> orange-orange-black-gold before they got so hot that the paint changed
> color. I'm curious if you found a schematic or something else to tell
> you what the design value really was.
>
> Cheers,
> Tom

2362. Re: Damaged resistor - what happens?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-16 02:32:54 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1145154774.637832.183560@i39g2000cwa.googlegroups.com>
Source record: 12563

Yeah, the "bunches of" is another indication that they are metal-oxide parts. It would be pretty unusual to have bunches of flameproof parts in a circuit, I think. The metal-oxides are good parts, but you do have to be aware that they can survive being really hot better than a lot of things around them can.

Cheers,
Tom

2363. Re: Radio-Electronics Sept 89

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-16 08:21:13 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1145175673.402904.149790@u72g2000cwu.googlegroups.com>
Source record: 12564

...could I be so bold as to reqeust also a copy?
thanks a priori
Saandy 4Z5KS
jack wrote:
> send me an email and I will send a PDF of the document -- it's 2.4 MB
> <pdrunen@aol.com> wrote in message
> news:1144344552.349256.25410@e56g2000cwe.googlegroups.com...
> > Hi All,
> >
> > I am looking for a spectrum monitor article, part 1 which appears in RE
> > Sept 89.
> > If you have the issues, would like to get a copy of this article,
> > either scanned or otherwise.
> >
> > de KJ4UO
> >

2364. Re: IC756/TL922 keying - Any Suggestion?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-16 17:43:58 UTC
From: Alex <mail.nospy@libero.it>
Message-ID: <ynv0g.85629$A83.2019226@twister1.libero.it>
Source record: 12565

"Highland Ham" wrote:

> Would a high voltage switching transistor with/without an opto-coupler
> circuit not be more reliable ?
> The opto-coupler circuit can be tailored for the transceiver's output
> and a cheap High Voltage transistor could excite the amplifier.
> Just a thought.
>
> Frank GM0CSZ / KN6WH

Many thanks Frank i'm searching for this kind of circuit, have you a printable (.jpg, .bmp, .gif, .tif etc.)) version with the complete parts list?

best 73 de Alex IK8XIR / N6XIR

2365. Re: IC756/TL922 keying - Any Suggestion?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-16 17:53:23 UTC
From: Alex <mail.nospy@libero.it>
Message-ID: <nwv0g.85043$PR2.1356003@twister2.libero.it>
Source record: 12566

"on4ahf" wrote

> Use an extern relais , otherwise you burn the very little tx relais (my
> friend dit it with the tl922)
> because the key voltage is 120v
> suc6
>

Thank you for your help, I know that (about the very little reed relay inside the rtx), for this reason i'm searching for a electronic circuit, with an switching absorption "greater" less than 500mA @ 16Vdc (as declared by Icom). A transistor feat. circuit i believe will be fine.

73 de Alex IK8XIR / N6XIR

2366. FA:VIBROPLEX BUG,amp parts,tubes,+stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-16 18:12:01 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <RNv0g.13146$az4.12165@bgtnsc04-news.ops.worldnet.att.net>
Source record: 12567

Vibroplex 'Presentation' in original box, more amp parts, tubes, fixed vac caps, + other stuff too; see at

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

tnx for looking: more tubes and 'stuff' coming--check back often:
heytubeguy

2367. Re: MILLIONAIRE showers with LADYbug!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-16 19:15:05 UTC
From: hhc314@yahoo.com
Message-ID: <1145214905.014345.172270@i39g2000cwa.googlegroups.com>
Source record: 12568

Stephan, evidently you haven't yet "figured it out" yet either.

Cut the spam or I'll file a complaint to your ISP.

Harry C.

2368. Re: Does cured Epoxy absorb microwaves?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-17 00:28:18 UTC
From: bg998@FreeNet.Carleton.CA
Message-ID: <e1unf2$k4i$1@theodyn.ncf.ca>
Source record: 12569

"Eike Lantzsch, ZP6CGE" (eikelan@gmx.net) writes:
> I know that microwaves are sometimes used to cure epoxy but does
> cured epoxy absorb microwaves? More practically put: can I use
> epoxy to glue some parts of a double quad for 2.4GHz?
>

Not sure if it is relevant to modern materials, but when I worked for the National Research Council (Canada) many years ago, I used to make dummy loads by mixing a powdered ferrite material with the then-available epoxy cement and pouring a tapered slab of this mix into the waveguide. (These were used as the flat load at liquid nitrogen temperatures in a Dicke radiometer at S and X bands.)

... Martin VE3OAT

2369. Re: Return Loss Bridge Accuracy Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-17 00:39:19 UTC
From: Dan Andersson <dan@andersson.co.uk>
Message-ID: <DgednfMEcKopft_ZSa8jmw@karoo.co.uk>
Source record: 12570

skavanagh72nospam@yahoo.ca wrote:

> I have just built an HF return loss bridge according to the info in
> "Solid State design for the Radio Amateur". While it works ok, I was
> hoping for a bit better performance. Clearly the "balun" doesn't have
> enough inductance to operate well below 10 MHz or so (10 turns bifilar
> #30 AWG enamelled wire on Amidon T23-43, as specified in the book -
> twisted pair, which isn't specified one way or the other in the book).
> This can probably be largely fixed by using a larger ferrite core
> (T37-43's available in junkbox). I am interested primarily in the
> 1.8-50 MHz range, though I wouldn't complain if it worked on 2m too.
>
> But even at 30 MHz a reasonably good microwave 50 ohm load gives only
> about 28 dB apparent return loss...Not bad, but I might have expected a
> bit more.
>
> And an open and short give about 2 dB different signal levels at 30
> MHz. That is with big pads (>20 dB attenuation) on both the signal
> generator and detector. The detector is an HF receiver with a step
> attenuator used to maintain a constant S-meter reading.
>
> The circuit is built on a small PC board using construction techniques
> typical for the UHF or low microwave range (except that the test port
> connector is an SO-239), and is enclosed in a shielded box. Each of
> the three 50 ohm resistors is made of two 100 ohm 1206 chip resistors
> in parallel and measures between 50.0 and 50.3 ohms at DC.
>
> Has anyone with experience with this circuit any suggestions for how to
> tweak it for best performance ? What accuracy level have you achieved
> ? Do you know where I might find an error analysis for this circuit ?
> Or if I am to think about errors myself, does anyone know how to model
> the balun in SPICE ?
>
> 73,
> Steve VE3SMA

Steve,

I assume you don't intend to run to much power thru' your bridge.

One of the best and "homebrew friendly" ways is to wind a ferrite based
directional coupler. I assume you intend to work with the usual 50 Ohms...

I used a small rf ferrite trafo from Coilcraft. It's a SMD sized two hole
ferrite and by ripping out the original transformer wire and replacing it
with the wiring of a DC, I got a nice DC for up to 1000 MHz.

The range of toroidal couplers can span two decades of frequency and 2MHz to 1200 MHz is not impossible.

I normally wind the DC with a 1:3 to 1:5 N1/N2 ratio. That gives me about 0.5 dB insertion loss and about 10 dB of coupled port loss.

As long as the copper wire only touches the ferrite on the corners (as little as possible) the linearity is surprisingly good and I can expect a return loss of 25 to 35 dB - wich is enough for most aerial measurements. I'm using these DC's for measurements between 1 and 500 MHz with good accuracy.

I suggest you look for :

RF Directional Couplers by Michael G. Ellis, Ph.D.

Cheers

Dan / M0DFI

2370. SolderSmoke#19: Expreimenters, FET amps, soundcards, software, Beginner projects...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-17 06:19:17 UTC
From: bill.meara@gmail.com
Message-ID: <1145254757.129851.41060@j33g2000cwa.googlegroups.com>
Source record: 12571
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.basics

SolderSmoke!
A SHOW FOR ELECTRONICS HOMEBREWERS!

http://www.ourmedia.org/node/206607

Topics discussed in SolderSmoke #19:

-- Experimenter or Tinkerer? (From Bacon Bits)
-- Bill's MTP3055V FET Linear Amplifier
-- Software and Soundcards in ham radio
-- Hack-A-Day's junkbox PIC programmer
-- Mike's new shack
-- Beginner project: Michigan Mighty Mite
-- April Fools radio articles
-- MAILBAG: KB1TOM, G4GOY, G3RJV

Listen at: http://www.ourmedia.org/node/206607

Background:
Tired of listening to Led Zepplin or NPR on your I-Pod? Wouldn't you like to be able to carry with you the kinds of ham radio conversations that you listen to while in your radio shack?
Mike, KL7R, in Juneau, Alaska, and Bill, M0HBR, in London, England meet regularly on the ECHOLINK system to discuss their homebrew radio projects. We are making them available as PODCASTS.

You can subscribe to the program, have them downloaded to your MP-3 player, and listen to them at your convenience. To subscribe, just cut and paste this URL into your I-poder (or similar) software. (There have been some problems with this subscription URL.)

http://www.ourmedia.org/mediarss/user/36170

If you don't have an MP3 player you can just go to the site below and listen to the latest program (and earlier editions) using the audio software on your computer.

http://www.ourmedia.org/node/206607

Here's the homepage for our show. All our programs are available here. There is also a blog and links

to some of the sites and documents we've been discussing: http://www.ourmedia.org/user/36170

We hope you enjoy the program. Please send us feedback.

73 from London
Bill M0HBR N2CQR CU2JL
http://www.qsl.net/n2cqr

2371. Re: Does cured Epoxy absorb microwaves?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-17 11:28:00 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1145273280.095646.72470@t31g2000cwb.googlegroups.com>
Source record: 12572

....yes, you can, provided you use Araldite slow setting epoxy (the
blue kind).
don't forget that the FR4 board is made of it!
while working at Tadiran, years ago, we found out that the slower the
epoxy cure the better its RF characteristics.
we never found out why- actually we never tried hard enough- but the
fact remains.
on higher frequencies you have to be careful, but Bluetooth thrives on
FR4 (at 2.4GHz)!.
Saandy 4Z5KS

2372. Re: Does cured Epoxy absorb microwaves?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-17 11:28:03 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1145273283.932232.206430@z34g2000cwc.googlegroups.com>
Source record: 12573

....yes, you can, provided you use Araldite slow setting epoxy (the
blue kind).
don't forget that the FR4 board is made of it!
while working at Tadiran, years ago, we found out that the slower the
epoxy cure the better its RF characteristics.
we never found out why- actually we never tried hard enough- but the
fact remains.
on higher frequencies you have to be careful, but Bluetooth thrives on
FR4 (at 2.4GHz)!.
Saandy 4Z5KS

2373. The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-17 21:13:18 UTC
From: fmmck@aol.com
Message-ID: <fmmck-1704061713180001@ac801112.ipt.aol.com>
Source record: 12574
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Most everyone has a screwdriver or two laying around the house, but not everyone has a minimum collection stored in a tool box. If you know a young person graduating from high school, a single relative, or even yourself, a tool box with a minimum complement of tools may be the perfect gift.

Based on my own experience, the BASIC TOOL BOX should include:

A plastic or metal box such as the 13" plastic box from Walmart or the 14" plastic box from Lowes. The box should have a secure latch that won't come open when picked up.

#1 Philips screwdriver

#2 Philips screwdriver

1/8" Flat blade screwdriver

1/4" Flat blade screwdriver

Standard pair of slip-joint pliers with insulated handle

Diagonal cutters with insulated handle

Long nose pliers with side cutter and insulated handle

Small claw hammer such as Sears 3805 - 7 oz.

Depending on your knowledge of the individual's needs and the size of the box, additional items might include:

Full-size hammer

Crowbar or pry-lever

Flashlight

Tire pressure gauge(s)

Pocket knife & sharpening stone

Soldering iron & solder & soldering braid

Digital multimeter

Set of nut drivers

Set of Allen wrenches

Set of Torx drivers

You get the idea!

73, Fred, K4DII

2374. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-17 21:32:10 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <M_OdnQ7LktjFlNnZRVnyhw@pipex.net>
Source record: 12575
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

> Based on my own experience, the BASIC TOOL BOX should include:
>
> A plastic or metal box such as the 13ï¿½ plastic box from Walmart or the 14ï¿½
> plastic box from Lowes. The box should have a secure latch that wonï¿½t
> come open when picked up.
>
> #1 Philips screwdriver
>
> #2 Philips screwdriver
>
> 1/8ï¿½ Flat blade screwdriver
>
> 1/4ï¿½ Flat blade screwdriver
==========
What about Posidrive screwdrivers ? These are similar to Philips type of
screwdrivers but have additional 'notches' (if that is the correct word)
for better grip . The relevant screw heads are accordingly.

Frank , GM0CSZ / KN6WH

PS Most screws used in the UK are now of the Posidrive type.

2375. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-17 21:41:02 UTC
From: jakdedert <jakdedert@bellsouth.net>
Message-ID: <XTT0g.5298$4O2.3393@bignews7.bellsouth.net>
Source record: 12576
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Fred McKenzie wrote:
> Most everyone has a screwdriver or two laying around the house, but not
> everyone has a minimum collection stored in a tool box. If you know a
> young person graduating from high school, a single relative, or even
> yourself, a tool box with a minimum complement of tools may be the perfect
> gift.
>
> Based on my own experience, the BASIC TOOL BOX should include:
>
> A plastic or metal box such as the 13ï¿½ plastic box from Walmart or the 14ï¿½
> plastic box from Lowes. The box should have a secure latch that wonï¿½t
> come open when picked up.
>
> #1 Philips screwdriver
>
> #2 Philips screwdriver
>
> 1/8ï¿½ Flat blade screwdriver
>
> 1/4ï¿½ Flat blade screwdriver
>
> Standard pair of slip-joint pliers with insulated handle
>
> Diagonal cutters with insulated handle
>
> Long nose pliers with side cutter and insulated handle
>
> Small claw hammer such as Sears 3805 - 7 oz.
>
> Depending on your knowledge of the individualï¿½s needs and the size of the
> box, additional items might include:
>
> Full-size hammer
>
> Crowbar or pry-lever
>
> Flashlight
>
> Tire pressure gauge(s)
>
> Pocket knife & sharpening stone
>
> Soldering iron & solder & soldering braid

>
> Digital multimeter
>
> Set of nut drivers
>
> Set of Allen wrenches
>
> Set of Torx drivers
>
> You get the idea!
>
> 73, Fred, K4DII
>
Dunno why it didn't occur to me...thankfully it 'did' occur to my wife:
Bought almost the exact (above) setup for my prospective son-in-law
for Christmas. He's mechanically dis-inclined. We're gonna fix that.
Can't have a s-in-l who can't fix stuff....

jak

2376. Re: Accurate voltage calibration

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 00:20:40 UTC
From: Alfred Green <nu8i@cox.net>
Message-ID: <whW0g.25320$zf6.7318@fed1read08>
Source record: 12577

Leon wrote:
> Alfred Green wrote:
>
>>I have recently aquired a nice 5.1/2 digit DVM, and would like to assess
>>the absolute accuracy. Many years ago I had a 'Standard Cell', but that
>>got lost in one of my several relocations.

>
> I don't think there is an easy to do what you want, otherwise people
> wouldn't spend lots of money getting their standards calibrated at
> national standards labs like NPL. Your best bet might be to find
> someone who has access to a regularly calibrated DVM and check it
> against that, or send it away to get it calibrated.
>

Well, maybe askimg for 1e-5 was very optimistic, but I would like to see
what can be done in a home environment.
For ham use I couldn't justify getting it professionally calibrated, but
I'll check with the test-equipment guy at work to see if we have
something recently done that I can do a comparison from.

> Standard voltage diodes are available and are used as secondary
> standards, but are probably quite expensive and difficult to find.
>

That was kind of what I was looking for. I really am prepared to pay a
few bob for something that I can reliably use as a reference in my lab.

> You should have kept your Weston cell. 8-) BTW, NPL even offers a
> calibration service for them, the volt is defined using a Josephson
> junction, these days.
>

Oh yep. I think it was amongst the stuff that got lost in the move from
UK to the States back in '85. They do show up on Ebay occaisionally, but
I'd like to think there was something newer that could do the job.
Interesting to hear about the current Volt definition: I'll do some
searching for some more info on that.

Thanks for your comments,

73 Alf NU8I (aka G4ABB, amongst others)

2377. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 00:22:04 UTC
From: "Jerry G." <jerryg50@hotmail.com>
Message-ID: <1145319724.492259.296070@i40g2000cwc.googlegroups.com>
Source record: 12578
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

And... You plan to work on SMD circuit boards with this!!!

Jerry G.
======

2378. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 00:22:21 UTC
From: "Jerry G." <jerryg50@hotmail.com>
Message-ID: <1145319741.726441.17390@i39g2000cwa.googlegroups.com>
Source record: 12579
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

And... You plan to work on SMD circuit boards with this!!!

Jerry G.
======

2379. Re: Accurate voltage calibration

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 00:53:05 UTC
From: Alfred Green <nu8i@cox.net>
Message-ID: <ULW0g.25322$zf6.12618@fed1read08>
Source record: 12580

K7ITM wrote:
> I'd suggest you either find a calibrator to connect your meter to, or
> make something you can use as a transfer standard. Maxim, for example,
> has some reasonably low cost voltage references with good stability
> (very few ppm/C).

Yes, that's pretty much what I'm looking for. The only problem with
Maxim is that they have SO MUCH good stuff it makes it hard for me to
find what I'm looking for. I'll try a more directed search.

> Then calibrate the transfer standard against some
> known in-calibration volt meter or calibrator, at a known temperature,
> and use it.

Yes, I can do that. I already have a temperature controlled environment
for my frequency sources.

> I'd think in Scottsdale you could find a calibration
> service that would do the job for you, or maybe you know someone who
> has access to an accurate voltmeter. Of course, you should really do
> it for several ranges. You can maybe calibrate a voltage divider
> yourself, but it would save a lot of trouble if you could just do it
> directly. If you don't know anyone who works with more accurate
> instruements regularly and don't want to pay for a calibration, perhaps
> you could pay a visit to the EE or physics department in Tempe and use
> one of their instruments.
>

All good points. I have friends at ASU that could help with this, but at
the end of the day it still has to come home with me. Back to the
transfer standard issue.

> I've thought of making a secondary standard myself--I have several of
> the reference boards from HP3455 DMMs that have single specific things
> wrong with them, but combining them I have at least one good voltage
> reference, and one good DC 10:1 divider.
>

Hmm. The unit in question is a HP3478A. It has a 'CAL' button, but I
haven't hunted for a manual yet so I dont know what it does. Any ideas?

> Don't EVER expect to get to voltage measurements with accuracy or even
> repeatability like you can with frequency

Oh no, I wasn't expecting that. Even my comment about 1e-5 was really
tongue-in-cheek. However, I really can't point to anything in my shack
that can even approach 1e-2 in any repeatable way as far as voltage or

current measurement goes. I just feel that in this day and age I should be able to do better that that.

73 Alf NU8I

2380. Re: Damaged resistor - what happens?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 02:19:31 UTC
From: "g. beat"
Message-ID: <gJSdnffpUJEo0dnZRVn-uw@comcast.com>
Source record: 12581

<KC2PIH@gmail.com> wrote in message
news:1145071744.749424.325970@j33g2000cwa.googlegroups.com...
>I have a carbon film resistor that got so hot that it melted itself
> free of the circuit board. Can the resistance (of the resistor) be
> permanently increased when this happens or does a resistor just become
> "open" when that happens? The reason I ask is because I have two
> resistors in parallel that go:
>
> Black | Brown | Black | Gold
>
> I think the resistance should measure ~1/2 Ohm, but my ohm meter reads
> 33 Ohms. Does this mean they are damage or did I do something wrong?
>
> Thanks,
> Scott, KC2PIH
>

That value is ONE OHM +/- 5%
http://www.dannyg.com/examples/res2/resistor.htm

g. beat

2381. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 03:18:19 UTC
From: fmmck@aol.com
Message-ID: <fmmck-1704062318190001@acac1c7d.ipt.aol.com>
Source record: 12582
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

In article <M_OdnQ7LktjFlNnZRVnyhw@pipex.net>, Highland Ham
<abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:

> What about Posidrive screwdrivers ? These are similar to Philips type of
> screwdrivers but have additional 'notches' (if that is the correct word)
> for better grip . The relevant screw heads are accordingly.

Frank-

I've heard of Posidrive. I think they are used in an old Hewlett Packard
counter I have. However, the tool dealers I asked had never heard of
them. I ended up using a common Phillips driver for my counter.

Certainly Posidrive would be a better choice where they are more commonly used.

Fred

2382. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 03:46:57 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <44446097.AFA74AB7@earthlink.net>
Source record: 12583
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

"Jerry G." wrote:
>
> And... You plan to work on SMD circuit boards with this!!!
>
> Jerry G.
> ======

I see that you still have reading comprehension problems, Jerry.
Anyway, no one in their right mind would try to cram a good SMD rework
station into any toobox. There is no way I would let anyone shove a
stereo microscope into a toolbox.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2383. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 05:04:42 UTC
From: Mr Fed UP <mrfedup@bellsouth.net>
Message-ID: <bp_0g.31358$Jk3.67@bignews5.bellsouth.net>
Source record: 12584
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Heh heh dont forget the asprin and $50 for the headache and one
tool you'll always have to go get for each job. And a 6" or 8"
knuckle buistin adjustable wrench. LOL

Good luck

K4TWO Gary

"Fred McKenzie" <fmmck@aol.com> wrote in message
news:fmmck-1704061713180001@ac801112.ipt.aol.com...
>
> Most everyone has a screwdriver or two laying around the house, but not
> everyone has a minimum collection stored in a tool box. If you know a
> young person graduating from high school, a single relative, or even
> yourself, a tool box with a minimum complement of tools may be the perfect
> gift.
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> Based on my own experience, the BASIC TOOL BOX should include:
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> A plastic or metal box such as the 13" plastic box from Walmart or the 14"
> plastic box from Lowes. The box should have a secure latch that won"t
> come open when picked up.
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> #2 Philips screwdriver
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> 1/8" Flat blade screwdriver
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> 1/4" Flat blade screwdriver
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> Standard pair of slip-joint pliers with insulated handle
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> Diagonal cutters with insulated handle
>
> Long nose pliers with side cutter and insulated handle
>
> Small claw hammer such as Sears 3805 - 7 oz.
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> Depending on your knowledge of the individual"s needs and the size of the
> box, additional items might include:
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> Full-size hammer

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> Crowbar or pry-lever
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> Flashlight
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> Tire pressure gauge(s)
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> Pocket knife & sharpening stone
>
> Soldering iron & solder & soldering braid
>
> Digital multimeter
>
> Set of nut drivers
>
> Set of Allen wrenches
>
> Set of Torx drivers
>
> You get the idea!
>
> 73, Fred, K4DII

2384. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 05:12:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1248ta74cr2pm3e@corp.supernews.com>
Source record: 12585
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Fred McKenzie wrote:
> I've heard of Posidrive. I think they are used in an old Hewlett Packard
> counter I have. However, the tool dealers I asked had never heard of
> them. I ended up using a common Phillips driver for my counter.
>
> Certainly Posidrive would be a better choice where they are more commonly used.

I'd consider looking for some other tool dealers to do business with. Pozidriv (a registered trademark of Phillips Screw Co.) screws and drivers are very common, sold by just about every tool company from Snap-on through Stanley to Sears.

Tektronix used Pozidriv screws exclusively for many years, until they converted over to Torx. A standard Phillips bit fits poorly in a Pozidriv screw, making it really easy to chew up the screw with this combination. Any decent toolbox should include some Pozidriv drivers or bits.

Roy Lewallen, W7EL

2385. Re: Accurate voltage calibration

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 05:21:20 UTC
From: clifto <clifto@gmail.com>
Message-ID: <hj9eh3-841.ln1@remote.clifto.com>
Source record: 12586

Alfred Green wrote:
> That was kind of what I was looking for. I really am prepared to pay a
> few bob for something that I can reliably use as a reference in my lab.

I'm no expert, but I wonder what you might be able to do with a
temperature-compensated design around a LMV431BI.

--
All relevant people are pertinent.
All rude people are impertinent.
Therefore, no rude people are relevant.
-- Solomon W. Golomb

2386. Buildig block IF amplifiers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 05:25:17 UTC
From: clifto <clifto@gmail.com>
Message-ID: <tq9eh3-841.ln1@remote.clifto.com>
Source record: 12587

Has anyone played with any of the new high-bandwidth op amps in IF amplifier circuits? I've got an idea I want to experiment with, and not a whole lot of analog design ability (though I do better with building blocks than with compensating discretes), and now that GBw products are cheap above 1 MHz it might look practical to pursue. I have no standards for comparison since I know nothing about parameters like noise figures and the like in standard discrete circuits.

--
All relevant people are pertinent.
All rude people are impertinent.
Therefore, no rude people are relevant.
-- Solomon W. Golomb

2387. Fading signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 05:40:39 UTC
From: clifto <clifto@gmail.com>
Message-ID: <nnaeh3-r41.ln1@remote.clifto.com>
Source record: 12588

Has anyone gotten a good oscilloscope look at the type of signals
that distort by cancellation of part of the carrier, i.e. the
signals that synchronous detectors detect much better than other
types? I'm wondering about the characteristics that make these
signals so hard to understand when they "fade" into that condition.

--
All relevant people are pertinent.
All rude people are impertinent.
Therefore, no rude people are relevant.
-- Solomon W. Golomb

2388. Finding short duration interference?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 10:40:12 UTC
From: mike <spamme0@netscape.net>
Message-ID: <1249ghuscr3fneb@corp.supernews.com>
Source record: 12589

What's a good method for finding short duration interference?

My 440 repeater is plagued by an interfering signal that lasts a small
fraction of a second, just long enough to bring up the repeater,
and repeats randomly every 20 seconds or so.
Comes and goes...Seems to be dependent on outside temperature.
Sometimes sounds like there's hum on the signal.
First thought was that it was one of those oscillating Winegard
RV TV antennas, but it doesn't seem to drift around like they
typically do.

I hooked the repeater antenna up to the spectrum analyzer,
but the duration is too short to get thru the filters at
the bandwidth required to get any sensitivity.

I can hear it on the mobile.
I've driven around the neighborhood, but the duration is so short
that I've not been able to track it down. Strength seems to peak
at different places blocks apart...but it's hard to tell.

I have some experience with a double duckey and started designing
a doppler system, but it occurs that the short duration signal
will be completely washed out by the Switched Cap Filter. Don't see
how I'm gonna get the low rep-rate signal past the noise. Filter
types that I know about ain't gonna work.

Ideas?
Thanks, mike

2389. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 13:32:29 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4444EA45.304C5072@earthlink.net>
Source record: 12591
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Mr Fed UP wrote:
>
> Heh heh dont forget the asprin and $50 for the headache and one
> tool you'll always have to go get for each job. And a 6" or 8"
> knuckle buistin adjustable wrench. LOL

Don't forget a 4" pipe wrench for those tight spots! It has been a
real life saver to remove broken studs and broken pieces of bolts. I
have one made by Rigid.

BTW, you won't bust your knuckles if you buy a real wrench. 8" is too
short to get a good grip on things. I have a 12" and a 14" "New Britain"
adjustable, along with a 4" Xcelite in my electronics tools.

The only tools I usually have to buy these days are new ones to
replace what walks away. :(

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2390. shielded multiway connector

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 13:39:43 UTC
From: John Wilkinson <john.wilkinson@philips.com>
Message-ID: <xg83ptcufrqo.1cant45uidi82$.dlg@40tude.net>
Source record: 12592

Hi,
I am using an LMS485 chips to send a differential 1MHz clock to multiple PLL's via twisted screened cable. Does anyone know of a screened small 2 way connector I could use on my PCB for this?

Thanks,
John.

2391. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 13:56:02 UTC
From: Silfax <Silfax@localhost.localdomain>
Message-ID: <slrne49rvi.j80.Silfax@minimac.linux1.lan>
Source record: 12593
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

On 2006-04-17, Fred McKenzie <fmmck@aol.com> wrote:
>
> A plastic or metal box such as the 13ï¿½ plastic box from Walmart or the 14ï¿½
> plastic box from Lowes. The box should have a secure latch that wonï¿½t
> come open when picked up.
>
<snip a bunch of good stuff>

6" and 12" adjustable wench
12' tape measure (25' would be better)
mechanical pencil, extra leads and a small notepad

2392. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 13:58:06 UTC
From: Silfax <Silfax@localhost.localdomain>
Message-ID: <slrne49s3e.j80.Silfax@minimac.linux1.lan>
Source record: 12594
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

On 2006-04-18, Silfax <Silfax@localhost.localdomain> wrote:
>
> 6" and 12" adjustable wench

oops I meant wrench, although a flexible wench might not be a bad idea
either (but she should be bigger than 12 inches....)

2393. Re: Buildig block IF amplifiers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 14:45:08 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1145371508.131596.99210@i40g2000cwc.googlegroups.com>
Source record: 12595

clifto wrote:
> Has anyone played with any of the new high-bandwidth op amps in IF
> amplifier circuits? I've got an idea I want to experiment with, and
> not a whole lot of analog design ability (though I do better with
> building blocks than with compensating discretes), and now that
> GBw products are cheap above 1 MHz it might look practical to
> pursue. I have no standards for comparison since I know nothing
> about parameters like noise figures and the like in standard
> discrete circuits.

GBw products above 1MHz have been around for a long time in op amps, if you don't mind dropping the bucks then you can even get GHz numbers. There's very little stopping anyone from using even the old high-bandwidth op amps in IF's. But there's not much need to.

In IF strips for FM receivers, most op-amps do really bad things when they hit their limiting amplitudes. Google for "phase reversal" with "op amp".

"Straight" op-amps are not easily amenable to AGC action, but I've done some playing around with for example LED/CdS optocouplers as very linear controllable-loss blocks for AGC action and they work fine up through the low MHz. Above a few MHz I think capacitance across the CdS photocell gives too much leakage in typical receiver use, although if you only want a limited amount of AGC I think you're good to go.

It is MOST interesting to use chips like AD603's in IF's if you want AGC action. Many many app notes and construction articles on the web will show you examples of use.

Are you perhaps really talking about RC active filters to replace crystal or mechanical IF filters? I have always been VERY PESSIMISTIC about this, usually even few percent tolerance capacitors (not cheap) cause your passband/ultimate rejection to be way way worse than what you expect. Different filter topologies have different tradeoffs, but RC active filters when you want the Q to be >100 and want even mediocre ultimate rejection are economically unfeasible in every analysis I've done.

Tim.

2394. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 15:48:15 UTC
From: jakdedert <jakdedert@bellsouth.net>
Message-ID: <dP71g.2683$oW1.1531@bignews1.bellsouth.net>
Source record: 12596
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Michael A. Terrell wrote:
> Mr Fed UP wrote:
>> Heh heh dont forget the asprin and $50 for the headache and one
>> tool you'll always have to go get for each job. And a 6" or 8"
>> knuckle buistin adjustable wrench. LOL
>
>
> Don't forget a 4" pipe wrench for those tight spots! It has been a
> real life saver to remove broken studs and broken pieces of bolts. I
> have one made by Rigid.
>
> BTW, you won't bust your knuckles if you buy a real wrench. 8" is too
> short to get a good grip on things. I have a 12" and a 14" "New Britain"
> adjustable, along with a 4" Xcelite in my electronics tools.
>
A common problem is to turn the adjustable wrench around the *wrong
way*! I've had people argue that there is no wrong orientation for the
common 'C' (Crescent) wrench, but there most certainly is. Do it wrong
and you'll be fine 75% of the time; but that one time when you need it
to really bite--and you do it wrong--*you* are the one who gets bitten.

> The only tools I usually have to buy these days are new ones to
> replace what walks away. :(

Boy Howdy! I recently moved my office/shop and salvaged the buildings
on the property at the same time. I'm still trying to find all my tools....

jak
>

2395. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 15:50:07 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <124a2mmbs6uflca@corp.supernews.com>
Source record: 12597
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Roy,

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:1248ta74cr2pm3e@corp.supernews.com...
> Tektronix used Pozidriv screws exclusively for many years, until they
> converted over to Torx. A standard Phillips bit fits poorly in a Pozidriv
> screw, making it really easy to chew up the screw with this combination.

How well does it work the other way around -- using Pozidriv screwdrivers on
"regular old" Phillips-head screws?

2396. Re: Buildig block IF amplifiers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 15:57:44 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <124a34vfq7l3ie3@corp.supernews.com>
Source record: 12498

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
news:1145371508.131596.99210@i40g2000cwc.googlegroups.com...
> Are you perhaps really talking about RC active filters to replace
> crystal or mechanical IF filters? I have always been VERY PESSIMISTIC
> about this, usually even few percent tolerance capacitors (not cheap)
> cause your passband/ultimate rejection to be way way worse than what
> you expect.

I'm not as pessimistic as you, but I share your disappointment to some extent.
However, if a filter doesn't need to be in "active duty" 100% of the time,
having it self-calibrate seems potentially viable, at least for lower order
filters.

> Different filter topologies have different tradeoffs, but
> RC active filters when you want the Q to be >100 and want even mediocre
> ultimate rejection are economically unfeasible in every analysis I've
> done.

I'm usually after active filters for the sake of space, and consider Q>100
difficult to achieve at HF with any physically small design.

I do enjoy the occasional posts from people whose SPICE simulations show
ultimate rejections in the couple hundred dB ballpark. :-)

---Joel

2397. Re: Fading signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 16:41:43 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1145378503.724413.301340@i39g2000cwa.googlegroups.com>
Source record: 12499

clifto wrote:
> Has anyone gotten a good oscilloscope look at the type of signals
> that distort by cancellation of part of the carrier, i.e. the
> signals that synchronous detectors detect much better than other
> types? I'm wondering about the characteristics that make these
> signals so hard to understand when they "fade" into that condition.

If you are talking about AM reception (and I think you are): I highly recommend that you have some fun with an ISB (independent sideband) receiver, with USB and LSB going into different ears. It's fun. Not sure exactly what you learn :-).

I would also recommend that you look at spectra +/- a few kHz rather than just waveforms. You can clearly see selective fading rolling up and down under some conditions and hear the resulting distortions.

I too am generally interested in homebrew synchronous AM detectors. I am not convinced that they are better than diversity antennas or ISB listening (of course not everybody has diversity antennas or ISB receivers.)

Tim.

2398. FA:MOUSER 24VCT 1 A + OTHER STUFF

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 17:12:56 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <s691g.40825$1q4.17993@bgtnsc05-news.ops.worldnet.att.net>
Source record: 12500

NOS MOUSER 24VCT AT 1AMP XFMRS LESS THAN 9 HRS LEFT: + more tubes, fixed vac caps,+ vac relays and other stuff; see at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx , heytubeguy

2399. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 17:22:58 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <44452048.69134AF4@earthlink.net>
Source record: 12501
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

jakdedert wrote:
>
> Michael A. Terrell wrote:
> > Mr Fed UP wrote:
> >> Heh heh dont forget the asprin and $50 for the headache and one
> >> tool you'll always have to go get for each job. And a 6" or 8"
> >> knuckle buistin adjustable wrench. LOL
> >
> >
> > Don't forget a 4" pipe wrench for those tight spots! It has been a
> > real life saver to remove broken studs and broken pieces of bolts. I
> > have one made by Rigid.
> >
> > BTW, you won't bust your knuckles if you buy a real wrench. 8" is too
> > short to get a good grip on things. I have a 12" and a 14" "New Britain"
> > adjustable, along with a 4" Xcelite in my electronics tools.
> >
> A common problem is to turn the adjustable wrench around the *wrong
> way*! I've had people argue that there is no wrong orientation for the
> common 'C' (Crescent) wrench, but there most certainly is. Do it wrong
> and you'll be fine 75% of the time; but that one time when you need it
> to really bite--and you do it wrong--*you* are the one who gets bitten.

Yes, most people seem to use it backwards where the stress is against
the front of the movable jaw, rather than the back where its supposed to
be. It doesn't matter if the item is fairly loose, but when you really
need the torque, it needs to be turned the right way. Maybe they need
to cast notches for your fingers to show people the right way to use it!
;-)

> > The only tools I usually have to buy these days are new ones to
> > replace what walks away. :(
>
> Boy Howdy! I recently moved my office/shop and salvaged the buildings
> on the property at the same time. I'm still trying to find all my tools....
>
> jak

I'm trying to but my shop back together. I haven't really worked in
the shop since the middle of 2001, right before I got sick and lost my
job. Now, its been five years and two years of hurricanes that made the
mess even worse. Some squirrels nested in the building and chewed the
cords off of everything in sight. I had to put rat poison in there to
kill them all. I'm missing two cordless drills, two surface grinders

and enough hand tools to fill a couple large toolboxes. Since I no longer do any work away from home I have started hanging what is left on pegboard over the different workbenches.

--
Service to my country? Been there, Done that, and I've got my DD214 to prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2400. Re: Buildig block IF amplifiers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 17:26:43 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4445212A.7878413@earthlink.net>
Source record: 12502

Tim Shoppa wrote:
>
> clifto wrote:
> > Has anyone played with any of the new high-bandwidth op amps in IF
> > amplifier circuits? I've got an idea I want to experiment with, and
> > not a whole lot of analog design ability (though I do better with
> > building blocks than with compensating discretes), and now that
> > GBw products are cheap above 1 MHz it might look practical to
> > pursue. I have no standards for comparison since I know nothing
> > about parameters like noise figures and the like in standard
> > discrete circuits.
>
> GBw products above 1MHz have been around for a long time in op amps, if
> you don't mind dropping the bucks then you can even get GHz numbers.
> There's very little stopping anyone from using even the old
> high-bandwidth op amps in IF's. But there's not much need to.
>
> In IF strips for FM receivers, most op-amps do really bad things when
> they hit their limiting amplitudes. Google for "phase reversal" with
> "op amp".
>
> "Straight" op-amps are not easily amenable to AGC action, but I've done
> some playing around with for example LED/CdS optocouplers as very
> linear controllable-loss blocks for AGC action and they work fine up
> through the low MHz. Above a few MHz I think capacitance across the CdS
> photocell gives too much leakage in typical receiver use, although if
> you only want a limited amount of AGC I think you're good to go.
>
> It is MOST interesting to use chips like AD603's in IF's if you want
> AGC action. Many many app notes and construction articles on the web
> will show you examples of use.
>
> Are you perhaps really talking about RC active filters to replace
> crystal or mechanical IF filters? I have always been VERY PESSIMISTIC
> about this, usually even few percent tolerance capacitors (not cheap)
> cause your passband/ultimate rejection to be way way worse than what
> you expect. Different filter topologies have different tradeoffs, but
> RC active filters when you want the Q to be >100 and want even mediocre
> ultimate rejection are economically unfeasible in every analysis I've
> done.
>
> Tim.

The engineers at my last job liked the Mini Circuits ERA and similar monolithic amps. They also liked to do most of the AGC on the front end rather than at the IF. This sometimes included an electronic attenuator to drop the gain by 20 dB to prevent overloading a critical stage. The customers liked the way they worked, they ordered plenty of them at $20,000 USD each.
--
Service to my country? Been there, Done that, and I've got my DD214 to prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2401. Re: shielded multiway connector

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 18:01:24 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1145383284.342318.272800@g10g2000cwb.googlegroups.com>
Source record: 12503

Hirose make lots of small shielded connectors that should be fine for 1MHz. They aren't cheap. Unless you are operating in a particularly noisy environment, though, I wonder why you couldn't just use a three or four pin header (ground on just one side or in the middle, or symmetrical ground on each side). Will you be connecting and disconnecting them often, or is it more a set-and-forget application?

Have you done any phase noise testing on the LMS485? I'm wondering how well they work for precision clock distribution. It's an interesting idea. We find that ECL keeps close-in phase noise quite low, and could drive the usual 100-ohm-differential RS485 bus, at least singly-terminated.

Cheers,
Tom

2402. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 18:16:03 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <44452ce3_2@newsfeed.slurp.net>
Source record: 12504
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

ORIGINAL MESSAGE:

Roy Lewallen wrote:

> Tektronix used Pozidriv screws exclusively for many years, until they
> converted over to Torx. A standard Phillips bit fits poorly in a
> Pozidriv screw, making it really easy to chew up the screw with this
> combination. Any decent toolbox should include some Pozidriv drivers
> or bits.

********** REPLY SEPARATOR **********

The flutes on a Phillips bit are tapered; on a Pozidrive they are
parallel. In many cases you can use either bit on the other, but if
available, use the correct one.

A Phillips bit can "lever" itself out due to the taper, where a
Pozidrive will not.

Bill, W6WRT
ex Tektronix employee

2403. Re: Fading signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 18:45:13 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <e23c3p$vn0$2@engnntp2.cig.mot.com>
Source record: 12507

"clifto" <clifto@gmail.com> wrote in message
news:nnaeh3-r41.ln1@remote.clifto.com...
> Has anyone gotten a good oscilloscope look at the type of signals
> that distort by cancellation of part of the carrier, i.e. the
> signals that synchronous detectors detect much better than other
> types? I'm wondering about the characteristics that make these
> signals so hard to understand when they "fade" into that condition.
>
> --
> All relevant people are pertinent.
> All rude people are impertinent.
> Therefore, no rude people are relevant.
> -- Solomon W. Golomb

Not sure just what you mean, but AM needs a carrier to work. In an envelope detector, the carrier is needed to have the correct waveform so that the audio can be extracted. If there is no carrier, or too little, the waveform is not what is needed for the detector to work. Listen on a sideband receiver and you don't need the carrier and only the fade occurs with no distortion.
Just look at the waveforms for AM and Single sideband in tutorials which are all over the web and it is obvious. If the carrier goes down, you don't get that waveform. I couldn't find any good papers on the web showing the waveforms of AM and what happens as you reduce the carrier, but,...
Here are some references that may help you.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part9/page2.html
http://www.radio-electronics.com/info/receivers/synchdet/sync_det.php
http://www.radio-electronics.com/info/receivers/am_demod/diode_am_demod.php
Compare the waveforms in those with what is here.
See Fig 1 in this paper. http://www.scott-inc.com/ham/ssb_im.pdf It is what you see when the carrier fades compared to the classical waveform you see for AM above. Note the nice sine wave is gone.

73, Steve, K9DCI

2404. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 18:53:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <124addnke4t1qcd@corp.supernews.com>
Source record: 12505
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Joel Kolstad wrote:
> Roy,
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:1248ta74cr2pm3e@corp.supernews.com...
>> Tektronix used Pozidriv screws exclusively for many years, until they
>> converted over to Torx. A standard Phillips bit fits poorly in a Pozidriv
>> screw, making it really easy to chew up the screw with this combination.
>
> How well does it work the other way around -- using Pozidriv screwdrivers on
> "regular old" Phillips-head screws?

In my experience, it works better than using a Phillips driver on a
Pozidriv screw. But it still doesn't fit really well.

Roy Lewallen

2405. Re: Regen with spider web coils ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 19:18:03 UTC
From: jvereker@wp.pl
Message-ID: <1145387883.001442.49690@u72g2000cwu.googlegroups.com>
Source record: 12506

OK, inductances are:
30 uH, 7.5 uH, 1.9 uH.

2406. Re: Regen with spider web coils ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-18 21:40:40 UTC
From: - exray - <exray@coqui.net>
Message-ID: <124an70425ttu93@corp.supernews.com>
Source record: 12508

jvereker@wp.pl wrote:

> OK, inductances are:
> 30 uH, 7.5 uH, 1.9 uH.
>
Hi,
Using a 90mm form with the centre as 50mm in diameter (like the ones in my previous photos) 2mm thickness with #22 wire you'll have 18 turns, 8-3/4 turns and 4 turns respectively.
I wound my tickler on the outside...that makes it easier to adjust.
Depends on your circuit but I'd guess maybe 4, 2 and 1 would be in the ballpark.
Let us know how it turns out.

GL,
Bill

2407. Re: Accurate voltage calibration

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-19 00:33:13 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <Vo6dnbcvSKPHQdnZRVn-jQ@comcast.com>
Source record: 12590

Thaler has the best voltage references -- there was a design in one of the rags (Nuts n Volts or QEX) a few years ago in which 3 Thaler references were placed in parallel for a super reference. Email me privately if you would like a copy.

Also, get a copy of Linear Technology Application Note 86 "A Standards Lab Grade 20 bit DAC with 0.1ppm/degC Drift" -- Jim Williams is the author -- and make sure to read the appendices. Williams also did an ApNote with a comprehensive history of voltage measurement techniques, but I forget the application number.

2408. Re: Finding short duration interference?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-19 00:55:54 UTC
From: Dan Andersson <dan@andersson.co.uk>
Message-ID: <i5-cnakGvqILF9jZSa8jmw@karoo.co.uk>
Source record: 12509

mike wrote:

> What's a good method for finding short duration interference?
>
> My 440 repeater is plagued by an interfering signal that lasts a small
> fraction of a second, just long enough to bring up the repeater,
> and repeats randomly every 20 seconds or so.
> Comes and goes...Seems to be dependent on outside temperature.
> Sometimes sounds like there's hum on the signal.
> First thought was that it was one of those oscillating Winegard
> RV TV antennas, but it doesn't seem to drift around like they
> typically do.
>
> I hooked the repeater antenna up to the spectrum analyzer,
> but the duration is too short to get thru the filters at
> the bandwidth required to get any sensitivity.
>
> I can hear it on the mobile.
> I've driven around the neighborhood, but the duration is so short
> that I've not been able to track it down. Strength seems to peak
> at different places blocks apart...but it's hard to tell.
>
> I have some experience with a double duckey and started designing
> a doppler system, but it occurs that the short duration signal
> will be completely washed out by the Switched Cap Filter. Don't see
> how I'm gonna get the low rep-rate signal past the noise. Filter
> types that I know about ain't gonna work.
>
> Ideas?
> Thanks, mike

You need a professional direction finding gear, probably from the DoD marketplace.

You can by all means build gear to trace this kind of interference but be adviced! the Guru factor is very high!

If you set up an array of 3 or 4 antennas, you can compare the phase difference from the different antennas and by that triangulate the position. You need to have a fast trigger mechanism and memory to be able to make a constant monitoring with a monitoring stop triggered by your signal. As a receiver, you should probably use a sdr rig or a wide >1 Msp ADC to catch spur's on 440.

In other words... It have to be very annoying before one starts of this expensive hunting of spurs!

A nice project for homebrewing tho'

Cheers

Dan / M0DFI

2409. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-19 02:30:43 UTC
From: fmmck@aol.com
Message-ID: <fmmck-1804062230430001@ac951a46.ipt.aol.com>
Source record: 12510
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

In article <1248ta74cr2pm3e@corp.supernews.com>, Roy Lewallen
<w7el@eznec.com> wrote:

> I'd consider looking for some other tool dealers to do business with.
> Pozidriv (a registered trademark of Phillips Screw Co.) screws and
> drivers are very common, sold by just about every tool company from
> Snap-on through Stanley to Sears.

OK Guys! I've done some more checking, and still can't find a store that sells Posidrive or Pozidrive. I have one lead to a specialty tool store across the state, but the local Ace, Sears and Lowes don't carry either the screws or the drivers.

I can see where the Posidrive may be used in some electronic equipment, but all of the screws in the hinges in my house, as well as the screws holding the locks on the doors, are definitely Phillips. Are Posidrive screws used for those applications in other countries?

I can see now that my original list should have stopped without the additional items. The purpose was to define a really BASIC set of tools for use around the home!

Fred

2410. Re: Accurate voltage calibration

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-19 02:36:50 UTC
From: Alfred Green <nu8i@cox.net>
Message-ID: <bnh1g.30961$zf6.27806@fed1read08>
Source record: 12511

jack wrote:
> Thaler has the best voltage references -- there was a design in one of the
> rags (Nuts n Volts or QEX) a few years ago in which 3 Thaler references
> were placed in parallel for a super reference. Email me privately if you
> would like a copy.
>
> Also, get a copy of Linear Technology Application Note 86 "A Standards Lab
> Grade 20 bit DAC with 0.1ppm/degC Drift" -- Jim Williams is the author --
> and make sure to read the appendices. Williams also did an ApNote with a
> comprehensive history of voltage measurement techniques, but I forget the
> application number.
>
>

Thanks for the suggestion. I must admit to never having heard of of
'Thaler', but a quick search has thrown up some really interesting
stuff. No online ordering, but an 800 number to find the distributors.
I'll follow up on that.

I'll get the LT AppNote. Thanks for the info.

73 Alf NU8I

2411. Re: Accurate voltage calibration

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-19 02:50:43 UTC
From: Alfred Green <nu8i@cox.net>
Message-ID: <cAh1g.31424$zf6.30231@fed1read08>
Source record: 12512

clifto wrote:
> Alfred Green wrote:
>
>>That was kind of what I was looking for. I really am prepared to pay a
>>few bob for something that I can reliably use as a reference in my lab.
>
>
> I'm no expert, but I wonder what you might be able to do with a
> temperature-compensated design around a LMV431BI.
>

That looks like an interesting part, cheap enough and available. I'll
give it a try!

2412. Re: Finding short duration interference?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-19 02:57:54 UTC
From: kb9rqz@markmorgan.net
Message-ID: <dn9b42tno31ma4mat5ap0kjmf20srsbbbc@4ax.com>
Source record: 12513

On Tue, 18 Apr 2006 03:40:12 -0700, mike <spamme0@netscape.net> wrote:

>What's a good method for finding short duration interference?
>
>My 440 repeater is plagued by an interfering signal that lasts a small
>fraction of a second, just long enough to bring up the repeater,
>and repeats randomly every 20 seconds or so.
>Comes and goes...Seems to be dependent on outside temperature.
>Sometimes sounds like there's hum on the signal.
>First thought was that it was one of those oscillating Winegard
>RV TV antennas, but it doesn't seem to drift around like they
>typically do.
>
>I hooked the repeater antenna up to the spectrum analyzer,
>but the duration is too short to get thru the filters at
>the bandwidth required to get any sensitivity.
>
>I can hear it on the mobile.
>I've driven around the neighborhood, but the duration is so short
>that I've not been able to track it down. Strength seems to peak
>at different places blocks apart...but it's hard to tell.
>
>I have some experience with a double duckey and started designing
>a doppler system, but it occurs that the short duration signal
>will be completely washed out by the Switched Cap Filter. Don't see
>how I'm gonna get the low rep-rate signal past the noise. Filter
>types that I know about ain't gonna work.
>
>Ideas?
>Thanks, mike

can you just duck the problem and use a PL tone Iknwo when we lived in
sprinfeild it worked welll a 2 m repeater and another 440repeater in
the general area that worked out well too

Usenet Zone Free Binaries Usenet Server
More than 140,000 groups
Unlimited download
http://www.usenetzone.com to open account

2413. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-19 03:37:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <124bc3r5csvlp1b@corp.supernews.com>
Source record: 12514
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Fred McKenzie wrote:
> In article <1248ta74cr2pm3e@corp.supernews.com>, Roy Lewallen
> <w7el@eznec.com> wrote:
>
>> I'd consider looking for some other tool dealers to do business with.
>> Pozidriv (a registered trademark of Phillips Screw Co.) screws and
>> drivers are very common, sold by just about every tool company from
>> Snap-on through Stanley to Sears.
>
>
> OK Guys! I've done some more checking, and still can't find a store that
> sells Posidrive or Pozidrive. I have one lead to a specialty tool store
> across the state, but the local Ace, Sears and Lowes don't carry either
> the screws or the drivers.

There's sure no problem finding mail order sources:

http://www.stanleytools.com/default.asp?TYPE=CATEGORY&CATEGORY=HT+PZDRV+AND+MULTI+SDRVRS
http://www.vermontamerican.com/products/subcategorybrowse.htm?G=157721
http://buy1.snapon.com/catalog/search_keyword.asp?keyword=POZIDRIV
http://www.aaronsscrewdrivers.com/PowerBits.htm
http://www.sears.com/sr/javasr/product.do?BV_UseBVCookie=Yes&vertical=TOOL&pid=00973645000
&subcat=Screwdrivers

> I can see where the Posidrive may be used in some electronic equipment,
> but all of the screws in the hinges in my house, as well as the screws
> holding the locks on the doors, are definitely Phillips. Are Posidrive
> screws used for those applications in other countries?
>
> I can see now that my original list should have stopped without the
> additional items. The purpose was to define a really BASIC set of tools
> for use around the home!

The real advantage of Pozidriv is in applications where something is
mass produced with the screws put in by power drivers, so they're fairly
common in manufactured goods. I was really directing my earlier comment
that every toolbox should have some Posidriv bits or drivers to people
doing any kind of work on electronic equipment or other kinds of
manufactured goods. Posidriv tools probably wouldn't be of much use for
most household repairs, so wouldn't be appropriate for a very basic
household tool box. The same goes for Torx.

You can identify Pozidriv screws by a ding in between the slots. There's
a good picture at http://www.aaronsscrewdrivers.com/PowerBits.htm.

Roy Lewallen, W7EL

2414. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-19 04:07:00 UTC
From: dplatt@radagast.org
Message-ID: <124bdr4idtfus73@corp.supernews.com>
Source record: 12515
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

In article <fmmck-18040622304300001@ac951a46.ipt.aol.com>,
Fred McKenzie <fmmck@aol.com> wrote:

>OK Guys! I've done some more checking, and still can't find a store that
>sells Posidrive or Pozidrive. I have one lead to a specialty tool store
>across the state, but the local Ace, Sears and Lowes don't carry either
>the screws or the drivers.

I haven't seen complete Pozidrive drivers anywhere around here, but
Orchard Supply (local hardware outlet) has Pozidrive bits in several
sizes, which will go into the usual magnetic-hex-socket driver
handles. In fact, just yesterday I glanced over their $2.99 "17 bits
in a small carrying case" assortment by the cash register, and found
that it contains 3 Phillips and 3 similarly-sized Pozidrive bits.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2415. Re: Accurate voltage calibration

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-19 06:31:48 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1145428308.571575.65580@i39g2000cwa.googlegroups.com>
Source record: 12516

Hi Alf,

I'm not familiar with that particular model (HP3478A). We used to have a complete set of microfiche for all the HP product line, back to the HP200 oscillators, but unfortunately someone else coveted it and we don't have it any longer. Sorry I can't be more specific help. You should be able to find a manual somewhere--there are places that specialize in used manuals. Or you may find it online--if not now, it may show up before too long (I just don't know how accessible it will be...)

Cheers,
Tom

2416. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-19 09:01:24 UTC
From: dick on the langwang <dick@ravelrig01.demon.co.uk>
Message-ID: <1145437283.988686.185570@u72g2000cwu.googlegroups.com>
Source record: 12517
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

I've kept a long, slim, scalpel (+ pack of spare blades) in my toolbox for over 40yrs, wouldn't be without them. Can be used for cutting, poking, as an improvised instrument probe and (if push comes to shove) the final solution to that b****r of a problem ..... provided you fit a new blade first !!

2417. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-19 09:38:37 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <N6idnWSkTb-ImNvZRVny2A@pipex.net>
Source record: 12518
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

> I can see where the Posidrive may be used in some electronic equipment,
> but all of the screws in the hinges in my house, as well as the screws
> holding the locks on the doors, are definitely Phillips. Are Posidrive
> screws used for those applications in other countries?
==========
Most wood screws in (at least)western Europe are now posidrive ,because
the grip is so much better ,which is necessary due to the frequent use
of electric screwdrivers.

A tool company Draper are selling chromium-vanadium steel screwdrivers
in sets with coloured plastic grips (in the UK)
A set comprises 3x3 ,total of 9 screwdrivers
Flat blade : Red grip
Phillips : Blue grip (or is it Philips?)
Posidrive : Green grip

Frank GM0CSZ / KN6WH

2418. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-19 10:20:23 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <7oydnSnWw5V9k9vZRVnysw@pipex.net>
Source record: 12519
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

dick on the langwang wrote:
> I've kept a long, slim, scalpel (+ pack of spare blades) in my toolbox
> for over 40yrs, wouldn't be without them. Can be used for cutting,
> poking, as an improvised instrument probe and (if push comes to shove)
> the final solution to that b****r of a problem .... provided you
> fit a new blade first !!
==========
Talking tools , I consider different dental 'poking'utensils and
twizzers essential for dealing with circuit boards ,especially in the
homebrewing arena. I use these frequently.

Frank GM0CSZ / KN6WH

2419. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-19 13:09:50 UTC
From: jakdedert <jakdedert@bellsouth.net>
Message-ID: <%Dq1g.3987$MM6.1570@bignews3.bellsouth.net>
Source record: 12520
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Highland Ham wrote:
> dick on the langwang wrote:
>> I've kept a long, slim, scalpel (+ pack of spare blades) in my toolbox
>> for over 40yrs, wouldn't be without them. Can be used for cutting,
>> poking, as an improvised instrument probe and (if push comes to shove)
>> the final solution to that b****r of a problem ..... provided you
>> fit a new blade first !!
> ==========
> Talking tools , I consider different dental 'poking'utensils and
> twizzers essential for dealing with circuit boards ,especially in the
> homebrewing arena. I use these frequently.
>
> Frank GM0CSZ / KN6WH
>
>
...and on medical instruments: a pair or two (or three) of locking
medical forceps are indispensable...rubber gloves are handy...syringes
are good for dispensing various compounds, especially glue.

2420. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-19 13:59:35 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4446420E.649F2165@earthlink.net>
Source record: 12521
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

dick on the langwang wrote:
>
> I've kept a long, slim, scalpel (+ pack of spare blades) in my toolbox
> for over 40yrs, wouldn't be without them. Can be used for cutting,
> poking, as an improvised instrument probe and (if push comes to shove)
> the final solution to that b****r of a problem .... provided you
> fit a new blade first !!

You can buy an Exacto knife a lot easier, and there are a lot of
different blades available.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2421. Re: Accurate voltage calibration

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-19 15:56:52 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <m1mc42tqtbue82sup146oooage6827k9sn@4ax.com>
Source record: 12522

Hi Alf,

Look at this item on ebay. This guy makes little reference boards for
a good price. I have had conversations with him and got some good info
on standards.

http://cgi.ebay.com/10V-L-STANDARD-VOLTAGE-REFERENCE-NIST-TRCBL-CALIBRATOR_W0QQitemZ761044
1828QQcategoryZ25399QQssPageNameZWDVWQQrdZ1QQcmdZViewItem

If the link doesn't work search ebay on "voltage reference".

I built a little standard using a different chip than he used. I used
an LT1019A and trimed it in.

I have a small spread sheet comparing his board with mine and the 731B
transfer standard if you would like me to send it to you.

He had sent me one of his boards to play with. I found that they move
quite a bit with temperature. Temperature is the biggest problem in
maintaining a stable reference with those chips. I have a fluke 731B
transfer standard to reference to, using an hp 3456 voltmeter to
measure things with.

The board he has is not a bad deal as he sends it out calibrated. If
you can duplicate his temperature you will do pretty good but probably
not quite as good as he advertises.

A good pre regulated supply is important to feed the reference chip
too.

73
Gary K4FMX

On Fri, 14 Apr 2006 19:47:03 -0700, Alfred Green <nu8i@cox.net> wrote:

>I have recently aquired a nice 5.1/2 digit DVM, and would like to assess
>the absolute accuracy. Many years ago I had a 'Standard Cell', but that
>got lost in one of my several relocations.
>What is a good alternative these days? I would think that there is a
>semiconductor device that has a known threshold. I am familiar with the
>Wheatstone bridge method to measure voltage without affecting the reference.
>Once I have a good DC reference, getting AC & RMS calibration is fairly
>easy.
>Having a GPS locked time and frequency reference, I am used to being at
>the 1e-10 accuracy level for those, but if I can get to 1e-5 for analog
>voltage I would be very happy.
>Any suggestions gratefully received.
>

>73 Alf NU8I
>Scottsdale AZ DM43an
>160m - 10 Gigs

2422. If you've nothing better to do just now !

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-19 16:34:36 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <87pc42daqbjedmqtsot3sb0q2d1ke3rtfk@4ax.com>
Source record: 12523

Hi,

If your recent copies of QST are in order of month on the
shelf, have you noticed that the letters "QST" on their spines
trace out a crude sine wave? This seems to have happened with the
January 2003 issue when they appeared to have changed the
justification of the year/month group from left to centre.

So there ya go - Joe, G3LLV

2423. Re: Buildig block IF amplifiers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-19 17:42:35 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <44467661.263FFE21@earthlink.net>
Source record: 12524

Allisonnospam@nouce.bellatlantic.net wrote:
>
> On Tue, 18 Apr 2006 17:26:43 GMT, "Michael A. Terrell"
> <mike.terrell@earthlink.net> wrote:
>
> >Tim Shoppa wrote:
> >>
> >> clifto wrote:
> >> > Has anyone played with any of the new high-bandwidth op amps in IF
> >> > amplifier circuits? I've got an idea I want to experiment with, and
> >> > not a whole lot of analog design ability (though I do better with
> >> > building blocks than with compensating discretes), and now that
> >> > GBw products are cheap above 1 MHz it might look practical to
> >> > pursue. I have no standards for comparison since I know nothing
> >> > about parameters like noise figures and the like in standard
> >> > discrete circuits.
> >>
> >> GBw products above 1MHz have been around for a long time in op amps, if
> >> you don't mind dropping the bucks then you can even get GHz numbers.
> >> There's very little stopping anyone from using even the old
> >> high-bandwidth op amps in IF's. But there's not much need to.
> >>
> >> In IF strips for FM receivers, most op-amps do really bad things when
> >> they hit their limiting amplitudes. Google for "phase reversal" with
> >> "op amp".
> >>
> >> "Straight" op-amps are not easily amenable to AGC action, but I've done
> >> some playing around with for example LED/CdS optocouplers as very
> >> linear controllable-loss blocks for AGC action and they work fine up
> >> through the low MHz. Above a few MHz I think capacitance across the CdS
> >> photocell gives too much leakage in typical receiver use, although if
> >> you only want a limited amount of AGC I think you're good to go.
> >>
> >> It is MOST interesting to use chips like AD603's in IF's if you want
> >> AGC action. Many many app notes and construction articles on the web
> >> will show you examples of use.
> >>
> >> Are you perhaps really talking about RC active filters to replace
> >> crystal or mechanical IF filters? I have always been VERY PESSIMISTIC
> >> about this, usually even few percent tolerance capacitors (not cheap)
> >> cause your passband/ultimate rejection to be way way worse than what
> >> you expect. Different filter topologies have different tradeoffs, but
> >> RC active filters when you want the Q to be >100 and want even mediocre
> >> ultimate rejection are economically unfeasible in every analysis I've

> >> done.
> >>
> >> Tim.
> >
> >
> >
> >The engineers at my last job liked the Mini Circuits ERA and similar
> >monolithic amps. They also liked to do most of the AGC on the front end
> >rather than at the IF. This sometimes included an electronic attenuator
> >to drop the gain by 20 dB to prevent overloading a critical stage. The
> >customers liked the way they worked, they ordered plenty of them at
> >$20,000 USD each.
>
> I tried that once using MAR-6s and -11s for gain and 1n4007s as
> pseudo PIN diodes (Pi antenuators) between stages. Produced an
> excellent IF for gain, noise and intercepts but it drew near 350ma
> at 9V for the IF and AGC. Definately not for the qrp/battery user.
>
> Allison

We weren't in the QRP business. We were building hi rel equipment to
track space probes.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2424. Re: Accurate voltage calibration

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-19 20:39:43 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1145479183.913968.114280@e56g2000cwe.googlegroups.com>
Source record: 12526

Thanks for the reference to the references, Jack. I emailed them, and
got back a nice reply that said, in summary:
-- Yes, they sell singles, no problem.
-- Order direct from them.
-- Current prices for four items I asked about are
** VRE100C $43.50 4 week lead time
** VRE102C $48.73 in stock
** VRE302AS/AD $11.04 in stock
** VRE302CS/CD $6.52 in stock

Those first ones are extremely low tempco parts (typ. 0.3ppm/C) with
very good initial accuracy (0.01% max error), +10V and +/-10V. The
second two are 2V parts with still very good tempco and good initial
accuracy. See their website for details.

Cheers,
Tom

2425. Re: If you've nothing better to do just now !

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-19 21:04:24 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <4446a592.537203447@news.blueyonder.co.uk>
Source record: 12527

On Wed, 19 Apr 2006 17:34:36 +0100, Joe McElvenney
<ximac@btinternet.com> wrote:

>Hi,
>
> If your recent copies of QST are in order of month on the
>shelf, have you noticed that the letters "QST" on their spines
>trace out a crude sine wave? This seems to have happened with the
>January 2003 issue when they appeared to have changed the
>justification of the year/month group from left to centre.
>
>
> So there ya go - Joe, G3LLV

Get out that soldering iron! You know it makes sense ...

Peter G3PHO :-)

2426. Re: Fading signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-19 22:49:15 UTC
From: clifto <clifto@gmail.com>
Message-ID: <bcrih3-o09.ln1@remote.clifto.com>
Source record: 12528

Steve Nosko wrote:
> "clifto" <clifto@gmail.com> wrote...
>> Has anyone gotten a good oscilloscope look at the type of signals
>> that distort by cancellation of part of the carrier, i.e. the
>> signals that synchronous detectors detect much better than other
>> types? I'm wondering about the characteristics that make these
>> signals so hard to understand when they "fade" into that condition.
>
> http://www.radio-electronics.com/info/receivers/am_demod/diode_am_demod.php

I think this one best illustrated what I've read sparse information
about, that multipath will sometimes cancel part or all of the
carrier.

--
All relevant people are pertinent.
All rude people are impertinent.
Therefore, no rude people are relevant.
-- Solomon W. Golomb

2427. Re: Finding short duration interference?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-19 23:15:19 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <4446C52A.9030008@nettally.com>
Source record: 12529

Check this link and see if you have same problem....

www.qsl.net/va3bmc/inter477.pdf

mike wrote:

> What's a good method for finding short duration interference?
>
> My 440 repeater is plagued by an interfering signal that lasts a small
> fraction of a second, just long enough to bring up the repeater,
> and repeats randomly every 20 seconds or so.
> Comes and goes...Seems to be dependent on outside temperature.
> Sometimes sounds like there's hum on the signal.
> First thought was that it was one of those oscillating Winegard
> RV TV antennas, but it doesn't seem to drift around like they
> typically do.
>
> I hooked the repeater antenna up to the spectrum analyzer,
> but the duration is too short to get thru the filters at
> the bandwidth required to get any sensitivity.
>
> I can hear it on the mobile.
> I've driven around the neighborhood, but the duration is so short
> that I've not been able to track it down. Strength seems to peak
> at different places blocks apart...but it's hard to tell.
>
> I have some experience with a double duckey and started designing
> a doppler system, but it occurs that the short duration signal
> will be completely washed out by the Switched Cap Filter. Don't see
> how I'm gonna get the low rep-rate signal past the noise. Filter
> types that I know about ain't gonna work.
>
> Ideas?
> Thanks, mike

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

2428. Re: Buildig block IF amplifiers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-20 01:01:48 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4446DD4E.36F27124@earthlink.net>
Source record: 12530

Allisonnospam@nouce.bellatlantic.net wrote:
>
> On Wed, 19 Apr 2006 17:42:35 GMT, "Michael A. Terrell"
> <mike.terrell@earthlink.net> wrote:
>
> >> >The engineers at my last job liked the Mini Circuits ERA and similar
> >> >monolithic amps. They also liked to do most of the AGC on the front end
> >> >rather than at the IF. This sometimes included an electronic attenuator
> >> >to drop the gain by 20 dB to prevent overloading a critical stage. The
> >> >customers liked the way they worked, they ordered plenty of them at
> >> >$20,000 USD each.
> >>
> >> I tried that once using MAR-6s and -11s for gain and 1n4007s as
> >> pseudo PIN diodes (Pi antenuators) between stages. Produced an
> >> excellent IF for gain, noise and intercepts but it drew near 350ma
> >> at 9V for the IF and AGC. Definately not for the qrp/battery user.
> >>
> >> Allison
> >
> >
> > We weren't in the QRP business. We were building hi rel equipment to
> >track space probes.
>
> Well that much was obvious. However, despite the higher power needs
> it's performance is stellar. I can see no reason why it would not be
> very high rel.
>
> The reciever it was used in has a overload threshold and dynamic
> range far higher than anything in the ham market. Also the NF is low
> giving it an excellent MDS. It was built to work weak signals
> effectively without overload because I have a "kilowatt charlie" less
> than 300yds away on the same band. Nominal RF comming down
> the coax from him is 25-150mw! The whole reciever pulls a whopping
> 2A (no signal) becuase of all of the high standing currents in RF and
> IF processing never mind the required 17DBM LO..
>
> At the other end of the power spectra I've used cascode J310 FETs
> to build very good IFs with far lower power needs but still good AGC
> and gain.
>
> What's hard is building filters with at least 140db of stopband
> attenuation. There nothing like shielding, lots of it. Then testing,
> testing, testing.
>

> Allison

We built tubular filters in house, because we couldn't get what we needed, when we needed it. We built the ground station and a mobile earth station with a large mobile diesel generator for power, for the Italian government to track their launches. They had a severe overload problem, trying to set up the one station near the launch pad. Engineering was going round and round about a way to reduce the signal levels prior to the launch, that could be done quickly. My suggestion was a chain link fence near the pad to block most of the signal, till the rocket left the pad and was no longer pointing right at the ground based antennas. The receivers had lots of aluminum between stages to stop stray signals.

We used a LINEAR AGC system that was a pain to get set up, but the dual diversity combiner required the linear 0 to 5 volt signals to steer the combiner.

--
Service to my country? Been there, Done that, and I've got my DD214 to prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2429. Re: Accurate voltage calibration

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-20 06:17:25 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <f7CdnWfQCOEY49vZRVn-sg@comcast.com>
Source record: 12525

One good thing about the Thaler references is that they provide a
Temperature Output -- so if you are using a Fluke, Keithley, HP-Agilent DVM
with GPIB, HP-IL or RSwhatever you can compensate for temperature
differentials.

Of course, you can also use the temperature output to drive a differential
amplifier and "cook" the unit to a constant temperature much as we used to
with crystal oscillators (boy, am I dating myself now :)

"Gary Schafer" <gaschafer@comcast.net> wrote in message
news:m1mc42tqtbue82sup146oooage6827k9sn@4ax.com...
> Hi Alf,
>
> Look at this item on ebay. This guy makes little reference boards for
> a good price. I have had conversations with him and got some good info
> on standards.
>
>
http://cgi.ebay.com/10V-L-STANDARD-VOLTAGE-REFERENCE-NIST-TRCBL-CALIBRATOR_W0QQitemZ761044
1828QQcategoryZ25399QQssPageNameZWDVWQQrdZ1QQcmdZViewItem
>
> If the link doesn't work search ebay on "voltage reference".
>
> I built a little standard using a different chip than he used. I used
> an LT1019A and trimed it in.
>
> I have a small spread sheet comparing his board with mine and the 731B
> transfer standard if you would like me to send it to you.
>
> He had sent me one of his boards to play with. I found that they move
> quite a bit with temperature. Temperature is the biggest problem in
> maintaining a stable reference with those chips. I have a fluke 731B
> transfer standard to reference to, using an hp 3456 voltmeter to
> measure things with.
>
> The board he has is not a bad deal as he sends it out calibrated. If
> you can duplicate his temperature you will do pretty good but probably
> not quite as good as he advertises.
>
> A good pre regulated supply is important to feed the reference chip
> too.
>
> 73
> Gary K4FMX
>

>
> On Fri, 14 Apr 2006 19:47:03 -0700, Alfred Green <nu8i@cox.net> wrote:
>
> >I have recently aquired a nice 5.1/2 digit DVM, and would like to assess
> >the absolute accuracy. Many years ago I had a 'Standard Cell', but that
> >got lost in one of my several relocations.
> >What is a good alternative these days? I would think that there is a
> >semiconductor device that has a known threshold. I am familiar with the
> >Wheatstone bridge method to measure voltage without affecting the
reference.
> >Once I have a good DC reference, getting AC & RMS calibration is fairly
> >easy.
> >Having a GPS locked time and frequency reference, I am used to being at
> >the 1e-10 accuracy level for those, but if I can get to 1e-5 for analog
> >voltage I would be very happy.
> >Any suggestions gratefully received.
> >
> >73 Alf NU8I
> >Scottsdale AZ DM43an
> >160m - 10 Gigs
>

2430. Re: Buildig block IF amplifiers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-20 13:57:47 UTC
From: "scoles@isomedia.com" <scoles@isomedia.com>
Message-ID: <1145541467.382030.84720@g10g2000cwb.googlegroups.com>
Source record: 12531

Clifto,

Is your goal a project to get hobbyists with AF project background into RF building with a minimum of giant steps (or something like that)? If so, the familiarity of op-amp building is probably a good choice. Introducing ceramic filters and the need for a ground plane can be enough for hobbyists doubtful about entering a higher frequency range. Getting something to work will build confidence. You can make more satisfying results a later step.

Steven

clifto wrote:
> Has anyone played with any of the new high-bandwidth op amps in IF
> amplifier circuits? I've got an idea I want to experiment with, and
> not a whole lot of analog design ability (though I do better with
> building blocks than with compensating discretes), and now that
> GBw products are cheap above 1 MHz it might look practical to
> pursue. I have no standards for comparison since I know nothing
> about parameters like noise figures and the like in standard
> discrete circuits.
>
> --
> All relevant people are pertinent.
> All rude people are impertinent.
> Therefore, no rude people are relevant.
> -- Solomon W. Golomb

2431. Microwave Projects?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-20 15:04:50 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <4cc36$4447a312$d135c4af$31881@MDI.CA>
Source record: 12532

I like to build simple receivers from 1 to 2.4GHz.
Any recommendations for oscillators?
What schottky diode works to make a signal strength meter?

Thanks

JJ

2432. Re: Accurate voltage calibration

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-20 17:59:08 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <gtif42pfhqh4k49h5rs24vu359h1u3ecjp@4ax.com>
Source record: 12534

On Fri, 21 Apr 2006 00:40:19 -0400, "jack" <jdwalton@comcast.net>
wrote:

>Tom --
>
>If you didn't see the subsequent post -- the VRE305 used by Tipton has a
>Temperature Out pin -- 630mV with a 2.1 mV/C coefficient. This could be
>used with a transistor array to maintain a constant temperature for the
>device.
>
>Jack
>

The LT1019A Linear Technology chip that I played with has the same pin
to give a changing output as the junction temperature changes. However
LT says that it is pretty much useless for actual temperature
relationships. I took measurements with that pin and also found it to
not correlate with temperature close enough to do anything with other
than give an indication of change. I believe it is buried to far into
the junction.

73
Gary K4FMX

2433. Re: Buildig block IF amplifiers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-20 21:23:11 UTC
From: clifto <clifto@gmail.com>
Message-ID: <vmalh3-cjt.ln1@remote.clifto.com>
Source record: 12535

scoles@isomedia.com wrote:
> Clifto,
>
> Is your goal a project to get hobbyists with AF project background into
> RF building with a minimum of giant steps (or something like that)?

Actually, I want to play a bit myself, and my analog design "skills"
(if that word applies) have always been weak. I've always been a
much better troubleshooter than designer.

--
All relevant people are pertinent.
All rude people are impertinent.
Therefore, no rude people are relevant.
-- Solomon W. Golomb

2434. Re: Microwave Projects?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-20 21:26:21 UTC
From: "John Jardine." <john@jjdesigns.fsnet.co.uk>
Message-ID: <e28u9q$l6u$1@news7.svr.pol.co.uk>
Source record: 12536

"JJ" <JJ@nowhere.com> wrote in message
news:4cc36$4447a312$d135c4af$31881@MDI.CA...
> I like to build simple receivers from 1 to 2.4GHz.
> Any recommendations for oscillators?
> What schottky diode works to make a signal strength meter?
>
> Thanks
>
> JJ

Oscillator construction seems a big problem up there. Was trying something similar the other week. Turned out 99% art 1% science, so packed it in and now awaiting a sample of an interesting satelite downconverter chip. http://www.semiconductors.philips.com/pip/TDA8261.html , digitally covers 950 to 2175MHz using a VCO/synthesiser running at a quarter of it's mixer input frequency. VCO simply consists of a Varicap, 2 caps and a 18nH inductor. Chip is 'direct conversion'(with quadrature outputs!) and would make a wonderful 0-1GHz spectrum analyser if it's mixer ran down to a few megs. Sadly, no mention of this spec' in the datasheet, so must assume response tails off badly at the low end.
john

2435. HB VHF low-pass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-20 22:24:34 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1145571874.839811.78600@u72g2000cwu.googlegroups.com>
Source record: 12537

Hi gang,

And old chum of mine suffers badly from pager interference when he's trying to listen on the 2m band. The interference is strong to him (S9+) and takes out all his reception, despite the fact that it's quite a way up-band at 153Mhz.
I've been looking into designing a filter for him to cut off by 153Mhz to better than -20db but it turns out to be rather more tricky than I'd imagined. Even with a seven element butterworth configuration, the difference between the 146Mhz (wanted) and the 153Mhz (unwanted is an insignificant 6db or so. I'm just not getting enough roll-off and need something much sharper. Worse still, the roll-off I'm seeing is on a computer simulation of the filter with ideal components and would no doubt be even worse with real-world Ls and Cs. Any suggestions as to how to tackle the problem, guys?
Thanks,
P.

2436. Re: HB VHF low-pass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-20 22:43:47 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <44480E60.518DE37@earthlink.net>
Source record: 12538

paul@burridge8333.fsbusiness.co.uk wrote:
>
> Hi gang,
>
> And old chum of mine suffers badly from pager interference when he's
> trying to listen on the 2m band. The interference is strong to him
> (S9+) and takes out all his reception, despite the fact that it's quite
> a way up-band at 153Mhz.
> I've been looking into designing a filter for him to cut off by 153Mhz
> to better than -20db but it turns out to be rather more tricky than I'd
> imagined. Even with a seven element butterworth configuration, the
> difference between the 146Mhz (wanted) and the 153Mhz (unwanted is an
> insignificant 6db or so. I'm just not getting enough roll-off and need
> something much sharper. Worse still, the roll-off I'm seeing is on a
> computer simulation of the filter with ideal components and would no
> doubt be even worse with real-world Ls and Cs. Any suggestions as to
> how to tackle the problem, guys?
> Thanks,
> P.

If its just one transmitter he would be better off with a notch
filter.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2437. Re: HB VHF low-pass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-21 00:25:11 UTC
From: Norm Mann <folder0735@hotmail.com>
Message-ID: <HDV1g.10938$oQ2.4421@trnddc05>
Source record: 12539

<paul@burridge8333.fsbusiness.co.uk> wrote in message
news:1145571874.839811.78600@u72g2000cwu.googlegroups.com...
> Hi gang,
>
> And old chum of mine suffers badly from pager interference when he's
> trying to listen on the 2m band. The interference is strong to him
> (S9+) and takes out all his reception, despite the fact that it's quite
> a way up-band at 153Mhz.
> I've been looking into designing a filter for him to cut off by 153Mhz
> to better than -20db but it turns out to be rather more tricky than I'd
> imagined. Even with a seven element butterworth configuration, the
> difference between the 146Mhz (wanted) and the 153Mhz (unwanted is an
> insignificant 6db or so. I'm just not getting enough roll-off and need
> something much sharper. Worse still, the roll-off I'm seeing is on a
> computer simulation of the filter with ideal components and would no
> doubt be even worse with real-world Ls and Cs. Any suggestions as to
> how to tackle the problem, guys?
> Thanks,
> P.

A coax stub filter to notch out the pager would probably work better. It's cheap to make, but it also has some drawbacks - signals within roughly +/- 10 MHz of the notch may have as much as 10 dB of attenuation. Your friend may be able to cope with some attenuation better than 100% overload.

-NM

2438. Re: HB VHF low-pass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-21 00:38:04 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <MPV1g.1386$4D2.354@trnddc01>
Source record: 12540

"Norm Mann" <folder0735@hotmail.com> wrote in message
news:HDV1g.10938$oQ2.4421@trnddc05...
>
> <paul@burridge8333.fsbusiness.co.uk> wrote in message
> news:1145571874.839811.78600@u72g2000cwu.googlegroups.com...
>> Hi gang,
>>
>> And old chum of mine suffers badly from pager interference when he's
>> trying to listen on the 2m band. The interference is strong to him
>> (S9+) and takes out all his reception, despite the fact that it's quite
>> a way up-band at 153Mhz.
>> I've been looking into designing a filter for him to cut off by 153Mhz
>> to better than -20db but it turns out to be rather more tricky than I'd
>> imagined. Even with a seven element butterworth configuration, the
>> difference between the 146Mhz (wanted) and the 153Mhz (unwanted is an
>> insignificant 6db or so. I'm just not getting enough roll-off and need
>> something much sharper. Worse still, the roll-off I'm seeing is on a
>> computer simulation of the filter with ideal components and would no
>> doubt be even worse with real-world Ls and Cs. Any suggestions as to
>> how to tackle the problem, guys?
>> Thanks,
>> P.
>
> A coax stub filter to notch out the pager would probably work better.
> It's cheap to make, but it also has some drawbacks - signals within
> roughly +/- 10 MHz of the notch may have as much as 10 dB of attenuation.
> Your friend may be able to cope with some attenuation better than 100%
> overload.
>
> -NM
>
>
>You will not meet your goals with a real world LPF. A coaxial Stub may
>yield -20dB attenuation but have terrible in band (2M) VSWR and high loss.
The previous poster is correct- a notch- particularly an asymmetrcial notch
is the proper solution.

50dB or greater attenuation at 163 MHz with in band loss of under -0.4dB is
easily achieved. See:
http://www.eham.net/reviews/detail/3716

Or:
http://www.eham.net/reviews/detail/385

Dale W4OP

2439. Re: HB VHF low-pass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-21 00:48:51 UTC
From: dplatt@radagast.org
Message-ID: <124gavjj0lrcq6c@corp.supernews.com>
Source record: 12541

In article <HDV1g.10938$oQ2.4421@trnddc05>,
Norm Mann <folder0735@hotmail.com> wrote:
>> And old chum of mine suffers badly from pager interference when he's
>> trying to listen on the 2m band. The interference is strong to him
>> (S9+) and takes out all his reception, despite the fact that it's quite
>> a way up-band at 153Mhz.

>A coax stub filter to notch out the pager would probably work better. It's
>cheap to make, but it also has some drawbacks - signals within roughly +/-
>10 MHz of the notch may have as much as 10 dB of attenuation. Your friend
>may be able to cope with some attenuation better than 100% overload.

PAR Electronics makes some two- and three-section anti-pager notch
filters which are quite effective. From their looks and construction
I infer that they use helical resonators. Might be possible to
homebrew something similar?

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2440. Re: HB VHF low-pass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-21 01:16:47 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <q5cg42hjhebiop8coam7cl7qekjfc9aisl@4ax.com>
Source record: 12542

On 20 Apr 2006 15:24:34 -0700, paul@burridge8333.fsbusiness.co.uk
wrote:

>Hi gang,
>
>And old chum of mine suffers badly from pager interference when he's
>trying to listen on the 2m band. The interference is strong to him
>(S9+) and takes out all his reception, despite the fact that it's quite
>a way up-band at 153Mhz.
>I've been looking into designing a filter for him to cut off by 153Mhz
>to better than -20db but it turns out to be rather more tricky than I'd
>imagined. Even with a seven element butterworth configuration, the
>difference between the 146Mhz (wanted) and the 153Mhz (unwanted is an
>insignificant 6db or so. I'm just not getting enough roll-off and need
>something much sharper. Worse still, the roll-off I'm seeing is on a
>computer simulation of the filter with ideal components and would no
>doubt be even worse with real-world Ls and Cs. Any suggestions as to
>how to tackle the problem, guys?
>Thanks,
>P.

A notch filter is the easiest thing to do. While a pass cavity will
probably work too it will be quite large and expensive.

Try a small box with connectors on either end and a wire passing
through. connect a series tuned coil / capacitor resonant at the
offending frequency. You can get up to 30 db of rejection with a
single notch. Two circuits connected side by side will improve around
another 10 db. A quarter wave length cable (and shielding) between the
two circuits will approach 60 db if needed.

The higher the Q of the circuit the narrower the notch will be and the
less loss of the wanted frequencies being passed through.

73
Gary K4FMX

2441. Re: HB VHF low-pass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-21 02:53:40 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1145588020.184636.234260@j33g2000cwa.googlegroups.com>
Source record: 12543

Design a network that has a notch at 153 AND passes 146. Just the notch is not good; it will have significant attenuation at 146. In terms of poles and zeros, you want a transmission zero at 153 and a transmission pole at 146.

One way to do this is with a coaxial resonator. The separation is great enough that it shouldn't take a super-high-Q one. You tap your input and output a short distance up from the shorted end of a quarter-wave stub that's open on the other end. The distance from the open to the attachment point is 1/4 wave at 153MHz, which reflects back a short to the line at 153. But that's capacitive at 146, and resonates with the short stub between the attachment point and the shorted end to yield a high impedance across the line there.. You can do the same thing with a couple coils and a trimmer cap: something like 10nH across the line and a series-tuned tank of 100nH and about 10.8pF right at the same place would do it. Coil Q should be pretty high to have a deep null and avoid loss at 146. You get to figure out which will give you better performance.

Cheers,
Tom

2442. Re: Microwave Projects?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-21 03:39:04 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <baf7d$444853d8$d135c4af$15108@MDI.CA>
Source record: 12544

Very interesting receiver chip. I see Maxim makes those too.
Any other manufacturers that would interest microwave experimenters?

JJ

2443. Re: Accurate voltage calibration

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-21 04:40:19 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <wqWdnVk2vuLeJNrZRVn-pQ@comcast.com>
Source record: 12533

Tom --

If you didn't see the subsequent post -- the VRE305 used by Tipton has a Temperature Out pin -- 630mV with a 2.1 mV/C coefficient. This could be used with a transistor array to maintain a constant temperature for the device.

Jack

2444. Re: HB VHF low-pass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-21 11:15:31 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1145618131.650742.274110@e56g2000cwe.googlegroups.com>
Source record: 12545

Actually 6 dB may be of some help, since the problem is probably caused by 3rd order intermodulation between two signals and the attenuation of the intermodulation product will be greater. However, as the others have pointed out a low-pass filter is not likely a good solution. Either the notch filter suggested or a bandpass filter should be better. There are some 2m bandpass filter designs in the RSGB VHF/UHF Handbook 3rd edition, if you can borrow a copy.

73,
Steve VE3SMA

2445. Re: HB VHF low-pass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-21 12:00:54 UTC
From: - exray - <exray@coqui.net>
Message-ID: <124hibtc27ove7e@corp.supernews.com>
Source record: 12546

Allisonnospam@nouce.bellatlantic.net wrote:

>
> I've notched out a a local pager just using a coax T and a ~12-13"
> open stub section of LMR400 (1/4wl @ pager frequency).
>
>
> Allison

I'd try that first. I work in cable tv and one of our older methods of "scrambling" was to use an interfering carrier ~2 MHz above the video. It was fairly easy to use a little stub of coax and completely remove the jamming...ie >40db of rejection with only a few db hit on the video carrier 2 MHz away. In your case 7 MHz away it (insertion loss) will be a non-issue.
You'll find the stub length to be critical to about 5mm so its a true cut-n-try technique. Use some old scrap television cable for the stub so you don't waste the good stuff.

GL,
Bill

2446. Motorola manuals FS

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-21 15:28:07 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <kfuh42d7f12m8adklgm0oho4utgokmra83@4ax.com>
Source record: 12547

Cleaning out the garage. I have many older Motorola radio manuals.
Mostly motrac vintage, some micor and even some old T power. Would
like to get $5.00 each.
Let me know what you need. I will try to put a list together latter
on.

73
Gary K4FMX Near Ft. Lauderdale.

2447. Re: HB VHF low-pass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-21 18:35:29 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1145644529.770915.286060@u72g2000cwu.googlegroups.com>
Source record: 12448

I question the bit about insertion loss 7MHz away being a non-issue with only a single open stub across the line. If you put an open stub of lossless 50 ohm line a quarter-wave long at 153MHz across the feed line, it puts a short across the line at 153, but it puts 0.26-j3.58 ohms across it at 146MHz. That's a 99% reflection, or SWR close to 200:1 at 146. It's only about a 17dB loss, but that's more loss than I'd want.

But if you also put at the same point across the line either a shorted stub or an inductor to resonate that, it will let 146 pass much more easily...the inductance required is only about 4nH, though, so it ends up being a pretty short piece of wire, and a Q of 20 results in almost 3dB loss. Still, that's a lot better than 17dB loss.

Also, you can tune a stub by making it very slightly shorter than calculated and adding capacitance to the open end--an air-dielectric 50 ohm stub cut 1cm short, with a 1pF capacitance across the open end, tunes back to 153MHz. A little piston cap lets you tune it right on the offending signal. (You can also make the 146MHz peak tuneable by using a stub a bit _longer_ than 1/4 wave at 146 in place of the inductor, and putting a tuning cap on it too...then it's easy to tweak right in for optimum performance.)

These what-if scenarios are easy to simulate in RFSim99, which is freeware. There are lots of variations on the theme, but at very least, it's a quick check of a proposed solution to see if it's really all that good at both getting rid of the offender and passing the desired signal. Be sure to include expected loss resistance to simulate the finite Q of real components.

Cheers,
Tom

2448. Re: HB VHF low-pass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-21 19:38:37 UTC
From: - exray - <exray@coqui.net>
Message-ID: <124id63sknn9l49@corp.supernews.com>
Source record: 12449

K7ITM wrote:

> I question the bit about insertion loss 7MHz away being a non-issue
> with only a single open stub across the line. If you put an open stub
> of lossless 50 ohm line a quarter-wave long at 153MHz across the feed
> line, it puts a short across the line at 153, but it puts 0.26-j3.58
> ohms across it at 146MHz. That's a 99% reflection, or SWR close to
> 200:1 at 146. It's only about a 17dB loss, but that's more loss than
> I'd want.

You're correct. Someone pointed this out to me via email so I'll
retract my recommendation of using the stub.

Thanks,
Bill

2449. Favorite low power receiver ICs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-21 20:28:10 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <124ig4j152ptd07@corp.supernews.com>
Source record: 12450

Anyone have a favorite low power (as in tens of milliwatts) receiver IC that you can still get ahold of? I'm looking to see what could potentially replace some Philips UAA2080's, which are no longer available new from Philips. They were a really great part, giving you an oscillator, frequency mulitplier, RF pre-amp, I/Q mixers and a bit of demodulation (they were intended for use in pagers but gave you the raw I/Q output so could be pushed into service for other applications too) -- all of this for less than 10mW!

Looking around at parts, it seems that even plain old mixers now often run 50mW or more. Ostensibly this seems due to their usage at higher frequencies (low GHz range), which I can understand, but it's a feature don't require. I'm after low power parts for dealing with more pedestrian frequencies (low to mid-hundreds of MHz) and small bandwidths (single digit kHz).

Thanks,
---Joel KOlstad

2450. FA Kenwood Station Monitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-21 20:59:52 UTC
From: Roberto IZ5FCY <iz5fcy_NOSPAMPLEASE_@arrl.net>
Message-ID: <txsiv6amwwis.gkyy60vkkhze.dlg@40tude.net>
Source record: 12451

Hi,
a splendid Kenwood Station Monitor SM-230:
http://cgi.ebay.it/ws/eBayISAPI.dll?ViewItem&item=9714764236&rd=1&sspagename=STRK%3AMESE%3AIT&rd=1

--
73's de IZ5FCY Roberto

2451. Re: Favorite low power receiver ICs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-21 23:04:39 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <IpCdnVr354Oa-NTZnZ2dnUVZ_tWdnZ2d@web-ster.com>
Source record: 12452

Joel Kolstad wrote:

> Anyone have a favorite low power (as in tens of milliwatts) receiver IC that
> you can still get ahold of? I'm looking to see what could potentially replace
> some Philips UAA2080's, which are no longer available new from Philips. They
> were a really great part, giving you an oscillator, frequency mulitplier, RF
> pre-amp, I/Q mixers and a bit of demodulation (they were intended for use in
> pagers but gave you the raw I/Q output so could be pushed into service for
> other applications too) -- all of this for less than 10mW!
>
> Looking around at parts, it seems that even plain old mixers now often run
> 50mW or more. Ostensibly this seems due to their usage at higher frequencies
> (low GHz range), which I can understand, but it's a feature don't require.
> I'm after low power parts for dealing with more pedestrian frequencies (low to
> mid-hundreds of MHz) and small bandwidths (single digit kHz).
>
> Thanks,
> ---Joel KOlstad
>
>
Hey, if you find one let me know!

Have you considered looking at one of the obsolete-components suppliers?
It sounds stupid, but it seems like a lot of good RF parts for VHF are
going by the wayside as everyone gets on the GHz bandwagon.

Maybe we could hire Jim Thompson and start a company...

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

2452. Rec.radio.amateur antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-21 23:54:50 UTC
From: amdx <amdx@worldnet.att.net>
Message-ID: <2e6dd$444970cb$45011502$11128@KNOLOGY.NET>
Source record: 12453

I get no posts in rec radio amateur antenna. Is anyone else having problems?
I had some problems the past couple days, but today nothing appears.
Mike

2453. Re: Favorite low power receiver ICs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-22 00:12:41 UTC
From: biascomms <biascomms@blueyonder.co.uk>
Message-ID: <Zxe2g.57326$wl.9580@text.news.blueyonder.co.uk>
Source record: 12454

Joel Kolstad wrote:

> Anyone have a favorite low power (as in tens of milliwatts) receiver IC
> that
> you can still get ahold of? I'm looking to see what could potentially
> replace
> some Philips UAA2080's, which are no longer available new from Philips.
> They were a really great part, giving you an oscillator, frequency
> mulitplier, RF pre-amp, I/Q mixers and a bit of demodulation (they were
> intended for use in pagers but gave you the raw I/Q output so could be
> pushed into service for other applications too) -- all of this for less
> than 10mW!
>
> Looking around at parts, it seems that even plain old mixers now often run
> 50mW or more. Ostensibly this seems due to their usage at higher
> frequencies (low GHz range), which I can understand, but it's a feature
> don't require. I'm after low power parts for dealing with more pedestrian
> frequencies (low to mid-hundreds of MHz) and small bandwidths (single
> digit kHz).
>
> Thanks,
> ---Joel KOlstad

Most manufacturers seem to be obsessed with "high intercept point", which is desirable in some instances, but always carries a major power penalty.
With the demise of some of my favourite ICs, I'm going back to discrete components for many things.

Bob
--
Everything gets easier with practice, except getting up in the morning!

2454. Re: Rec.radio.amateur antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-22 00:19:22 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <124itkasgufm6b4@corp.supernews.com>
Source record: 12455

amdx wrote:
> I get no posts in rec radio amateur antenna. Is anyone else having problems?
> I had some problems the past couple days, but today nothing appears.
> Mike

It's alive and well -- there have been numerous postings every day.

Roy Lewallen, W7EL

2455. Re: Rec.radio.amateur antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-22 00:21:45 UTC
From: - exray - <exray@coqui.net>
Message-ID: <124itovrrtof703@corp.supernews.com>
Source record: 12456

amdx wrote:

> I get no posts in rec radio amateur antenna. Is anyone else having problems?
> I had some problems the past couple days, but today nothing appears.
> Mike
>
>
No problem here.

-Bill

2456. FA:1DAY+,VIRBOPLEX'PRESENTATION'+ MO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-22 00:56:49 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <lbf2g.61090$1q4.50320@bgtnsc05-news.ops.worldnet.att.net>
Source record: 12457
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Presentation in very fine possibly NOS condition in original box with documents + other stuff too: see at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking, more coming, heytubeguy

2457. Re: Rec.radio.amateur antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-22 02:55:05 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1145674504.998641.79070@e56g2000cwe.googlegroups.com>
Source record: 12458

The "alive" part Roy mentioned I agree with. I'm not so sure about the "well" part, but that's just my bias I guess.

You can always use Google to check activity on a group. Well, not ALL groups, but lots of them. To post through Google, you need to log in, but you can read groups without doing that.

Cheers,
Tom

2458. Re: Microwave Projects?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-22 14:16:46 UTC
From: "John Jardine." <john@jjdesigns.fsnet.co.uk>
Message-ID: <e2dds9$dl9$1@newsg1.svr.pol.co.uk>
Source record: 12459

"JJ" <JJ@nowhere.com> wrote in message
news:baf7d$444853d8$d135c4af$15108@MDI.CA...
> Very interesting receiver chip. I see Maxim makes those too.
> Any other manufacturers that would interest microwave experimenters?
>
> JJ

Also hoping the RF guys could throw in a couple of tasty pointers. Seems plenty of amps and mixers out there but if it's not cellphone stuff then seemingly very little else.
john

2459. Re: Microwave Projects?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-22 17:31:09 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1145727069.586990.95580@j33g2000cwa.googlegroups.com>
Source record: 12460

What do you mean by simple receivers ? What are you trying to receive, with what stability and sensitivity ? Amateurs have traditionally used crystal-controlled downconverters in front of lower frequency receivers, but this is generally suited only for receiving small segments of spectrum and doesn't usually have a very small parts count. The local oscillator usually involves several multiplier stages and tunable filters. The performance can be very good though.

For example there are lots of technical articles at

http://dpmc.unige.ch/dubus/index.html

The 1N5711 schottky diode works well in the lower microwave range and is quite widely available and cheap.

Steve VE3SMA

2460. low distortion antenna amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-22 17:55:44 UTC
From: amdx <amdx@worldnet.att.net>
Message-ID: <c0138$444a6e1e$45011502$12070@KNOLOGY.NET>
Source record: 12461
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hi All,
The article below shows a low distortion antenna amp for BCB and SW.

http://www.kongsfjord.no/dl/Amplifiers/Ultralinear%202N5109%20And%202N3053%20Amplifiers.pdf

Note the wrap.

When built as a push pull it has stated specs such as
12db power gain
ICP2in +100
ICP3in +35
Flat from 100khz to 30 Mhz
I'm interested in comments, and I'm also trying to generate some interest
in maybe some simulations to work on biasing options.
The author states more work needs to be done on transformer winding
ratios.
Take a look, it is an interesting article.
Mike

2461. Re: Interested? Become a Healthy Adult Male, ("Ham", M9ZZZ) and not a Coughing Bird ("CB", H5N1) - here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-22 20:52:10 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <444a977a$0$31266$dbd41001@news.wanadoo.nl>
Source record: 12463
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Morey wrote:
> I am in agreement withyou friend. I am KC8W0Q in Cadillac MI. U.S.A.
> Thanks for sticking to your guns. My name is Morey Cotton.
> Plod's Conscience <aiyr.r.bean@lycos.co.uk> wrote in message
> news:1144681555.714402.227210@u72g2000cwu.googlegroups.com...
>> A necessary preface.....
>>
>> (It is becoming increasingly difficult to fly the flag for
>> decency and for civilised behaviour in Radio Hammery.

Loads of drivel snipped.....

OMG, Beanie has got a top-poster fan club.....

2462. Re: Interested? Become a Healthy Adult Male, ("Ham", M9ZZZ) and not a Coughing Bird ("CB", H5N1) - here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-22 21:23:08 UTC
From: Morey <dammy@netonecom.net>
Message-ID: <26f26$444a91cb$d17c353a$9960@123.NET>
Source record: 12462
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

I am in agreement withyou friend. I am KC8W0Q in Cadillac MI. U.S.A.
Thanks for sticking to your guns. My name is Morey Cotton.
Plod's Conscience <aiyr.r.bean@lycos.co.uk> wrote in message
news:1144681555.714402.227210@u72g2000cwu.googlegroups.com...
> A necessary preface.....
>
> (It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery. Even
> the Usenet newsgroups dedicated to the cause have degenerated
> into a hotbed of abusive onslaughts by those who ought to know
> better; the Nugatory Numpties who boast of an interest
> exceeding 10, 20, 30, 40 or even 50 years and yet who have
> proved themselves incapable of even meeting the trivial exam
> standards set for 6-year-olds. However, there still exists
> the fundamental basis on which Ham Radio is based, and
> that will never die. This FAQ ("What Is Ham Radio?") will
> be regularly published and will not be shouted or bullied
> down. It is important that those of a technical bent, who
> are the natural seed-corn of Radio Hammery and who
> gravitate towards us to be the real novitiate, can
> still find us, (and know that we are still here), their fellows.)
>
> -----ooooo-----
>
> So,.....What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>
> Ham Radio awakens in its aficionados a whole-life
> fascination with all things technical and gives
> an all-abiding curiosity to improve one's scientific
> knowledge. It's a great swimming pool, please dive in!
>
> This excitement causes a wish to share the experience
> with ones fellow man, and shows itself in the
> gentlemanly traditions of Ham Radio.
>

> Radio Hams are in a unique privileged position in that
> they can construct and operate their own equipment! No-one
> else has this privilege. Users, such as broadcasters,
> the po lice and armed farces, CBers and mobile phone
> users have to purchase ready-made gear. Manufacturers
> are not licensed to operate their gear. Radio Hams
> are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment. This is a privilege well worth the effort
> to gain, and one to be jealously guarded.
>
> The excitement that drives a Radio Ham starts with
> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to
> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.
>
> -----OOOOO----
>
> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;
> they are free with rather silly personal insults.
>
> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.
>
> No _REAL_ Radio Hams are deceived by such people!
>
> -----ooooo-----

>
> One infallible way to disambiguate the CB Radio Hobbyist
> from the _REAL_ Radio Ham is to solicit their view of the
> difference between CB Radio and Ham Radio. A Radio Ham will
> perceive Ham Radio to be a technical pursuit and will
> perceive CB Radio to be a social communications facility
> no different in essence to a land-line telephone or a
> GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
> could also hold a CB licence safe in the knowledge that
> such a licence says no more about him than having a land-line
> telephone, whilst continuing to regard Ham Radio as a separate
> technical pursuit.
>
> A CB Radio hobbyist, on the other hand, sees no difference between
> a Ham Radio licence and a CB Radio licence. To him, they are
> sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
> tries to classify himself as the equal of the Radio
> Ham when, in fact, he is nothing of the kind.
>
> Ham Radio is not CB Radio and has no common ground with it!
> Ham Radio is _THE_ technical pursuit for gentlemen; CB Radio
> is the operating hobby for those who buy their rigs and
> equipment off the shelf.
>
> -----ooooo-----
>
> If you are the sort of person who is motivated by
> a technical interest in how things work; if you took apart
> malfunctioning clocks, toasters and the like and put them
> right despite never having seen them working, then
> a Ham Radio licence is your traditional route! There has
> never been a shortage of such people, and those who gravitate
> towards such an interest have always been welcomed into
> our shacks and their interests fostered. There is not today,
> nor has there ever been, a need to go out and encourage
> and press children, children who have never expressed an
> interest in Ham Radio, to come into our shacks. Such an
> activity should cause eyebrows to be raised - what
> normal well-adjusted adults seek the social acquaintance
> of children?!
>
> -----ooooo-----
>
> Please remember that this FAQ is a _POSITIVE EXHORTATION_
> to you to exert yourselves to join our fraternity! (If you find
> otherwise, then perhaps you are already classing yourself in the
> mediocre groups of those who are criticised in the FAQ and from
> whom we _MUST_ dissociate? If so - it's never too late for
> a re-taxonomisation on your part - there's nothing elitist about
> us, and we welcome all those who are prepared to put themselves

> out in order to join our ranks!)
>

2463. Re: Interested? Become a Healthy Adult Male, ("Ham", M9ZZZ) and not a Coughing Bird ("CB", H5N1) - here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-22 22:06:22 UTC
From: The Magnum <magnum@mag2781.freeserve.co.uk>
Message-ID: <444ab74f$0$20107$834e42db@reader.greatnowhere.com>
Source record: 12464
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"know code" <know_code@wanadoo.nl> wrote in message
news:444a977a$0$31266$dbd41001@news.wanadoo.nl...
> Morey wrote:
> > I am in agreement withyou friend. I am KC8W0Q in Cadillac MI. U.S.A.
> > Thanks for sticking to your guns. My name is Morey Cotton.
> > Plod's Conscience <aiyr.r.bean@lycos.co.uk> wrote in message
> > news:1144681555.714402.227210@u72g2000cwu.googlegroups.com...
> >> A necessary preface.....
> >>
> >> (It is becoming increasingly difficult to fly the flag for
> >> decency and for civilised behaviour in Radio Hammery.
>
> Loads of drivel snipped.....
>
> OMG, Beanie has got a top-poster fan club.....

Beanie's got a boyfriend, Beanie's got a boyfriend.....Seriously Morey a few people do agree to a degree with Beanie but it's the pathetic repetitive way he goes about it that drives everyone nuts... If he was to make a less insulting post with the same basic points then I feel he would get much further in his quest for all things "Hammery"...

Graham
--
-.-. -... / .-. .- -.. .. ---

Radio is only a Hobby. Don't let it rule your life...

73/51 - Graham, 26-Golf Charlie-19

2464. Re: low distortion antenna amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-22 22:23:51 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1145744631.219730.126750@i40g2000cwc.googlegroups.com>
Source record: 12465
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Yes, it's an interesting article. I do think you need to ask yourself exactly what problem you're trying to solve before just jumping in, though. One thing that can be very useful is an antenna/preselector that can get rid of "boomers" before they get to the amplifier. For example, a small tuned loop can be oriented to null an on-frequency interfering signal, and will have enough selectivity (assuming it's tuned) that off-frequency boomers will be much less problem. That doesn't work if you _must_ listen to everything all the time, though even then notching out one or two large signals can be useful. Because of the very high atmospheric noise on MW and even up into HF, there is seldom a need for a very good noise figure; the distortion performance takes precidence because of all the large signals around.

With a good antenna, there may be no need for an amplifier before the mixer at all, and it's possible to build mixers with input IP3s up around +50dBm -- there are people that read this group that know how to do that. Once past the mixer, you can filter, and if your _filter_ had low enough distortion and selects the signal you want while attenuating others, the rest of the amplifier chain doesn't have to be _quite_ as good.

I have an abiding interest in amplifiers with good distortion performance over just the band mentioned, though, and I can tell you that over most of it, you can do quite well with modern op amps. One example (but not the only one) is the circuit on the front page of the OPA847 data sheet. The OPA847 also has very respectably low noise. There are a few non-operational-amplifiers that do quite well, too. The IC amps generally have more noise, I think, than what's mentioned in the article (I haven't read it all -- yet), but they should be adequate for at least MF and lower HF work.

Just this morning I came across a PDF talking about using simulation software to optimize an amplifier for good distortion performance--it was an ap note that touted the (somewhat expensive for ham use) simulation software from that company. I didn't bother downloading it because it was out of both my price range (the software) and my frequency range (the ap note).

I'm curious about comments from BCB DXers--from what I've seen, it's hard to find signals you could listen to that are all that small, because there are so many stations on the air that every "channel" has something at least moderately large in it. For example, I see local stations here at about -30dBm on the antenna I'm using, and I can see signals every 10kHz across the whole band that are seldom lower than

-100dBm--just one or two that are lower than that and not by much. In that situation, a +40dBm TOI should be adequate: distortion from the -30dBm signals would be 140dB below them, or 50dB below the smallest signals I might want to listen to. But maybe if I spent more time looking at other times of the day, I'd get different results...and certainly having a neighbor running a kW on the same HF band I'm trying to listen to would require much better performance.

Cheers,
Tom

2465. Re: Microwave Projects?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-23 00:22:47 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <9Fz2g.6699$kg.5945@news02.roc.ny>
Source record: 12466

JJ wrote:
...
> What schottky diode works to make a signal strength meter?

Schottky diodes are soooo 20th Century,
http://www.analog.com/en/prod/0%2C2877%2CAD8313%2C00.html

-W8LNA

2466. Re: low distortion antenna amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-23 00:26:38 UTC
From: amdx <amdx@worldnet.att.net>
Message-ID: <d50$444ac9bb$45011502$31572@KNOLOGY.NET>
Source record: 12467
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"K7ITM" <k7itm@msn.com> wrote in message
news:1145744631.219730.126750@i40g2000cwc.googlegroups.com...
> Yes, it's an interesting article. I do think you need to ask yourself
> exactly what problem you're trying to solve before just jumping in,
> though. One thing that can be very useful is an antenna/preselector
> that can get rid of "boomers" before they get to the amplifier. For
> example, a small tuned loop can be oriented to null an on-frequency
> interfering signal, and will have enough selectivity (assuming it's
> tuned) that off-frequency boomers will be much less problem. That
> doesn't work if you _must_ listen to everything all the time, though
> even then notching out one or two large signals can be useful. Because
> of the very high atmospheric noise on MW and even up into HF, there is
> seldom a need for a very good noise figure; the distortion performance
> takes precidence because of all the large signals around.

The application where I saw this used, was in an antenna phasing unit,
the low distortion helped reduced mixing products in the output of the
phasing unit. I didn't see any noise figure in the article, but was told it
was 3 or 4 db, (ten years ago).

> With a good antenna, there may be no need for an amplifier before the
> mixer at all, and it's possible to build mixers with input IP3s up
> around +50dBm -- there are people that read this group that know how to
> do that. Once past the mixer, you can filter, and if your _filter_ had
> low enough distortion and selects the signal you want while attenuating
> others, the rest of the amplifier chain doesn't have to be _quite_ as
> good.

I'm thinking of using the amp on a Flag/Pennant antenna
which has a low output.

> I have an abiding interest in amplifiers with good distortion
> performance over just the band mentioned, though, and I can tell you
> that over most of it, you can do quite well with modern op amps. One
> example (but not the only one) is the circuit on the front page of the
> OPA847 data sheet. The OPA847 also has very respectably low noise.
> There are a few non-operational-amplifiers that do quite well, too.
> The IC amps generally have more noise, I think, than what's mentioned
> in the article (I haven't read it all -- yet), but they should be
> adequate for at least MF and lower HF work.
>
> Just this morning I came across a PDF talking about using simulation
> software to optimize an amplifier for good distortion performance--it
> was an ap note that touted the (somewhat expensive for ham use)

> simulation software from that company. I didn't bother downloading it
> because it was out of both my price range (the software) and my
> frequency range (the ap note).
>
> I'm curious about comments from BCB DXers--from what I've seen, it's
> hard to find signals you could listen to that are all that small,
> because there are so many stations on the air that every "channel" has
> something at least moderately large in it. For example, I see local
> stations here at about -30dBm on the antenna I'm using, and I can see
> signals every 10kHz across the whole band that are seldom lower than
> -100dBm--just one or two that are lower than that and not by much. In
> that situation, a +40dBm TOI should be adequate: distortion from the
> -30dBm signals would be 140dB below them, or 50dB below the smallest
> signals I might want to listen to. But maybe if I spent more time
> looking at other times of the day, I'd get different results...and
> certainly having a neighbor running a kW on the same HF band I'm trying
> to listen to would require much better performance.
>
I don't have the understanding of the numbers you seem to, but I heard
others look for better amps because of mixing products especially on
the AM band.
The trick in the AM BCB is to null out those large signals to hear
the smaller signals.

> Cheers,
> Tom
>
Thanks for your interest and thoughtful response, BTW the phasing
circuit is at

http://www.kongsfjord.no/dl/Antennas/MW%20Phaser%20no2%20III.pdf

Found on the following URL with many other good articles.

http://www.kongsfjord.no/dl/dl.htm

Mike

2467. Homebrew connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-23 01:07:29 UTC
From: Bob Liesenfeld <wb0poq@visi.com>
Message-ID: <444AD351.AD9EA178@visi.com>
Source record: 12468

Hi gang,
I've been thinking about making some homebrew connectors for RG-174/U coax. I plan to use them to interconnect several enclosures made of PC board material. I envision something like an SMB connector made from some of the brass tubing that can be found in hobby shops. Rather than re-invent the wheel, I thought I would ask here if anyone has done something like this. The goal is to avoid the large size of something like a BNC connector along with the attendant high cost of most all RF connectors.

Tnx!

Bob WB0POQ

2468. Re: Homebrew connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-23 02:18:10 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <CtB2g.2883$BO2.275@trnddc02>
Source record: 12469

"Bob Liesenfeld" <wb0poq@visi.com> wrote in message
news:444AD351.AD9EA178@visi.com...
> Hi gang,
> I've been thinking about making some homebrew connectors for RG-174/U
> coax. I plan to use them to interconnect several enclosures made of PC
> board material. I envision something like an SMB connector made from
> some of the brass tubing that can be found in hobby shops. Rather than
> re-invent the wheel, I thought I would ask here if anyone has done
> something like this. The goal is to avoid the large size of something
> like a BNC connector along with the attendant high cost of most all RF
> connectors.
>
> Tnx!
>
> Bob WB0POQ
>
> Hi Bob,

Why not use SMA or SMB? I used perhaps 30- 40 in my homebrew RX and it makes for easy fast connect/disconnect. The connectors are cheap as are the crimp tool. One can assemble a jumper in 3-4 minutes. I would not advise the RG-174 if you will be doing any soldering. Spend a few pennies more per foot and use RG-188/RG-316 teflon.

Dale W4OP
>

2469. Re: Homebrew connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-23 02:28:09 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <IMKdnSnrG_qoe9fZRVn-tg@web-ster.com>
Source record: 12470

Dale Parfitt wrote:

> "Bob Liesenfeld" <wb0poq@visi.com> wrote in message
> news:444AD351.AD9EA178@visi.com...
>
>>Hi gang,
>> I've been thinking about making some homebrew connectors for RG-174/U
>>coax. I plan to use them to interconnect several enclosures made of PC
>>board material. I envision something like an SMB connector made from
>>some of the brass tubing that can be found in hobby shops. Rather than
>>re-invent the wheel, I thought I would ask here if anyone has done
>>something like this. The goal is to avoid the large size of something
>>like a BNC connector along with the attendant high cost of most all RF
>>connectors.
>>
>>Tnx!
>>
>>Bob WB0POQ
>>
>>Hi Bob,
>
>
> Why not use SMA or SMB? I used perhaps 30- 40 in my homebrew RX and it makes
> for easy fast connect/disconnect. The connectors are cheap as are the crimp
> tool. One can assemble a jumper in 3-4 minutes. I would not advise the
> RG-174 if you will be doing any soldering. Spend a few pennies more per foot
> and use RG-188/RG-316 teflon.
>
> Dale W4OP
>
>
>
Where do you get connectors? The ones I see in Digi-Key are something
like $5.00 a crack. If I'm missing something please let me know!

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

2470. Re: Accurate voltage calibration

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-23 04:04:33 UTC
From: Ed Bailen <n5kzw@arrl.net>
Message-ID: <0lul42d96cfh6c0rad5e4us9ochucfkjgn@4ax.com>
Source record: 12471

On 15 Apr 2006 07:52:29 -0700, "K7ITM" <k7itm@msn.com> wrote:

>I'd suggest you either find a calibrator to connect your meter to, or
>make something you can use as a transfer standard. Maxim, for example,
>has some reasonably low cost voltage references with good stability
>(very few ppm/C). Then calibrate the transfer standard against some
>known in-calibration volt meter or calibrator, at a known temperature,
>and use it. I'd think in Scottsdale you could find a calibration
>service that would do the job for you, or maybe you know someone who
>has access to an accurate voltmeter. Of course, you should really do
>it for several ranges. You can maybe calibrate a voltage divider
>yourself, but it would save a lot of trouble if you could just do it
>directly. If you don't know anyone who works with more accurate
>instruements regularly and don't want to pay for a calibration, perhaps
>you could pay a visit to the EE or physics department in Tempe and use
>one of their instruments.
>
Most of the equipment I've seen at University EE departments (even
grad school), hasn't seen a calibration lab in 3 or 4 decades.

Some time back, a firend gave me a Leeds & Northrup Presision
Potentiometer. I've used it occasionally to check some voltmeters,
but I don't have anything over 3-1/2 digits of resolution.

Regards,
Ed

><SNIP>
>
>Cheers,
>Tom

2471. Re: Homebrew connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-23 05:00:11 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <vRD2g.305$0z.275@trnddc01>
Source record: 12472

"Tim Wescott" <tim@seemywebsite.com> wrote in message
news:lMKdnSnrG_qoe9fZRVn-tg@web-ster.com...
> Dale Parfitt wrote:
>
>> "Bob Liesenfeld" <wb0poq@visi.com> wrote in message
>> news:444AD351.AD9EA178@visi.com...
>>
>>>Hi gang,
>>> I've been thinking about making some homebrew connectors for RG-174/U
>>>coax. I plan to use them to interconnect several enclosures made of PC
>>>board material. I envision something like an SMB connector made from
>>>some of the brass tubing that can be found in hobby shops. Rather than
>>>re-invent the wheel, I thought I would ask here if anyone has done
>>>something like this. The goal is to avoid the large size of something
>>>like a BNC connector along with the attendant high cost of most all RF
>>>connectors.
>>>
>>>Tnx!
>>>
>>>Bob WB0POQ
>>>
>>>Hi Bob,
>>
>>
>> Why not use SMA or SMB? I used perhaps 30- 40 in my homebrew RX and it
>> makes for easy fast connect/disconnect. The connectors are cheap as are
>> the crimp tool. One can assemble a jumper in 3-4 minutes. I would not
>> advise the RG-174 if you will be doing any soldering. Spend a few pennies
>> more per foot and use RG-188/RG-316 teflon.
>>
>> Dale W4OP
>>
>>
>>
> Where do you get connectors? The ones I see in Digi-Key are something
> like $5.00 a crack. If I'm missing something please let me know!
>
I got mine from The RF Connection in MD. Admittedly I bought perhaps a
hundred or so.

Dale W4OP

2472. Best way to build fixed 1.6GHz locked oscillator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-23 05:04:53 UTC
From: 3flp <zalio@optusnet.com.au>
Message-ID: <1145768693.594483.54000@e56g2000cwe.googlegroups.com>
Source record: 12473

Hi,

I'm in the process of designing a simple scalar network analyser. The synthesizer will use 2 PLLs. One tuning from 1.6 to 2.6GHz and the second on locked to 1.6GHz. I hope to create a DC to 1GHz output. I'll use Minicircuits or similar for the broadband VCO. But it seems a little wastefull to use the same thing for the fixed frequency PLL. So here's the question, what would you experienced home brew gurus recommend?

The oscillator phase noise does not have to be perfect, but it should not be much worse that the Minicircuits VCOs. The cumbersome old-fasioned multiplied crystal is not really needed. So what other options should I look at?

Thanx for ideas,
74,
VK3FLP

2473. The New and Improved 'Islander'...a 7 Watt FM Transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-23 06:31:52 UTC
From: "braincambre500@yahoo.com" <braincambre500@yahoo.com>
Message-ID: <1145773912.733225.275920@i40g2000cwc.googlegroups.com>
Source record: 12474

Hello all,

I have just improved the "Islander". Do take a look at it at...

http://braincambre500.freeservers.com/islander.htm

Should you fancy projects like this, do send me an e-mail, and I will
be here, should you need assistance in this fun journey!

Sincerely,

Patrick

2474. Re: The New and Improved 'Islander'...a 7 Watt FM Transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-23 06:41:48 UTC
From: "braincambre500@yahoo.com" <braincambre500@yahoo.com>
Message-ID: <1145774508.525947.316250@i40g2000cwc.googlegroups.com>
Source record: 12475

Hell again all,

I sorry. I gave out the wrong address. Here is the right address for
the Islander.

http://draftwebpage.4t.com/islander.htm

...and all the best in 2006 ! ! !

...your freind, Patrick

2475. Re: Homebrew connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-23 06:47:58 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <124m8ov6k3rlnd6@corp.supernews.com>
Source record: 12476

See if you can find a drawing of a Peltola connector. This is a very low cost but high performance connector for RG-174 type cable (having a solid center conductor) designed by Ron Peltola at Tektronix and used in Tek scopes and other equipment for many years. You're likely to find some to look at in just about any analog Tek scope from the '70s onwards.

Roy Lewallen, W7EL

Bob Liesenfeld wrote:
> Hi gang,
> I've been thinking about making some homebrew connectors for RG-174/U
> coax. I plan to use them to interconnect several enclosures made of PC
> board material. I envision something like an SMB connector made from
> some of the brass tubing that can be found in hobby shops. Rather than
> re-invent the wheel, I thought I would ask here if anyone has done
> something like this. The goal is to avoid the large size of something
> like a BNC connector along with the attendant high cost of most all RF
> connectors.
>
> Tnx!
>
> Bob WB0POQ
>
>
>

2476. Re: Homebrew connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-23 11:33:54 UTC
From: amdx <amdx@worldnet.att.net>
Message-ID: <6ba60$444b661d$45011502$17492@KNOLOGY.NET>
Source record: 12477

"Bob Liesenfeld" <wb0poq@visi.com> wrote in message
news:444AD351.AD9EA178@visi.com...
> Hi gang,
> I've been thinking about making some homebrew connectors for RG-174/U
> coax. I plan to use them to interconnect several enclosures made of PC
> board material. I envision something like an SMB connector made from
> some of the brass tubing that can be found in hobby shops. Rather than
> re-invent the wheel, I thought I would ask here if anyone has done
> something like this. The goal is to avoid the large size of something
> like a BNC connector along with the attendant high cost of most all RF
> connectors.
>
> Tnx!
>
> Bob WB0POQ
>
You can reduce the connector number by one half by drilling a hole in your
PCB enclosure and running the >input cable inside the box and soldering it
to the board, then put a connector on the other end of the cable.
All outputs> would have the connector mounted to the box.
Mike

2477. Re: Interested? Become a Healthy Adult Male, ("Ham", M9ZZZ) and not a Coughing Bird ("CB", H5N1) - here's the FAQ for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-23 12:49:12 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1145796552.732975.94620@j33g2000cwa.googlegroups.com>
Source record: 12478
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

know code wrote:
> Morey wrote:
> > I am in agreement withyou friend. I am KC8W0Q in Cadillac MI. U.S.A.
> > Thanks for sticking to your guns. My name is Morey Cotton.
> > Plod's Conscience <aiyr.r.bean@lycos.co.uk> wrote in message
> > news:1144681555.714402.227210@u72g2000cwu.googlegroups.com...
> >> A necessary preface.....
> >>
> >> (It is becoming increasingly difficult to fly the flag for
> >> decency and for civilised behaviour in Radio Hammery.
>
> Loads of drivel snipped.....
>
> OMG, Beanie has got a top-poster fan club.....

I don't suppose for one moment that the twit who posted that is really KC8WOQ. Only a certifiable looney would re-post G4SDW's drivel in its entirety, complete with a note of support, and then put their own name and callsign to it.

73
Mike G4KFK

2478. Re: low distortion antenna amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-23 14:26:28 UTC
From: Ban <bansuri@masterweb.it>
Message-ID: <4vO2g.18443$6e2.3695@news.edisontel.com>
Source record: 12479
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

amdx wrote:
> Hi All,
> The article below shows a low distortion antenna amp for BCB and SW.
>
> http://www.kongsfjord.no/dl/Amplifiers/Ultralinear%202N5109%20And%202N3053%2
> 0Amplifiers.pdf
>

I know the lossless feedback based on Dr. Norton (Anzac Electronics) since
1977, when a German M. Martin DJ7VY published in CQ-DL a two stage preamp
for 145/440MHz with BFT66 and BFR34A.
I modified this amp for my thesis on phased array ultrasonic flaw detectors
for lower frequencies. I got much better performance than with the Plessey
SL531. F"=1.9dB, and phaseshift change of less than 1deg. over 102dB dynamic
range until +16dBm O/P.
--
ciao Ban
Apricale, Italy

2479. Re: low distortion antenna amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-23 20:11:36 UTC
From: amdx <amdx@worldnet.att.net>
Message-ID: <5d131$444bdf73$45011502$7338@KNOLOGY.NET>
Source record: 12480
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"Ban" <bansuri@masterweb.it> wrote in message
news:4vO2g.18443$6e2.3695@news.edisontel.com...
> amdx wrote:
> > Hi All,
> > The article below shows a low distortion antenna amp for BCB and SW.
> >
> >
http://www.kongsfjord.no/dl/Amplifiers/Ultralinear%202N5109%20And%202N3053%2
> > 0Amplifiers.pdf
> >
>
> I know the lossless feedback based on Dr. Norton (Anzac Electronics) since
> 1977, when a German M. Martin DJ7VY published in CQ-DL a two stage preamp
> for 145/440MHz with BFT66 and BFR34A.
> I modified this amp for my thesis on phased array ultrasonic flaw
detectors
> for lower frequencies. I got much better performance than with the Plessey
> SL531. F"=1.9dB, and phaseshift change of less than 1deg. over 102dB
dynamic
> range until +16dBm O/P.
> --
> ciao Ban
> Apricale, Italy
>
Hi Ban,
Interesting that you mention Anzac, I picked up an Anzac AM-962 at a
hamfest
many years ago, by the looks of it I thought it might be of the lossless
feedback
style, but I never found any confirmation on the net.
Please help me with your terms.

(1) Definition of F"----?

(2) phaseshift change of less than 1deg. over 102dB dynamic
range until +16dBm O/P.

let me guess
Very little phaseshift with a large increase of input until the output
equals +16dBm??

Thanks, Mike

2480. Re: low distortion antenna amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-23 21:17:49 UTC
From: Ban <bansuri@masterweb.it>
Message-ID: <U9S2g.18459$6e2.9426@news.edisontel.com>
Source record: 12481
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

amdx wrote:
> "Ban" <bansuri@masterweb.it> wrote in message
> news:4vO2g.18443$6e2.3695@news.edisontel.com...
>> amdx wrote:
>>> Hi All,
>>> The article below shows a low distortion antenna amp for BCB and SW.
>>>
>>>
> http://www.kongsfjord.no/dl/Amplifiers/Ultralinear%202N5109%20And%202N3053%2
>>> 0Amplifiers.pdf
>>>
>>
>> I know the lossless feedback based on Dr. Norton (Anzac Electronics)
>> since 1977, when a German M. Martin DJ7VY published in CQ-DL a two
>> stage preamp for 145/440MHz with BFT66 and BFR34A.
>> I modified this amp for my thesis on phased array ultrasonic flaw
>> detectors for lower frequencies. I got much better performance than
>> with the Plessey SL531. F"=1.9dB, and phaseshift change of less than
>> 1deg. over 102dB dynamic range until +16dBm O/P.
>> --
>> ciao Ban
>> Apricale, Italy
>>
> Hi Ban,
> Interesting that you mention Anzac, I picked up an Anzac AM-962 at a
> hamfest
> many years ago, by the looks of it I thought it might be of the
> lossless feedback
> style, but I never found any confirmation on the net.
> Please help me with your terms.
>
> (1) Definition of F"----?
>
F" is the noise figure. it says how much the noise gets increased in
comparison with a resistor of in this case 50 ohms.

> (2) phaseshift change of less than 1deg. over 102dB dynamic
> range until +16dBm O/P.
>
> let me guess
> Very little phaseshift with a large increase of input until the
> output equals +16dBm??
>

yes
When you make a phased array amp this is the most important figure, since we want to use zero x-ings to get relevant data. Similar to FM.
This is in general only possible with differential amps, which have at least F"= 6 to 8dB. So this application really appreciated this design.
--
ciao Ban
Apricale, Italy

2481. Re: Best way to build fixed 1.6GHz locked oscillator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-24 00:01:28 UTC
From: Chris Jones <lugnut808@nospam.yahoo.com>
Message-ID: <124o1ojf88fjhcf@corp.supernews.com>
Source record: 12482

3flp wrote:

> Hi,
>
> I'm in the process of designing a simple scalar network analyser. The
> synthesizer will use 2 PLLs. One tuning from 1.6 to 2.6GHz and the
> second on locked to 1.6GHz. I hope to create a DC to 1GHz output. I'll
> use Minicircuits or similar for the broadband VCO. But it seems a
> little wastefull to use the same thing for the fixed frequency PLL. So
> here's the question, what would you experienced home brew gurus
> recommend?
>
> The oscillator phase noise does not have to be perfect, but it should
> not be much worse that the Minicircuits VCOs. The cumbersome
> old-fasioned multiplied crystal is not really needed. So what other
> options should I look at?
>
> Thanx for ideas,
> 74,
> VK3FLP

Hi,
That sounds like a very interesting project. Can I try to persuade you to make it a vector network analyser? After considering making such a thing, I reckon that at least a third of the work is in making the signal source, and so once you've gone to that trouble, you might as well make a VNA which then allows proper calibration, so your return loss bridge etc. doesn't actually have to have good directivity, just be stable over time.

Regarding your question, I think two full PLLs is probably the best solution. If you don't need such wide tuning range for one (or both) of them, you could consider one of the Analog Devices PLL chips with integrated VCO.

Usually in a mixer, one of the inputs is driven hard and the other one is driven weakly. If you drive both inputs of your mixer hard then I guess that in addition to the wanted output you'll see the third harmonic of one oscillator mixing with the third harmonic of the other, giving you a spur at three times the wanted output frequency. What are your plans in order to get a clean output?

Chris

2482. Re: low distortion antenna amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-24 00:55:10 UTC
From: amdx <amdx@worldnet.att.net>
Message-ID: <51b0$444c21e8$45011502$20098@KNOLOGY.NET>
Source record: 12483
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

> >>
> >> I know the lossless feedback based on Dr. Norton (Anzac Electronics)
> >> since 1977, when a German M. Martin DJ7VY published in CQ-DL a two
> >> stage preamp for 145/440MHz with BFT66 and BFR34A.
> >> I modified this amp for my thesis on phased array ultrasonic flaw
> >> detectors for lower frequencies. I got much better performance than
> >> with the Plessey SL531. F"=1.9dB, and phaseshift change of less than
> >> 1deg. over 102dB dynamic range until +16dBm O/P.
> >> --
> >> ciao Ban
> >> Apricale, Italy
> >>
> > Hi Ban,
> > Interesting that you mention Anzac, I picked up an Anzac AM-962 at a
> > hamfest
> > many years ago, by the looks of it I thought it might be of the
> > lossless feedback
> > style, but I never found any confirmation on the net.
> > Please help me with your terms.
> >
> > (1) Definition of F"----?
> >
> F" is the noise figure. it says how much the noise gets increased in
> comparison with a resistor of in this case 50 ohms.
>

Wow, that's a very low noise figure, do you recall at what frequency
you were working?
How does your amp compare to the amp here?
http://www.kongsfjord.no/dl/Amplifiers/Ultralinear%202N5109%20And%202N3053%2
0Amplifiers.pdf
Did your design answer any of the questions posed in the article?

> > (2) phaseshift change of less than 1deg. over 102dB dynamic
> > range until +16dBm O/P.
> >
> > let me guess
> > Very little phaseshift with a large increase of input until the
> > output equals +16dBm??
> >
> yes
> When you make a phased array amp this is the most important figure, since
we
> want to use zero x-ings to get relevant data. Similar to FM.

> This is in general only possible with differential amps, which have at
least
> F"= 6 to 8dB. So this application really appreciated this design.
> --
> ciao Ban
> Apricale, Italy
>
>

2483. Feedback!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-24 01:52:03 UTC
From: James Thompson <Jamesthompson2002@hotmail.com>
Message-ID: <a5c67$444c2f44$438c8615$26880@ALLTEL.NET>
Source record: 12484

Has anyone got a good but cheap circuit to eliminate or surpress feedback. Im making my son some low power fm mikes to use in his church, but they get feedback real easy. Is there a simple notch filter per say that I can add the the mike section of this. My pcb is only 1.5 by 2" right now. Thanks.

2484. Class C engineering question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-24 02:58:08 UTC
From: Mont <k0ycn@arrl.net>
Message-ID: <49X2g.63477$F_3.25444@newssvr29.news.prodigy.net>
Source record: 12485

Following is a note I received from a friend who earnestly believes that a Class C plate modulated final requires approximately 200% (rather than 50%) of the final power input to achieve 100% modulation. I am interested in any theoretical arguments surrounding this.
Thanks, Mont - K0YCN

Mont,

Here are the numbers as I calculate them to achieve my goal.

Since Eimac specs are listed in terms of watts output so I will follow that too.
My goal is to be capable of 130% positive peak modulation with 375 watts of carrier output.

The Eimac tube manual says a single 4-400 typical operation at 3000 volts on the plate is 630 watts high level plate modulated carrier output. So, 630 watts X 4 = 2520 watts pep capability.

So, a more conservative 375 watts X 4 X 1.30 = 1950 watts pos. peak. Dividing that by 2 = 975 watts of peak audio output required from the positive producing modulator tube to make 1950 pos. peak RF output.

The 4-125 typical operation indicates 330 watts of AB1 is available. This is a far cry from 975 that I need. On the other hand a 4-400 in AB1 will deliver 1540 watts.

The negative vs. positive peaks will be controlled by a broadcast quality Innovonics AM asymmetrical compressor limiter which I am currently using in the shack.

The simple unexplained rule of thumb I came to understand early in my early ham days is that a 375 watt transmitter requires 187.5 watts of audio for 100% modulation. So, a 4-125, with 330 watts of capability, should be more than what is needed. In practical terms this is very misleading. That is why I been beating a dead horse for three years while two broadcast engineers could not explain why I could barely attain near 100 modulation. Little did I know that I was driving the pants of the poor 4-125's while trying!

Hence, I ordered a custom built filament xfmr that will power two 4-400 modulators. Hope to have all that working in about two weeks.

73,

2485. Re: Class C engineering question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-24 03:36:16 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1145849776.388061.168260@j33g2000cwa.googlegroups.com>
Source record: 12486

Soooo...if the modulator is transformer-coupled, how does the DC input to the RF amplifier increase when modulation is applied? A transformer can't couple DC...

Not saying the fellow can't do what he wants, but we need to know a LOT more about the circuit.

Remember, too, that the half-power rule is for sinewave modulation. If you use square-wave modulation at 100% depth, you need as much power from the modulator as the DC input to the RF amplifier. The modulated output is four times the unmodulated power, for half the time, and zero for the other half, assuming an RF stage that responds linearly to the modulation voltage.

For a given modulated waveform, it's easy enough to figure out what the actual power is, and it all has to come from somewhere. If the plate modulation is linear (current is linear with modulated voltage) and the modulation is coming through a transformer, then the average current from the RF deck plate supply must be constant, and the DC power input is therefore constant. Whatever power you put in the sidebands must come through the transformer. But maybe the circuit he's proposing DC couples the modulation voltage, and thus allows an increase in the DC current going to the RF deck.

Cheers,
Tom

2486. Re: Feedback!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-24 03:38:21 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <70io429s09d3hp377ltc573c0gs0cllckq@4ax.com>
Source record: 12487

You need an equalizer in the amplifier line.

Regards
Gary K4FMX

On Sun, 23 Apr 2006 21:52:03 -0400, "James Thompson"
<Jamesthompson2002@hotmail.com> wrote:

>Has anyone got a good but cheap circuit to eliminate or surpress feedback.
>Im making my son some low power fm mikes to use in his church, but they get
>feedback real easy. Is there a simple notch filter per say that I can add
>the the mike section of this. My pcb is only 1.5 by 2" right now. Thanks.
>

2487. Re: Feedback!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-24 03:42:11 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1145850131.164814.160130@e56g2000cwe.googlegroups.com>
Source record: 12488

You can get DSP-based feedback eliminators that work well and are not outrageously expensive. We use a Behringer DSP110 Shark unit, which you can get for well under $100, and it works well for us. Google "feedback eliminator" and you'll get lots of hits. I wouldn't even think about trying to build one on my own, with such units available. I'm sure there are better ones for more money, and others at similar cost that you should also consider, but I don't personally have experience with them.

Cheers,
Tom

2488. Re: Class C engineering question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-24 03:52:26 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <r1io42dimj5sh967va5ncieenvo45sor2j@4ax.com>
Source record: 12489

He is not calculating PEP properly. For 100% modulation the plate
voltage must double. That will require 187 watts average power to do
so. A little more with transformer losses.

Average power output from the transmitter will be 375 watts carrier
and 93 watts in each side band for a total of 562 watts average output
with full modulation.
But Peak envelope power will be 1500 watts at 100% modulation. 4
times carrier power.

100% modulation requires the plate voltage to double. Doubling the
plate voltage also doubles the current. So twice the voltage and twice
the current equals 4 times the power for PEP = 1500 watts.

4-125's in AB1 don't produce much power. I would have to look it up
but their AB1 rating is very low compared to some other tube types.

73
Gary K4FMX

On Mon, 24 Apr 2006 02:58:08 GMT, "Mont" <k0ycn@arrl.net> wrote:

>Following is a note I received from a friend who earnestly believes that a
>Class C plate modulated final requires approximately 200% (rather than 50%)
>of the final power input to achieve 100% modulation. I am interested in any
>theoretical arguments surrounding this.
>Thanks, Mont - K0YCN
>--
>Mont,
>
>Here are the numbers as I calculate them to achieve my goal.
>
>Since Eimac specs are listed in terms of watts output so I will follow that
>too.
>My goal is to be capable of 130% positive peak modulation with 375 watts of
>carrier output.
>
>The Eimac tube manual says a single 4-400 typical operation at 3000 volts on
>the plate is 630 watts high level plate modulated carrier output. So, 630
>watts X 4 = 2520 watts pep capability.
>
>So, a more conservative 375 watts X 4 X 1.30 = 1950 watts pos. peak.
>Dividing that by 2 = 975 watts of peak audio output required from the
>positive producing modulator tube to make 1950 pos. peak RF output.
>
>The 4-125 typical operation indicates 330 watts of AB1 is available. This

>is a far cry from 975 that I need. On the other hand a 4-400 in AB1 will
>deliver 1540 watts.
>
>The negative vs. positive peaks will be controlled by a broadcast quality
>Innovonics AM asymmetrical compressor limiter which I am currently using in
>the shack.
>
>The simple unexplained rule of thumb I came to understand early in my early
>ham days is that a 375 watt transmitter requires 187.5 watts of audio for
>100% modulation. So, a 4-125, with 330 watts of capability, should be more
>than what is needed. In practical terms this is very misleading. That is
>why I been beating a dead horse for three years while two broadcast
>engineers could not explain why I could barely attain near 100 modulation.
>Little did I know that I was driving the pants of the poor 4-125's while
>trying!
>
>Hence, I ordered a custom built filament xfmr that will power two 4-400
>modulators. Hope to have all that working in about two weeks.
>
>73,
>

2489. Re: Homebrew connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-24 12:24:00 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1145881440.954940.166280@y43g2000cwc.googlegroups.com>
Source record: 12490

Bob Liesenfeld wrote:
> Hi gang,
> I've been thinking about making some homebrew connectors for RG-174/U
> coax. I plan to use them to interconnect several enclosures made of PC
> board material. I envision something like an SMB connector made from
> some of the brass tubing that can be found in hobby shops. Rather than
> re-invent the wheel, I thought I would ask here if anyone has done
> something like this. The goal is to avoid the large size of something
> like a BNC connector along with the attendant high cost of most all RF
> connectors.
>
> Tnx!
>
> Bob WB0POQ

What frequencies will you be working at? At HF, RCA or phono plugs are not perfect and not awfully tiny but they aren't bad and they are EXTREMELY cheap and widely available and easily assembled. The impedance bump from each connection will be obviously there but for most non-measurement HF applications it simply doesn't matter.

The more connections you'll be making or the higher your frequency (especially above 30MHz), the harder it is to argue that you should homebrew it from brass tubing. The cost per connector will go down in bulk, and the reliability you need from each connector will go up. Homebrewing loses a lot of its fun when you spend more time wiggling connectors than actually making or using the circuit. At UHF you start becoming acutely aware of any impedance bumps and the pre-cast connectors take care of all those details for you very nicely up to GHz.

As to cost, SMA/SMB/other small connectors and jumpers with preattached connectors often show up in bulk in the auction places etc.

BNC's will look large if you're laying out PCB's with surface mount components, that's for sure, and RCA jacks aren't a whole lot smaller. There are some variants of phono plugs out there that are smaller but they are not as widely available or as cheap.

Good RF crimpers are not awfully cheap but should be considered in the TOTAL budget.

Tim.

2490. how to test MC1350P based if amplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-24 12:48:04 UTC
From: aadu.adok@gmail.com
Message-ID: <1145882884.089145.211090@g10g2000cwb.googlegroups.com>
Source record: 12491

hello,

In my receiver project I have reached to point where I need to test my
IF amplifier.
It's based on one MC1350P stage.

I know it should give me approx 60dB gain. First idea that comes to my
mind is that I should feed it with very weak signal. Am I correct: if
feed it with lets say..1 microvolt, then 60dB of gain should give me 1
millivolt at the output?

If so..then how can I get such a low level signal (my Hartley
oscillator gives my 1.7 volts PTP).

Any comments?

2491. Re: how to test MC1350P based if amplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-24 13:12:40 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <e2iis8$s9o$2@puck.litech.org>
Source record: 12492

aadu.adok@gmail.com wrote:
> hello,

> In my receiver project I have reached to point where I need to test my
> IF amplifier.
> It's based on one MC1350P stage.

> I know it should give me approx 60dB gain. First idea that comes to my
> mind is that I should feed it with very weak signal. Am I correct: if
> feed it with lets say..1 microvolt, then 60dB of gain should give me 1
> millivolt at the output?

> If so..then how can I get such a low level signal (my Hartley
> oscillator gives my 1.7 volts PTP).

> Any comments?

A metal box with good coax connectors on both ends, containing a
resistive divider made with _good_ noninductive resistors, is the
first thing that comes to mind. You'll also want _good_ coax cable
(better than 99% shield coverage) on the jumpers from your Hartley
oscillator to the divider box, and from the divider to your amplifier.

It probably would be a _very_ good thing to put your oscillator
inside a shielded metal box, too, with precautions to minimize signal
leakage from the cables and from inside the box. Otherwise you'll be
getting some unmeasured leakage signal into your IF amp as well as the
signal from the output side of the resistive divider, and that will
invalidate your measurements.

Good luck, and let us know how you decide to do this.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

2492. Re: how to test MC1350P based if amplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-24 13:50:48 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1145886648.713569.6410@e56g2000cwe.googlegroups.com>
Source record: 12493

aadu.adok@gmail.com wrote:
> hello,
>
> In my receiver project I have reached to point where I need to test my
> IF amplifier.
> It's based on one MC1350P stage.
>
> I know it should give me approx 60dB gain. First idea that comes to my
> mind is that I should feed it with very weak signal. Am I correct: if
> feed it with lets say..1 microvolt, then 60dB of gain should give me 1
> millivolt at the output?
>
> If so..then how can I get such a low level signal (my Hartley
> oscillator gives my 1.7 volts PTP).
>
> Any comments?

If you just want to see if it works rather than get detailed performance specifications - put a piece of wire on your oscillators output, put a piece of wire on the input to your amp. See if you can hear it. Increase physical distance between them, decrease length of wire(s) - crude, but will prove it as a "go/no go" test. When you have finished the rest of the receiver, then do some more testing...

Besides, if you dont have a calibrated sig gen, and calibrated instruments to see what comes out of the amp, and its terminated properly, this method is as good as any.....

Andrew VK3BFA.

2493. FA:GATES 4 H 3KV 1Amp CHOKE+MO PARTS

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-24 16:42:16 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <ld73g.77023$1q4.26304@bgtnsc05-news.ops.worldnet.att.net>
Source record: 12494

Heavy Gates 4H 3KV at 1 A choke (one of two) + more parts and stuff:
see at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx heytubeguy

2494. Re: Class C engineering question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-24 17:01:51 UTC
From: You <You@shadow.orgs>
Message-ID: <You-1CA4C6.09015824042006@netnews.worldnet.att.net>
Source record: 12495

In article <1145849776.388061.168260@j33g2000cwa.googlegroups.com>,
"K7ITM" <k7itm@msn.com> wrote:

> Soooo...if the modulator is transformer-coupled, how does the DC input
> to the RF amplifier increase when modulation is applied? A transformer
> can't couple DC...

You really don't know the answer to this? Did you actually pass the
Theory Exam? Inquiring minds want to know.........

2495. Re: how to test MC1350P based if amplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-24 17:03:25 UTC
From: You <You@shadow.orgs>
Message-ID: <You-C169C6.09033324042006@netnews.worldnet.att.net>
Source record: 12496

In article <1145882884.089145.211090@g10g2000cwb.googlegroups.com>,
aadu.adok@gmail.com wrote:

> hello,
>
> In my receiver project I have reached to point where I need to test my
> IF amplifier.
> It's based on one MC1350P stage.
>
> I know it should give me approx 60dB gain. First idea that comes to my
> mind is that I should feed it with very weak signal. Am I correct: if
> feed it with lets say..1 microvolt, then 60dB of gain should give me 1
> millivolt at the output?
>
> If so..then how can I get such a low level signal (my Hartley
> oscillator gives my 1.7 volts PTP).
>
> Any comments?
>

that's what attenuator stacks are for.......... Dah.....

2496. Re: Microwave Projects?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-24 17:28:30 UTC
From: "tucker@conninc.com" <tucker@conninc.com>
Message-ID: <1145899710.712380.229440@j33g2000cwa.googlegroups.com>
Source record: 12497

Seems you could take advantage of all the old Ku & C band
receivers,lnbs and other big dish stuff that people are throwing away,
i
remember the reciever tunes a 950-1400 mhz input span or somewhere
close, from the lnb. Should be alot easier to convert one of
these yardsale items than start from scratch. Ive got a bunch of these
setting around & wanted to put one on the 33cm 902-928mhz
amateur tv band, but the satellite starts alittle higher than that so i
put it on hold for now.

2497. Re: Homebrew connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-24 17:31:26 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <hNmdnYaREd7yltDZnZ2dnUVZ8s-dnZ2d@pipex.net>
Source record: 12398

> As to cost, SMA/SMB/other small connectors and jumpers with preattached
> connectors often show up in bulk in the auction places etc.
==========
They can also be found on flea-markets ,being leftovers from mobile
phone cellinstallation contracts.....at least on European flea
markets they are plentyful.

Frank GM0CSZ / KN6WH

2498. Re: Class C engineering question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-24 19:21:34 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d7-dnfTokvZuuNDZRVnyuw@bt.com>
Source record: 12399

It is so simple you can't believe it. It's only Ohm's Law.

The Class-C plate modulated final amplifier is driven hard on its control grid such that it is driven into saturation even when its DC plate volts is increased to twice its normal DC value.

When saturated, the peak RF plate output volts always swing between twice the DC supply volts and some very low value.

The final amplifier therefore constitutes a fixed DC load resistance across the DC supply, which depends on unmodulated RF power output and amplifier power efficiency.

This fixed resistance is also the value of the audio-frequency load impedance across the secondary of the modulation transformer.

For 100 percent modulation, the peak RF plate volts across the tank circuit swing between twice the modulated plate supply DC volts and zero. (Or some very low value.)

The harder the grid drives the plate circuit into saturation, the greater the modulating linearity. The drive limit is reached when any of the tube's electrodes approaches its rated power dissipation.

Eaxactly the same things happen with transistors.

Reg.

2499. Re: Class C engineering question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-24 21:04:48 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1145912687.938537.132040@i39g2000cwa.googlegroups.com>
Source record: 12400

Thank you, Reg. My reply would have been much less gracious and not nearly so complete. Probably something like, "Which part of 'constant DC input' do you not understand?" I appreciate that you took the time to write such a nice reply, one that the lurkers may well learn something from.

Another reason, of course, that a tube can't handle modulation peaks is that it's getting weak (or the initial design was inadequate). Seeing the plate current meter wiggle during modulation that's below 100% is a good sign it's time to check the RF output tubes, and as your reply suggests, the drivers as well, though the grid current meter should tell you enough about that. If the filament (cathode) no longer has enough emission, the tube may handle the carrier OK, but not the positive modulation peaks where the current must be about twice as high as with just the carrier. Then the DC current will drop during modulation.

Cheers,
Tom

2500. Re: Favorite low power receiver ICs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-24 21:49:37 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <124qi13fb3bkoea@corp.supernews.com>
Source record: 12401

Hi Tim,

"Tim Wescott" <tim@seemywebsite.com> wrote in message
news:IpCdnVr354Oa-NTZnZ2dnUVZ_tWdnZ2d@web-ster.com...
> Hey, if you find one let me know!

Yeah, will do!

> Have you considered looking at one of the obsolete-components suppliers?

Not yet, I'll check there shortly.

> Maybe we could hire Jim Thompson and start a company...

I could use about 1000 of them right about now... perhaps even a couple
thousand. But I suspect the quantity would have to be in at least the tens of
thousands if not hundreds of thousands before anyone would be willing to build
something new...

2501. Re: Favorite low power receiver ICs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-24 22:37:44 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <444D52E5.9C4C7B9A@earthlink.net>
Source record: 12402

Joel Kolstad wrote:
>
> Hi Tim,
>
> "Tim Wescott" <tim@seemywebsite.com> wrote in message
> news:IpCdnVr354Oa-NTZnZ2dnUVZ_tWdnZ2d@web-ster.com...
> > Hey, if you find one let me know!
>
> Yeah, will do!
>
> > Have you considered looking at one of the obsolete-components suppliers?
>
> Not yet, I'll check there shortly.
>
> > Maybe we could hire Jim Thompson and start a company...
>
> I could use about 1000 of them right about now... perhaps even a couple
> thousand. But I suspect the quantity would have to be in at least the tens of
> thousands if not hundreds of thousands before anyone would be willing to build
> something new...

Check with Lansdale to see if they can help. They buy the rights to
manufacture a lot of EOL parts. http://www.lansdale.com/

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2502. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 03:02:30 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <bjg3g.888$1V4.66707@news20.bellglobal.com>
Source record: 12403
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

"Fred McKenzie" <fmmck@aol.com> wrote in message
news:fmmck-1704062318190001@acac1c7d.ipt.aol.com...
> In article <M_OdnQ7LktjFlNnZRVnyhw@pipex.net>, Highland Ham
> <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:
>
>> What about Posidrive screwdrivers ? These are similar to Philips type of
>> screwdrivers but have additional 'notches' (if that is the correct word)
>> for better grip . The relevant screw heads are accordingly.
>
> Frank-
>
> I've heard of Posidrive. I think they are used in an old Hewlett Packard
> counter I have. However, the tool dealers I asked had never heard of
> them. I ended up using a common Phillips driver for my counter.
>
> Certainly Posidrive would be a better choice where they are more commonly
> used.
>
> Fred

In that vein, Canadians would have Robertson screwdrivers in their basic
toolbox for home use. Described, with history, at
http://en.wikipedia.org/wiki/Robertson_screwdriver .

Tom

2503. Re: low distortion antenna amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 04:27:00 UTC
From: charlesh3@msn.com
Message-ID: <wJednZWYQe-OONDZnZ2dnUVZ_vydnZ2d@giganews.com>
Source record: 12404
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

There are a number of MW DXers who listen only for signals from outside the Americas where channel spacing of 9 kHz is used. In that case, you can have a 1 kw signal from New Zealand sandwiched somewhere between 2 nearby strong 50 kw US stations while using a long Beverage antenna.

I used to have such a setup - I was a mile from WSB 750 with 50 kw with a 1900' Beverage. I needed close to 100 dB of dynamic range if my meory is correct.

Chuck

2504. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 04:39:30 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <444DA7D0.F4A35232@earthlink.net>
Source record: 12405
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Tom Holden wrote:
>
> "Fred McKenzie" <fmmck@aol.com> wrote in message
> news:fmmck-1704062318190001@acac1c7d.ipt.aol.com...
> > In article <M_OdnQ7LktjFlNnZRVnyhw@pipex.net>, Highland Ham
> > <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:
> >
> >> What about Posidrive screwdrivers ? These are similar to Philips type of
> >> screwdrivers but have additional 'notches' (if that is the correct word)
> >> for better grip . The relevant screw heads are accordingly.
> >
> > Frank-
> >
> > I've heard of Posidrive. I think they are used in an old Hewlett Packard
> > counter I have. However, the tool dealers I asked had never heard of
> > them. I ended up using a common Phillips driver for my counter.
> >
> > Certainly Posidrive would be a better choice where they are more commonly
> > used.
> >
> > Fred
>
> In that vein, Canadians would have Robertson screwdrivers in their basic
> toolbox for home use. Described, with history, at
> http://en.wikipedia.org/wiki/Robertson_screwdriver .
>
> Tom

I despise Robertson screws, along with the "Clutch head" screws.
Every time I run into either of them, someone has put them in with a
worn bit that strips the head and makes them almost impossible to
remove. I've used surface grinders, drills, and a cutting torch to
remove them to make repairs. I generally replace them with hex head
screws and make sure that I always inspect the bit before I start a job.
--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2505. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 05:23:56 UTC
From: Bill Turner <dezrat@copper.net>
Message-ID: <rgcr42lmr5euvp2bah9l8gnvsi52so993i@4ax.com>
Source record: 12406
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

ORIGINAL MESSAGE:

On Tue, 25 Apr 2006 04:39:30 GMT, "Michael A. Terrell"
<mike.terrell@earthlink.net> wrote:

>I've used surface grinders, drills, and a cutting torch to
>remove them to make repairs.

********** REPLY SEPARATOR **********

Often a Dremel tool with a thin grinding wheel will allow you to make
a slot and then use a regular screwdriver to remove it.

Bill, W6WRT

2506. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 05:32:43 UTC
From: Michael Kennedy <Mikek400@remthis.comcast.net>
Message-ID: <Ib2dnQUj3MFrKdDZ4p2dnA@comcast.com>
Source record: 12408
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

I've never seen anything with a posidrive screw in it.. They aren't used very much in the USA or at least in Florida... I have yet to need a posidrive screwdriver and I've taken all kinds of things apart in my life.. I consider a good set of torx and allen wrenches a necessity along with a set of sockets and wrenches and of course a small set of jewlers screwdrivers and mini torx bits, hammers, saws, etc...

The funny thing is I never knew what that weird looking phillips bit I had was called until today.

- Mike

"Fred McKenzie" <fmmck@aol.com> wrote in message news:fmmck-1804062230430001@ac951a46.ipt.aol.com...
> In article <1248ta74cr2pm3e@corp.supernews.com>, Roy Lewallen
> <w7el@eznec.com> wrote:
>
>> I'd consider looking for some other tool dealers to do business with.
>> Pozidriv (a registered trademark of Phillips Screw Co.) screws and
>> drivers are very common, sold by just about every tool company from
>> Snap-on through Stanley to Sears.
>
>
> OK Guys! I've done some more checking, and still can't find a store that
> sells Posidrive or Pozidrive. I have one lead to a specialty tool store
> across the state, but the local Ace, Sears and Lowes don't carry either
> the screws or the drivers.
>
> I can see where the Posidrive may be used in some electronic equipment,
> but all of the screws in the hinges in my house, as well as the screws
> holding the locks on the doors, are definitely Phillips. Are Posidrive
> screws used for those applications in other countries?
>
> I can see now that my original list should have stopped without the
> additional items. The purpose was to define a really BASIC set of tools
> for use around the home!
>
> Fred

2507. SolderSmoke #20: 80 mtrs, '602 circuits, Wee Willy, Seeing Rhea from London

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 05:33:09 UTC
From: bill.meara@gmail.com
Message-ID: <1145943188.952282.287880@j33g2000cwa.googlegroups.com>
Source record: 12407
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.basics,sci.astro.amateur

SolderSmoke!
A SHOW FOR ELECTRONICS HOMEBREWERS!

http://www.ourmedia.org/node/211360

Topics discussed in SolderSmoke #20:

-- Mike's rig for 80 QRP
-- Wee Willy DSB QRP rig
-- NE602s for DSB and SSB
-- QST article on Drake 2B receiver
-- Electroluminescent receiver
-- Bill's new telescope and Saturn's moon Rhea

Listen at: http://www.ourmedia.org/node/211360

Background:
Tired of listening to Led Zepplin or NPR on your I-Pod? Wouldn't you like to be able to carry with you the kinds of ham radio conversations that you listen to while in your radio shack?
Mike, KL7R, in Juneau, Alaska, and Bill, M0HBR, in London, England meet regularly on the ECHOLINK system to discuss their homebrew radio projects. We are making them available as PODCASTS.

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discussing: http://www.ourmedia.org/user/36170

We hope you enjoy the program. Please send us
feedback.

73 from London
Bill M0HBR N2CQR CU2JL
http://www.qsl.net/n2cqr

2508. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 05:34:36 UTC
From: Michael Kennedy <Mikek400@remthis.comcast.net>
Message-ID: <4dKdncRQh8r6KNDZnZ2dnUVZ_sCdnZ2d@comcast.com>
Source record: 12409
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

I hate those stupid robitson bits too... Like you said they always seem to
be stripped off...

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
news:444DA7D0.F4A35232@earthlink.net...
> Tom Holden wrote:
>>
>> "Fred McKenzie" <fmmck@aol.com> wrote in message
>> news:fmmck-1704062318190001@acac1c7d.ipt.aol.com...
>> > In article <M_OdnQ7LktjFlNnZRVnyhw@pipex.net>, Highland Ham
>> > <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:
>> >
>> >> What about Posidrive screwdrivers ? These are similar to Philips type
>> >> of
>> >> screwdrivers but have additional 'notches' (if that is the correct
>> >> word)
>> >> for better grip . The relevant screw heads are accordingly.
>> >
>> > Frank-
>> >
>> > I've heard of Posidrive. I think they are used in an old Hewlett
>> > Packard
>> > counter I have. However, the tool dealers I asked had never heard of
>> > them. I ended up using a common Phillips driver for my counter.
>> >
>> > Certainly Posidrive would be a better choice where they are more
>> > commonly
>> > used.
>> >
>> > Fred
>>
>> In that vein, Canadians would have Robertson screwdrivers in their basic
>> toolbox for home use. Described, with history, at
>> http://en.wikipedia.org/wiki/Robertson_screwdriver .
>>
>> Tom
>
> I despise Robertson screws, along with the "Clutch head" screws.
> Every time I run into either of them, someone has put them in with a
> worn bit that strips the head and makes them almost impossible to
> remove. I've used surface grinders, drills, and a cutting torch to
> remove them to make repairs. I generally replace them with hex head
> screws and make sure that I always inspect the bit before I start a job.

> --
> Service to my country? Been there, Done that, and I've got my DD214 to
> prove it.
> Member of DAV #85.
>
> Michael A. Terrell
> Central Florida

2509. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 05:43:02 UTC
From: Bill Turner <dezrat@copper.net>
Message-ID: <iddr42pechrbi90503cqab82f9cjpg7jpo@4ax.com>
Source record: 12410
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

ORIGINAL MESSAGE:

On Tue, 25 Apr 2006 01:32:43 -0400, "Michael Kennedy"
<Mikek400@remthis.comcast.net> wrote:

>I've never seen anything with a posidrive screw in it.. They aren't used
>very much in the USA or at least in Florida...

********** REPLY SEPARATOR **********

Tektronix used Pozidriv for many years in their scopes. Sometime after
I left the company in 1986 I was told they changed to Torx.

You can recognize a Pozidriv screw because it looks like a Phillips
but has a fine line scribed between adjacent flutes.

Bill, W6WRT

2510. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 07:06:11 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <444DCA30.C51D69F2@earthlink.net>
Source record: 12411
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Bill Turner wrote:
>
> ORIGINAL MESSAGE:
>
> On Tue, 25 Apr 2006 04:39:30 GMT, "Michael A. Terrell"
> <mike.terrell@earthlink.net> wrote:
>
> >I've used surface grinders, drills, and a cutting torch to
> >remove them to make repairs.
>
> ********** REPLY SEPARATOR **********
>
> Often a Dremel tool with a thin grinding wheel will allow you to make
> a slot and then use a regular screwdriver to remove it.
>
> Bill, W6WRT

Yes, sometimes, or even a fine toothed blade in a hacksaw, but not when you are standing on top of a ladder and struggling to reach the crappy hardware. The moron who built my four car garage used 4" or longer Robertson screws everywhere, and most of the heads were puled below the surface before the #2 bit slipped and chewed up the head. I broke two crowbars removing a dangerous hanging rack he's built to hold plywood above one of the bays. Both were flimsy, and they hung low enough that you could bump your head on exposed screw points sticking an inch though the bottom 2*4 beams. I had to remove and replace a lot of lumber that split because of the way he screwed things up.

--
Service to my country? Been there, Done that, and I've got my DD214 to prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2511. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 07:07:37 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <444DCA86.E2B7B7B1@earthlink.net>
Source record: 12412
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Michael Kennedy wrote:
>
> I've never seen anything with a posidrive screw in it.. They aren't used
> very much in the USA or at least in Florida... I have yet to need a
> posidrive screwdriver and I've taken all kinds of things apart in my life..
> I consider a good set of torx and allen wrenches a necessity along with a
> set of sockets and wrenches and of course a small set of jewlers
> screwdrivers and mini torx bits, hammers, saws, etc...
>
> The funny thing is I never knew what that weird looking phillips bit I had
> was called until today.

Microdyne and Lockheed-Martin both use it, although Microdyne has
moved out of the area.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2512. Amp Supply AT 1-6 Tuned input board Dentron FA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 09:42:01 UTC
From: NI4L <ni4l@charter.net>
Message-ID: <P9m3g.3654$nD.3226@fe05.lga>
Source record: 12413
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

This is a complete AT 1-6 Tuned input board and switch from the Amp Supply
LK series

Amplifiers. This will fit into the Dentrons also. Have schematics for this.

If you have a Stock Amp Supply or Dentron amp this is what you need.

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=9716726956&rd=1&sspagename=STRK%3AMESE%
3AIT&rd=1

2513. Re: Class C engineering question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 10:20:15 UTC
From: w8ji@akorn.net
Message-ID: <1145960415.156528.177590@t31g2000cwb.googlegroups.com>
Source record: 12414

> The Eimac tube manual says a single 4-400 typical operation at 3000 volts on
> the plate is 630 watts high level plate modulated carrier output. So, 630
> watts X 4 = 2520 watts pep capability.
> So, a more conservative 375 watts X 4 X 1.30 = 1950 watts pos. peak.
> Dividing that by 2 = 975 watts of peak audio output required from the
> positive producing modulator tube to make 1950 pos. peak RF output.

He'd be better off to consider what the modulator is actually doing.
The modulator is DOUBLING the anode voltage for 100% positive peaks.
Say the anode voltage is 1000 volts and current is 1 ampere. The
modulator drives a load impedance of 1000/1 or 1000 ohms. It has to
produce 1000 volts PEAK, which on a sine wave is 707 volts RMS.

707 volts RMS into a 1000 ohm load is 500 watts of sine wave power.

The modulator SINE WAVE power for 100% positive peak is exactly half
the plate input power. This ASSUMES a triode well into class C for the
PA. A tetrode will actually often use a bit less power because it often
must be modulated on the screen (or control grid) and anode at the same
time in order to be linear. The anode of a tetrode or pentode does not
follow square law power rules like a low mu class C triode does.

You can generally consider for voice even LESS power is required, a
good rule of thumb is about 25% of dc input power. So as a general rule
a 250 watt average audio power modulator will modulate a 1000 watt
transmitter 100% on voice.

I suspect he has something wrong with the PA not following square law
power change with anode voltage changes. In order to be linear with
modulating voltage changes the PA has to be well into class C
(switching very hard) and it must, with a terode, have some portion of
audio power applied to the screen (you could do the drive power
instead, but that's tricky).

He could have an audio mismatch or the modulator system might be
incapable of supplying the necessary power which is half the dc plate
input power for 100% modulation with a sine wave. He could have a PA
that does not follow square law power as voltage is changed. There is
absolutely NOTHING wrong with the rule that a modulator capable of
supplying half the dc input will modulate a properly designed PA 100%.

73 Tom

> The 4-125 typical operation indicates 330 watts of AB1 is available. This
> is a far cry from 975 that I need. On the other hand a 4-400 in AB1 will
> deliver 1540 watts.
>

> The negative vs. positive peaks will be controlled by a broadcast quality
> Innovonics AM asymmetrical compressor limiter which I am currently using in
> the shack.
>
> The simple unexplained rule of thumb I came to understand early in my early
> ham days is that a 375 watt transmitter requires 187.5 watts of audio for
> 100% modulation. So, a 4-125, with 330 watts of capability, should be more
> than what is needed. In practical terms this is very misleading. That is
> why I been beating a dead horse for three years while two broadcast
> engineers could not explain why I could barely attain near 100 modulation.
> Little did I know that I was driving the pants of the poor 4-125's while
> trying!
>
> Hence, I ordered a custom built filament xfmr that will power two 4-400
> modulators. Hope to have all that working in about two weeks.
>
> 73,

2514. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 11:34:04 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <NOn3g.986$1V4.74819@news20.bellglobal.com>
Source record: 12415
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
news:444DA7D0.F4A35232@earthlink.net...
> I despise Robertson screws, along with the "Clutch head" screws.
> Every time I run into either of them, someone has put them in with a
> worn bit that strips the head and makes them almost impossible to
> remove. I've used surface grinders, drills, and a cutting torch to
> remove them to make repairs. I generally replace them with hex head
> screws and make sure that I always inspect the bit before I start a job.
> --

Misdirected feelings - should be towards worn bits of all types that can
mess up all types of screws. Don't blame the screw for the fault of the bit
and the recklessness of the user. Among the three common wood screws here
(slot, Phillips and Robertson), I'll take the Robbie anyday. The ability of
the bit to retain the screw is a big advantage.

Tom

2515. Re: Best way to build fixed 1.6GHz locked oscillator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 12:01:18 UTC
From: 3flp <zalio@optusnet.com.au>
Message-ID: <1145966478.761380.266640@i40g2000cwc.googlegroups.com>
Source record: 12416

Hi Chris,

I am planning to make it a VNA in a later stage. For now, I just need something to check antennas, filters, etc. So a scalar analyzer with a good return loss bridge will do OK.

After some thought & googling around, I'll just use the original suggestion for now. Two identical VCOs + PLLs. So in effect, I am optimising the design for speed & easiness :-). Not for cost or performance...

I am aware that the mixer will produce various combinations of LO & IF frequencies. I am hoping to optimise the power levels to get the 2nd and 3rd harmonic down to -50dBc. That should be enough for return loss measurement. For filter response measurements, this is probably not good enough, so I am thinking about adding a switchable bank of low pass filters at the output. But this is slightly messy, so I'll do it later, and only if I convince myself that it's needed.

73
Fil
VK3FLP

2516. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 15:38:10 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <444E4230.4F409285@earthlink.net>
Source record: 12417
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Tom Holden wrote:
>
> "Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
> news:444DA7D0.F4A35232@earthlink.net...
> > I despise Robertson screws, along with the "Clutch head" screws.
> > Every time I run into either of them, someone has put them in with a
> > worn bit that strips the head and makes them almost impossible to
> > remove. I've used surface grinders, drills, and a cutting torch to
> > remove them to make repairs. I generally replace them with hex head
> > screws and make sure that I always inspect the bit before I start a job.
> > --
>
> Misdirected feelings - should be towards worn bits of all types that can
> mess up all types of screws. Don't blame the screw for the fault of the bit
> and the recklessness of the user. Among the three common wood screws here
> (slot, Phillips and Robertson), I'll take the Robbie anyday. The ability of
> the bit to retain the screw is a big advantage.
>
> Tom

You can have all of them. I'll keep using hex and torx head screws,
thank you! ;-)

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2517. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 16:06:49 UTC
From: Bill Turner <dezrat@copper.net>
Message-ID: <t6is42hddvr5h0gkn7f376evpurmjo78bq@4ax.com>
Source record: 12418
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

ORIGINAL MESSAGE:

On Tue, 25 Apr 2006 15:38:10 GMT, "Michael A. Terrell"
<mike.terrell@earthlink.net> wrote:

> You can have all of them. I'll keep using hex and torx head screws,
>thank you! ;-)

********** REPLY SEPARATOR **********

I kind of like the square drive myself. I wonder why it's not more
popular? Is there an inherent deficiency I'm not aware of?

Bill, W6WRT

2518. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 17:09:10 UTC
From: Greg Neill <gneillREM@OVE.THIS.netcom.ca>
Message-ID: <zls3g.1295$fx.205352@news20.bellglobal.com>
Source record: 12419
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

"Bill Turner" <dezrat@copper.net> wrote in message
news:t6is42hddvr5h0gkn7f376evpurmjo78bq@4ax.com...

>
> I kind of like the square drive myself. I wonder why it's not more
> popular? Is there an inherent deficiency I'm not aware of?

The Robertson drive screws are ubiquitous in Canada where they were first made (in 1908) and patented. They are less so in the U.S. due to the fact that, after one business fiasco with licensing the right to manufacture to a third party in England, Robertson refused to license it to any one else, including Ford in the U.S. Ford would not adopt any screw for its production lines for which it could not guarantee unbroken availability, despite the fact that the screw proved to save considerable time in the production of cars. So, they never really caught on there like they did in Canada.

2519. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 18:58:21 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <124ssafmjsel1da@corp.supernews.com>
Source record: 12420
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Greg Neill wrote:
>
> The Robertson drive screws are ubiquitous in Canada where
> they were first made (in 1908) and patented. They are less
> so in the U.S. due to the fact that, after one business
> fiasco with licensing the right to manufacture to a third
> party in England, Robertson refused to license it to any
> one else, including Ford in the U.S. Ford would not adopt
> any screw for its production lines for which it could not
> guarantee unbroken availability, despite the fact that the
> screw proved to save considerable time in the production
> of cars. So, they never really caught on there like they
> did in Canada.
>

They're catching on. I recently had my deck surface replaced, and nearly all the screws are square drive. (The remainder are Torx.) It's the first use I've seen of them here. They're readily available now at Home Depot and, I assume, other DIY stores.

Roy Lewallen, W7EL

2520. Re: Class C engineering question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 20:46:55 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e2m1rv$e4m$1@avnika.corp.mot.com>
Source record: 12422

A couple of comments not covered by others.... *****

"Mont" <k0ycn@arrl.net> wrote in message
news:49X2g.63477$F_3.25444@newssvr29.news.prodigy.net...
> Following is a note I received from a friend who earnestly believes that a
> Class C plate modulated final requires approximately 200% (rather than
50%)
> of the final power input to achieve 100% modulation. ...> Thanks, Mont -
K0YCN
> --
> Mont,
...
> My goal is to be capable of 130% positive peak modulation with 375 watts
of
> carrier output.

****** WHY?. What could be the possible benefit (thinking on terms of dB)?
This is what, 2 dB more power in the sidebands...? This is 69% more power
in the sidebands and 2dB is 56% more...

> The Eimac 4-400...3000 volts...630 watts high level plate modulated
carrier output. So, 630 watts X 4 = 2520 watts pep capability.

***** PEP is a red herring here. I could be wrong because of the contorted
reasoning, but I believe he is confusing Peak power and PEP, but I can't be
sure 'cuz I don't completely understand what he is trying to reason out.
Peak Power is Vpk x Ipk
PEP is V(rms at the peak) x I(rms at the peak)

> ...375 watts X 4 X 1.30 = 1950 watts pos. peak.
> Dividing that by 2 = 975 watts of peak audio output required...

**** This appears to be a location for a logic fault.

> The 4-125 typical operation indicates 330 watts of AB1 is available....
*** Noted for later.

> The negative vs. positive peaks will be controlled by a broadcast quality
> Innovonics AM asymmetrical compressor limiter which I am currently using
in
> the shack.

*** This may be a separate issue, but doesn't this suggest that the
modulator AND transformer must have the capability of handling the distorted
waveform from this "asymmetrical compressor " such that the low frequency
response extends low enough to get this extra plate voltage turing the
positive peaks?

> ... a 375 watt transmitter requires 187.5 watts of audio for
> 100% modulation. So, a 4-125, with 330 watts of capability, should be
more
> than what is needed.

*** No argument here...

> In practical terms this is very misleading.
*** paraphrased = " _I_ can't get _my_ circuit to work."

> That is
> why I been beating a dead horse for three years while two broadcast
> engineers could not explain why I could barely attain near 100 modulation.
> Little did I know that I was driving the pants of the poor 4-125's while
> trying!

*** Are the RF amp and modulator operating properly in the first place?
*** Does he have the proper modulation transformer?
*** Is he even using a modulation transformer?
*** Is he confused between Peak power and PEP?

73, Steve, K9DCI
>
> Hence, I ordered a custom built filament xfmr that will power two 4-400
> modulators. Hope to have all that working in about two weeks.
>
> 73,
>
>

2521. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 20:55:26 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <444E8C8B.E96BA3D1@earthlink.net>
Source record: 12421
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Roy Lewallen wrote:
>
> Greg Neill wrote:
> >
> > The Robertson drive screws are ubiquitous in Canada where
> > they were first made (in 1908) and patented. They are less
> > so in the U.S. due to the fact that, after one business
> > fiasco with licensing the right to manufacture to a third
> > party in England, Robertson refused to license it to any
> > one else, including Ford in the U.S. Ford would not adopt
> > any screw for its production lines for which it could not
> > guarantee unbroken availability, despite the fact that the
> > screw proved to save considerable time in the production
> > of cars. So, they never really caught on there like they
> > did in Canada.
> >
>
> They're catching on. I recently had my deck surface replaced, and nearly
> all the screws are square drive. (The remainder are Torx.) It's the
> first use I've seen of them here. They're readily available now at Home
> Depot and, I assume, other DIY stores.
>
> Roy Lewallen, W7EL

They have been used in mobile homes for years in the US. I can buy
them bulk at several local building surplus stores. There are several
mobile home manufacturers in the area that dump a lot of leftover or
damaged items.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2522. Re: Feedback!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 21:13:20 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e2m3dh$ea1$1@avnika.corp.mot.com>
Source record: 12423

Pay attention to the placement of speakers. For one, don't try to use mics
in front of speakers. The talker needs to have a zone and loud-speakers
should not "talk" to that zone. People near the talker don't need to have
loud-speakers to hear him/her, so if there are some, disconnect them. They
should also "point" where the sound is needed, not oriented because the
mounting is easy. You have to walk around and see where the loud-speakers
are needed and have them there, but not everywhere. I obviously don't know
if this is the case for you, but churches tend to have PA systems thrown at
them rather than designed.
You can "notch" the preferred frequency, for a few db of feedback margin,
with an equalizer. However, when you notch the primary frequency, the next
pops up a few dB down and you can keep chasing them until you have reduced
the gain all thougth the spectrum. Plus, just move a foot or two and the
path changes and the preferred frequency changes.

I am unfamiliar with DSP feedback eliminators, but the job should be easier
if you start at the source (of speaker / mic proximity)

73, Steve, K9DCI

"James Thompson" <Jamesthompson2002@hotmail.com> wrote in message
news:a5c67$444c2f44$438c8615$26880@ALLTEL.NET...
> Has anyone got a good but cheap circuit to eliminate or surpress feedback.
> Im making my son some low power fm mikes to use in his church, but they
get
> feedback real easy. Is there a simple notch filter per say that I can add
> the the mike section of this. My pcb is only 1.5 by 2" right now.
Thanks.
>
>

2523. Re: Feedback!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-25 23:06:39 UTC
From: biascomms <biascomms@blueyonder.co.uk>
Message-ID: <3Yx3g.59668$wl.5610@text.news.blueyonder.co.uk>
Source record: 12424

James Thompson wrote:

> Has anyone got a good but cheap circuit to eliminate or surpress feedback.
> Im making my son some low power fm mikes to use in his church, but they
> get feedback real easy. Is there a simple notch filter per say that I can
> add
> the the mike section of this. My pcb is only 1.5 by 2" right now.
> Thanks.

You can try an equaliser in the amplifier input feed, and try to notch out the worst feedback frequencies. This will work, but is quite a limited approach.

The best method is to use a frequency shifter that moves the whole audio spectrum a few hertz up or down. Surrey Electronics here in England make such a device, and it's transparent in use - you can't hear it working, but feedback problems are almost entirely eliminated.
http://reflectionseurope.com/surreyelectronics.html

Chris

--
Everything gets easier with practice, except getting up in the morning!

2524. Re: Feedback!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-26 07:17:12 UTC
From: Adrian Brentnall <"adrian-the papers and the trash"@ambquality.co.uk>
Message-ID: <0s6u42lcslmukrgcg8chlkc7accgnbvluq@4ax.com>
Source record: 12425

Hi

On Tue, 25 Apr 2006 23:06:39 GMT, biascomms
<biascomms@blueyonder.co.uk> wrote:

>James Thompson wrote:
>
>> Has anyone got a good but cheap circuit to eliminate or surpress feedback.
>> Im making my son some low power fm mikes to use in his church, but they
>> get feedback real easy. Is there a simple notch filter per say that I can
>> add
>> the the mike section of this. My pcb is only 1.5 by 2" right now.
>> Thanks.
>

We had the same problem in our local Church. The 'system' involved a
couple of bass guitar speakers hung on the wall, a guitar amp and a
not-so-cheap omnidirectional mic at the lectern.

The whole thing 'rang' like a bell at the slightest provovation.

The Church is in a smallish room - probably 30ft x 50ft - with a low
ceiling - and partly divided half-way by a couple of stub walls -
which made it very hard for people at the back of the Church to hear
wht was being said, unless the speakers at the front of the church
were turned up loud enough that you got feedback...

The solution was to replace the lot ! - but as a lot of it was
homebrewed it didn't cost a fortune.

The lectern mics were replaced by a pair of electret boundary mics
with a cardiod response (didn't pick up sound from the direciton of
the speakers. The giant bass speakers were replaced by two pairs of
decent 2nd-hand hi-fi speakers - one pair near the front of the Church
and the other pair at the stub walls, facing backwards.

The amp was replaced with a custom unit, containing three (mono)
40Watt IC amp modules - one for the front speakers, one for the back
speakers and the third one for future use to drive an inductive
hearing aid loop. Volume is independantly controllable between the
front and rear speakers.

This, of course, is a specific solution for our specific situation.
What you probably need to do is start with a simple plan of your
Church - showing the areas where mics are needed, and where you can
put speakers. If possible, you'll find that multiple,
independantly-controllable speakers will allow you to keep the sound

level high enough for intelligibilty without getting feedback - you might find that you only need amplification 'at the back' of the Church....

Look closely at mics - the closer and more directional the better - may even be worthwhile using radio mics, if your people can be trained to use them. The notch filter will work - but it's only a 'band-aid' solution - get the accoustic design right and you won't need one !

Hope this helps
Adrian
Suffolk UK
======return email munged=================
take out the papers and the trash to reply

2525. Re: Feedback!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-26 07:21:04 UTC
From: Adrian Brentnall <"adrian-the papers and the trash"@ambquality.co.uk>
Message-ID: <ml7u4211elg2m6ff4dl3m5qk9hceskq75l@4ax.com>
Source record: 12426

Hi again James

Should have read your original post more carefully - sorry !

On Tue, 25 Apr 2006 23:06:39 GMT, biascomms
<biascomms@blueyonder.co.uk> wrote:

>James Thompson wrote:
>
>> Has anyone got a good but cheap circuit to eliminate or surpress feedback.
>> Im making my son some low power fm mikes to use in his church, but they
>> get feedback real easy. Is there a simple notch filter per say that I can
>> add
>> the the mike section of this. My pcb is only 1.5 by 2" right now.
>> Thanks.

I guess that you could build a speicific notch into the mic pcb - but
that'll only work if the feedback is at one specific (resonant)
frequency. I think the best filtering systems are 'adaptive' - in
that they can spot feedback happening and can drop a tunable notch on
top of it in real time. Complicated though - and tends to be done at
the amp, rather than at the mic.

All the stuff in the other post applies though - look at the system
first......

Adrian
Suffolk UK
======return email munged=================
take out the papers and the trash to reply

2526. Re: Microwave Projects?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-26 17:02:21 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <647bb$444fa79d$d135c4af$23197@MDI.CA>
Source record: 12427

skavanagh72nospam@yahoo.ca wrote in news:1145727069.586990.95580
@j33g2000cwa.googlegroups.com:

> What do you mean by simple receivers ? What are you trying to receive,
> with what stability and sensitivity ? Amateurs have traditionally used
> crystal-controlled downconverters in front of lower frequency
> receivers, but this is generally suited only for receiving small
> segments of spectrum and doesn't usually have a very small parts count.
> The local oscillator usually involves several multiplier stages and
> tunable filters. The performance can be very good though.

Something that can be built with 1 chip just to experiment for now.
From what I read, regular fiberglass boards don't work well above 1 GHz.
Where do you get teflon boards?

JJ

2527. Re: Microwave Projects?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-26 17:04:19 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <153d6$444fa813$d135c4af$23197@MDI.CA>
Source record: 12428

"tucker@conninc.com" <tucker@conninc.com> wrote in
news:1145899710.712380.229440@j33g2000cwa.googlegroups.com:

> Seems you could take advantage of all the old Ku & C band
> receivers,lnbs and other big dish stuff that people are throwing away,
> i
> remember the reciever tunes a 950-1400 mhz input span or somewhere
> close, from the lnb. Should be alot easier to convert one of
> these yardsale items than start from scratch. Ive got a bunch of these
> setting around & wanted to put one on the 33cm 902-928mhz
> amateur tv band, but the satellite starts alittle higher than that so i
> put it on hold for now.
Cool, how much are these cheap receivers?
Can you use them for a radio telescope @1420MHz?
These would need to recieve AM mode.

JJ

2528. Re: Microwave Projects?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-26 17:27:49 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <124vbcmg1q6u305@corp.supernews.com>
Source record: 12429

"JJ" <JJ@nowhere.com> wrote in message
news:647bb$444fa79d$d135c4af$23197@MDI.CA...
> skavanagh72nospam@yahoo.ca wrote in news:1145727069.586990.95580
> From what I read, regular fiberglass boards don't work well above 1 GHz.

That's a bit of an overgeneralization. We routinely use "generic" FR-4 to 3GHz, and you'll find that many wireless routers at 2.4GHz do as well. As long as the paths are relatively short and you're just using the board to get a signal from point A to point B, it works pretty well.

The folks who suggest you use Teflon or other high-quality board materials are probably thinking of building distributed circuits on it -- stuff like filters, where the board's loss (its Q) significantly impact how good your filter's response is. (Building something like a bandpass WiFi filter -- ~25MHz wide at ~2.45GHz -- on FR-4 using coupled lines is probably not such a hot idea -- this would be a good test case to simulate.)

> Where do you get teflon boards?

All the decent-sized board houses (e.g., Advanced Circuits, DDI, etc.) have low-loss board materials available. Nelco (http://www.parknelco.com/) and Rogers (http://www.rogers-corp.com/acm/index.htm) are two of the big players here. We have many boards done in Nelco 4000-13, which is a "mid-loss" material... only somewhat better than FR-4 when it comes to absolute loss, but considerably better when it comes to the specs not drifting over process, temperature, etc., all at a relatively small pricing premium.

If you can afford it, by all means, get low-loss boards. However, in many cases in the low-GHz area you end up with more loss from items such as coax cable, connectors, impedances mismatches, etc. than the PCB material itself.

---Joel Kolstad

2529. Re: Damaged resistor - what happens?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-26 18:00:22 UTC
From: Telstar Electronics <briangriffey@sbcglobal.net>
Message-ID: <1146074422.024326.248990@j33g2000cwa.googlegroups.com>
Source record: 12430

Resistors can certainly change value when heated. As for your color code... that resistor must have gotten very hot indeed to have the first band as black. That color doesn't make sense in that position...

www.telstar-electronics.com

2530. Regen Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-27 00:27:47 UTC
From: dconley@lawfacts.com
Message-ID: <1146097667.588709.301120@v46g2000cwv.googlegroups.com>
Source record: 12431

I was wondering if ya'll could help me with an issue that I am having with a regen receiver that I built.

I built the usual regen circuit with two stages of audio coupled with interstage transformers. The regeneration is controlled by a pot which varies the plate regen voltage. The grid leak combination is a 6 Mohm resistor and 45 pf cap.

The regen and first audio stage tubes are 1H5GT triodes. The second stage audio tube is a 1C5GT pentode. The filament voltage is 1.4 volts, plate voltage is 90 volts and screen voltage for the 1C6GT tube is 90 volts. The set easily and cleanly drives a speaker.

I have wound my own coils which cover the broadcast band up to about 15 Mhz.

I really like the way the set operates and it is very sensitive.

My problem is that the regeneration often fades out (the radio essentially goes dead) and I have to touch the grid of the regen tube to bring it back in. I had originally built this radio only having one stage of audio and I did not have this problem with that version. It's kind of like the charge on the grid builds up too high and I have to "drain" it off with my finger. Sorry for the bad description--I'm obviously not an engineer.

I did try various other combinations of the resistor/cap for the grid leak including the classic 2.2 Mohm/150 Pf combination and it still has the same fade out problem. Therefore,
I decided to stay with the higher resistor/lower cap value because the receiver works better at those values (when it is working).

I usually power the radio with a battery eliminator, but the same problem exists even when I use only batteries. For a ground, I am using the mains ground.

I'm hoping that you can give me some ideas to fix the problem for what is otherwise a great receiver.

Thanks to all of you in advance.

Dan

2531. Re: Regen Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-27 08:33:49 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1146126829.180068.76090@v46g2000cwv.googlegroups.com>
Source record: 12432

Hi Dan,

Have you checked that your 6M ohm grid leak is actually 6M ?

It does sound like a charge build up on the grid. Does the RF anode current rise or fall when the radio goes dead ?

Are there any components attached to the grid that could be breaking down slowly - capacitor, maybe even valve base.

Have you tried replacing the valve base ?

Have you tried a different valve ? Maybe broken or cracked valve bottom (paxolin to valve pin).

Stick the whole unit in the oven (on low) and dry it out for 3 hrs - moisture getting in somewhere ?

Does sound weird and interesting.

Regards,

Mark.

2532. Re: Regen Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-27 11:14:05 UTC
From: dconley@lawfacts.com
Message-ID: <1146136445.610283.93380@i39g2000cwa.googlegroups.com>
Source record: 12433

Hi Mark,

The resistor is definetly 6 Mohm, but you bring up an interesting point about moisture.

I have noticed that the set seems to fade out more during rainy or high humidity days. I didn't even want to mention it because it sounded silly, but I did wonder if humidity might be a factor.

On some clear, dry days, I have not had any trouble at all. So, maybe you have something there.

I will carefully go back over the items you mentioned and maybe replace all of the caps in the circuit. Replacing tubes hasn't made a difference. Thanks.

2533. Re: Microwave Projects?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-27 12:22:03 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1146140523.697972.318490@u72g2000cwu.googlegroups.com>
Source record: 12434

one of the most widespread is is the 1N5711. I used them a lot. one of
their best features, besides the the 70 Volts reverse operating voltage
is that they are so uniform that i never had to select among them to
get a matched pair.
Saandy 4Z5KS

2534. Re: HB VHF low-pass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-27 13:01:03 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <4450c090$0$30749$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 12435

Is it a single pager?
I once watched the local pager band with a spectrum analyser, and there were at least a dozen pagers coming on and off at different times and on different frequencies, the lowest of which was below 149MHz. (This is in Australia) Several of them actually produced IM products between them that were *not* from the spec an front end. I surmise that these are actually produced locally. Apparently transmitter output stages can produce these when there are antennas located close to each other (within a few metres) on the same tower. Others have proposed a stub configuration - you may have to consider beefing up the front end for better strong signal handling as well if there are several signals.

Richard

paul@burridge8333.fsbusiness.co.uk wrote:
> Hi gang,
>
> And old chum of mine suffers badly from pager interference when he's
> trying to listen on the 2m band. The interference is strong to him
> (S9+) and takes out all his reception, despite the fact that it's quite
> a way up-band at 153Mhz.
> I've been looking into designing a filter for him to cut off by 153Mhz
> to better than -20db but it turns out to be rather more tricky than I'd
> imagined. Even with a seven element butterworth configuration, the
> difference between the 146Mhz (wanted) and the 153Mhz (unwanted is an
> insignificant 6db or so. I'm just not getting enough roll-off and need
> something much sharper. Worse still, the roll-off I'm seeing is on a
> computer simulation of the filter with ideal components and would no
> doubt be even worse with real-world Ls and Cs. Any suggestions as to
> how to tackle the problem, guys?
> Thanks,
> P.
>

2535. Re: Class C engineering question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-27 18:35:27 UTC
From: WSQT <wsqtradio@ziplip.com>
Message-ID: <1146162927.168581.191720@j33g2000cwa.googlegroups.com>
Source record: 12436

There are a few other factors here. The big one ne is that no real
tube or transistor swings ALL THE WAY to zero volts at full current!
Another is that for the final to be truly ohmic would require that a
near-Class E or F condition, with the grid swinging from cutoff to
saturation almost instantly(as in a square-wave drive, sometimes used
in broadcast AM Class F setups).

The next condition is that the current drawn through the load at 2X
supply voltage must not cause the tube or transistor's bottoming
voltage to more than double! In the real world, this means that the
current(loading) must be backied off from CW conditions for any
particular device, just as the voltage must be. If you load a final
for maximum output at carrier, guess what-you will be lucky to see 30%
upward modulation with MOSFETS or somewhat better with tubes!

As a result, you want to design the final as though you were building a
CW amp to operate at double the supply votage with so short a duty
cycle that dissipation wouldn't overheat the device first. The active
device must not at any time be an impediment to drawing full AC current
through the load.

OK, here's what my experiments with the IRF 510 MOSFET uncovered at MF:

1: this device can make 55W a part at 17V, but for even 90% modulation
you must cut
loading to 37W a pair. Similar current derating should be expectd
from tubes, bipolars,
etc.

2: MOSFETS tend to lose drive as you raise the supply voltage. Here's
why-in Class C,
You are severely compressing voltage gain. As you add B+ in
modulation, voltage gain
increases. This increases the effect of Miller(reverse transfer)
capacitance). Any non-
neutralized common-cathode device will have this problem-or at the
other extreme
could oscillate on peaks! MOSFETS are lossy in all interelectrode
capacitances, so
even with "unilaterialization" in which both R and C(not just C)
are balanced, drive loss
in the resuloting "bridge" circuit" still rises with the supply
voltage. Since MOSFETS
cannot be driven beyond maximum safe gate voltage, you therfore
will need to modulate
the driver as well, or apply a few volts of gate modulation as an

alternative.

IF YOU DO NOT DO THIS, you will have 100% downward modulation real easy,
but as little as 30-50% upward modulation, with a real serious carrier shift problem
and audio that sounds like $%^&.

3: I've heard bipolar transistors also need some base modulation to follow collector
modulation properly.

4: Tetrodes have a similar problem, but in a different way. Here, the problem is that plate
voltage and evn bottoming voltage have little effect on plate current, and real-world
tetrodes and pentodes require some screen modulation to propely follow the plate
modulation.

5: Triodes with their low plate resistance may well give bottoming voltage in proportion to
current, and therefore to voltage. This is a desirable condition, but the only common use
of triodes today is in grounded-grid, where 100% downward modulation is impossible.

One of the nice things about those Class E and F, true ZVS finals for AM is that they give a far more ohmic modulation curve!

2536. Transistor Deal

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-27 18:52:14 UTC
From: Brian Murrey <brian@iquest.net>
Message-ID: <yp84g.9878$sq5.9149@newsread2.news.atl.earthlink.net>
Source record: 12437

I just came into possession of several thousand brand new Motorola brand
PN2222A transistors in the TO-92 package. So I have them 100 for $7.00
including shipping in the USA. These are new (old stock), unused parts,
still
on the paper tape they were born with. The part is clearly labeled and is
genuine
Motorola goods.

Order Item: PN2222 - Motorola

Send your order payable to:

Brian Murrey
47 Grassy Drive
New Whiteland IN 46184

or

Paypal to orders@hamradparts.com

--
==========
Radio Amateurs - Fill your junk box, from my junkbox!
http://www.hamradparts.com
73 de KB9BVN
==========

2537. Test

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-27 19:43:27 UTC
From: amdx <amdx@knology.net>
Message-ID: <ae947$44511ed3$45011502$20150@KNOLOGY.NET>
Source record: 12438

Yes, I did post to a test group and it worked!
But my last four posts here didn't show up.
Sorry (maybe) Mike

2538. Size of pcb for pin diode switch?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-27 20:34:16 UTC
From: amdx <amdx@knology.net>
Message-ID: <ea87c$44512ac3$45011502$32332@KNOLOGY.NET>
Source record: 12439

Hi All,

I'm looking at the pcb on page 8 of the following;

http://www.avagotech.com/pc/downloadDocument.do?id=3369

(It is an HP application note #1049)

The way I figure it the pcb is 4" x 4" and the in/out and bias
traces are .125" wide, necking down to .050".
The vias compute to .170".
Does any of this make sense for a surface mount pcb with so
few parts?

Mike

2539. Re: Microwave Projects?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-27 21:26:05 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <6082f$445136ed$d135c4af$8000@MDI.CA>
Source record: 12440

"Saandy , 4Z5KS" <hardware2@ift-int.com> wrote in
news:1146140523.697972.318490@u72g2000cwu.googlegroups.com:

> one of the most widespread is is the 1N5711. I used them a lot. one of
> their best features, besides the the 70 Volts reverse operating voltage
> is that they are so uniform that i never had to select among them to
> get a matched pair.
> Saandy 4Z5KS
>
What is the maximum freq. for the 1N5711?
I like something that works to 2.4GHz at least.

JJ

2540. Plastic Antenna Insulators

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-27 22:39:22 UTC
From: stargatesg1 <nospam@here.net>
Message-ID: <uKb4g.43$Nh7.12@trnddc01>
Source record: 12441
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Anyone ever try using plastic drywall anchors for yagi antenna insulators?
I'm wondering how they will hold up to UV and the weather in general.

Thanks,
RoD

2541. Checkin' out dummy loads with a VNA...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-27 22:56:24 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1146178584.921966.197090@y43g2000cwc.googlegroups.com>
Source record: 12442
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hi all,

I'd like to see what this new dummy load I just bought on e-bay looks
like under test at its purported frequency limit of one Gig.
Problem is, all the documentation I have for my VNA shows devices to be

tested having *two* connectors (an 'in' and an 'out' if you will) like
filters for example. I can only connect to the *one* connection that
dummy loads typically have, since it'a a termination device rather than

a through one like a filter or attenuator. Does that mean I can't
analyse its
characteristics? Or is there a work around/special cable configuration
that would solve
this problem?
Thanks,
<clueless paul>

2542. Re: Checkin' out dummy loads with a VNA...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-27 23:04:24 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <1252jfpmve2o79a@corp.supernews.com>
Source record: 12443
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

<paul@burridge8333.fsbusiness.co.uk> wrote in message
news:1146178584.921966.197090@y43g2000cwc.googlegroups.com...
> Problem is, all the documentation I have for my VNA shows devices to be
> tested having *two* connectors (an 'in' and an 'out' if you will) like
> filters for example. I can only connect to the *one* connection that
> dummy loads typically have, since it'a a termination device rather than
> a through one like a filter or attenuator. Does that mean I can't
> analyse its
> characteristics?

Tell your VNA you want to measure S11; it won't even touch the second port (feel free to hook it up to a high-gain antenna and point it at the nearest cell phone tower in your neighborhood...)

Unless your VNA is 20+ years old, it'll be happy to display the S11 measurement in the form of a Smith chart, real/imaginary impedances, VSWR, etc...

2543. Re: Checkin' out dummy loads with a VNA...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-27 23:19:03 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <Hjc4g.21366$tN3.18143@newssvr27.news.prodigy.net>
Source record: 12444
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Paul,

> I'd like to see what this new dummy load I just bought on e-bay looks
> like under test at its purported frequency limit of one Gig.
> Problem is, all the documentation I have for my VNA shows devices to be
>
> tested having *two* connectors (an 'in' and an 'out' if you will) like
> filters for example. I can only connect to the *one* connection that
> dummy loads typically have, since it'a a termination device rather than
>
> a through one like a filter or attenuator. Does that mean I can't
> analyse its
> characteristics? Or is there a work around/special cable configuration
> that would solve
> this problem?

A quick and dirty one would be to use a resistor from VNA-out to dummy load, then another from dummy load to VNA-in. 50 ohms or less. With next to nothing reactive, of course. All nicely RF fashioned, chip resistors maybe. It's not going to be matched but you can have the analyzer do the math to calculate out the dummy load. Mind the power limits.

Sometimes I do this with an HP resistive splitter when the impedance analyzer is down (like it is right now, again....%*&#!!).

Regards, Joerg

http://www.analogconsultants.com

2544. Re: Checkin' out dummy loads with a VNA...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-28 01:46:51 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1146188811.527595.197470@j73g2000cwa.googlegroups.com>
Source record: 12445
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hi Paul,

I don't mean to pick on you, but... you really should become more familiar with VNA measurements in general. You should be able to find documentation on the web; try the Agilent site for example, and look for VNA ap notes. I downloaded some recently, so I'm pretty sure they are there. A VNA is a wonderful piece of test equipment, but it won't give you answers you can trust if you don't understand it. I would trust what they tell you (or similar from R&S or other reputable manufacturer) more than I would trust replies here to be not only accurate but complete.

For example, you should understand that your dummy load could be considered a two-port device where S21 and S12 will be very low--hopefully vanishingly close to zero. If you connect it to port 1, you should get a valid indication of S11. You should expect S22 to be unity or very close to it, if that port is left open or shorted. (But why would you even bother to ask for S22, or S21, or S12?)

But there's another problem here. HOW do you calibrate your VNA?? You ideally should have a precision short, a precision open, and a precision load--best if you have calibration data for the loads. If you measure your load, how will you know whether an imperfect S11 is due to the load, or to the VNA? Of course, it will be to some extent both, but it would be nice to know that the VNA is accurate to within some tolerance.

Cheers,
Tom

2545. Re: Size of pcb for pin diode switch?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-28 02:14:13 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1146190452.983863.54720@v46g2000cwv.googlegroups.com>
Source record: 12446

It was probably just a convenient size...but FWIW, if I measure the traces compared with the SOT-23 size (lead spacing, for example), I get that the input/output traces are 0.054", plus or minus a bit. To be 50 ohms on an FR-4 board, that must mean the distance to the ground plane is about 1/32 inch (which seems quite reasonable), and the board would be about 1.8" across.

Cheers,
Tom

2546. Re: Plastic Antenna Insulators

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-28 05:54:38 UTC
From: biascomms <biascomms@blueyonder.co.uk>
Message-ID: <y6i4g.60716$wl.45076@text.news.blueyonder.co.uk>
Source record: 12447
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

stargatesg1 wrote:

> Anyone ever try using plastic drywall anchors for yagi antenna insulators?
> I'm wondering how they will hold up to UV and the weather in general.

It depends on the plastic material - it's worth doing the microwave oven
test before using it. I find that PVC that's OK in the microwave oven
usually stands up to UV well.

Bob
--
Everything gets easier with practice, except getting up in the morning!

2547. test

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-28 09:30:04 UTC
From: Bernard caron <diode@globetrotter.net>
Message-ID: <wgl4g.229$cZ3.6@clgrps13>
Source record: 12348

[No readable article body recovered]

2548. Re: Checkin' out dummy loads with a VNA...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-28 11:16:11 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1146222971.004296.183710@i39g2000cwa.googlegroups.com>
Source record: 12349
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Okay guys, thanks.
Yes, as you've surmised, I'm only just beginning to get to grips with this complex piece of kit and there is *much* to learn indeed. In my defence, I have to say although I purchased this thing 5 months ago, I've only now been able to assemble the ancilliary cables, loads, splitters and whatnot to be able to check it out properly. All I could do back in December was to switch it on and check for signs of life. Now, however, things start to get rather more complicated (but hopefully stimulating, too).

2549. Re: Class C engineering question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-28 15:30:29 UTC
From: w8ji@akorn.net
Message-ID: <1146238229.732068.158260@i39g2000cwa.googlegroups.com>
Source record: 12350

WSQT wrote:
> There are a few other factors here. The big one ne is that no real
> tube or transistor swings ALL THE WAY to zero volts at full current!

It does niot have to be at full cuttrent, and it actually cannt be at
full current or the modulation will not be linear.

The power has to follow a square law relationship with voltage change.
meaning current is twice when voltage is twice, current is zero when
voltage is zero.

This is why the anode impedance is stable over a wide range of anode
voltage, and why PEP power is four times the carrier power in a good
clean plate modulated transmitter.

> Another is that for the final to be truly ohmic would require that a
> near-Class E or F condition, with the grid swinging from cutoff to
> saturation almost instantly(as in a square-wave drive, sometimes used
> in broadcast AM Class F setups).

Class F is an invention to describe certain circuits. It technically
fits the definition of class C.

RCA and other manufacturers used "square wave" drive in class C
amplifiers in the 40's and 50's. The method of obtaining the square
plate current waveshape was the addition of third harmonic resonators
or traps in the grid and anode circuits of low mu triodes. Allowing the
3rd harmonic inherent in the tube switching from cutoff to positive
grid voltage by not "grounding" the grid or anode at the third harmonic
caused the PA to switch into and out of conduction rapidly. Typical
efficiencies were in the mid 90% range.

It was called class C back then, and it techincally fits the
description of class C.

When the tube switches very hard, the linearity of anode power input
(and RF output) follows the desired square law change very well.

> The next condition is that the current drawn through the load at 2X
> supply voltage must not cause the tube or transistor's bottoming
> voltage to more than double! In the real world, this means that the
> current(loading) must be backied off from CW conditions for any
> particular device, just as the voltage must be. If you load a final
> for maximum output at carrier, guess what-you will be lucky to see 30%
> upward modulation with MOSFETS or somewhat better with tubes!

What does that have to do with plate modulated stages?

The anode operating impedance is nearly constant throughout the full audio cycle, and the ratio of E/I tracks very well regardless of load setting in low-mu triode class C modulated stages.

The tetrode is a problem only because the anode does not follow a square law power change as voltage is changed. This is because, as you pointed out, the anode current is controlled by the screen voltage more than anode voltage.

In a tetrode or any other screen grided tube, some audio has to be applied either to drive, control grid, or screen voltage. This is to ensure anode current tracks a square law relationship with modulation voltage, plate operating impedance is reasonably constant, and peak power is four times carrier power.

No matter how I load a class C plate modulated triode, modulation remains reasonably constant. It is only in multigrided plate modulated tubes that modulation can be seriously affected, since screen current and the effects of screen voltage and current change can vary drastically with load setting.

The issue the orignal poster missed was how the class C PA behaves as voltage is changed by the modulation transformer. Power output should square as voltage is doubled, but that's tough to do in a tetrode unless screen operating conditions are controlled and the circuit applies audio voltage in the proper relationship to anode voltage in a grid.

Most of the AM pages I see don't really understand the importance of that, and think just throwing a high inductance choke in series with the screen makes the tube follow square law rules as modulation voltage is changed.

73 Tom

2550. Eavesdropping Video Receives 5 Stars Review

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-28 15:39:48 UTC
From: ctaylor@pinpoint-productions.com
Message-ID: <1146238788.142978.81160@y43g2000cwc.googlegroups.com>
Source record: 12351

The newspapers and journals are full of information about warrantless wiretapping and eavesdropping. What many people do not realize is that the type of eavesdropping occurring for national security purposes is vastly different than the real world of eavesdropping and wiretapping utilized for industrial espionage, law enforcement and by your local private investigator or tech-guy that has crossed the line into illegal eavesdropping.

Now, the realistic world of eavesdropping has been thoroughly exposed in the new two-hour video called "The Red Balloon". Already recognized as the best Issue Awareness Video in 2005 at the international Aurora Awards and given a 5 Stars review in the March issue of Security Management, The Red Balloon presents the government and industry statistics about industrial espionage and eavesdropping, and how big this problem really is. It also reveals the different types of eavesdropping devices used with illegal wiretapping and eavesdropping and the novel techniques utilized by both professional and amateur eavesdroppers.

If you are curious about the eavesdropping industry then you simply must see the powerful informational video presented by one of the world's most recognized experts in the field. To learn more you can go to http://www.tscmvideo.com

2551. Re: Size of pcb for pin diode switch?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-28 15:55:46 UTC
From: amdx <amdx@knology.net>
Message-ID: <3f0a$44523afb$45011502$495@KNOLOGY.NET>
Source record: 12352

"K7ITM" <k7itm@msn.com> wrote in message
news:1146190452.983863.54720@v46g2000cwv.googlegroups.com...
> It was probably just a convenient size...but FWIW, if I measure the
> traces compared with the SOT-23 size (lead spacing, for example), I get
> that the input/output traces are 0.054", plus or minus a bit. To be 50
> ohms on an FR-4 board, that must mean the distance to the ground plane
> is about 1/32 inch (which seems quite reasonable), and the board would
> be about 1.8" across.
>
> Cheers,
> Tom
>
Hi Tom,
Thanks for your info, I recomputed using the lead spacing and got about
the same 1.8" as you say. My first computation used the info from the
article
that the diode spacing is 0.27" apart, this is how I got 4". I'm still not
sure
about the size, because using either computation I should get the same
answer.
You are correct on the 1/32" FR-4, it is somewhere in the article.
If I make this circuit it will be a 75 ohm pcb for a cable tv switch.
I'll need to look for a stripline calculator.
Mike

2552. Re: Checkin' out dummy loads with a VNA...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-28 17:21:46 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <Kas4g.21552$tN3.4037@newssvr27.news.prodigy.net>
Source record: 12353
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Paul,

> Okay guys, thanks.
> Yes, as you've surmised, I'm only just beginning to get to grips with
> this complex piece of kit and there is *much* to learn indeed. In my
> defence, I have to say although I purchased this thing 5 months ago,
> I've only now been able to assemble the ancilliary cables, loads,
> splitters and whatnot to be able to check it out properly. All I could
> do back in December was to switch it on and check for signs of life.
> Now, however, things start to get rather more complicated (but
> hopefully stimulating, too).
>

Just curious, which VNA are you using?

Tentec has a really nice one. Only goes to 100MHz but for around $700 it seems like a good deal. Some of my clients could have used these but unfortunately this VNA does not seem to have an industry-standard calibration scheme. Wish they did, then I could probably get rid of my heavy 4191 in the lab.

Regards, Joerg

http://www.analogconsultants.com

2553. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-28 19:04:33 UTC
From: Bill Turner <dezrat@copper.net>
Message-ID: <bkp45299l6do7m0rtnsgd78vejg44b3qgq@4ax.com>
Source record: 12354
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

ORIGINAL MESSAGE:

On Tue, 25 Apr 2006 20:55:26 GMT, "Michael A. Terrell"
<mike.terrell@earthlink.net> wrote:

> They have been used in mobile homes for years in the US. I can buy
>them bulk at several local building surplus stores. There are several
>mobile home manufacturers in the area that dump a lot of leftover or
>damaged items.

********** REPLY SEPARATOR **********

I would think one advantage of square drive would be it is nearly
impossible to strip the drive hole, unlike Phillips and especially hex
(Allen). I think I'll scout around for some for my next building
project in 6-32, 8-32 and 10-32.

Who knows, might even try metric sizes.

Bill, W6WRT

2554. Roller Inductor Squeak

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-28 20:15:10 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <clt452hd1u1sb5ls8taini381qb53l7rji@4ax.com>
Source record: 12355

What is a good conductive lub to use on roller indictors? The inductor in my tunert squeaks like an old door. Any other tips to keep that roller noise down?

Win, w0lz

2555. Re: Size of pcb for pin diode switch?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-28 20:53:32 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1146257612.716729.212580@i40g2000cwc.googlegroups.com>
Source record: 12356

I'm amazed with all the times I've posted it that there is _anyone_ left who hasn't downloaded RFSim99. It's a freebie you should be able to find with a quick Google search. Besides being a useful simple simulator, it is also a toolbox: impedance calcs for L and C, transmission line calcs including microstrip, attenuators, couplers (hybrids), ... Also includes a "spur search" program for calculating higher order mixing products.

BTW, I also used the 0.27" spacing which I interpreted as center-to-center for the diode pair on either side...I used it as a quick cross-check. It told me the board is about 2" square. Scaling like that, if you get within ten percent you're probably doing well. It's a shame they didn't put the scale in the drawing, though.

Cheers,
Tom

2556. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-28 21:38:00 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <44528AB4.CFFE7F50@earthlink.net>
Source record: 12357
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Bill Turner wrote:
>
> ORIGINAL MESSAGE:
>
> On Tue, 25 Apr 2006 20:55:26 GMT, "Michael A. Terrell"
> <mike.terrell@earthlink.net> wrote:
>
> > They have been used in mobile homes for years in the US. I can buy
> >them bulk at several local building surplus stores. There are several
> >mobile home manufacturers in the area that dump a lot of leftover or
> >damaged items.
>
> ********** REPLY SEPARATOR **********
>
> I would think one advantage of square drive would be it is nearly
> impossible to strip the drive hole, unlike Phillips and especially hex
> (Allen). I think I'll scout around for some for my next building
> project in 6-32, 8-32 and 10-32.
>
> Who knows, might even try metric sizes.
>
> Bill, W6WRT

I have never seen them with machine screw threads, only as wood
screws.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2557. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-28 21:45:46 UTC
From: Greg Neill <gneillREM@OVE.THIS.netcom.ca>
Message-ID: <Y1w4g.4535$fx.398962@news20.bellglobal.com>
Source record: 12358
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
news:44528AB4.CFFE7F50@earthlink.net...
> Bill Turner wrote:

> >
> > I would think one advantage of square drive would be it is nearly
> > impossible to strip the drive hole, unlike Phillips and especially hex
> > (Allen). I think I'll scout around for some for my next building
> > project in 6-32, 8-32 and 10-32.
> >
> > Who knows, might even try metric sizes.
> >
> > Bill, W6WRT
>
>
>
> I have never seen them with machine screw threads, only as wood
> screws.

Ah, you poor deprived person! Got 'em aplenty up
here in the Great White North!

2558. Re: Regen Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 00:31:53 UTC
From: dconley@lawfacts.com
Message-ID: <1146270713.245293.151660@i39g2000cwa.googlegroups.com>
Source record: 12359

Thanks Allison,

All of those are great suggestions and I am going to carefully clean
all of my soldered connections to see if it makes a difference in the
grid leak.

Dan

2559. Thermistors! Ah!!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 01:12:41 UTC
From: KC2PIH@gmail.com
Message-ID: <1146273161.372023.247350@j73g2000cwa.googlegroups.com>
Source record: 12360

The fan on the power supply in my Kenwood TS-940 section stopped coming on. I replaced the motor with a new one. The thermistor would kick on the new fan when I placed a soldering iron against it. I put thin layer of thermal grease between the thermistor case and the heatsink and screwed it firmly to the sink. The fan refuses to come on with this configuration. Just can't get enough heat into the thermistor I guess.

Do thermistors go bad or what? I'd like this thing to come on at a lower temp anyway. Does anybody know of a replacement which would do that? I have zero data on the factory thermistor...I don't have a temp probe to check it myself either.

-Scott.

2560. Re: The Perfect Gift: A Tool Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 03:25:00 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4452DC55.94847D98@earthlink.net>
Source record: 12361
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Greg Neill wrote:
>
> "Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
> >
> > I have never seen them with machine screw threads, only as wood
> > screws.
>
> Ah, you poor deprived person! Got 'em aplenty up
> here in the Great White North!

Well, I've never seen them in the sunny south. I'll just keep using Torx and Allen screws, thank you. The Allen screws have served me well since the '60s, and the Torx for over a decade. maybe you need them up there to be able to hold on to the screw with your hand shaking while you try to get it started into the threads? ;-)

--
Service to my country? Been there, Done that, and I've got my DD214 to prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2561. Re: Thermistors! Ah!!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 03:26:42 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4452DCBB.3B25A017@earthlink.net>
Source record: 12362

KC2PIH@gmail.com wrote:
>
> The fan on the power supply in my Kenwood TS-940 section stopped coming
> on. I replaced the motor with a new one. The thermistor would kick on
> the new fan when I placed a soldering iron against it. I put thin layer
> of thermal grease between the thermistor case and the heatsink and
> screwed it firmly to the sink. The fan refuses to come on with this
> configuration. Just can't get enough heat into the thermistor I guess.
>
> Do thermistors go bad or what? I'd like this thing to come on at a
> lower temp anyway. Does anybody know of a replacement which would do
> that? I have zero data on the factory thermistor...I don't have a temp
> probe to check it myself either.
>
> -Scott.

Yes they go bad. Ask any old TV repairman how many hundred
thermistors they replaced in the degaussing circuits.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2562. Re: Eavesdropping Video Receives 5 Stars Review

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 04:00:44 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreWorthless@dev.null>
Message-ID: <MPG.1ebc84c98c0096929896d3@192.168.42.131>
Source record: 12363

In article <1146238788.142978.81160@y43g2000cwc.googlegroups.com>,
ctaylor@pinpoint-productions.com (known to some as ctaylor@pinpoint-
productions.com) scribed...

> The newspapers and journals are full of information about warrantless
> wiretapping and eavesdropping...

<drivelectomy>

And Usenet groups are obviously full of posts that are off-topic
and irrelevant to the given subject of the group. Your drivel was an
excellent example of such.

PLONK!

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute
(Known to some as Bruce Lane, KC7GR)
http://www.bluefeathertech.com -- kyrrin a/t bluefeathertech d-o=t calm
"Salvadore Dali's computer has surreal ports..."

2563. Re: Thermistors! Ah!!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 06:45:06 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1146293106.778198.82090@u72g2000cwu.googlegroups.com>
Source record: 12364

Michael A. Terrell wrote:
> KC2PIH@gmail.com wrote:
> >
>
> > Do thermistors go bad or what? I'd like this thing to come on at a
> > lower temp anyway. Does anybody know of a replacement which would do
> > that? I have zero data on the factory thermistor...I don't have a temp
> > probe to check it myself either.
> >
> > -Scott.
>
>
> Yes they go bad. Ask any old TV repairman how many hundred
> thermistors they replaced in the degaussing circuits.
>

> Michael A. Terrell
> Central Florida

Mm, yes - TV set PTC's do go crook, but thats because they get full mains voltage at many amps across them. And it takes a few years to do it. And its usually the heat generated dry joints on the main board anyway that winds the set up in the shop.

Easy method - repalce the thermistor, in the meantime stick a fan at the back of the radio so it doesnt melt down. Or wire the fan hard on always....(Hint - put your hand on the heatsink/case, if its too hot to touch, its too hot.)

If you want to get technical, then its time for logical fault finding. There are 3 things that can go wrong. _ the fan, the thermistor, the switching cct. You have replaced the fan. The thermistor DOES switch when it gets heaps of heat. Leads me to think the switching cct is faulty.

BUT to prove - disconnect the thermistor from cct, stick your ohmeter across it, apply heat. Should be fairly rapid change in dc resistance - and use a hairdryer, not your soldering iron. If the change is only a few ohms, then its faulty - replace. Otherwise, on to next step - check out switching circuit of controller.

This is a "bread and butter" fault, shouldnt be too hard to fix.....

Andrew VK3BFA.

2564. Re: Regen Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 09:19:53 UTC
From: jvereker@wp.pl
Message-ID: <1146302393.723665.188730@j33g2000cwa.googlegroups.com>
Source record: 12365

Dan wrote that the regeneration in his receiver is controlled by a pot which varies the plate regen voltage. I saw this method was popular mainly in old books (ARRL from 30's and 40's for example) but later the most popular became a control on the screen grid. Does it mean, that the second method is better ? Why ?
Sorry if my question is naive but I'm beginner, especially in tube stuff.

2565. Re: Roller Inductor Squeak

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 10:25:49 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1146306349.377976.31410@u72g2000cwu.googlegroups.com>
Source record: 12366

Win wrote:
> What is a good conductive lub to use on roller indictors? The
> inductor in my tunert squeaks like an old door. Any other tips to
> keep that roller noise down?
>
> Win, w0lz

Electrolube used to make a contact lubricant pen. Perhaps they are
still available.

Leon

2566. Re: Regen Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 12:54:12 UTC
From: dconley@lawfacts.com
Message-ID: <1146315252.554822.314130@g10g2000cwb.googlegroups.com>
Source record: 12367

"Dan wrote that the regeneration in his receiver is controlled by a
pot
which varies the plate regen voltage. I saw this method was popular
mainly in old books (ARRL from 30's and 40's for example) but later the
most popular became a control on the screen grid. Does it mean, that
the second method is better ? Why ?
Sorry if my question is naive but I'm beginner, especially in tube
stuff. "

Actually my regen tube is a high mu triode (1H5GT), so there is no screen voltage to control. A lot of folks like to use throttle caps to control regen, but pots are easier to mount and don't take up quite as much space. (I know that a lot of people will disagree with me here on my choice).

My second audio tube is a pentode (1C5GT) and I use a one meg pot on the grid to control the volume for the set. I also have a 10 ohm pot on the first audio tube (1H5GT) filament which also helps control the volume and nulls out hum.

In case you are wondering why I chose these tubes, they are the tubes that were used in the old battery sets and have low battery drain (although I use a battery eliminator anyway for my power source). They are also very cheap and plentiful.

I also was able to "steal" the engineering from the old battery radio schematics to figure out the capacitors and resistors to use in the audio circuits to make the output sound good. I'm basically too lazy to learn the formulas to do my own calculations. The set sounds as good as any battery set that I have ever heard.

This particular combination of a 1H5GT first audio stage tube followed by a 1C5GT second audio tube was used in a lot of battery sets. It also made selecting the output transformer easy to maximize output to a 4 ohm speaker.

Dan

2567. Re: Regen Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 13:26:08 UTC
From: jvereker@wp.pl
Message-ID: <1146317168.517145.160430@u72g2000cwu.googlegroups.com>
Source record: 12368

My mistake, it's a triode, no screen grid. :) I'm not used to American symbols, here in Europe we have easier sytem (EC-triode, ECC-double triode, etc.). For me 1H2GT and 1T4T is the same tube ;)
What are the differences, advantages and disadvantages between methods with a pot in plate circuit, screen grid circuit, throttle cap ?

2568. Re: Checkin' out dummy loads with a VNA...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 15:02:37 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1146322957.717097.248560@v46g2000cwv.googlegroups.com>
Source record: 12369
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

It's an HP 8754A (4 to 1300Mhz) and luckily old enough to be reasonably serviceable and repairable!
This is just as well since there is a fault with the rectangular trace, which just appears to 'flatline' with nothing visible other than the sweep + markers. So no nice bod plots of filters, I'm afraid. However, the polar and phase displays seem absolutely fine. If I can just get that one fault fixed, it'll be a great piece of test gear to have around. I've never worked on anything this complicated before, though, so it'll be something of a challenge!

2569. 13.8V high current power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 15:14:57 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1146323696.956339.201070@j73g2000cwa.googlegroups.com>
Source record: 12370

Hi all,

You may recall me mentioning I was thinking about adapting a 24V PSU
for use at 13.8V for powering up mobile HF rigs and stuff. I had some
spare time yesterday and took this thing to bits for a better look
inside. It turns out the mains transformer has several secondary
tapping points. I discontected the DC-stab/reg side of the supply
circuitry and reconnected the secondary tapping points to lower voltage
tappings.
Now I measure 16.8V after the transformer's output has been rectified
and applied across the *big* electrolytic. This is under no-load
conditions. Now, is that 3V enough 'headroom' to use up in regulation
and stabilisation for 13.8V final output if I throw the old 28V
reg/stab away and build something from scratch? There are 6 pass
transistors plus a driver (2n3055) already mounted which I plan to use
in the adapted version, so basically I'll just junk the existing
control board and re-use everything else. Any observations/tips?
Thanks,
P.

2570. Re: 13.8V high current power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 15:24:41 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1146324280.967879.213460@e56g2000cwe.googlegroups.com>
Source record: 12371

This is probably a stupid idea for some reason that's beyond me right now, but how about losing the extra volts with a series of diode drops? Provided the diodes were high forward current types with adequate heat sinking. I know it wouldn't be as stable as a proper design, but would it work well enough to run a mobile 100W rig?

2571. Re: 13.8V high current power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 16:11:10 UTC
From: Greg Neill <gneillREM@OVE.THIS.netcom.ca>
Message-ID: <ieM4g.4842$fx.450574@news20.bellglobal.com>
Source record: 12372

<paul@burridge8333.fsbusiness.co.uk> wrote in message
news:1146324280.967879.213460@e56g2000cwe.googlegroups.com...
> This is probably a stupid idea for some reason that's beyond me right
> now, but how about losing the extra volts with a series of diode drops?
> Provided the diodes were high forward current types with adequate heat
> sinking. I know it wouldn't be as stable as a proper design, but would
> it work well enough to run a mobile 100W rig?

I think you'll end up with lousy regulation and
a ripple problem.

2572. Re: 13.8V high current power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 17:22:10 UTC
From: James Thompson <Jamesthompson2002@hotmail.com>
Message-ID: <12b2e$4453a0c3$438c87aa$11884@ALLTEL.NET>
Source record: 12373

<paul@burridge8333.fsbusiness.co.uk> wrote in message
news:1146323696.956339.201070@j73g2000cwa.googlegroups.com...
> Hi all,
>
> You may recall me mentioning I was thinking about adapting a 24V PSU
> for use at 13.8V for powering up mobile HF rigs and stuff. I had some
> spare time yesterday and took this thing to bits for a better look
> inside. It turns out the mains transformer has several secondary
> tapping points. I discontected the DC-stab/reg side of the supply
> circuitry and reconnected the secondary tapping points to lower voltage
> tappings.
> Now I measure 16.8V after the transformer's output has been rectified
> and applied across the *big* electrolytic. This is under no-load
> conditions. Now, is that 3V enough 'headroom' to use up in regulation
> and stabilisation for 13.8V final output if I throw the old 28V
> reg/stab away and build something from scratch? There are 6 pass
> transistors plus a driver (2n3055) already mounted which I plan to use
> in the adapted version, so basically I'll just junk the existing
> control board and re-use everything else. Any observations/tips?
> Thanks,
> P.
>
I would cobble together a simple, say lm317 regulator to drive your series
pass driver and see what you come up with under some small loads. You may
be ok with that big transformer. The power supply I built uses 4 2n3055 in
parralel like what you have. Have fun.. JTT

2573. 1N23W source?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 17:46:52 UTC
From: texassparky@subdimension.com
Message-ID: <gf9752pjmui6i4l8hff6vkcht8povnv70c@4ax.com>
Source record: 12374

Does anyone know of a source for a couple of 1N23W mixer diodes?

This is not a new design, they are for repair. So, I must use the old style cartridge unit.

Thanks!

Mike, WB5MYY

2574. Re: Checkin' out dummy loads with a VNA...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 18:13:11 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <X0O4g.63816$_S7.38990@newssvr14.news.prodigy.com>
Source record: 12375
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Paul,

> It's an HP 8754A (4 to 1300Mhz) and luckily old enough to be reasonably
> serviceable and repairable!
> This is just as well since there is a fault with the rectangular trace,
> which just appears to 'flatline' with nothing visible other than the
> sweep + markers. So no nice bod plots of filters, I'm afraid. However,
> the polar and phase displays seem absolutely fine. If I can just get
> that one fault fixed, it'll be a great piece of test gear to have
> around. I've never worked on anything this complicated before, though,
> so it'll be something of a challenge!
>

That looks like a problem in the digital section. Just hope that none of the EPROMs suffered a memory loss. I am not sure whether they'd report a checksum error in the 8754. I had found one that had become unseated on another analyzer and the instrument produced only garbage output but reported nothing on self-test. That disappointed me a bit. The only reason I found the cause was that I opened it and looked at it long enough.

Complicated they are. However, while on the troubleshooting trail in my HP4191 I sometimes came upon a large conglomeration of discretes and banged my head, asking myself "Why didn't they do that with a uA733?". And on the directional bridge they seem to have left about 10dB of dynamic range on the table for the test channel versus the ref channel. I'd have put a wee amp before the sampler.

Regards, Joerg

http://www.analogconsultants.com

2575. Re: 13.8V high current power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 19:43:08 UTC
From: "g. beat"
Message-ID: <WuGdnS-CZ-tOXM7ZnZ2dnUVZ_v6dnZ2d@comcast.com>
Source record: 12376

<paul@burridge8333.fsbusiness.co.uk> wrote in message
news:1146323696.956339.201070@j73g2000cwa.googlegroups.com...
> Hi all,
>
> You may recall me mentioning I was thinking about adapting a 24V PSU
> for use at 13.8V for powering up mobile HF rigs and stuff. I had some
> spare time yesterday and took this thing to bits for a better look
> inside. It turns out the mains transformer has several secondary
> tapping points. I discontected the DC-stab/reg side of the supply
> circuitry and reconnected the secondary tapping points to lower voltage
> tappings.
> Now I measure 16.8V after the transformer's output has been rectified
> and applied across the *big* electrolytic. This is under no-load
> conditions. Now, is that 3V enough 'headroom' to use up in regulation
> and stabilisation for 13.8V final output if I throw the old 28V
> reg/stab away and build something from scratch? There are 6 pass
> transistors plus a driver (2n3055) already mounted which I plan to use
> in the adapted version, so basically I'll just junk the existing
> control board and re-use everything else. Any observations/tips?
> Thanks,
> P.
>

Paul -

An ideal secondary voltage is about 5 more volts than you want to regulate.
Let's say that it is 13.8 volt finished.
Then and ideal secondary voltage would be 18 or 19 Volts AC on the
secondary.

Using 6 pass transistors (2N3055) - The 2N3055 is good for an intermittent
current or amp draw of 10 amps.
A heavier one that is often used for 13.8 VDC supplies is the 2N3771.
This one is good for 15 amps intermittent. Both of these are NPN type
transistors.
These are placed in a parallel circuit, if more that 10 amps surge, is
required.

Heat is the biggest enemy of our power supplies.
Keep them cool, use well sized heat sinks and they last a lot longer!!

You will find that the LM723 is the most used regulator IC for commercial
linear supplies -
it has been around since the 1970s !!

Here are some web site articles and references for both your design and building.

David Metz, WA0AUQ Classic web article (November 1996)
Regulated Power Supply Construction
OR What is Inside your Astron?
http://www.seits.org/features/pwrsup.htm

Metz's schematic
http://www.seits.org/features/pwrsup.gif

Astron Power Supply schematics
See how the "best of breed" US commercial unit is built
http://www.repeater-builder.com/astron/astron-index.html

KBT Linear Regulated Supplies
Specification sheets on pass transistors, ICs, DIY, How to, FAQ
Index for multiple knowledge pages is gray bar on left column of main page
http://www.kbt-dc-supplies.com/index.php

Best of luck with the project !

w9gb

2576. Re: Checkin' out dummy loads with a VNA...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 21:17:52 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1146345471.954882.23880@v46g2000cwv.googlegroups.com>
Source record: 12377
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Thanks, Joerg.
I think this item pre-dates a lot of this digital stuff; I doubt
there's a single eprom in it - and no custom chips, either!
It was built in about 1980 and doesn't go through any self-testing
routines. One has to carry out manual tests oneself. This wonderful
simplicity should hopefully enable me to keep it running indefinitely,
once I can get it fixed. Serviceability is one of my main criteria when
choosing an item of test equipment.

2577. Re: Regen Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 22:01:58 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <rnR4g.16869$t61.11820@bignews6.bellsouth.net>
Source record: 12378

The regeneration control either varies the amount of feedback
(throttle cap, movable tickler coil, or pot across the tickler coil)
OR varies the gain of the valve (or solid state device) by varying the
plate voltage (pot or series resistor), screen voltage (consider the
screen of the tetrode or pentode as the plate of the triode and the
plate of the tetrode that of a cascaded second stage), or grid voltage
(yes you can also add negative bias to the grid to lower the gain,
rarely used in a regen using tubes but the ONLY way with FET's).

If the variable gain method is used, then the tickler coil must have
JUST the right number of turns so there is JUST the right amount of
feedback for regeneration to start when the valve (or other active
device) is operating at the optimal gain setting for detection. If
TOO much feedback is provided the gain of the detector must be set
so low that poor sensitivity results. Also adjustment of the regen
will be tricky. If too little feedback is provided regeneration may
not happen or the detector gain will have to be so high that the
detector will be unstable.

For some reason most triodes seem to operate as detectors with
about 30-50 volts on the plate, and pentodes with 20-50 volts on
the screen. Using a regulated supply for the detector is a good
idea, especially if you want to try and receive SSB signals.

The fade out problem with your regen sounds familiar, I had this problem
on an old AA5 radio. It would stop playing after a while and came back
if I touched the signal grid lead (antenna tuning cap hot side) of the
12BE6 tube (I actually held one end of a .01 cap and touched the OTHER
side of the cap to the grid as it was a hot chassis set). Weird!

Maybe I had a bad cap in the agc circuit, not sure.

Allisonnospam@nouce.bellatlantic.net wrote:
> On 29 Apr 2006 06:26:08 -0700, jvereker@wp.pl wrote:
>
>
>>My mistake, it's a triode, no screen grid. :) I'm not used to American
>>symbols, here in Europe we have easier sytem (EC-triode, ECC-double
>>triode, etc.). For me 1H2GT and 1T4T is the same tube ;)
>
>
>>What are the differences, advantages and disadvantages between methods
>>with a pot in plate circuit, screen grid circuit, throttle cap ?
>
>
> Apples and potatoes. Seriously screen grid valves(tubes) of the

> tetrode/pentatode flavor are different animals than triodes so
> applying comparison of regen throttle techniques across them
> is difficult to compare. However.. with that said.
>
> Throttle cap is usally the best as you can optimize the tube operating
> point and then only adjust the amount of feedback. Disadvantage is
> there is RF on the capacitor and that means careful layout and good
> mechanical mounting for stability.
>
> The other two vary the plate(anode) voltage and vary the screen
> grid voltage are similar as they both affect the gain of the tube by
> altering it's operating point. Disadvantage is that you may have
> to play more with the feedback winding (or tap) so that regeration
> occurs at the best point on the variable resistor or performance will
> suffer. Advantage, no RF on any of the wires to the resistor so
> placement and mounting is more flexible.
>
> Both can be made to work equally well with care.
>
>
> Allison
>
>

2578. Re: 13.8V high current power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 22:15:47 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <19mdnauDOrsVeM7ZRVnytw@pipex.net>
Source record: 12379

James Thompson wrote:
> I would cobble together a simple, say lm317 regulator to drive your series
> pass driver and see what you come up with under some small loads. You may
> be ok with that big transformer. The power supply I built uses 4 2n3055 in
> parralel like what you have. Have fun.. JTT
==========
There as an exellent design in RadCom Oct 2001 ,pages 34-35 by OZ1XB ,
with a LM317 , TIP32 (PNP) and 2xBUV20 (NPN) ,with the latter
replacable by 4x2N3055 or whatever you have .
Simple,rugged ,reliable design.
It incorporates sensing lines ,ensuring the full set voltage under all
load conditions at the consuming apparatus.

Frank GM0CSZ / KN6WH

2579. Re: Checkin' out dummy loads with a VNA...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-29 23:22:46 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <azS4g.63884$_S7.46407@newssvr14.news.prodigy.com>
Source record: 12380
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Paul,

> I think this item pre-dates a lot of this digital stuff; I doubt
> there's a single eprom in it - and no custom chips, either!
> It was built in about 1980 and doesn't go through any self-testing
> routines. One has to carry out manual tests oneself. This wonderful
> simplicity should hopefully enable me to keep it running indefinitely,
> once I can get it fixed. Serviceability is one of my main criteria when
> choosing an item of test equipment.
>

The HP4191A is from that era as well. However, it is one heck of a
complicated machine with a computer board as large as a family-size
pizza. Lots of PROMs and stuff :-(

Regards, Joerg

http://www.analogconsultants.com

2580. Re: 13.8V high current power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-30 00:40:42 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1146357642.620733.175050@y43g2000cwc.googlegroups.com>
Source record: 12381

You're probably right! I did actually try to rip the heating element
out of a 2kW electric fire to use as just such a test load, but the
manufacturers had used some really devious sort of screw heads to keep
the two casings together. :-(
Failing some serious resistance wire, the only other 'to hand' option
is to hook up the HF mobile and key-up; but I don't have a sufficiently
gutsy dummy load or antenna to dump 100W into, I'm afraid. :-(

2581. Re: Regen Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-30 00:44:58 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <8MT4g.32714$Kh5.4397@bignews8.bellsouth.net>
Source record: 12382

Allisonnospam@nouce.bellatlantic.net wrote:
> On Sat, 29 Apr 2006 18:01:58 -0400, ken scharf
> <wa2mzeNOSPAMBOTS@bellsouth.net> wrote:
>
>
>>The regeneration control either varies the amount of feedback
>>(throttle cap, movable tickler coil, or pot across the tickler coil)
>>OR varies the gain of the valve (or solid state device) by varying the
>>plate voltage (pot or series resistor), screen voltage (consider the
>>screen of the tetrode or pentode as the plate of the triode and the
>>plate of the tetrode that of a cascaded second stage), or grid voltage
>
>
>>(yes you can also add negative bias to the grid to lower the gain,
>>rarely used in a regen using tubes but the ONLY way with FET's).
>
>
> I found that was not the best with fets. However, fets work best when
> run at best gain and the amount of feedback (regeneration) is
> controlled via pot or throttle cap.
>
>
>>If the variable gain method is used, then the tickler coil must have
>>JUST the right number of turns so there is JUST the right amount of
>>feedback for regeneration to start when the valve (or other active
>>device) is operating at the optimal gain setting for detection. If
>>TOO much feedback is provided the gain of the detector must be set
>>so low that poor sensitivity results. Also adjustment of the regen
>>will be tricky. If too little feedback is provided regeneration may
>>not happen or the detector gain will have to be so high that the
>>detector will be unstable.
>
>
> Mostly what I said.
>
>
>>For some reason most triodes seem to operate as detectors with
>>about 30-50 volts on the plate, and pentodes with 20-50 volts on
>>the screen. Using a regulated supply for the detector is a good
>>idea, especially if you want to try and receive SSB signals.
>
>
> It does help. I have a 5 tube 80m RX I built that uses a regenative
> detector. I didn't need the gain but for selectivity using very loose

> couped IF. Stability was hard to maintain without a regulated
> screen (6BA6 detector) source from interactions of agc and audio
> amp pulling the supply. Once I nailed it down it performs extemely
> well and is a bit narrow for AM phone with only 2 IF cans.
>
> Also for radios using tubes with directly heated filliments dropping
> the filiment voltage can tame the regneration a bit.
>
>
>>The fade out problem with your regen sounds familiar, I had this problem
>>on an old AA5 radio. It would stop playing after a while and came back
>>if I touched the signal grid lead (antenna tuning cap hot side) of the
>>12BE6 tube (I actually held one end of a .01 cap and touched the OTHER
>>side of the cap to the grid as it was a hot chassis set). Weird!
>
>
> The problem was likely an open antenna or oscilator coil, I've seen
> that before. The coil opens (broken connection) and the grid floats
> till its self bias drives it nuts. Inject noise and you bleed off the
> charge for a while.
>
> I suspect the 6M grid resistor is too high for the tube used and it's
> building space charge bias till it cuts off. I tried a regen using
> some 1AD5 (submini 1.5V filliment tube) and it didn't like grid
> resistors over about 4meg and it behaved the same way.
> the solution was lower (2.2m) grid resistor and 100PF cap.
>
In general using a higher grid resister and smaller capacitor results
in increased selectivity and sensitivity with a loss in large signal
handling ability. Visa Versa for smaller grid resister and larger
coupling capacitor. Also the grid resistor can go across the capacitor
or from the grid to ground. If the grid coil's cold end is NOT grounded
the latter arrangement is required. In early tube manuals the
recommended grid leak resistance was usually 1-2 meg ohms, with a
capacitor value of 100-250pf. You have to watch the time constant
there or you might end up with 'super-regeneration' where the tube
breaks into a high frequency (ultra-sonic that is, around 10khz)
oscillation.

2582. Re: 1N23W source?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-30 01:43:39 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <s55852dtackncbff2dbmm2lturkfl6g46e@4ax.com>
Source record: 12383

On Sat, 29 Apr 2006 12:46:52 -0500, texassparky@subdimension.com
wrote:

>
>Does anyone know of a source for a couple of 1N23W mixer diodes?
>
>This is not a new design, they are for repair. So, I must use the old
>style cartridge unit.

I have a new pair of 1N23F in unopened packaging. These are the
almost the same (but 1 dB better NF) diodes but in the DO-22 package.
In this package, the cathode is connected to the pin and the flange is
non-removable.

If these will work, make me a reasonable offer.

n7ws at yahoo.com

2583. Coax & Rotor Bulkhead

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-30 03:47:32 UTC
From: west <westley@tampabay.rr.com>
Message-ID: <orW4g.5775$d_4.5325@tornado.tampabay.rr.com>
Source record: 12384

Is there a place on the net, in a book, etc. that I can see examples & diagrams of a coax bulkhead? Perhaps someone on this NG constructed such a device & wouldn't mind sharing his plans.
My house sits on a slab and I would like to run about 4 or 5 coax cables, rotor cable, AC & DC source all going from the shack to my tower. In Florida lightning is a major concern so the bulkhead will have to have coax (gas arrestors?) & other types of arrestors. All this, of course, should be grounded to a copper ground rod. I would like this outside "box" nicely & neatly dressed & labeled so it's easy to disconnect & is not an eye sore. I searched the Ham books and many Internet sights to no avail.
Anybody? Thank you.

west, AF4GC

2584. Re: Coax & Rotor Bulkhead

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-30 04:04:51 UTC
From: Dan Richardson <>
Message-ID: <kpd852lgn1s1mo853us9u2qv9flj0488np@4ax.com>
Source record: 12385

On Sun, 30 Apr 2006 03:47:32 GMT, "west" <westley@tampabay.rr.com>
wrote:

> Is there a place on the net, in a book, etc. that I can see examples &
>diagrams of a coax bulkhead? Perhaps someone on this NG constructed such a
>device & wouldn't mind sharing his plans.
> My house sits on a slab and I would like to run about 4 or 5 coax cables,
>rotor cable, AC & DC source all going from the shack to my tower. In Florida
>lightning is a major concern so the bulkhead will have to have coax (gas
>arrestors?) & other types of arrestors. All this, of course, should be
>grounded to a copper ground rod. I would like this outside "box" nicely &
>neatly dressed & labeled so it's easy to disconnect & is not an eye sore. I
>searched the Ham books and many Internet sights to no avail.
>Anybody? Thank you.
>
>west, AF4GC

Try this URL: http://www.polyphaser.com/ppc_TD1029.aspx

Danny, K6MHE

>

In my many years I have come to a conclusion that one
useless man is a shame, two is a law firm, and three
or more is a congress. - John Adams

email: k6mhe<at>arrl<dot>net
http://www.k6mhe.com/

2585. Re: 13.8V high current power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-30 10:37:51 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <9u6dnR9pG5H2DsnZRVny1Q@pipex.net>
Source record: 12386

> My favorite high current 12V load is auto headlamps average sealed
> beam is not less than 80W often as much as 120W so two are easily a
> 10-20A load. Some of the halogen lamps are higher power but get very
> hot (caution).
>
> the key thing is enough load to simulate a radio and parallel lamps
> of sufficient power will do that safely.
==========
In the absence of car bulbs , a good dummy load to test a power supply
unit is to take a length of galvanised fence wire of say 1mm dia or larger.

For a 13.8V-20A supply the load resistance needs to be 0.7 Ohms.

Send a current of 1 ampere through the wire and measure the voltage with
a DVM. Subsequently slide a crocodile clip along the wire until the
voltage measured is 700mV ,then you have the correct length.
Coil the wire and connect to a "chocbloc" connector.
Place coil in a plastic bucket filled with water.
Although tap water is somewhat conductive the overall resistance will
probably not decrease significantly. If it would you could make the wire
resistance somewhat higher (longer wire).

An alternative method would be using a roll of PVC insulated copper wire
of sufficient diameter determining a 0.7 Ohms resistance with the above
method. Again use as dummy load placed in a bucket filled with water .

Frank GM0CSZ / KN6WH

2586. Re: Checkin' out dummy loads with a VNA...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-30 13:20:02 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1146403202.636228.14750@v46g2000cwv.googlegroups.com>
Source record: 12387
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hi Joerg,
Well I'm sorry to hear that. As an analogue guy, I don't much care for PROMS and stuff. I can fix up anything analogue in good time, given a schematic and a decent range of test equipment, but am off my territory with digital stuff. But I'm still not sure what the problem is here. Are you saying spares for the digital parts are hard to obtain or rather that the encoding on those chips may be hard to reprogram?

2587. Re: Roller Inductor Squeak

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-30 18:07:45 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <r5v952hd1u1sb5ls8taini381qb53l7rig@4ax.com>
Source record: 12388

On 29 Apr 2006 03:25:49 -0700, "Leon" <leon.heller@bulldoghome.com>
wrote:

>
>Win wrote:
>> What is a good conductive lub to use on roller indictors? The
>> inductor in my tunert squeaks like an old door. Any other tips to
>> keep that roller noise down?
>>
>> Win, w0lz
>
>Electrolube used to make a contact lubricant pen. Perhaps they are
>still available.
>
>Leon

Thanks, Leon. I will do a search for it to the WEB.

Win, w0lz

2588. Re: Regen Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-30 19:15:00 UTC
From: dconley@lawfacts.com
Message-ID: <1146424500.578971.92870@j73g2000cwa.googlegroups.com>
Source record: 12389

"Other tubes I've used (12BA6) that resistance could be 10meg it
behaves
well where with a 12EK6(12v space charge tube) was happiest
with 5meg."

I'm thinking of putting a 10 ohm pot in series with the filament of the regen tube to see if making the filament less negative in relation to the regen grid might work, maybe also using a bypass cap across the pot. I don't have one right now but I'm going to play around with different resistor values (like around 3 ohms) until I can order one.

Did you think about doing something like this when you couldn't get your 12EK6's to work with a 10 meg resistor?

2589. Re: Checkin' out dummy loads with a VNA...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-30 21:22:32 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <sU95g.64152$_S7.10581@newssvr14.news.prodigy.com>
Source record: 12390
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Paul,

> Well I'm sorry to hear that. As an analogue guy, I don't much care for
> PROMS and stuff. I can fix up anything analogue in good time, given a
> schematic and a decent range of test equipment, but am off my territory
> with digital stuff. But I'm still not sure what the problem is here.
> Are you saying spares for the digital parts are hard to obtain or
> rather that the encoding on those chips may be hard to reprogram?
>

Not sure yet what is broken. The analog sampling stuff and all seems to work but is reads out garbage. The PROMs are really old style. They look posh with gold plating and all but I guess that non-programmed spares would be next to impossible to find. But again, maybe they are still ok. Hopefully...

Regards, Joerg

http://www.analogconsultants.com

2590. Re: Thermistors! Ah!!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-30 22:33:56 UTC
From: Telstar Electronics <briangriffey@sbcglobal.net>
Message-ID: <1146436436.324149.14790@y43g2000cwc.googlegroups.com>
Source record: 12391

Thermistors can certainly go bad. Pull it out and test it with an Ohm meter while heating and cooling.

www.telstar-electronics.com

2591. Re: Roller Inductor Squeak

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-30 23:13:56 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1146438836.353852.10720@j33g2000cwa.googlegroups.com>
Source record: 12392

I'd try Caig De-oxit #5, I think it is. It's not specifically conductive, but it's used on noisy contacts and controls, and acts as a cleaner and lubricant. Other similar cleaner-lubricants should work, too, but Caig has a very good reputation.

Cheers,
Tom

2592. Re: Roller Inductor Squeak

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-04-30 23:41:23 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <6nia525alfh0raf75fuu2h1a9rm8n4ecrs@4ax.com>
Source record: 12393

On 30 Apr 2006 16:13:56 -0700, "K7ITM" <k7itm@msn.com> wrote:

>I'd try Caig De-oxit #5, I think it is. It's not specifically
>conductive, but it's used on noisy contacts and controls, and acts as a
>cleaner and lubricant. Other similar cleaner-lubricants should work,
>too, but Caig has a very good reputation.
>
>Cheers,
>Tom

Thanks,Tom. I receiveed the same suggestion via email. I will look
into it.

Win, w0lz

2593. Simple Tone Detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-01 01:34:52 UTC
From: Bill Powell <whp@att.net>
Message-ID: <ogpa52hso86gp77jq4visjgjd19m3bf0ua@4ax.com>
Source record: 12394

Simple Tone Detector

I'm looking for a SIMPLE circuit to detect the presence of a tone - any tone in the audible range.

My quest: Consider the poor radio dispatcher, sitting there wearing a pair of headphones when the next town / county over tones out an ambulance or fire department.

I'm looking to be able to detect any audible tone and use the results to decrease the operator's headphone sound level during the tone.

I have already tried a DSP tone elimination and found that:
1) It's too effective: I need do decrease tone volume - not eliminate it.
2) Way too complex and expensive for the seemingly simple task.

The circuit needs to be compact and inexpensive - connected between the dispatch console headphone jack and the operator's headphones. It must NOT interfere with normal speech!

I have spent several hours online seatching and came up empty. Any thoughts or suggestions?

Bill Powell

2594. Re: Simple Tone Detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-01 03:56:12 UTC
From: 3flp <zalio@optusnet.com.au>
Message-ID: <1146455771.879478.326510@v46g2000cwv.googlegroups.com>
Source record: 12395

Hi Bill,

One idea: Have an audio voltage controlled oscillator, locked to the audio input with a phase locked loop. I'd try the 4046 chip. Add the locked VCO output shifted by 180 degrees to the audio. Set the amplitude of the counter-tone, so that it doesn't completely cancel the output, but just attenuates it. The PLL will keep the shift constant. You'll also have to detect when the PLL is not locked and remove the counter-tone on this condition. No idea how well this would work... but I'd cost only a few $, for the 4046, an opamp or two and some Rs&Cs.

Anyway, just an idea.
Cheers,
VK3FLP

2595. Re: Regen Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-01 05:25:40 UTC
From: clifto <clifto@gmail.com>
Message-ID: <knigi3-cup.ln1@remote.clifto.com>
Source record: 12396

ken scharf wrote:
> The fade out problem with your regen sounds familiar, I had this problem
> on an old AA5 radio. It would stop playing after a while and came back
> if I touched the signal grid lead (antenna tuning cap hot side) of the
> 12BE6 tube (I actually held one end of a .01 cap and touched the OTHER
> side of the cap to the grid as it was a hot chassis set). Weird!

Nah. Something plugged, and your grid leak bias wasn't leaking any more.

--
All relevant people are pertinent.
All rude people are impertinent.
Therefore, no rude people are relevant.
-- Solomon W. Golomb

2596. Re: Simple Tone Detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-01 06:14:39 UTC
From: James Thompson <Jamesthompson2002@hotmail.com>
Message-ID: <528eb$4455a751$438c87aa$28799@ALLTEL.NET>
Source record: 12397

"Bill Powell" <whp@att.net> wrote in message
news:ogpa52hso86gp77jq4visjgjd19m3bf0ua@4ax.com...
> Simple Tone Detector
>
> I'm looking for a SIMPLE circuit to detect the presence of a tone -
> any tone in the audible range.
>
> My quest: Consider the poor radio dispatcher, sitting there wearing a
> pair of headphones when the next town / county over tones out an
> ambulance or fire department.
>
> I'm looking to be able to detect any audible tone and use the results
> to decrease the operator's headphone sound level during the tone.
>
> I have already tried a DSP tone elimination and found that:
> 1) It's too effective: I need do decrease tone volume - not eliminate
> it.
> 2) Way too complex and expensive for the seemingly simple task.
>
> The circuit needs to be compact and inexpensive - connected between
> the dispatch console headphone jack and the operator's headphones. It
> must NOT interfere with normal speech!
>
> I have spent several hours online seatching and came up empty. Any
> thoughts or suggestions?
>
> Bill Powell
>
>
You could build a circuit using a 567 tone decoder IC, but the problem is
that you will first need to know what freq the tone is. Still you could use
multiple tone decoders, feeding to a muteing circuit. If you can specify
the tones you want to mute, we may come up with a circuit to help. The 567
would output to a relay that would simply mute the audio only when the tone
is present. JTT KF4HUF .

2597. Re: 13.8V high current power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-01 09:22:58 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1146475378.171501.193100@j73g2000cwa.googlegroups.com>
Source record: 12298

Sounds like a good start

Don't forget the 6 x Emitter ballast resistors (each should drop 100mV at full load), so maybe 10 milli ohms each (short length of electric heater element ?).

May need a fan to keep the heatsink cool.

You probably also need to mount the driver transistor on a heatsink.

Regulation using an LM723 or similar. There should be plenty of detailed designs out there - also see the Nat Semi application notes on the subject.

See http://www.national.com/pf/LM/LM723.html

Regards,

Mark.

2598. Re: Simple Tone Detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-01 09:30:28 UTC
From: biascomms <biascomms@blueyonder.co.uk>
Message-ID: <Uyk5g.62287$wl.22434@text.news.blueyonder.co.uk>
Source record: 12299

3flp wrote:

> The PLL will keep the shift constant.
> You'll also have to detect when the PLL is not locked and remove the
> counter-tone on this condition.

Use a CMOS switch (4016 or 4066) to mute the tone.

> No idea how well this would work... but
> I'd cost only a few $, for the 4046, an opamp or two and some Rs&Cs.

It works really well - I used to use this method to remove the 96 kHz
(approx) interference in "scrambled" cable TV signals.

Bob

--
Everything gets easier with practice, except getting up in the morning!

2599. Re: Checkin' out dummy loads with a VNA...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-01 11:40:57 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1146483657.558084.39840@j73g2000cwa.googlegroups.com>
Source record: 12300
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

....noooo, you should not have any problems! these two connectors
units are actually attenuators, not loads. loads have only one input
connector.
ctually you can measure all the important characteristics of the load
by applying power through some kind of directional coupler an measuring
the applied (incident) power and the reflected power by using the VSWR
formula you can calculate the input real resistance in order to obtain
a curve relative to frequency. of course, in order tomeasure the
complex impedance, you need acces to equipment capable of measuring the
phase angle also, like a vector impedance meter or a vector network
analyzer: you measure reflections caused by mismatch in a 50 Ohms
environment, and translate them in complex impedance values.
Saandy 4Z5KS

paul@burridge8333.fsbusiness.co.uk wrote:
> Hi all,
>
> I'd like to see what this new dummy load I just bought on e-bay looks
> like under test at its purported frequency limit of one Gig.
> Problem is, all the documentation I have for my VNA shows devices to be
>
> tested having *two* connectors (an 'in' and an 'out' if you will) like
> filters for example. I can only connect to the *one* connection that
> dummy loads typically have, since it'a a termination device rather than
>
> a through one like a filter or attenuator. Does that mean I can't
> analyse its
> characteristics? Or is there a work around/special cable configuration
> that would solve
> this problem?
> Thanks,
> <clueless paul>

2600. Re: 1N23W source?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-01 12:27:55 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4455FE7B.BF870A88@earthlink.net>
Source record: 12301

texassparky@subdimension.com wrote:
>
> Does anyone know of a source for a couple of 1N23W mixer diodes?
>
> This is not a new design, they are for repair. So, I must use the old
> style cartridge unit.
>
> Thanks!
>
> Mike, WB5MYY

<http://shop.store.yahoo.com/americanmicrosemiconductor/index.html>
claims to have a lot of obsolete and obscure parts, but I have never
dealt with them.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2601. Re: Plastic Antenna Insulators

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-01 14:27:09 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <1Vo5g.1304$g01.285@trnddc01>
Source record: 12302
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"stargatesg1" <nospam@here.net> wrote in message
news:uKb4g.43$Nh7.12@trnddc01...
> Anyone ever try using plastic drywall anchors for yagi antenna insulators?
> I'm wondering how they will hold up to UV and the weather in general.
>
> Thanks,
> RoD
>
>Hi Rod,
Someone may have already given this response and I missed it. Charles Byers
has both insulators and element "keepers" for the insulators. A Google
search under this name should turn up the product. Seem to recall they are
black delrin.

73,
Dale W4OP

2602. FA: Vintage WRL Globe FCL-1 "Speech Booster" - RARE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-01 16:02:21 UTC
From: Tom <tfarl@iowatelecom.net>
Message-ID: <hiq5g.952970$xm3.606729@attbi_s21>
Source record: 12303
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

An interesting accessory designed and built by WRL for the Globe "Scout"
and "Hi-Bander" series.

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=9720352662

Ends this Sunday, May-07-06 16:39:16 PDT (23:39:16 GMT/UTC).

Tnx fer looking.
Vy 73 es best dx
de Tom N&#65533;JMY . .

2603. power transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-01 17:10:52 UTC
From: James Thompson <Jamesthompson2002@hotmail.com>
Message-ID: <5251f$4456411d$438c87aa$30398@ALLTEL.NET>
Source record: 12304

Has anyone re-wound a power transformer with good results?
I have salvaged some big transformers from microwave ovens, and cut the secondary winding out of it. Then re-wound it with 14 guage till getting enough turns to produce about 20 volts. Problem is the thing gets hot even without a load on it.
Is there something I am overlooking? Thanks.

2604. Re: power transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-01 18:19:24 UTC
From: Skipp says hello <spammenotthanks@yahoo.com>
Message-ID: <e35jfc$59l$1@skeeter.ucdavis.edu>
Source record: 12305

Hi James,

Yes, there are shunts, which need to be removed. There is/was an article about how to rewind microwave oven transformers. It was in an ARRL QEX or similar magazine.

You can find a copy of that article in the Files Section of the yahoo rfamplifiers group.

http://groups.yahoo.com/group/rfamplifiers/

Pretty much shows you what needs to be done.

Hope that helps...
cheers,
skipp

: James Thompson <Jamesthompson2002@hotmail.com> wrote:
: Has anyone re-wound a power transformer with good results?
: I have salvaged some big transformers from microwave ovens, and cut the
: secondary winding out of it. Then re-wound it with 14 guage till getting
: enough turns to produce about 20 volts. Problem is the thing gets hot even
: without a load on it.
: Is there something I am overlooking? Thanks.

2605. Re: power transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-01 18:19:43 UTC
From: jgboyles@aol.com
Message-ID: <1146507583.320504.229050@i40g2000cwc.googlegroups.com>
Source record: 12306

James Thompson wrote:
> Has anyone re-wound a power transformer with good results?
> I have salvaged some big transformers from microwave ovens, and cut the
> secondary winding out of it. Then re-wound it with 14 guage till getting
> enough turns to produce about 20 volts. Problem is the thing gets hot even
> without a load on it.
> Is there something I am overlooking? Thanks.

I found the same thing when I rewound one a few years back.
Apparently the primary is saturated so it will draw 4 or 5 amps with
the secondary loaded or unloaded. This provides some voltage
regulation.
I should have taken a variac and ran a V/I curve from 0 volts to the
point saturation occurs and the current starts to rise. That would
prove that the transformer operates in saturation.
My microwave is rated for continous operation at full load, so
apparently the transformer doesn't get hot enough to let the smoke out,
but it does get hot.

Gary N4AST

2606. Re: Simple Tone Detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-01 19:01:59 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e35lv9$857$1@avnika.corp.mot.com>
Source record: 12307

How about a simple AGC circuit. You could make the detector more sensitive
around the tone frequency (with a BP filter) so it will reduce gain more due
to tone.
OR
If you know the tone freq, just notch it 6-8-10-15 dB - whatever you need.

I'm not sure why you say the DSP has to eliminate the tone. It could easily
be made to only reduce the tone to a a specified level.

I think the tone detector-PLL is not too good a method. Getting the phase
shift to do a cancell will take an adjustable all-pass phase shifter. Not
impossible, but complex as well.

73, Steve, K9DCI

"Bill Powell" <whp@att.net> wrote in message
news:ogpa52hso86gp77jq4visjgjd19m3bf0ua@4ax.com...
> Simple Tone Detector
>
> I'm looking for a SIMPLE circuit to detect the presence of a tone -
> any tone in the audible range.
>
> My quest: Consider the poor radio dispatcher, sitting there wearing a
> pair of headphones when the next town / county over tones out an
> ambulance or fire department.
>
> I'm looking to be able to detect any audible tone and use the results
> to decrease the operator's headphone sound level during the tone.
>
> I have already tried a DSP tone elimination and found that:
> 1) It's too effective: I need do decrease tone volume - not eliminate
> it.
> 2) Way too complex and expensive for the seemingly simple task.
>
> The circuit needs to be compact and inexpensive - connected between
> the dispatch console headphone jack and the operator's headphones. It
> must NOT interfere with normal speech!
>
> I have spent several hours online seatching and came up empty. Any
> thoughts or suggestions?
>
> Bill Powell
>
>

2607. Re: Plastic Antenna Insulators

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-01 20:00:44 UTC
From: Butch Magee <lynyrd@cableone.net>
Message-ID: <125cq81luegl75b@corp.supernews.com>
Source record: 12308
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

stargatesg1 wrote:
> Anyone ever try using plastic drywall anchors for yagi antenna insulators?
> I'm wondering how they will hold up to UV and the weather in general.
>
> Thanks,
> RoD
>
>
Go to a new home site (under construction) and pick up a few inches of PVC 1/2 in. or 3/4 in. cut them to an appealing size and drill some holes in them at their ends and BAM, insulators!

I like mine professional looking so I buy them from Buxcomm.com. They are inexpensive and in several designs or styles and Buck got good prices too!!

Butch KF5DE

2608. Re: Roller Inductor Squeak

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-01 20:21:18 UTC
From: Butch Magee <lynyrd@cableone.net>
Message-ID: <125cren28kp2t83@corp.supernews.com>
Source record: 12309

Win wrote:
> What is a good conductive lub to use on roller indictors? The
> inductor in my tunert squeaks like an old door. Any other tips to
> keep that roller noise down?
>
> Win, w0lz

Radio Shack has a product that is perfect for your need. I have used it for that same purpose, it is the electronic cleaner and lubricant. It comes in a small spray can and is some really good stuff.

Butch KF5DE

2609. PROJECT BOX

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-01 21:13:09 UTC
From: Butch Magee <lynyrd@cableone.net>
Message-ID: <125cug53d8nf884@corp.supernews.com>
Source record: 12310
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.radio.amateur.homebrew

I'm looking for a supplier of project boxes (metal). What I need right now is a 4 x 7 x 5 in. Or numbers close to this, abt. 1/2in either way for a little ant. tuner I want to put together.

Thanks,
Butch KF5DE

2610. Re: power transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-01 21:32:37 UTC
From: Risto Tiilikainen <risto.Non.tiilikainen@luukku.comMunist.invalid>
Message-ID: <44567e74$0$10686$39db0f71@news.song.fi>
Source record: 12311

James Thompson kirjoitti:
> Has anyone re-wound a power transformer with good results?
> I have salvaged some big transformers from microwave ovens, and cut the
> secondary winding out of it. Then re-wound it with 14 guage till getting
> enough turns to produce about 20 volts. Problem is the thing gets hot even
> without a load on it.
> Is there something I am overlooking? Thanks.
>
>
Hi !

That transformer is working in saturation.
Maybe you can see a welded line in the iron going over the plates.
Maybe not. It depends on design

Saturation guarantees good enough regulation for magnetron HT.
Also so called line conditioners and AC stabilizers are working with
saturated core.

Saturated cores are getting warm even withouth any load.
Added load doesn't warm up them remarcable any more.

Maybe saturation is an advantage for you because of regulation phenomena.
Test regulation with variac in input but use some load in secondary !

Line conditioner behaves so that in certain lowered input voltage the
saturation stops and output trends to drop.
To guarantee stabilization and conditioning they need some load all the
time (5 % of max allowed power is normally OK)
Line conditioners are normally working in resonance principle.
Therefore they have a nice flywheel efect. Gaps or glitches in line
sinus form are removed

73 ! Risto, OH2BT

2611. New program - SKYTRIG

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-01 23:56:26 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <I8KdnSI2msqQP8vZRVny2Q@bt.com>
Source record: 12312

Program SKYTRIG - SKYWAVE TRIGONOMETRY

With an input of elevation angle, layer height and critical frequency,
the program calculates skywave path distance, groundpath distance,
spreading (dispersion) loss, field strength from a 100 watt
transmitter, and the MUF.

The program can be used for guidance on the low MUF's and the geometry
of near vertical incidence radio paths over short distance
groundpaths.

Elevation angle is NOT the angle at which an antenna radiates the
strongest signal. It is the angle of the path taken by the radio wave
between two places on the Earth's surface and is nothing to do with an
antenna.

The program notes provide some elementary information on the heights
and behaviour of the various ionospheric layers in sunlight and in
darkness. Also on factors which affect received field strength such as
operating frequency being greater than MUF.

Download in a few seconds program SKYTRIG from website below.
Filesize = 42 kilo-bytes. Run immediately. Or you can open/run it
without downloading.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

2612. Re: power transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-02 01:19:18 UTC
From: James Thompson <Jamesthompson2002@hotmail.com>
Message-ID: <9d2b9$4456b39b$471cd40a$7404@ALLTEL.NET>
Source record: 12313

"James Thompson" <Jamesthompson2002@hotmail.com> wrote in message
news:5251f$4456411d$438c87aa$30398@ALLTEL.NET...
> Has anyone re-wound a power transformer with good results?
> I have salvaged some big transformers from microwave ovens, and cut the
> secondary winding out of it. Then re-wound it with 14 guage till getting
> enough turns to produce about 20 volts. Problem is the thing gets hot
> even without a load on it.
> Is there something I am overlooking? Thanks.
>
>
Thanks for all that great info. I will hunt down the links you posted. I am
currently running a fan just to cool the transformer, but now I'm back to
the drawing board. Have a great day. Jim

2613. Re: PROJECT BOX

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-02 02:08:22 UTC
From: "Percival P. Cassidy" <Nobody@NotMyISP.com>
Message-ID: <paz5g.352$PN3.160@fe05.lga>
Source record: 12314
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.radio.amateur.homebrew

Try the Mouser and Newark catalogs.

"Perce"
(aka Alan NV8A)

On 05/01/06 05:13 pm Butch Magee wrote:

> I'm looking for a supplier of project boxes (metal). What I need right
> now is a 4 x 7 x 5 in. Or numbers close to this, abt. 1/2in either way
> for a little ant. tuner I want to put together.

2614. Re: Simple Tone Detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-02 06:25:03 UTC
From: biascomms <biascomms@blueyonder.co.uk>
Message-ID: <3XC5g.62784$wl.26145@text.news.blueyonder.co.uk>
Source record: 12315

Steve N. wrote:

> I think the tone detector-PLL is not too good a method. Getting the phase
> shift to do a cancell will take an adjustable all-pass phase shifter. Not
> impossible, but complex as well.

The PLL can correct phase as well as frequency of the cancelling tone - it's
trivially easy.

Bob

--
Everything gets easier with practice, except getting up in the morning!

2615. Re: PROJECT BOX

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-02 09:25:59 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <acqdnQaPkv4-uMrZnZ2dnUVZ8qCdnZ2d@pipex.net>
Source record: 12316
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.radio.amateur.homebrew

Butch Magee wrote:
> I'm looking for a supplier of project boxes (metal). What I need right
> now is a 4 x 7 x 5 in. Or numbers close to this, abt. 1/2in either way
> for a little ant. tuner I want to put together.
==========
Suggest you don't make the enclosure too small for a matching box (tuner).
Any inductor too near metal , will affect the inductor's Q
A rule of thumb is to keep the inductor away from the enclosure not less
than 1 diameter(of the inductor)
For this reason I am constructing an antenna matching unit in a plywood
enclosure or perhaps MDF ,although I understand MDF is no longer used in
the USA,because in contains phenolic resin. Perhaps someone in the know
on this NG can confirm this.

Frank GM0CSZ / KN6WH

2616. Re: power transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-02 11:02:11 UTC
From: amdx <amdx@knology.net>
Message-ID: <43563$44573c2a$45011502$12172@KNOLOGY.NET>
Source record: 12317

"James Thompson" <Jamesthompson2002@hotmail.com> wrote in message
news:9d2b9$4456b39b$471cd40a$7404@ALLTEL.NET...
>
> "James Thompson" <Jamesthompson2002@hotmail.com> wrote in message
> news:5251f$4456411d$438c87aa$30398@ALLTEL.NET...
> > Has anyone re-wound a power transformer with good results?
> > I have salvaged some big transformers from microwave ovens, and cut the
> > secondary winding out of it. Then re-wound it with 14 guage till getting
> > enough turns to produce about 20 volts. Problem is the thing gets hot
> > even without a load on it.
> > Is there something I am overlooking? Thanks.
> >
> >
> Thanks for all that great info. I will hunt down the links you posted. I
am
> currently running a fan just to cool the transformer, but now I'm back to
> the drawing board. Have a great day. Jim
>

See if your drawing board has room for several extra turns
on the primary winding.
Mike

2617. Re: PROJECT BOX

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-02 11:10:11 UTC
From: Glenn <aa5pk@hotmail.com>
Message-ID: <p6H5g.216$QE.17@dukeread10>
Source record: 12318
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.radio.amateur.homebrew

"Butch Magee" <lynyrd@cableone.net> wrote in message
news:125cug53d8nf884@corp.supernews.com...
> I'm looking for a supplier of project boxes (metal). What I need right now is a 4 x 7 x 5 in. Or
> numbers close to this, abt. 1/2in either way for a little ant. tuner I want to put together.

You might find what you're looking for here: <http://home.flash.net/~k3iwk/>
73 de Glenn AA5PK

2618. Re: PROJECT BOX

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-02 11:44:05 UTC
From: w8ji@akorn.net
Message-ID: <1146570245.392397.15030@y43g2000cwc.googlegroups.com>
Source record: 12319
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Highland Ham wrote:
> Butch Magee wrote:
> > I'm looking for a supplier of project boxes (metal). What I need right
> > now is a 4 x 7 x 5 in. Or numbers close to this, abt. 1/2in either way
> > for a little ant. tuner I want to put together.
> ========================
> Suggest you don't make the enclosure too small for a matching box (tuner).
> Any inductor too near metal , will affect the inductor's Q
> A rule of thumb is to keep the inductor away from the enclosure not less
> than 1 diameter(of the inductor)
> For this reason I am constructing an antenna matching unit in a plywood
> enclosure or perhaps MDF ,although I understand MDF is no longer used in
> the USA,because in contains phenolic resin. Perhaps someone in the know
> on this NG can confirm this.
>
> Frank GM0CSZ / KN6WH

Hi Frank,

It sounds like you are going to an extreme that will create as more problems than it solves.

There is very little Q change in an aircore inductor of typical form factors when it is brought near sheet metal unless that sheet metal is in the core axis within a core diameter or less. The reason for this is air does not saturate, and the magnetic flux simply moves to a better spot.

There are only two exceptions to the generally very small Q reduction by a coil being near metal. The first is when the inductor is operated very near self-resonance, at which point any stray capacitance can seriously affect coil Q. The second is when the metal totally encloses the inductor and is so close it reduces inductance a significant amount.

MFJ has that problem is some small tuners, where the end of a 2 or 3" diameter coil is mounted right up against the sheetmetal (nearly zero spacing) and the when the cover is installed the other end has metal a fraction of an inch away. Unloaded inductor Q drops about 45% from 220 to 120 in that tuner whe the full coil is being used, and it is an exceptionally bad layout. Had they stayed an inch or two away from the ends of the coil it would not be an issue.

When you place components in a "transparent" box, you now have significant new problems. You have no reliable groundplane. Wiring is

an issue. There also is no containment of fields, you have created a small antenna in the room.

Most of the problems in tuners are caused by the tuner not have enough capacitance or using an inductor with crappy Q to start with, not by the box. You have to work at it pretty hard to make a design where the box kills the Q, but it is easy to make a box that radiates harmful RF into the area around the tuner.

73 Tom

2619. Re: power transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-02 16:33:19 UTC
From: James Thompson <Jamesthompson2002@hotmail.com>
Message-ID: <5a626$445789d1$471cd40a$15238@ALLTEL.NET>
Source record: 12320

"amdx" <amdx@knology.net> wrote in message
news:43563$44573c2a$45011502$12172@KNOLOGY.NET...
>
> "James Thompson" <Jamesthompson2002@hotmail.com> wrote in message
> news:9d2b9$4456b39b$471cd40a$7404@ALLTEL.NET...
>>
>> "James Thompson" <Jamesthompson2002@hotmail.com> wrote in message
>> news:5251f$4456411d$438c87aa$30398@ALLTEL.NET...
>> > Has anyone re-wound a power transformer with good results?
>> > I have salvaged some big transformers from microwave ovens, and cut the
>> > secondary winding out of it. Then re-wound it with 14 guage till
>> > getting
>> > enough turns to produce about 20 volts. Problem is the thing gets hot
>> > even without a load on it.
>> > Is there something I am overlooking? Thanks.
>> >
>> >
>> Thanks for all that great info. I will hunt down the links you posted. I
> am
>> currently running a fan just to cool the transformer, but now I'm back to
>> the drawing board. Have a great day. Jim
>>
>
> See if your drawing board has room for several extra turns
> on the primary winding.
> Mike
>
>
Yes I was reading that also. I didn't remove the mag shunt so I am doing
both of these. I have a few to play with and get right. I believe the
extra turns on the primary is needed when the mag shunt is removed but not
sure yet. I jumped all over the web hunting down info on this thing. Thanks
all for the direction.. JTT

2620. Re: Class C engineering question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-02 19:05:50 UTC
From: WSQT <wsqtradio@ziplip.com>
Message-ID: <1146596750.356161.84830@u72g2000cwu.googlegroups.com>
Source record: 12321

If the LOAD on teh device is too high, it is possible for the
"bottoming voltage" or anode voltage necessary to pull two times the
current through it to be more than doubled for double the current.
High plate resistance devices operated with too high a load will NOT
have a constant dynamic anode impedance with varying plate voltage.
This is because the instantanious voltage across the tank circuit
during conduction is the supply voltage minus the tube voltage drop.

If the tube drop is more than doubled when the current(and supply)
voltage are doubled, it means the voltage across the load is LESS THAN
doubled. The load being ohmic, this causes less than double the current
to flow, and cuases downward carrier shift.

> > The next condition is that the current drawn through the load at 2X
> > supply voltage must not cause the tube or transistor's bottoming
> > voltage to more than double! In the real world, this means that the
> > current(loading) must be backied off from CW conditions for any
> > particular device, just as the voltage must be. If you load a final
> > for maximum output at carrier, guess what-you will be lucky to see 30%
> > upward modulation with MOSFETS or somewhat better with tubes!
>
> What does that have to do with plate modulated stages?
>
> The anode operating impedance is nearly constant throughout the full
> audio cycle, and the ratio of E/I tracks very well regardless of load
> setting in low-mu triode class C modulated stages.
>
> The tetrode is a problem only because the anode does not follow a
> square law power change as voltage is changed. This is because, as you
> pointed out, the anode current is controlled by the screen voltage more
> than anode voltage.
>
> In a tetrode or any other screen grided tube, some audio has to be
> applied either to drive, control grid, or screen voltage. This is to
> ensure anode current tracks a square law relationship with modulation
> voltage, plate operating impedance is reasonably constant, and peak
> power is four times carrier power.
>
> No matter how I load a class C plate modulated triode, modulation
> remains reasonably constant. It is only in multigrided plate modulated
> tubes that modulation can be seriously affected, since screen current
> and the effects of screen voltage and current change can vary
> drastically with load setting.
>
> The issue the orignal poster missed was how the class C PA behaves as

> voltage is changed by the modulation transformer. Power output should
> square as voltage is doubled, but that's tough to do in a tetrode
> unless screen operating conditions are controlled and the circuit
> applies audio voltage in the proper relationship to anode voltage in a
> grid.
>
> Most of the AM pages I see don't really understand the importance of
> that, and think just throwing a high inductance choke in series with
> the screen makes the tube follow square law rules as modulation voltage
> is changed.
>
>
> 73 Tom

2621. Re: 1N23W source?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-02 20:25:55 UTC
From: Lynn Coffelt <coffelt2@comcast.net>
Message-ID: <e38f6s$h14$1@emma.aioe.org>
Source record: 12322

<texassparky@subdimension.com> wrote in message
news:gf9752pjmui6i4l8hff6vkcht8povnv70c@4ax.com...
>
> Does anyone know of a source for a couple of 1N23W mixer diodes?
>
> This is not a new design, they are for repair. So, I must use the old
> style cartridge unit.
>
> Thanks!
>
> Mike, WB5MYY

No help, probably, but most early marine radars used the type diode you
are looking for, usually in a matched pair (one reverse polarity from the
other). A most common replacement, and which worked as well or better was
the 1N415E (or F too, if I remember correctly) The 415's cap could be
installed on either end for reversing the polarity.
Both the 23 and the 415 types are very sensitive to damage from
external RF fields and static electricity. Came packed in metal tubes, metal
foil or other RF protecting packaging. If your use is very critical, try to
avoid buying any not in original, unopened packaging.
But you probably already know all of that..... grin!
Old Chief Lynn

2622. Re: Simple Tone Detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-02 20:41:55 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e38g6khdk1@avnika.corp.mot.com>
Source record: 12323

Curious, I ask...going somewhat on a tangent...

"biascomms" <biascomms@blueyonder.co.uk> wrote in message
news:3XC5g.62784$wl.26145@text.news.blueyonder.co.uk...
> Steve N. wrote:
>
> > I think the tone detector-PLL is not too good a method. Getting the
phase
> > shift to do a cancell will take an adjustable all-pass phase shifter.
Not
> > impossible, but complex as well.
>
> The PLL can correct phase as well as frequency of the cancelling tone -
it's
> trivially easy.
> Bob --
> Everything gets easier with practice, except getting up in the morning!

AMEN!

Bob,
The OP said a DSP was too complex, so I was keeping with that restriction (and assuming that he may have been an analog type of guy)
How do you propose to get the 180? An Exclusive OR type PD has *approx* 90 degrees for a type one loop and 90 should be possible with a type 2...so you need another 90. Not impossible by any means, of course. If the VCO is a state variable implementation or a phase shift type, you may be able to get another 90 degree section for "free".
The PLL lock time will allow a burst of tone at the start *and end*...(see next).
Then, when the loop is idling, with no tone to cancel you need a gating circuit to disable its tone from the output since ther'll be no tone to cancel and time for it to turn on/off. Sounds like a juggling exercise.
Comment?

The PLL lock time will allow a burst of tone where a notch/equalizer won't and it sure seems a notch is very simple - a hand full of parts in a twin "T" or possibly narrowing it up with a augmented twin-T (twin-T and amp)...or there may be another band reject, I think based on the Wein bridge or some other active filter topology.

Now that I think about it, I suspect there may me a way to just change where the tone in inserted into the path to eliminate it from the dispatcher's speaker/phones.. But that assumes access to the system and the OP may have just wanted to stick something in the output jack for the dispatcher...
There may even be a "dispatcher tone injection level adjustment." (:-)

Perhaps it is set too high now...

This is the type of problem that I *know* has a really simple solution.
It's just knowing all the constraints and getting the clue for that answer.

73, Steve, K9DCI.

2623. Re: 13.8V high current power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-02 22:13:36 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e38lihhua1@avnika.corp.mot.com>
Source record: 12325

<paul@burridge8333.fsbusiness.co.uk> wrote in message
news:1146357642.620733.175050@y43g2000cwc.googlegroups.com...
> You're probably right! I did actually try to rip the heating element
> out of a 2kW electric fire to use as just such a test load, but the
> manufacturers had used some really devious sort of screw heads to keep
> the two casings together. :-(
> Failing some serious resistance wire, the only other 'to hand' option
> is to hook up the HF mobile and key-up; but I don't have a sufficiently
> gutsy dummy load or antenna to dump 100W into, I'm afraid. :-(
>

Paul,

Welcome to the world of design...

No need to make a load to measure the ripple on the caps. You can
calculate it. I did this long ago for a 5V 28 amp supply I re-wound from a
28V 5A supply.

You have to know that for a capacitor, I = C * Dv / dt.

When the 60 HZ wave drops, the diodes drop out of conduction and the filter
cap is now supplying *all* the load current...and the voltage drops in the
usual capacitive nature following that formula.

I don't recall if you said the current, but...if you will be drawing, say 20
amps - you have the "I". If you have a "C" you plan to use from the old
design, you have "C". Dt is the discharge time between the (full-wave)
peaks from the bridge rectifier. This is 8.333 ms. minus the conduction
time. I forget the typical conduction time I have seen, but I'll assume 5
ms max-load (the diodes don't conduct very long, typically.and.and the peak
current is pretty high to boot!) -- leaving 3ms for the discharge time.
Then Dv is the ripple, or more accurately, the sag. Also, consider that the
peak voltage will be lower when loaded due to the transformer winding
resistance and diode drop and anything else in there.

So, solving for Dv. Dv = (I* dt) / C

If you wanted 20 amps and had 20,000 uF, You'd have (20*.005)/.02 or 3
volts of sag.

BUT! This assumes *normal* line voltage. If you DO measure as some of the
others suggest, remember that you'll be using whatever line voltage is at
the time. Consider when there is a brown out. Pick a low-line voltage, say
105 volts and use THAT voltage, Or the ratio 105/120 and adjust your output
voltage number accordingly when calculating things.

You have to make sure that *Everything* that you want to power from this voltage has enough voltage at the low point; series pass & Driver & driver's driver (perhaps the 723).

Finally, what I did to keep the required overhead to a minimum and, as a result, the dissipation in the series pass transistors lower (and guarantee poorer brown-out protection, unfortunately), I *added* a few extra, lighter gauge wire turns to the *OUTPUT* winding to supply the 723 and driver stuff. Add the same number of turns to each side of the secondary (put one and measure the volts-per-turn to figure out how many) and put a diode from both of them (pointing to) to another smaller filter cap. This requires, of course two more diodes and filter cap, but they're smaller. You also have to watch the ripple in the same way.

Hope this helps. Let me know @arrl.net

73, Steve, K9DCI

2624. Need further info on network analysis terms...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-02 22:14:29 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1146608069.454943.48830@u72g2000cwu.googlegroups.com>
Source record: 12324
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hi gang,

Reading through the instructions for this VNA it mentions some
important accessories; power spitters, 6db attenuators, 50 ohm
terminations, opens, shorts and throughs. What exactly is a "through"?
And is it possible to make up accurate opens and shorts oneself that
are good enough for calibration purposes up to 1.3Ghz? Not talking
about any absolute standard here, like you'd get from HP themselves;
but just mid-tolerance stuff that'd be sufficient for reasonably
accurate amateur experiments?
Thanks,
p.

2625. Re: Need further info on network analysis terms...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-02 22:49:58 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <qmR5g.71966$H71.14568@newssvr13.news.prodigy.com>
Source record: 12326
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Paul,

> Reading through the instructions for this VNA it mentions some
> important accessories; power spitters, 6db attenuators, 50 ohm
> terminations, opens, shorts and throughs. What exactly is a "through"?

Probably a matched connection from point A to point B. This is often used to provide a certain line length for purposes of equalizing a time delay. You'll see that on many directional coupler assemblies, like when you open the front pod of a HP4191A.

> And is it possible to make up accurate opens and shorts oneself that
> are good enough for calibration purposes up to 1.3Ghz? Not talking
> about any absolute standard here, like you'd get from HP themselves;
> but just mid-tolerance stuff that'd be sufficient for reasonably
> accurate amateur experiments?

For hobby use, probably. The lab analyzers come with a calibration kit. The 50ohm resistor is a barrel with a connector. The open is just that, a tube that looks like the innards of the connector have been scraped out. The short is a connector with a precision gold plate in there that guarantees a solid flat contact between center and rim. Believe it or not, the 50ohm resistor of mine is now about 52.5ohms. Couldn't believe it, considering the profit margins on that stuff.

For the terminator I suggest to look at chip resistors. What is most important is to keep all the contact surfaces clean.

Regards, Joerg

http://www.analogconsultants.com

2626. Re: Need further info on network analysis terms...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-02 22:50:56 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <knR5g.71967$H71.8709@newssvr13.news.prodigy.com>
Source record: 12327
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Paul,

BTW: Which VNA do you have? (looking for something that might replace
the HP4191A...)

Regards, Joerg

http://www.analogconsultants.com

2627. Re: Class C engineering question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-02 23:48:13 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <borf52d2oibtkqhce3bu36k41978df0dmp@4ax.com>
Source record: 12328

It sounds like you are trying to describe over modulation?
Otherwise, if the tube is operated within the linear portion of the
plate curve, the current will double when the plate voltage doubles as
Tom described.

Decreasing the loading on the tube means that you must also decrease
the modulation applied.

73
Gary K4FMX

On 2 May 2006 12:05:50 -0700, "WSQT" <wsqtradio@ziplip.com> wrote:

>
> If the LOAD on teh device is too high, it is possible for the
>"bottoming voltage" or anode voltage necessary to pull two times the
>current through it to be more than doubled for double the current.
>High plate resistance devices operated with too high a load will NOT
>have a constant dynamic anode impedance with varying plate voltage.
>This is because the instantanious voltage across the tank circuit
>during conduction is the supply voltage minus the tube voltage drop.
>
>If the tube drop is more than doubled when the current(and supply)
>voltage are doubled, it means the voltage across the load is LESS THAN
>doubled. The load being ohmic, this causes less than double the current
>to flow, and cuases downward carrier shift.
>
>> > The next condition is that the current drawn through the load at 2X
>> > supply voltage must not cause the tube or transistor's bottoming
>> > voltage to more than double! In the real world, this means that the
>> > current(loading) must be backied off from CW conditions for any
>> > particular device, just as the voltage must be. If you load a final
>> > for maximum output at carrier, guess what-you will be lucky to see 30%
>> > upward modulation with MOSFETS or somewhat better with tubes!
>>
>> What does that have to do with plate modulated stages?
>>
>> The anode operating impedance is nearly constant throughout the full
>> audio cycle, and the ratio of E/I tracks very well regardless of load
>> setting in low-mu triode class C modulated stages.
>>
>> The tetrode is a problem only because the anode does not follow a
>> square law power change as voltage is changed. This is because, as you
>> pointed out, the anode current is controlled by the screen voltage more
>> than anode voltage.

>>
>> In a tetrode or any other screen grided tube, some audio has to be
>> applied either to drive, control grid, or screen voltage. This is to
>> ensure anode current tracks a square law relationship with modulation
>> voltage, plate operating impedance is reasonably constant, and peak
>> power is four times carrier power.
>>
>> No matter how I load a class C plate modulated triode, modulation
>> remains reasonably constant. It is only in multigrided plate modulated
>> tubes that modulation can be seriously affected, since screen current
>> and the effects of screen voltage and current change can vary
>> drastically with load setting.
>>
>> The issue the orignal poster missed was how the class C PA behaves as
>> voltage is changed by the modulation transformer. Power output should
>> square as voltage is doubled, but that's tough to do in a tetrode
>> unless screen operating conditions are controlled and the circuit
>> applies audio voltage in the proper relationship to anode voltage in a
>> grid.
>>
>> Most of the AM pages I see don't really understand the importance of
>> that, and think just throwing a high inductance choke in series with
>> the screen makes the tube follow square law rules as modulation voltage
>> is changed.
>>
>>
>> 73 Tom

2628. Re: Simple Tone Detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-03 00:00:09 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <gisf52pnbfajqqp3r6a69vnr257882fj14@4ax.com>
Source record: 12329

On Mon, 01 May 2006 01:34:52 GMT, Bill Powell <whp@att.net> wrote:

>Simple Tone Detector
>
>I'm looking for a SIMPLE circuit to detect the presence of a tone -
>any tone in the audible range.
>
>My quest: Consider the poor radio dispatcher, sitting there wearing a
>pair of headphones when the next town / county over tones out an
>ambulance or fire department.
>
>I'm looking to be able to detect any audible tone and use the results
>to decrease the operator's headphone sound level during the tone.
>
>I have already tried a DSP tone elimination and found that:
> 1) It's too effective: I need do decrease tone volume - not eliminate
>it.
> 2) Way too complex and expensive for the seemingly simple task.
>
>The circuit needs to be compact and inexpensive - connected between
>the dispatch console headphone jack and the operator's headphones. It
>must NOT interfere with normal speech!
>
>I have spent several hours online seatching and came up empty. Any
>thoughts or suggestions?
>
>Bill Powell
>

Seems to me a good AGC amplifier will do the trick. It will maintain a
fairly constant volume level no matter what is comming in.

73
Gary K4FMX

2629. Crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-03 00:03:04 UTC
From: Rob <robnang34@woh.rr.com>
Message-ID: <YqS5g.19388$YI5.6998@tornado.ohiordc.rr.com>
Source record: 12330

I am trying to find a 10.400mhz crystal to replace the one in a Uniden scanner I have. I have tried all the usual places such as Digi-key, Mouser, etc. I don`t want to order from some place such as International crystal because they would probably want a fortune for it in small quantities. Any help would be greatly appreciated! Rob

2630. Re: power transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-03 00:18:01 UTC
From: "g. beat"
Message-ID: <BtWdnQgqKMAma8rZRVn-gw@comcast.com>
Source record: 12331

"James Thompson" <Jamesthompson2002@hotmail.com> wrote in message
news:9d2b9$4456b39b$471cd40a$7404@ALLTEL.NET...
>
> "James Thompson" <Jamesthompson2002@hotmail.com> wrote in message
> news:5251f$4456411d$438c87aa$30398@ALLTEL.NET...
>> Has anyone re-wound a power transformer with good results?
>> I have salvaged some big transformers from microwave ovens, and cut the
>> secondary winding out of it. Then re-wound it with 14 guage till getting
>> enough turns to produce about 20 volts. Problem is the thing gets hot
>> even without a load on it.
>> Is there something I am overlooking? Thanks.
>>
>>
> Thanks for all that great info. I will hunt down the links you posted. I
> am currently running a fan just to cool the transformer, but now I'm back
> to the drawing board. Have a great day. Jim
>
>
Dave Cushman, G8MZY
http://www.dave-cushman.net/elect/transformers.html

ESP
http://sound.westhost.com/xfmr2.htm

DIY Output transformer (audio)
http://www.audiohobbyist.com/projects/diyopt.htm

2631. Re: Crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-03 00:40:50 UTC
From: dplatt@radagast.org
Message-ID: <125fv0iebgbq6d1@corp.supernews.com>
Source record: 12332

In article <YqS5g.19388$YI5.6998@tornado.ohiordc.rr.com>,
Rob <robnang34@woh.rr.com> wrote:

>I am trying to find a 10.400mhz crystal to replace the one in a Uniden
>scanner I have. I have tried all the usual places such as Digi-key,
>Mouser, etc. I don`t want to order from some place such as International
>crystal because they would probably want a fortune for it in small
>quantities. Any help would be greatly appreciated! Rob

I've had good luck ordering custom stuff from Cal Crystal Lab / Comclok -
they seem to be quite good about providing onesies and twosies to
individuals.

Their web site is www.calcrystal.com - they don't seem to have a
10.400 in stock at the moment but I'd encourage you to give them a
call and see what they can come up with.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2632. Re: Crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-03 01:59:12 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <DcU5g.228$XH3.175@fe02.lga>
Source record: 12333

"Dave Platt" <dplatt@radagast.org> wrote in message
news:125fv0iebgbq6d1@corp.supernews.com...
> In article <YqS5g.19388$YI5.6998@tornado.ohiordc.rr.com>,
> Rob <robnang34@woh.rr.com> wrote:
>
>> I don`t want to order from some place such as International
>>crystal because they would probably want a fortune for it in small
>>quantities.

Well, they are the one place you will get EXACTLY what you need. But they
will be slow, and they wiill be expensive, although probably not "a
fortune". For a scanner, it probably only needs to be in the neighborhood.
Have you thought of taking an old FT-243 and grinding it? Probably your
scanner has an HC-49 or something so you would have to cobble something
together, but if you can find something in the neighborhood you should be
able to move it a bit.

..

2633. Re: Crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-03 02:07:08 UTC
From: - exray - <exray@coqui.net>
Message-ID: <125g42e4ed8p358@corp.supernews.com>
Source record: 12334

Rob wrote:
> I am trying to find a 10.400mhz crystal to replace the one in a Uniden
> scanner I have. I have tried all the usual places such as Digi-key,
> Mouser, etc. I don`t want to order from some place such as International
> crystal because they would probably want a fortune for it in small
> quantities. Any help would be greatly appreciated! Rob

I'm not sure how much a "fortune" is to you :) but JAN Crystals would
probably run you $15-20 shipped.

Being a Uniden/scanner part maybe there would be better luck at just
finding an old junker scanner?

-Bill

2634. Re: Need further info on network analysis terms...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-03 02:23:48 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <t74g52pqocodsn52ncn913f80njl5m2gon@4ax.com>
Source record: 12335
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On 2 May 2006 15:14:29 -0700, paul@burridge8333.fsbusiness.co.uk
wrote:

>Hi gang,
>
>Reading through the instructions for this VNA it mentions some
>important accessories; power spitters, 6db attenuators, 50 ohm
>terminations, opens, shorts and throughs. What exactly is a "through"?

A through is a direct connection of the two test ports (cables). If
all devices under test (DUTs) were "insertable", i.e. had one male and
one female connector (or GR or 7mm sexless connectors) then the test
port cables could be joined directly, thus forming a through ("thru")

Unfortunately, a lot of DUTs have the same sex connector on both
sides, thus a calibration thru must be a double, same sex adapter
(barrel). Using such an adapter during calibration adds some
unavoidable length (and loss and mismatch) to the test path length.
One method of removing (some of) the effects of the barrel is to
replace it after calibration with a matched length male-female adapter
that remains in the test path.

>And is it possible to make up accurate opens and shorts oneself that
>are good enough for calibration purposes up to 1.3Ghz? Not talking
>about any absolute standard here, like you'd get from HP themselves;
>but just mid-tolerance stuff that'd be sufficient for reasonably
>accurate amateur experiments?

Depends. For SMA stuff, an open and shorted connector wouldn't be too
bad. Type N is a little more problematic but probably doable for
moderately accurate measurements.

BTW, even HP (Agilent) doesn't offer "absolute" standards. :-;

2635. UPDATED - Parts for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-03 03:27:49 UTC
From: Brian Murrey <brian@iquest.net>
Message-ID: <VqV5g.575$Ae1.376@newsread1.news.pas.earthlink.net>
Source record: 12336
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have moved my junkbox surplus stuff to a new website.
http://www.hamradparts.com

1N4148 Diodes $3.00 for 100, $4.00 for 200
1N4001 - 1 Amp 50v General Purpose Rectifier Diodes - $3.00 for 50

33pf NPO Caps, SMT 0805, 50V - $3.00 for 100
150pf NPO Caps, SMT 0805, 50V - $3.00 for 100
220pf NPO Caps, SMT 0805, 50V - $3.00 for 100
390pf Caps, SMT 1206, 50V - $3.00 for 100
1500pf NPO Caps, SMT 0805, 50V - $3.00 for 100
3300pf Caps, SMT 0805, 25V - $3.00 for 100
.1uF Caps, SMT 0805, 50V - $3.00 for 100

SPECIAL SMT PACK - 50 of each listed value $9.00
350 total parts

2N3704 NPN TO92 - 20 for $2.00
2N2907 PNP TO92 Package - $4.00 for 50
2N3904 NPN TO92 Package - $4.00 for 50
2N2222 NPN TO18 (metal) Package - 5 for $1.00
MMBT4403 PNP SMT transistor - 50 for $4.00

SPECIAL: 100pcs PN2222A Motorola $7.00- FREE SHIPPING

2N2222 NPN TO92 Package - $4.00 for 50
The 2N2222 is a bulk transistor...meaning the part is not labeled.
They ship in a Zip Lock packet and the packet is clearly labeled.

2N3906 PNP TO92 Package - $4.00 for 50
The 2N3906 is a bulk transistor...meaning the part is not labeled.
They ship in a Zip Lock packet and the packet is clearly labeled.

IRF510 - MOSFET AMP TO220 - 4 for $5.00

Crystal Ladder Filters anyone?
3.575611 Mhz HC49 Crystals - 5 for $2.00
4.9152 Mhz HC49 Crystals - 10 for $3.00
9.830 Mhz Crystals (SS2 package) - 20 for $3.00
LM7805ACV 5v Positive Voltage Regulators (TO220) 5 for $2.00
LM386N-1 - Audio Amp 6 for $5.00

Sticky Back Rubber Feet for your projects, self adhesive - 8 to a strip - 2
Strips for $1.00

Panasonic Wall Warts - 12VDC, 500mA (center negative) $6.00 each
If you need center positiove, cut off the end and reverse it. I use these to

power my
rock mites, my TT2, and all of my homebrew test gear.

8pf NPO Ceramic 50 for $3.00
11pf NPO Ceramic 50 for $3.00
12pf NPO Ceramic 50 for $3.00
22pf Ceramic 50 for $3.00
470pf Ceramic 50 for $3.00
560pf Ceramic 50 for $3.00
.1 uF (104J) NPO Ceramic 50 for $3.00
.01uF (103K) Ceramic 50 for $3.00

SPECIAL PACK - 25 of each listed ceramic $10.00
200 parts total

Cash, check, paypal now accepted

Paypal to: orders@hamradparts.com

Add $3.00 shipping to any order under $50.00 unless you are ordering the
special Motorola PN2222 transistors.

Brian Murrey
47 Grassy Drive
New Whiteland IN 46184

73 de KB9BVN

--
==
Radio Amateurs - Fill your junk box, from my junkbox!
http://www.hamradparts.com
73 de KB9BVN
==

2636. Re: Crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-03 03:33:07 UTC
From: Pete KE9OA <p.gianako@comcast.net>
Message-ID: <R9SdnRFLFL__ucXZnZ2dneKdnZydnZ2d@comcast.com>
Source record: 12337

If this is a newer multiple conversion scanner and if this is the 2nd LO crystal, you will want it to be on frequency.......otherwise, your receiver will be off frequency and you will have unsymmetrical adjacent channel selectivity. You want your high and low frequency passbands to be centered. 10.400MHz is an uncommon frequency to find in the "junk box" so you will probably need to order it from one of the crystal manufacturers. If you don't have an internal trimmer to warp the crystal on frequency (your scanner hopefully does), you will also need to know the load capacitance for the crystal when you order it.

Pete

"- exray -" <exray@coqui.net> wrote in message
news:125g42e4ed8p358@corp.supernews.com...
> Rob wrote:
>> I am trying to find a 10.400mhz crystal to replace the one in a Uniden
>> scanner I have. I have tried all the usual places such as Digi-key,
>> Mouser, etc. I don`t want to order from some place such as International
>> crystal because they would probably want a fortune for it in small
>> quantities. Any help would be greatly appreciated! Rob
>
> I'm not sure how much a "fortune" is to you :) but JAN Crystals would
> probably run you $15-20 shipped.
>
> Being a Uniden/scanner part maybe there would be better luck at just
> finding an old junker scanner?
>
> -Bill

2637. Re: Need further info on network analysis terms...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-03 06:32:12 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1146637932.421410.288860@e56g2000cwe.googlegroups.com>
Source record: 12338
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

You can make a very decent 50 ohm load using two 100 ohm 0805 SMT resistors and an SMA PC-mount jack. Cut the center pin of the jack down to a height about the same as the thickness of the resistors, and solder the two resistors diametrically opposite, one side to the shell and one to the sawn-off center pin. The ones I've made check out fine up to a couple GHz...as I recall, better than 30dB return loss out that far. I've found the 0805 resistors work slightly better than 0603s, but as they say, YMMV, and unfortunately you probably have no good way to check them.

You can make a decent open that's nominally the same electrical length as the load by sawing the center pin off flush with the dielectric, and a short by shorting the pin to the shell. Do it with a tiny disc of copper foil if possible--but in a pinch you can use multiple lengths of wire radially out from the center pin. All these things should have as close to ZERO lead length as possible. At 1GHz, 1 millimeter is a little over 1 degree of phase shift, with air dielectric, and more with Teflon or other dielectric.

You can make a two-way levelling splitter if you are really careful. For a two-way, it's an input port that connects to two 50 ohm resistors, one to each of the two output ports. One output port is normally used to drive the reference port of the VNA, and the effect similar to the virtual ground of an op amp: the input port level is know or controlled accurately, so it's a virtual zero-impedance point there. Through the 50 ohm resistor to the test port makes for a virtual 50 ohm source impedance. Again, keep lead lengths to zero, or make any leads look like 50 ohms.

You won't get any VNA cal kits from HP these days...

Could be helpful to look for an S-parameter test set or a reflection/transmission test set to go with your VNA. You can find them on ebay sometimes. They can make life a lot easier.

Cheers,
Tom

2638. Re: Simple Tone Detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-03 07:10:59 UTC
From: biascomms <biascomms@blueyonder.co.uk>
Message-ID: <7IY5g.63396$wl.62954@text.news.blueyonder.co.uk>
Source record: 12339

Gary Schafer wrote:

> Seems to me a good AGC amplifier will do the trick. It will maintain a
> fairly constant volume level no matter what is comming in.

Ultimately, a clipper (with a low pass filter to get rid of much of the
nastiness) might solve the problem!

Bob

--
Everything gets easier with practice, except getting up in the morning!

2639. Re: Need further info on network analysis terms...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-03 13:05:29 UTC
From: Ian <ian_bucknerNOT@agilent.com>
Message-ID: <1146661398.109637@newsreg.cos.agilent.com>
Source record: 12340
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"K7ITM" <k7itm@msn.com> wrote in message
news:1146637932.421410.288860@e56g2000cwe.googlegroups.com...
<snip> various good suggestions.
>
> You won't get any VNA cal kits from HP these days...
>
> Could be helpful to look for an S-parameter test set or a
> reflection/transmission test set to go with your VNA. You can find
> them on ebay sometimes. They can make life a lot easier.
>
> Cheers,
> Tom
>
VNA cal kits maybe not from HP, but most certainly from Agilent.
I do like my N4431 electronic cal kit, no lead swapping and really
fast (once it has warmed up).

If you try ebay, be sure to check connector condition.

Regards
Ian

2640. Re: 1N23W source?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-03 14:03:04 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4458B73D.9B675118@earthlink.net>
Source record: 12341

Lynn Coffelt wrote:
>
> <texassparky@subdimension.com> wrote in message
> news:gf9752pjmui6i4l8hff6vkcht8povnv70c@4ax.com...
> >
> > Does anyone know of a source for a couple of 1N23W mixer diodes?
> >
> > This is not a new design, they are for repair. So, I must use the old
> > style cartridge unit.
> >
> > Thanks!
> >
> > Mike, WB5MYY
>
> No help, probably, but most early marine radars used the type diode you
> are looking for, usually in a matched pair (one reverse polarity from the
> other). A most common replacement, and which worked as well or better was
> the 1N415E (or F too, if I remember correctly) The 415's cap could be
> installed on either end for reversing the polarity.
> Both the 23 and the 415 types are very sensitive to damage from
> external RF fields and static electricity. Came packed in metal tubes, metal
> foil or other RF protecting packaging. If your use is very critical, try to
> avoid buying any not in original, unopened packaging.
> But you probably already know all of that..... grin!
> Old Chief Lynn

Some were packed in lead foil, as well.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2641. Re: 1N23W source?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-03 20:58:13 UTC
From: MRe <m.reneman=geenspam=@hccnet.nl>
Message-ID: <44591a77$0$4783$e4fe514c@dreader32.news.xs4all.nl>
Source record: 12342

"Michael A. Terrell" <mike.terrell@earthlink.net> schreef in bericht
news:4458B73D.9B675118@earthlink.net...
> Lynn Coffelt wrote:
> >
> > <texassparky@subdimension.com> wrote in message
> > news:gf9752pjmui6i4l8hff6vkcht8povnv70c@4ax.com...
> > >
> > > Does anyone know of a source for a couple of 1N23W mixer diodes?
> > >
> > > This is not a new design, they are for repair. So, I must use the old
> > > style cartridge unit.
> > >
> > > Thanks!
> > >
> > > Mike, WB5MYY
> >
> > No help, probably, but most early marine radars used the type diode
you
> > are looking for, usually in a matched pair (one reverse polarity from
the
> > other). A most common replacement, and which worked as well or better
was
> > the 1N415E (or F too, if I remember correctly) The 415's cap could be
> > installed on either end for reversing the polarity.
> > Both the 23 and the 415 types are very sensitive to damage from
> > external RF fields and static electricity. Came packed in metal tubes,
metal
> > foil or other RF protecting packaging. If your use is very critical, try
to
> > avoid buying any not in original, unopened packaging.
> > But you probably already know all of that..... grin!
> > Old Chief Lynn
>
>
> Some were packed in lead foil, as well.
>

I have two of them indeed packed in lead tubing.

MRe

2642. Re: Class C engineering question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-03 21:31:02 UTC
From: WSQT <wsqtradio@ziplip.com>
Message-ID: <1146691862.805880.85030@j73g2000cwa.googlegroups.com>
Source record: 12343

Overmodulation is by definition to condition where DOWNWARD modulation exceeds 100%. I was describing the effect of OVERLOADING a class C modulated stage. Trying to even approach 100% upward modulation with an overloaded or underdriven final will of course cause modulation to exceed 100% in the downward direction. This distortion of the modulation characteristic is carrier shift. Nonlinearity in a linear(AB1 amplifying AM) final would cause the same sort of problem.

I learned this the hard way, and found that designing the final for the intended PEP output (and with MOSFETs applying a little gate modulation or driver modulation along with the collector modulation)solves the problem.

2643. Re: Roller Inductor Squeak

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-03 23:33:10 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <rbfi529oauuqidjsi48eb74n9r0rjkuojn@4ax.com>
Source record: 12344

Thanks, Butch. I will get some and try it.

Win, w0lz

On Mon, 01 May 2006 15:21:18 -0500, Butch Magee <lynyrd@cableone.net>
wrote:

>Win wrote:
>> What is a good conductive lub to use on roller indictors? The
>> inductor in my tunert squeaks like an old door. Any other tips to
>> keep that roller noise down?
>>
>> Win, w0lz
>
>Radio Shack has a product that is perfect for your need. I have used it
>for that same purpose, it is the electronic cleaner and lubricant. It
>comes in a small spray can and is some really good stuff.
>
>Butch KF5DE

2644. Re: Crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-04 00:01:24 UTC
From: Rob <robnang34@woh.rr.com>
Message-ID: <ovb6g.20364$YI5.17734@tornado.ohiordc.rr.com>
Source record: 12345

Pete KE9OA wrote:
> If this is a newer multiple conversion scanner and if this is the 2nd LO
> crystal, you will want it to be on frequency.......otherwise, your receiver
> will be off frequency and you will have unsymmetrical adjacent channel
> selectivity. You want your high and low frequency passbands to be centered.
> 10.400MHz is an uncommon frequency to find in the "junk box" so you will
> probably need to order it from one of the crystal manufacturers. If you
> don't have an internal trimmer to warp the crystal on frequency (your
> scanner hopefully does), you will also need to know the load capacitance for
> the crystal when you order it.
>
> Pete
>
> "- exray -" <exray@coqui.net> wrote in message
> news:125g42e4ed8p358@corp.supernews.com...
>
>>Rob wrote:
>>
>>>I am trying to find a 10.400mhz crystal to replace the one in a Uniden
>>>scanner I have. I have tried all the usual places such as Digi-key,
>>>Mouser, etc. I don`t want to order from some place such as International
>>>crystal because they would probably want a fortune for it in small
>>>quantities. Any help would be greatly appreciated! Rob
>>
>>I'm not sure how much a "fortune" is to you :) but JAN Crystals would
>>probably run you $15-20 shipped.
>>
>>Being a Uniden/scanner part maybe there would be better luck at just
>>finding an old junker scanner?
>>
>>-Bill
>
>
>
Thanks for all the help, looks like i will be ordering one. Rob

2645. Re: FA: Vintage WRL Globe FCL-1 "Speech Booster" - RARE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-04 11:54:22 UTC
From: Telstar Electronics <briangriffey@sbcglobal.net>
Message-ID: <1146743662.301390.156720@j73g2000cwa.googlegroups.com>
Source record: 12346
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Anyone know the principle of this unit... is it just an audio amp?

www.telstar-electronics.com

2646. Help with Reg's programs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-04 12:06:06 UTC
From: amdx <amdx@knology.net>
Message-ID: <efac$4459f165$45011502$23365@KNOLOGY.NET>
Source record: 12347

Hi All,
I have used Reg Edwards programs before with great success,
Now I get the following error message.

16 bit MS-DOS Subsystem

The system file is not suitable for
running MS-DOS and Microsoft Windows applications.

What's wrong?
Thanks, Mike

2647. Help on Professor Fantasky

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-04 13:21:26 UTC
From: "Gian, I7SWX" <i7swx@yahoo.com>
Message-ID: <1146748886.201265.87020@i39g2000cwa.googlegroups.com>
Source record: 12248

Hi all,

I need help to trace the following information.
Probably Old Timers may remember Professor Fantasky, a
cartoon on an electronic company advertisement
published in Electronic Design and similar magazines
end of 60s and 70s.

I made my QSL card having Prof Fantasky cartoon on it
as clear rapresentation of my homebrewing activities.
Funny Radio with funny options and blowing up....

At that time I had my QSL in black and white ... now I
would like to reproduce it again but in color. I lost
my old magazines and I cannot trace any original color
advertisement.

You may look at my QSL card at www.qsl.net/i7swx in
the "my callsigns" subdirectory at I2SWX.

Thanks for your help

73
Gian
I7SWX

2648. Re: Help with Reg's programs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-04 14:18:31 UTC
From: Ted <kilocycles**@**yahoo.com>
Message-ID: <dh2k529n1b1lhisehi9out6o0uev9fu0hq@4ax.com>
Source record: 12249

Mike
First, Have you upgraded Windows XP to Service Pack 2, by any chance? I'm getting programs that won't run reliably, or at all since I upgraded. See the note regarding SP2 on the AADE site for the Filter program.

Second, A workable solution for running DOS programs under XP is DOSBox, now at version 0.65. Wes, W7ZOI's programs, along with the legacy DOS programs on the RF Cafe site will run under DOSBox. The problem in those particular cases is that XP makes them run full screen, and you can't get screen captures of the results. With DOSBox, the programs run in a virtual DOS environment in a window, and you can get screen captures (alt-printscreen, and open up MSPaint or other graphics software and paste the clipboard into the new blank drawing that appears. As a virtual DOS environment, DOSBox does have "DOS" memory limits and speed issues. Reg's programs should run with no problem in DOSBox. See Wes's website at http://users.easystreet.com/w7zoi/ , and on the main page, scroll down to "Some Technical Notes". The problem and solution are described in detail there.

73,
Ted KX4OM
www.kx4om.com

On Thu, 4 May 2006 07:06:06 -0500, "amdx" <amdx@knology.net> wrote:

>Hi All,
> I have used Reg Edwards programs before with great success,
>Now I get the following error message.
>
>16 bit MS-DOS Subsystem
>
>The system file is not suitable for
>running MS-DOS and Microsoft Windows applications.
>
>What's wrong?
> Thanks, Mike
>
>
>
>
>
>

2649. Re: Crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-04 15:19:16 UTC
From: Risto Tiilikainen <risto.Non.tiilikainen@luukku.comMunist.invalid>
Message-ID: <445a1b6c$0$1447$39db0f71@news.song.fi>
Source record: 12250

Rob kirjoitti:
> I am trying to find a 10.400mhz crystal to replace the one in a Uniden
> scanner I have. I have tried all the usual places such as Digi-key,
> Mouser, etc. I don`t want to order from some place such as International
> crystal because they would probably want a fortune for it in small
> quantities. Any help would be greatly appreciated! Rob

Hi !

Try that one

> http://support.radioshack.com/support_electronics/doc30/30385.htm

> X701 10594695 CRYSTAL,QX-145 10.400 MHZ CX0903

I think Rado Shack is not very expencive

73 , Risto OH2BT

2650. Re: Help with Reg's programs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-04 15:30:15 UTC
From: James Thompson <Jamesthompson2002@hotmail.com>
Message-ID: <12e64$445a1e08$471cd40a$12256@ALLTEL.NET>
Source record: 12251

"amdx" <amdx@knology.net> wrote in message
news:efac$4459f165$45011502$23365@KNOLOGY.NET...
> Hi All,
> I have used Reg Edwards programs before with great success,
> Now I get the following error message.
>
> 16 bit MS-DOS Subsystem
>
> The system file is not suitable for
> running MS-DOS and Microsoft Windows applications.
>
> What's wrong?
> Thanks, Mike
>
>
>
If you are running it from a shortcut, and it ran ok before - then try
running it from the program directory and or remake the shortcut. Sometimes
the shortcut can get hosed.

2651. Re: Help with Reg's programs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-04 18:54:46 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <125kjfrddvpgqce@corp.supernews.com>
Source record: 12252

amdx wrote:
> Hi All,
> I have used Reg Edwards programs before with great success,
> Now I get the following error message.
>
> 16 bit MS-DOS Subsystem
>
> The system file is not suitable for
> running MS-DOS and Microsoft Windows applications.
>
> What's wrong?

This problem also occurs with some EZNEC installations. (The installer uses some 16 bit code, although the program itself doesn't.) For the simplest solution that's likely to work, see the second item in the list at http://eznec.com/ez40faq.html.

Roy Lewallen, W7EL

2652. FS: UG-58A/U Type N Female Panel Mount Connector

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-04 19:13:16 UTC
From: AAA RF Products <sales@aaarfproducts.com>
Message-ID: <4ns6g.18074$Qz.9158@fed1read11>
Source record: 12253
Cross-posted to: alt.ham-radio,rec.boats.electronics,rec.radio.amateur.homebrew

UG-58A/U Type N Female Panel Mount Connector made in USA.
One piece solid nickel plated brass body.
Captive silver plated contact, teflon insulation. Unlimited quantity
availabe from stock.

1 to 99 ------ $2.95 each

100 to 499----$2.75 each

500+----------$2.50 each

Please email sales@AAARFProducts.com

or call 949 481 3154 (San Clemente, CA, USA)

No minimum order.

No handling charges

www.aaarfproducts.com

2653. MA110 specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-04 21:04:28 UTC
From: Leif Holmgren <nobody@nowhere.com>
Message-ID: <445A6C5C.6010807@nowhere.com>
Source record: 12254

Hello!

I have been searching for a datasheet for a diode called MA110 for a few days without any luck. Dozens of dealers are offering to sell me anything from 1000 to six hundred thousands of them but noone has any kind of data sheet.

I need to replace a single burnt one so buying even 1000 would be quite an overkill.

Does anyone know what's so special with this one? It's used in the battery charger in a ICOM IC2-SET and as far as I can remember one of a few of it's kind in that rig. Would you say it can be replaced with just about any 1N4148 (or whatever it's surface mount variant is called) or are there some special parameters that I need to look for?

/Leif

2654. Re: Class C engineering question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-04 21:56:44 UTC
From: w8ji@akorn.net
Message-ID: <1146779804.242963.98190@u72g2000cwu.googlegroups.com>
Source record: 12255

WSQT wrote:
> If the LOAD on teh device is too high, it is possible for the
> "bottoming voltage" or anode voltage necessary to pull two times the
> current through it to be more than doubled for double the current.

You are talking about devices that do not follow square law rules. I specifically restricted my comments to low mu triodes that were set to switch properly.

ANY modulated stage on a DSB AM transmitter with carrier and 100% undistorted sine wave modulation has to produce four times the power on envelope peaks and reach zero output on negative peaks.

The original posted has a pair of tetrode, which are multiple gridded tubes. Multiple grid tubes require some portion of audio be applied to the screen, control grid, or driver in orrder to be linear. **This is because the screen has significant control of anode current.**

In a low-mu class C plate modulated triode, the anode power and output power follows square law rules virtually independent of loading. This is why low-mu triodes are the tube of choice in distortion critical AM transmitters. The major point of concern where a low-mu triode deep into class C is not linear is when cathode emission is all used up, but that would be a terrible way to run the tube. Life would be a bigger worry than linearity.

> High plate resistance devices operated with too high a load will NOT
> have a constant dynamic anode impedance with varying plate voltage.
> This is because the instantanious voltage across the tank circuit
> during conduction is the supply voltage minus the tube voltage drop.

> If the tube drop is more than doubled when the current(and supply)
> voltage are doubled, it means the voltage across the load is LESS THAN
> doubled. The load being ohmic, this causes less than double the current
> to flow, and cuases downward carrier shift.

What you are saying is the tube has a non-linear plate resistance with anode voltage changes. The reason for this is screen grid tubes, tubes that are not deep into class C, and devices like collector modulated transistors do not make good mixers.

What always must happen when devices with less than desirable characteristics are used is we have to linearize the response by applying audio to some other stage or element on that device.

It's indeed true you can have a poor system and fiddle with the loading and operating point to linearize modulation. That was actually what I

was pointing out, that his plate modulated tetrodes were probably not working correctly through some type of design shortfall.

If you have to fiddle with loading to linearize the modulation, the PA design isn't a good one for AM.

73 Tom

2655. Re: MA110 specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-05 00:23:21 UTC
From: dplatt@radagast.org
Message-ID: <125l6npf9nkid4e@corp.supernews.com>
Source record: 12256

In article <445A6C5C.6010807@nowhere.com>,
Leif Holmgren <nobody@nowhere.com> wrote:

>Hello!
>
>I have been searching for a datasheet for a diode called MA110 for a few
>days without any luck. Dozens of dealers are offering to sell me
>anything from 1000 to six hundred thousands of them but noone has any
>kind of data sheet.
>
>I need to replace a single burnt one so buying even 1000 would be quite
>an overkill.
>
>Does anyone know what's so special with this one? It's used in the
>battery charger in a ICOM IC2-SET and as far as I can remember one of a
>few of it's kind in that rig. Would you say it can be replaced with just
>about any 1N4148 (or whatever it's surface mount variant is called) or
>are there some special parameters that I need to look for?

The data-sheet site I use (www.datasheetarchive.com) doesn't have a
sheet for this part, but indicates that possible substitutes are the
1SS332 and 1SS355. Both of these are "fast switching" diodes - the
former handles 40 volts reverse, the latter 80, and both seem to have
continuous/mean current limits of around 100 mA, with a reverse
recovery time of around 4 ns.

It looks to me as if a 1N4148 might be an acceptable substitute, as
these have similar or higher voltage and current limits, and an
equivalent reverse recovery time. I would not use a general-purpose
rectifier such as a 1N4002, as the slower recovery time of a
general-purpose PIN-structure rectifier might cause problems if the
circuit is actually switching at a high speed.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2656. Re: MA110 specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-05 01:57:46 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <125lc8v1l0mu440@corp.supernews.com>
Source record: 12257

"Dave Platt" <dplatt@radagast.org> wrote in message
news:125l6npf9nkid4e@corp.supernews.com...
> In article <445A6C5C.6010807@nowhere.com>,
> Leif Holmgren <nobody@nowhere.com> wrote:

>>I have been searching for a datasheet for a diode called MA110 for a
>>few
>>days without any luck. Dozens of dealers are offering to sell me
>>anything from 1000 to six hundred thousands of them but noone has any
>>kind of data sheet.
>>
>>I need to replace a single burnt one so buying even 1000 would be
>>quite
>>an overkill.
>>
>>Does anyone know what's so special with this one? It's used in the
>>battery charger in a ICOM IC2-SET and as far as I can remember one of
>>a
>>few of it's kind in that rig. Would you say it can be replaced with
>>just
>>about any 1N4148 (or whatever it's surface mount variant is called) or
>>are there some special parameters that I need to look for?

http://www.partstore.com/ModelDetail.aspx?ModelCatCode=070.010&ModelID=95158
lists it as 40V, 3nS switching, 100mA. Cost $1.10 in single unit.
Google is your friend....

- Bob W7OV

2657. Re: Coax & Rotor Bulkhead

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-05 04:12:30 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <445AD172.8040200@nettally.com>
Source record: 12258

The Polyphaser wenbsite is the best reference site.

Be sure to install ground rods at the corners of your house and in between and bond to your existing electrical service ground rod and copper plumbing (if you have any). You cannot overdo the grounding and bonding.. and that is your cheapest first line of defense.

Polyphaser has the widest selection of devices and will have the models you need for the rotor, AC and DC circuits. You ar thinking well to consider those circuits as well as your RF cables. I am surprised in commercial installations to see all kinds of ancillary equipment that is unprotected and extending wires out to the rooftop or tower.

The polyphasers coaxial prptectors are pretty much standard fare for commercial use as they have low let-through energy due to a DC blocking capacitor in series with the equipment side. For my station which is VHF-Microwave, I need DC continuity for remote preamplifiers. So I bought Huber and Suhner models from Tessco. (about $83). If you are familiar with the model numbers, you will know they are nicer construction than Polyphaser and you can sometimes find good buys on E-Bay, but be careful not to buy the DC stub models which are designed specifically for PCS and Cellular frequencies. The ones you want are a bulkhead type with N connectors and replaceable gas cartridge for the power level and frequency range desired. I mounted mine on a 1/8 inch aluminum rack panel. If you do something similar you can mount as you described in a large NEMA type box. Where are you located ? If you need a large NEMA type box (undrilled) let me know, I bought it for similar purposes and ended up with the bulkhead inside the shack.

Joe

west wrote:

> Is there a place on the net, in a book, etc. that I can see examples &
>diagrams of a coax bulkhead? Perhaps someone on this NG constructed such a
>device & wouldn't mind sharing his plans.
> My house sits on a slab and I would like to run about 4 or 5 coax cables,
>rotor cable, AC & DC source all going from the shack to my tower. In Florida
>lightning is a major concern so the bulkhead will have to have coax (gas
>arrestors?) & other types of arrestors. All this, of course, should be
>grounded to a copper ground rod. I would like this outside "box" nicely &
>neatly dressed & labeled so it's easy to disconnect & is not an eye sore. I
>searched the Ham books and many Internet sights to no avail.
>Anybody? Thank you.
>
>west, AF4GC

>
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

2658. Re: Simple Tone Detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-05 04:18:31 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <445AD2DB.9000106@nettally.com>
Source record: 12259

You might want to look into one of those public address feedback cancellors that uses automatic audio notches. they might have adjustment on the notch depth which might be what you need. Call an audio warehouse and ask questions..

Bill Powell wrote:

>Simple Tone Detector
>
>I'm looking for a SIMPLE circuit to detect the presence of a tone -
>any tone in the audible range.
>
>My quest: Consider the poor radio dispatcher, sitting there wearing a
>pair of headphones when the next town / county over tones out an
>ambulance or fire department.
>
>I'm looking to be able to detect any audible tone and use the results
>to decrease the operator's headphone sound level during the tone.
>
>I have already tried a DSP tone elimination and found that:
> 1) It's too effective: I need do decrease tone volume - not eliminate
>it.
> 2) Way too complex and expensive for the seemingly simple task.
>
>The circuit needs to be compact and inexpensive - connected between
>the dispatch console headphone jack and the operator's headphones. It
>must NOT interfere with normal speech!
>
>I have spent several hours online seatching and came up empty. Any
>thoughts or suggestions?
>
>Bill Powell
>
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

2659. FME "paper clip" antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-05 11:08:26 UTC
From: Doug Goncz <DGoncz@aol.com>
Message-ID: <1146827306.144897.228940@u72g2000cwu.googlegroups.com>
Source record: 12260

Hello, my new group.

Let me know if I am on topic for this group, please. It seems like rrah has had some cellular posts. There didn't seem to be a NG for cell hacks. Homebrew is the thing.

My Cingular / Seimens SX66 (HTC Blue Angel) has an FME RF port on the back. I couldn't find an accesory antenna without a cable at Wilson, or anywhere else. I usually lay it down on its face to protect the touch screen while I am using it with the headphones. When it's in the sun, this keeps the screen from overheating.

It seems natural to insert the _right length_ of suitable gage piano wire into the FME port but somebody could get an RF burn that way. I got one off my Motorola Star TAC long ago. God, what a clunker.

I guess whatever surface the 'phone was lying on would be a ground plane. I wonder if a metal surface would produce better results than a wood surface. I think it would.

What length and gage of piano wire would work? That is, the gage would be a pin to fit the FME center conductor socket and the length would be determined by an equation involving the speed of light and a factor applicable to the particular antenna design.

First off, is this a port for the cell antenna or for the WiFi?

What's the shortest wire I can use? A quarter wave in the 1800-1980 MHz band would be shortest, wouldn't it?

Could I just dip the wire in some grip compound, the kind you would dip plier handles in?

Would it help to heat-shrink this thin wire?

Would heat shrink and grip dip be enough protection for a reasonable level of safety?

Looking forward to more bars and bits per second more often. (I use it as a wireless modem, too) Might be some fun.

The smallest antenna I found was a Wilson mini that magnet mounts to the roof of a car. Not so good since I don't drive, and travel very light on my bicycle and by bus.

I can see a bus driver coming back to my seat and saying "Would you please take your antenna off the side of my bus? Somebody's gonna get their eye poked out!"

Doug Goncz
Replikon Research
Falls Church, VA 22044-0394

2660. Re: FME "paper clip" antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-05 17:42:50 UTC
From: You <You@shadow.orgs>
Message-ID: <You-2B462D.09430905052006@netnews.worldnet.att.net>
Source record: 12261

In article <1146827306.144897.228940@u72g2000cwu.googlegroups.com>,
"Doug Goncz" <DGoncz@aol.com> wrote:

> Hello, my new group.
>
> Let me know if I am on topic for this group, please. It seems like rrah
> has had some cellular posts. There didn't seem to be a NG for cell
> hacks. Homebrew is the thing.
>
> My Cingular / Seimens SX66 (HTC Blue Angel) has an FME RF port on the
> back. I couldn't find an accesory antenna without a cable at Wilson,
> or anywhere else. I usually lay it down on its face to protect the
> touch screen while I am using it with the headphones. When it's in the
> sun, this keeps the screen from overheating.
>

snipped for brevity

>
> Doug Goncz
> Replikon Research
> Falls Church, VA 22044-0394
>

Why not just go BUY an FME adapter connector to fit whatever antenna
your trying to use. You don't have to reinvent the world just to
get an adapter.......

2661. Re: FME "paper clip" antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-06 08:23:53 UTC
From: Doug Goncz <DGoncz@aol.com>
Message-ID: <1146903833.379571.283330@i40g2000cwc.googlegroups.com>
Source record: 12262

You wrote:

> snipped for brevity

They don't make the antenna I am trying to use.

Yes, I can install my bit of wire into an FME male connector, but why not just use a wire that's the same size as that FME connector's male pin?

Here's another idea. Why not make up a metal _stylus_ that fits the FME female connector on my SX66? Then, I'd always have my extra antenna handy. Hm. My stylus is 4 inches long.

3*10^8 m/sec / (1900 MHz) = about 6 inches.

Doug

2662. Re: 13.8V high current power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-06 14:25:14 UTC
From: Chris Jones <lugnut808@nospam.yahoo.com>
Message-ID: <445cb3bd@mail.netspeed.com.au>
Source record: 12263

paul@burridge8333.fsbusiness.co.uk wrote:

> You're probably right! I did actually try to rip the heating element
> out of a 2kW electric fire to use as just such a test load, but the
> manufacturers had used some really devious sort of screw heads to keep
> the two casings together. :-(
> Failing some serious resistance wire, the only other 'to hand' option
> is to hook up the HF mobile and key-up; but I don't have a sufficiently
> gutsy dummy load or antenna to dump 100W into, I'm afraid. :-(

What about some old car headlamps?

Chris

2663. Re: Best way to build fixed 1.6GHz locked oscillator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-06 14:38:49 UTC
From: Chris Jones <lugnut808@nospam.yahoo.com>
Message-ID: <445cb6eb@mail.netspeed.com.au>
Source record: 12264

3flp wrote:

> Hi Chris,
>
> I am planning to make it a VNA in a later stage. For now, I just need
> something to check antennas, filters, etc. So a scalar analyzer with a
> good return loss bridge will do OK.
>
> After some thought & googling around, I'll just use the original
> suggestion for now. Two identical VCOs + PLLs. So in effect, I am
> optimising the design for speed & easiness :-). Not for cost or
> performance...
>
> I am aware that the mixer will produce various combinations of LO & IF
> frequencies. I am hoping to optimise the power levels to get the 2nd
> and 3rd harmonic down to -50dBc. That should be enough for return loss
> measurement. For filter response measurements, this is probably not
> good enough, so I am thinking about adding a switchable bank of low
> pass filters at the output. But this is slightly messy, so I'll do it
> later, and only if I convince myself that it's needed.
>
> 73
> Fil
> VK3FLP

Hi Fil,
I think that if you use a mixer or sampler as a detector then it may well be possible to make the receiver relatively insensitive to harmonics in the source signal but if you use untuned detectors then it would be more of a pain.

If you were able to do proper VNA type calibrations then you would not need such a good return loss bridge, cables, connectors etc. I wonder whether in this age of cheap computing power, the VNA might actually be easier to build, for a given level of directivity after calibration.

Good luck and let us know how you get on.
Chris

2664. Re: FA: Vintage WRL Globe FCL-1 "Speech Booster" - RARE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-06 19:10:51 UTC
From: Tom <tfarl@iowatelecom.net>
Message-ID: <%w67g.718608$084.717043@attbi_s22>
Source record: 12265
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

It has a certain bandpass response curve. It also has an adjustable
clipper that you can set for various levels.

Thanks,
Tom

"Telstar Electronics" <briangriffey@sbcglobal.net> wrote in message
news:1146743662.301390.156720@j73g2000cwa.googlegroups.com...
| Anyone know the principle of this unit... is it just an audio amp?
|
| www.telstar-electronics.com
|

2665. New program - PROPGATE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-06 19:11:59 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <UJydnVJ5B5oKaMHZRVnytQ@bt.com>
Source record: 12266

For either line-of-sight or multi-hop propagation through the
ionosphere -

- this apparently simple program computes path loss in dB between
transmitter and receiver, field strength at the receiving site, and
receiver S-meter readings. Transmitter power output can be varied
between 10 KW and 1 milliwatt.

It is educational for newcomers and of assistance to DX and
line-of-sight experimenters. It illustates how S-meters OUGHT to work.

Download program PROPGATE from website below in a few seconds and run
immediately. Its at the bottom of the list.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp

2666. Ends Sun: FA: Vintage Globe Scout FCL-1 "Speech Booster" - RARE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-06 19:15:09 UTC
From: Tom <tfarl@iowatelecom.net>
Message-ID: <1B67g.718611$084.431034@attbi_s22>
Source record: 12267
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

An interesting accessory designed and built by WRL for the Globe "Scout"
and "Hi-Bander" series.

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=9720352662

Ends this Sunday, May-07-06 16:39:16 PDT (23:39:16 GMT/UTC).

Tnx fer looking.
Vy 73 es best dx
de Tom N&#65533;JMY . .

2667. Re: New program - PROPGATE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-06 23:45:15 UTC
From: John <john988@nospamspam.com>
Message-ID: <fya7g.410$M16.15@newsfe2-win.ntli.net>
Source record: 12268

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:UJydnVJ5B5oKaMHZRVnytQ@bt.com...
> For either line-of-sight or multi-hop propagation through the
> ionosphere -
>
It's actually on the following link -

http://www.btinternet.com/~g4fgq.regp/page3.html#S301"

That saves reading through all the boring stuff.

2668. Re: New program - PROPGATE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-06 23:45:52 UTC
From: John <john988@nospamspam.com>
Message-ID: <Qya7g.411$M16.390@newsfe2-win.ntli.net>
Source record: 12269

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:UJydnVJ5B5oKaMHZRVnytQ@bt.com...
> For either line-of-sight or multi-hop propagation through the
> ionosphere -

Is that really a picture of you? You look like Archie off Coronation
Street!

2669. Re: FA: Vintage WRL Globe FCL-1 "Speech Booster" - RARE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-07 00:21:57 UTC
From: Orv <Orv@Cox.Net>
Message-ID: <z4b7g.13831$TK1.9551@fed1read06>
Source record: 12270
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

It may be similar to the built-in speech processor that they used in their DSB-100 transmitter back in the early 1960s. If so, that unit, as you describe it, was quite effective for its day.

"Tom" <tfarl@iowatelecom.net> wrote in message
news:%w67g.718608$084.717043@attbi_s22...
> It has a certain bandpass response curve. It also has an adjustable
> clipper that you can set for various levels.
>
> Thanks,
> Tom
>
> "Telstar Electronics" <briangriffey@sbcglobal.net> wrote in message
> news:1146743662.301390.156720@j73g2000cwa.googlegroups.com...
> | Anyone know the principle of this unit... is it just an audio amp?
> |
> | www.telstar-electronics.com
> |
>
>

2670. Re: New program - PROPGATE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-07 14:07:06 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cuCdnc-NELohYsDZnZ2dnUVZ8qednZ2d@bt.com>
Source record: 12271

I never watch the tripe on Coronation Street. Who's Archie? Is he as handsome as I am?

Anyway, I wouldn't wish to correspond with anybody who regularly watches Coronatio Street. They are clearly of low intelligence - the submerged 20% of the population - with a concentratio span less than the interval between the adverts.

2671. FS Motorola motrac crystaled up for 29.5MHz 10 meter FM $20

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-07 17:53:41 UTC
From: "jamese@sterling.net" <jamese@sterling.net>
Message-ID: <1147024421.007556.13250@y43g2000cwc.googlegroups.com>
Source record: 12272

Sorry if this is posted to the wrong group. I would like to see go to a good home. It worked when I last used it about 25 years ago. I think it puts out about 30 watts. Comes complete with microphone, and head, transceiver, cable and speaker. Email for a picture.

Jim

2672. Quadrature Hybrid Construction

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-07 17:56:54 UTC
From: Radra <radra@adelphia.net>
Message-ID: <1147024614.124022.27680@j73g2000cwa.googlegroups.com>
Source record: 12273

I need several quadrature hybrids (i.e. a 90 degree two-way splitter) for use in portions of the 0.5 to 2.0 MHz band. This is for a low-power phasing scheme. Normally I would obtain them from some place like Mini-Circuit but some reason they only offer a 1.13 to 1.38 MHz model (PSCQ-2-1.25). Can anyone suggest a source of supply?

Suppose I could also build them but am not familiar with the construction techniques used at these low frequencies. Am more accustomed to stripline and microstrip at VHF and UHF. Any suggestions here would be appreciated. I am sure the techniques are well known and must be covered in some articles, books and/or web sites.

2673. Re: New program - PROPGATE: Coronation Street?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-07 17:59:57 UTC
From: Lynn Coffelt <coffelt2@comcast.net>
Message-ID: <e3lcfqrdi1@emma.aioe.org>
Source record: 12274

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cuCdnc-NELohYsDZnZ2dnUVZ8qednZ2d@bt.com...
> I never watch the tripe on Coronation Street. Who's Archie? Is he as
> handsome as I am?
>
> Anyway, I wouldn't wish to correspond with anybody who regularly
> watches Coronatio Street. They are clearly of low intelligence - the
> submerged 20% of the population - with a concentratio span less than
> the interval between the adverts.
>

Coronation Street still playing? Holy Cow! That was the best show on
"tellie" when we were fortunate enough to live in England over 40 years ago!
Salute!
Old Chief Lynn

2674. Re: Need further info on network analysis terms...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-07 18:48:10 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1147027690.680066.12060@i39g2000cwa.googlegroups.com>
Source record: 12275
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hi Joerg,
Sorry for the delay in replying; I've been away in Europe for a few
days.
It's the same HP 8754A analyser that appears in another thread of mine
hereabouts (4-1300Mhz). Probably rather too old for commercial
development use nowadays, although I do know an RF developer in
Brighton who still rates his one very highly and uses it daily.
Best wishes, Paul.

2675. Re: Quadrature Hybrid Construction

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-07 18:49:24 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <Uir7g.962113$xm3.873572@attbi_s21>
Source record: 12276

"Radra" <radra@adelphia.net> wrote in message
news:1147024614.124022.27680@j73g2000cwa.googlegroups.com...
>I need several quadrature hybrids (i.e. a 90 degree two-way splitter)
> for use in portions of the 0.5 to 2.0 MHz band. This is for a
> low-power phasing scheme. Normally I would obtain them from some place
> like Mini-Circuit but some reason they only offer a 1.13 to 1.38 MHz
> model (PSCQ-2-1.25). Can anyone suggest a source of supply?
>
MCL has them near all the way from DC to visible light.

> Suppose I could also build them but am not familiar with the
> construction techniques used at these low frequencies. Am more
> accustomed to stripline and microstrip at VHF and UHF. Any suggestions
> here would be appreciated. I am sure the techniques are well known and
> must be covered in some articles, books and/or web sites.

Reed Fisher, "Twisted-wire Quadrature Hybrid Directional Couplers". QST
January 1978. pp 21-23.

W4ZCB
>

2676. Re: Quadrature Hybrid Construction

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-07 20:10:40 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1147032640.845023.262380@v46g2000cwv.googlegroups.com>
Source record: 12277

Radra wrote:
> I need several quadrature hybrids (i.e. a 90 degree two-way splitter)
> for use in portions of the 0.5 to 2.0 MHz band. This is for a
> low-power phasing scheme. Normally I would obtain them from some place
> like Mini-Circuit but some reason they only offer a 1.13 to 1.38 MHz
> model (PSCQ-2-1.25). Can anyone suggest a source of supply?
>
> Suppose I could also build them but am not familiar with the
> construction techniques used at these low frequencies. Am more
> accustomed to stripline and microstrip at VHF and UHF. Any suggestions
> here would be appreciated. I am sure the techniques are well known and
> must be covered in some articles, books and/or web sites.

http://www.seboldt.net/k0jd/phase_notes.html

73, Leon

2677. [QST] VHF amplifier push-pull 2c39

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-07 20:36:16 UTC
From: F4DRH <F4DRH@wanadoo.fr>
Message-ID: <445e5a3e$0$6679$8fcfb975@news.wanadoo.fr>
Source record: 12278

Hello all

I am looking for information about a VHF amplifier with 2 X 2C39 in
push-pull configuration (not in //).
Does anybody know a website? ... or have a schematic?

Thanks for your help

Jean-Marc
F4DRH
www.barbaxoops.com

2678. Re: [QST] VHF amplifier push-pull 2c39

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-07 20:52:19 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <Z5t7g.15478$Sl4.7191@bignews1.bellsouth.net>
Source record: 12279

F4DRH wrote:
> Hello all
>
> I am looking for information about a VHF amplifier with 2 X 2C39 in
> push-pull configuration (not in //).
> Does anybody know a website? ... or have a schematic?
>
> Thanks for your help
>
> Jean-Marc
> F4DRH
> www.barbaxoops.com
>
>
>
The article you are looking for appeared in the Jan 1968 issue of QST
and was reprinted in the 1972 HB. Maybe somebody has the 1965-1969
set of QST view? I have a copy of the 1972 HB, but it is quite yellowed
and might not scan well. The schematic isn't going to do you much good
since this is mostly a 'plumbers' and 'metal-smithing' problem.
The article and the HB detail the cutting and bending of the metal
(probably copper or brass as this beast must be soldered together).
Also some springy finger stock is required to seal edges for rf and
to contact the tube surfaces. Teflon is used to insulate parts and
forms the dialectic for some capacitors. Mention is also made of
beryllium copper. Be careful there, this stuff is deadly!

2679. Re: [QST] VHF amplifier push-pull 2c39

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-07 20:54:39 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <88t7g.15479$Sl4.6523@bignews1.bellsouth.net>
Source record: 12280

F4DRH wrote:
> Hello all
>
> I am looking for information about a VHF amplifier with 2 X 2C39 in
> push-pull configuration (not in //).
> Does anybody know a website? ... or have a schematic?
>
> Thanks for your help
>
> Jean-Marc
> F4DRH
> www.barbaxoops.com
>
>
>
oops. The article I mentioned was actually a PARALLEL
amplifier, your post mentioned push pull. The article
mentioned is for 1296mhz (not vhf) where these tubes
are usually used.

2680. Re: Need further info on network analysis terms...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-07 20:56:10 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1147035370.757945.280840@i39g2000cwa.googlegroups.com>
Source record: 12281
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Okay, thanks all.
I've obtained proprietory 50 ohm loads and power splitters, so just need to sort out the throughs, shorts and opens. The obvious question now is: in respect of throughs and open and shorted terminations, is the coax length of these relevant? I envisage making up N-type connectors with say one inch long coax stubs for both open and short unless there's some problem with this. Is the electrical length of the coax relevant?
Thanks,
P.

2681. 12 volt plate tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-07 21:26:04 UTC
From: cornytheclown@hotmail.com
Message-ID: <1147037164.671574.93340@i39g2000cwa.googlegroups.com>
Source record: 12282

Anybody know any tubes...st or gt shape preferred that will work on 12 volts plate voltage for small 1 tube regens...possibly a stage or two of amplification also.

I know there were automobile radio tubes made that didnt need vibrators but dont know any numbers myself.

2682. Re: 13.8V high current power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-07 21:33:48 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <RIt7g.38008$MM6.2351@bignews3.bellsouth.net>
Source record: 12283

Steve N. wrote:
> <paul@burridge8333.fsbusiness.co.uk> wrote in message
> news:1146357642.620733.175050@y43g2000cwc.googlegroups.com...
>
>>You're probably right! I did actually try to rip the heating element
>>out of a 2kW electric fire to use as just such a test load, but the
>>manufacturers had used some really devious sort of screw heads to keep
>>the two casings together. :-(
>>Failing some serious resistance wire, the only other 'to hand' option
>>is to hook up the HF mobile and key-up; but I don't have a sufficiently
>>gutsy dummy load or antenna to dump 100W into, I'm afraid. :-(
>>
>
>
>
> Paul,
>
> Welcome to the world of design...
>
>
>
> No need to make a load to measure the ripple on the caps. You can
> calculate it. I did this long ago for a 5V 28 amp supply I re-wound from a
> 28V 5A supply.
>
>
>
> You have to know that for a capacitor, I = C * Dv / dt.
>
> When the 60 HZ wave drops, the diodes drop out of conduction and the filter
> cap is now supplying *all* the load current...and the voltage drops in the
> usual capacitive nature following that formula.
>
> I don't recall if you said the current, but...if you will be drawing, say 20
> amps - you have the "I". If you have a "C" you plan to use from the old
> design, you have "C". Dt is the discharge time between the (full-wave)
> peaks from the bridge rectifier. This is 8.333 ms. minus the conduction
> time. I forget the typical conduction time I have seen, but I'll assume 5
> ms max-load (the diodes don't conduct very long, typically.and.and the peak
> current is pretty high to boot!) -- leaving 3ms for the discharge time.
> Then Dv is the ripple, or more accurately, the sag. Also, consider that the
> peak voltage will be lower when loaded due to the transformer winding
> resistance and diode drop and anything else in there.
>

Since this is a full wave rectifier if we had ideal diodes they would be
conducting all the time (IE: one SET of diodes if a bridge or one diode
if a "CT" type rectifier). Also we have a SINE wave output, but in a
FW the negative cycle is flipped up. So your formulas don't reflect the
varying duty cycle out of the rectifier (it's not ON 5 ms and off 3 ms, but
goes from 0 to full voltage following a sine function). I guess you can
use the RMS function to determine the "effective" on and off times, and
your guess is probably ballpark enough to be correct.

>
>
> So, solving for Dv. Dv = (I* dt) / C
>
>
>
> If you wanted 20 amps and had 20,000 uF, You'd have (20*.005)/.02 or 3
> volts of sag.
>
>
>
> BUT! This assumes *normal* line voltage. If you DO measure as some of the
> others suggest, remember that you'll be using whatever line voltage is at
> the time. Consider when there is a brown out. Pick a low-line voltage, say
> 105 volts and use THAT voltage, Or the ratio 105/120 and adjust your output
> voltage number accordingly when calculating things.
>
>
>
> You have to make sure that *Everything* that you want to power from this
> voltage has enough voltage at the low point; series pass & Driver & driver's
> driver (perhaps the 723).
>
>
>
> Finally, what I did to keep the required overhead to a minimum and, as a
> result, the dissipation in the series pass transistors lower (and guarantee
> poorer brown-out protection, unfortunately), I *added* a few extra, lighter
> gauge wire turns to the *OUTPUT* winding to supply the 723 and driver stuff.
> Add the same number of turns to each side of the secondary (put one and
> measure the volts-per-turn to figure out how many) and put a diode from both
> of them (pointing to) to another smaller filter cap. This requires, of
> course two more diodes and filter cap, but they're smaller. You also have
> to watch the ripple in the same way.
>
>
>
> Hope this helps. Let me know @arrl.net
>
>
>

> 73, Steve, K9DCI
>
>
>
>
>
>
>
>

2683. Re: Need further info on network analysis terms...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-07 23:08:04 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1147043284.771340.266050@i39g2000cwa.googlegroups.com>
Source record: 12284
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Well, yes, length is in general important in a vector network analyzer. Let's say you have port 1 of an S-parameter test set, or a reflection-transmission test set, accurately calibrated at its connector. What is S11 if you connect nothing there? What is S11 if you connect an inch of coax there? If you tell me it's different in the two cases (which you better!), then you should pay attention to the length of the line to the open or short.

Another way to look at it: on a Smith chart, where will your 50 ohm termination be? Where will a short be? Where will an open be? If the "short" and "open" are at different distances down a line from their connector, even if you calibrate so the "open" is where it should be on the reflection coefficient display (Smith chart display), where then _should_ the short be, if you don't have the line lengths exactly the same?

And while I'm asking questions, what happens if you put your 50 ohm load, made with really good 0.1% 0805 resistors, at the end of a section of 50 ohm line which is not actually 50 ohms, but is instead 55 ohms or 45 ohms? The impedance tolerance on typical coax is pretty poor. Beware. It's actually unlikely to be as good as a carefully made load as I've described before here. (It's a real pain in the rear trying to set up a system to test things like VNAs accurately and guarantee your calibrations because of stuff like this.)

Cheers,
Tom

2684. Re: 12 volt plate tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-07 23:13:43 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <445E7F26.1000903@invalid.invalid>
Source record: 12285

cornytheclown@hotmail.com wrote:
> Anybody know any tubes...st or gt shape preferred that will work on 12
> volts plate voltage for small 1 tube regens...possibly a stage or two
> of amplification also.
>
> I know there were automobile radio tubes made that didnt need vibrators
> but dont know any numbers myself.

I found regular plain old receiving tubes worked OK down to 18 volts on
the plates - didn't have any convenient way of getting 12 at the time
but I'll bet they would have worked.

Audio power amps had REALLY low output but if you're building a 1-tube
regen you're not driving a speaker anyway...

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

2685. Re: Need further info on network analysis terms...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-07 23:41:09 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <q61t52hvg07d6hjm9vvhu3riclh91m75rd@4ax.com>
Source record: 12286
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On 7 May 2006 13:56:10 -0700, paul@burridge8333.fsbusiness.co.uk
wrote:

>Okay, thanks all.
>I've obtained proprietory 50 ohm loads and power splitters, so just
>need to sort out the throughs, shorts and opens. The obvious question
>now is: in respect of throughs and open and shorted terminations, is
>the coax length of these relevant? I envisage making up N-type
>connectors with say one inch long coax stubs for both open and short
>unless there's some problem with this. Is the electrical length of the
>coax relevant?

Yes.

No sense elaborating, you don't seem read the answers.

2686. Re: Quadrature Hybrid Construction

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 01:00:08 UTC
From: Jim <kill-spam@no-spam.org>
Message-ID: <avmdnXTT4_GBBcPZnZ2dnUVZ_smdnZ2d@comcast.com>
Source record: 12287

The range from .5 to 2 MHz is an extremely broad frequency range to get 90' using any sort of LC network. It is greater than an octave, and that is why it's a problem. Generally, most phase shifters cover less than 1 octave....

If you are thinking about shifting a Local oscillator signal, I'd recommend a digital approach.

If you multiply the LO by 4, you can then divide by 4 to get perfect 90' phase shift.

Jim

2687. Re: 12 volt plate tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 01:41:10 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <445EA281.7020502@nettally.com>
Source record: 12288

I think some early Motorola auto radios worked off DC directly and had tubes in the RF and transistor audio PA's. You might look for some vintage auto radio schematics for tube numbers. I thing the 12AX7 tube might be included.

cornytheclown@hotmail.com wrote:

>Anybody know any tubes...st or gt shape preferred that will work on 12
>volts plate voltage for small 1 tube regens...possibly a stage or two
>of amplification also.
>
>I know there were automobile radio tubes made that didnt need vibrators
>but dont know any numbers myself.
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

2688. Re: Quadrature Hybrid Construction

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 02:28:00 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1147055280.259058.17010@g10g2000cwb.googlegroups.com>
Source record: 12289

Jim wrote:
> The range from .5 to 2 MHz is an extremely broad frequency range to get
> 90' using any sort of LC network. It is greater than an octave, and that is
> why it's a problem. Generally, most phase shifters cover less than 1
> octave....
>
> If you are thinking about shifting a Local oscillator signal, I'd
> recommend a digital approach.
>
> If you multiply the LO by 4, you can then divide by 4 to get perfect 90'
> phase shift.

He wants to cover *portions* of the band using several hybrids.

73, Leon

2689. Re: 12 volt plate tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 02:57:27 UTC
From: Heriberto <lu6dbu@tapalquenet.com.ar>
Message-ID: <445eb397_3@x-privat.org>
Source record: 12290

Hi: in this site have good information over space charge mode function in conventional tubes (no special for 12 v).- This mode permit work the tubes with low voltagfe in plate.

http://www.duntemann.com/12vtubes/12vtubesindex.htm

In the followings sites have a receiver projetc with 6BA6 tubes working with 12 V in plate.-
http://www.qsl.net/kl7h/GlowBug.htm

http://www.qsl.net/kl7h/12v.htm

REgards from Argentina

Heriberto
LU6DBU

<cornytheclown@hotmail.com> escribi&#65533; en el mensaje news:1147037164.671574.93340@i39g2000cwa.googlegroups.com...
> Anybody know any tubes...st or gt shape preferred that will work on 12
> volts plate voltage for small 1 tube regens...possibly a stage or two
> of amplification also.
>
> I know there were automobile radio tubes made that didnt need vibrators
> but dont know any numbers myself.
>

Inviato da X-Privat.Org - Registrazione gratuita http://www.x-privat.org/join.php

2690. Re: 12 volt plate tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 03:00:50 UTC
From: Heriberto <lu6dbu@tapalquenet.com.ar>
Message-ID: <445eb462_2@x-privat.org>
Source record: 12291

hI:
I forgoten this site also ;

http://www.oldradios.co.nz/hikers/

Regards

Heriberto
LU6DBU

<cornytheclown@hotmail.com> escribi&#65533; en el mensaje
news:1147037164.671574.93340@i39g2000cwa.googlegroups.com...
> Anybody know any tubes...st or gt shape preferred that will work on 12
> volts plate voltage for small 1 tube regens...possibly a stage or two
> of amplification also.
>
> I know there were automobile radio tubes made that didnt need vibrators
> but dont know any numbers myself.
>

Inviato da X-Privat.Org - Registrazione gratuita http://www.x-privat.org/join.php

2691. Re: 12 volt plate tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 03:44:50 UTC
From: - exray - <exray@coqui.net>
Message-ID: <125tfll15kmkd81@corp.supernews.com>
Source record: 12292

Heriberto wrote:
> hI:
> I forgoten this site also ;
>
> http://www.oldradios.co.nz/hikers/
>
> Regards
>
> Heriberto
> LU6DBU

I second this one. I've built 3 Hikers, bcb and sw...one is featured on the site...and they have been excellent rcvrs for low voltage. The later version using 3Q5s also works very well.

-Bill

2692. ICOM 02-AT QUESTION

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 04:31:05 UTC
From: Dave Hildebrand <dave@cahuenga.com>
Message-ID: <Pine.LNX.4.58.0605071326260.23549@torquay.cahuenga.com>
Source record: 12294
Cross-posted to: alt.ham-radio.mods,alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have a 22-year old Icom 02-AT that has worked reliably until now, when it ceased putting out any transmitter power whatsoever.

Shall I assume the obvious, that the final (amplifier) transistor has blown? (They're easy enough to replace in most radios.) Or is there something else that's known to fail in these (particular) radios that results in a loss of transmitter power?

And can anyone please tell me the part number of the power device used in the final amplifier? Thanx.

...Dave, N6BHU

2693. Re: Quadrature Hybrid Construction

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 04:31:28 UTC
From: Radra <radra@adelphia.net>
Message-ID: <1147062688.747519.248140@g10g2000cwb.googlegroups.com>
Source record: 12293

I am willing to use several hybrids to cover the band, if I must. But it would be helpful to use broadband hybrids so I don't need to use so many. I appreciate the reference to the QST article on hybrid construction. I will build one to see how much bandwidth I can get. Would like to find a construction technique which yields wider bandwidth tho. The PSCQ-2-32 from Mini-Circuits has a 3.2 to 32 MHz bandwidth! Wonder how they do it.

The LO technique is not applicable for my design but it is interesting. I will have to give it some thought to understand how it works.

Vinton

2694. tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 06:04:46 UTC
From: steve carey <scarey@tds.net>
Message-ID: <445edf0b_1@newspeer2.tds.net>
Source record: 12295

Looking 3B28 tubes does anybody have some in there junk box thanks Steve

2695. Re: 12 volt plate tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 08:05:50 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1147075550.174573.269470@j73g2000cwa.googlegroups.com>
Source record: 12296

there was a menufacturer here in 4Zulu land who made suck radios. I
think I have the schematic at home: i'll look itup this evening. I
think one of them was 12k7.
Actually I had that readio for years. I can't remember what became of
it.
Saandy 4Z5KS

2696. Re: Quadrature Hybrid Construction

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 08:18:56 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1147076336.115763.306830@g10g2000cwb.googlegroups.com>
Source record: 12297

you use the same techniques. you only switch to lumped components!
quite a time ago there was a paper in QST, describing just what you
need, but it's going to take me sometime to track it and rescan it.
basically it's a bifilar wound inductor with a reactance of 50 ohms at
the operating frequency, with shunt capacitors, also of 50 ohms
reactance shunted across adjacent terminals. not too complicated and
cheap to make. not too wideband though.
Saandy 4Z5KS

2697. Re: Need further info on network analysis terms...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 08:27:23 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1147076843.058679.321530@i40g2000cwc.googlegroups.com>
Source record: 12148
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

one by one.
through is actually a piece of cable used to connect the two ports of the VNA, prion to making what we call 2 ports measuremets: gain or transmission response. it just lets you set you baseline and calibrate out the incosistencies of the measuring setup.
for a short use the connector of your choice, with a well made short on the back side. cut a small piece of copper or brass drill a hole for the pin and solder everything as close as possible to the connector's shell
for an open, use again a connector of your choice with the pin cut flush with the back of the shell and left open. I used these made out from SMA and TnC connectors up to 3 GHz and they were quite allright for all practical purposes. I had the HP units to compare and they wewren't far off.
Saandy 4Z5KS

2698. Re: Quadrature Hybrid Construction

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 09:49:59 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <bvE7g.936543$x96.594321@attbi_s72>
Source record: 12149

"Radra" <radra@adelphia.net> wrote in message
news:1147062688.747519.248140@g10g2000cwb.googlegroups.com...
>I am willing to use several hybrids to cover the band, if I must. But
> it would be helpful to use broadband hybrids so I don't need to use so
> many. I appreciate the reference to the QST article on hybrid
> construction. I will build one to see how much bandwidth I can get.
> Would like to find a construction technique which yields wider
> bandwidth tho. The PSCQ-2-32 from Mini-Circuits has a 3.2 to 32 MHz
> bandwidth! Wonder how they do it.
>
> The LO technique is not applicable for my design but it is interesting.
> I will have to give it some thought to understand how it works.
>
> Vinton

Well, for that requirement, you need :

G.W. Horn, I4MK, "How to design Wide-Band RF Quadrature Network"
QEX, November 1982, pp5-9.
3-30 MHz quadrature networks designed by VE5FP/VK2BOX

Rick Campbell, KK7B has "SPRAT Technical cartoons #1 and #2" that have
details on single band hybrids, and the component values for them.
>
W4ZCB

2699. Re: ICOM 02-AT QUESTION

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 12:50:37 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <b4KdnfnPC70-o8LZnZ2dnUVZ_vidnZ2d@rcn.net>
Source record: 12150
Cross-posted to: alt.ham-radio.mods,alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Dave Hildebrand wrote:
> I have a 22-year old Icom 02-AT that has worked reliably until now, when
> it ceased putting out any transmitter power whatsoever.
>
> Shall I assume the obvious, that the final (amplifier) transistor has
> blown? (They're easy enough to replace in most radios.) Or is there
> something else that's known to fail in these (particular) radios that
> results in a loss of transmitter power?
>
> And can anyone please tell me the part number of the power device used in
> the final amplifier? Thanx.

Does it still receive correctly?

What usually happens, is the synthesizer quits, and it stops sending,
or receiving.

The output transistor is a T05 (TO39) type package, and is soldered to the
metal frame that surrounds the radio. It is very special, in that the case
of the transistor is connected to the emitter. Most transistors in that
package have the case connected to the collector. This is done so that they
could run the emitter grounded (as is usual) and not need any insulated
heatsinking hardware.

The usual way of blowing the output transistor in an 02AT is to use a battery
pack that supplies more than 9v, or to try and power the rig directly from
your car battery. ISTR that a short on the antenna is a third way.

-Chuck

2700. 13.8V high current power supply - update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 15:50:16 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1147103416.176308.205570@y43g2000cwc.googlegroups.com>
Source record: 12151

Hi all and thanks again for all the responses.

Well I had another 10 minutes to spare again today so took a different
secondary tapping to try to get more voltage headroom. Following that
tweak, I now have 25.5VDC available across the large electrolytics.
This is obviously plenty enough for 13.8VDC regulated; but is it now
too much to drop efficiently?
Thanks,
p.

2701. Re: Need further info on network analysis terms...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 16:01:51 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1147104111.417163.277700@j73g2000cwa.googlegroups.com>
Source record: 12152
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Well I can understand how it might appear that way, but in truth I certainly *do* read *all* the answers. Understanding them is another thing, however. :-(

2702. Re: 13.8V high current power supply - update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 16:27:21 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1147105641.842995.48270@v46g2000cwv.googlegroups.com>
Source record: 12153

paul@burridge8333.fsbusiness.co.uk wrote:
> Hi all and thanks again for all the responses.
>
> Well I had another 10 minutes to spare again today so took a different
> secondary tapping to try to get more voltage headroom. Following that
> tweak, I now have 25.5VDC available across the large electrolytics.
> This is obviously plenty enough for 13.8VDC regulated; but is it now
> *too* much to drop efficiently?
> Thanks,
> p.

It's more than ideal but there is no such thing as "too much" if you've got an adequate supply of heat sinks and circulating air :-).

Is 25.5VDC measured at your "full load" current or at "no load"? If that's what it is like under a typical load then you'll get about 50% efficiency from a linear supply.

A switching step-down converter is possible but if that were an option you wouldn't be where you are today.

The no-load voltage is irrelevant for power dissipation because with no current there's no heat.

Tim.

2703. Re: Need further info on network analysis terms...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 17:07:13 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <7ptu52d28lmspf82k1pjp0h4tlpgvmdp3e@4ax.com>
Source record: 12154
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On 8 May 2006 09:01:51 -0700, paul@burridge8333.fsbusiness.co.uk
wrote:

>Well I can understand how it might appear that way, but in truth I
>certainly *do* read *all* the answers. Understanding them is another
>thing, however. :-(

Okay. It's just that in an earlier post you asked, "What exactly is a
"through"?"

I said, among other things:

"A through is a direct connection of the two test ports (cables). If
all devices under test (DUTs) were "insertable", i.e. had one male and
one female connector (or GR or 7mm sexless connectors) then the test
port cables could be joined directly, thus forming a through ("thru")

Unfortunately, a lot of DUTs have the same sex connector on both
sides, thus a calibration thru must be a double, same sex adapter
(barrel). Using such an adapter during calibration adds some
unavoidable length (and loss and mismatch) to the test path length.
One method of removing (some of) the effects of the barrel is to
replace it after calibration with a matched length male-female adapter
that remains in the test path."

Now maybe I didn't make it clear enough, but if nothing else, I
inferred that extra length, even in an adapter, is a bad thing.

You then ask, "...The obvious question now is: in respect of throughs
and open and shorted terminations, is the coax length of these
relevant?..."

Sorry to have been short, but it appeared that you didn't read, or
believe anyway, my answer.

Unless you know otherwise, as you would with fully characterized
reference standards, the open-short-load-thru's are assumed to be
"perfect". A perfect short or open terminating a piece of coax,
regardless of length, is no longer "perfect". A non-zero length thru
isn't perfect either.

2704. Re: 13.8V high current power supply - update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 19:09:52 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <FbidnQg6X6cfCsLZnZ2dnUVZ8sydnZ2d@pipex.net>
Source record: 12155

paul@burridge8333.fsbusiness.co.uk wrote:
> Well I had another 10 minutes to spare again today so took a different
> secondary tapping to try to get more voltage headroom. Following that
> tweak, I now have 25.5VDC available across the large electrolytics.
> This is obviously plenty enough for 13.8VDC regulated; but is it now
> *too* much to drop efficiently?
==========
25.5 V seems a normal voltage level for a regulated 13.8 V PSU , no way
too high.
Suggest you check the working voltage of the large elctrolytic
capacitors. They should be 40 V or higher.
I am currently repairing a Yaesu PSU ,output 13.8 V -20A max, having
40V electrol. caps in output of 25A bridge rectifier.
FYI the unit has a soft start facility being a 10 Ohms resistor in the
230V -AC supply circuit ; this to limit bridge rectifier inrush current,
charging the electrolytic caps from zero.
As soon as DC output (13.8V) is there, a relay will be energised ,its
contact shorting the above 10 Ohms resistor .

Frank GM0CSZ / KN6WH

2705. Re: 12 volt plate tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 19:39:18 UTC
From: Straydog <asd@panix.com>
Message-ID: <Pine.NEB.4.63.0605081531150.2486@panix1.panix.com>
Source record: 12156

FYI,

The tubes designed to work on 12 v for the plate might be best, but there are a number of battery filament tubes that also migh give you some results. eg. 1L4,1T4,1U4,1R4,1R5, etc (all 7 pin miniatures). (there was a series of 8 pin octal tubes, too). Most of them ran filament voltages of 1.4 volts at 50 ma current. I built a audio oscilator with a 1T4 (pentode) as a kid and it would oscilate down to 7 volts on the plate!! Most of those tubes were designed for up to 90 v on the plate. Power audio tubes were like 3S4, 3Q4, 3A4, etc (which would run 3.0 v at 50 ma, or center taped filament at 1.4 v and 100 ma). The 3A4, pentode, as RF amplifier was good for something like 1/2 watt output or so, not bad for QRP and no transistors.

There was an older series of battery fillament tubes, designed for lead acid cells (all were 2.0 v on filaments and not much amperage, either). You'll have to consult an older tube manual for those if you want to try them.

===== no change to below, included for reference and context =====

On Sun, 7 May 2006, cornytheclown@hotmail.com wrote:

> Anybody know any tubes...st or gt shape preferred that will work on 12
> volts plate voltage for small 1 tube regens...possibly a stage or two
> of amplification also.
>
> I know there were automobile radio tubes made that didnt need vibrators
> but dont know any numbers myself.
>
>

2706. RS-232 Rf module

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 19:46:33 UTC
From: ayman <aymmmm@gmail.com>
Message-ID: <1147117593.825426.287010@j33g2000cwa.googlegroups.com>
Source record: 12157

hi,
I am working on an FPGA project.
It is a CDMA-based point-to-point communication system; two FPGAs each
works as a transceiver.
The final stage of the project is to send the data via the serial port
(RS-232) to an RF module.
Can any one support me a low-cost, serial (RS-232) Rf module capable of
managing data rates up to 1.25 Mb/s and working reliably within
buildings giving a suitable range (>10 meters).

2707. Re: 13.8V high current power supply - update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 19:56:57 UTC
From: biascomms <biascomms@blueyonder.co.uk>
Message-ID: <doN7g.66321$wl.43028@text.news.blueyonder.co.uk>
Source record: 12158

paul@burridge8333.fsbusiness.co.uk wrote:

> Hi all and thanks again for all the responses.
>
> Well I had another 10 minutes to spare again today so took a different
> secondary tapping to try to get more voltage headroom. Following that
> tweak, I now have 25.5VDC available across the large electrolytics.
> This is obviously plenty enough for 13.8VDC regulated; but is it now
> *too* much to drop efficiently?
> Thanks,
> p.

I find that about 19 to 20 Volts off-load is about ideal for 13.8 Volts output - if your unregulated voltage is much higher than that, you make a /lot/ of heat! If you're using a suitably rated transformer (so that the secondary voltage doesn't dip too much under load), 19 Volts gives ample headroom.

A brief word of advice - if you're going to use a 723 type regulator (usually a good choice), be careful to RF-bypass the op-amp (inside the 723) and provide an over-voltage trip of some kind. It is sometimes possible for the 723 to suffer from "RF brain damage" and completely lose the plot if you get enough RF in the wrong places! The best over-voltage trip is really brutal - a high current thyristor to ground after a fuse in the unregulated DC rail driven by a simple transistor and zener comparator - if you get it right, you can get a large "thump" out of the blowing fuse!

Bob

--
Everything gets easier with practice, except getting up in the morning!

2708. Re: 13.8V high current power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 20:27:25 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e3o9jebfm1@avnika.corp.mot.com>
Source record: 12160

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:RIt7g.38008$MM6.2351@bignews3.bellsouth.net...

> That Steve N. wrote:

> > Paul,
> Welcome to the world of design...
> > No need to make a load to measure the ripple on the caps. You can
> > calculate it. ...
> > You have to know that for a capacitor, I = C * Dv / dt.
> > When the 60 HZ wave drops, the diodes drop out of conduction and the
filter
> > cap is now supplying *all* the load current...and the voltage drops in
the
> > usual capacitive nature following that formula....

Saying:
> Since this is a full wave rectifier if we had ideal diodes they would be
> conducting all the time (IE: one SET of diodes if a bridge or one diode
> if a "CT" type rectifier).

Ken,
This is true only without the capacitor filter. When you add a capacitor input filter, the diodes (ideal or not) only conduct for a rather short part of the input cycle. Line current is in the form of rather short current pulses as a result. This is a concern for the power company, by the way. It also keeps the power company wave form rather flattened on the top, because of all the supplies on the grid drawing current only there.

You can see and measure this on a supply if you have the capability. The cap will charge, pretty much to the peak. When the sine wave then drops rapidly toward zero, the caps "hold" that voltage and are now are supplying the load current. The voltage on the cap drops according to the formula. (the action of the regulator keeps the current at this point constant, so *THAT* formula applies)

> Also we have a SINE wave output,

Not once you add the capacitor input filter. You need the cap filter to (help) keep the output at the constant DC we desire.

> but in a FW the negative cycle is flipped up.

*** Yes and therefore you have 120, half cycles per second (in the US). That is 8.33 ms period (one peak every 8.33 ms). Draw a full wave rectified waveform, then plot some capacitor descharge on it and you will see that for a peak-to-peak ripple of, say, 10% the time the cap is charging

is rather short. This is the diode conduction time.

> So your formulas don't reflect the varying duty cycle out of the
rectifier (it's not ON 5 ms and off 3 ms,

I did mention that the diode conduction-angle duty-cycle does vary, but this is due to load current varrying - and it is predictable We only have 8.33 ms per pulse and the conduction angle is only 1-5 ms. depending on load. This *IS* the way linear supplies work. In theory and practice. That's why *that* formula works. If there was current in the diodes all the time, it would imply thta your capacitor filter ripple would be the full supply voltage.

> but goes from 0 to full voltage following a sine function).

Again, this is only without a capacitor input filter, if you refer to the output voltage.

> I guess you can
> use the RMS function to determine the "effective" on and off times, and

No, this does not apply to this situation. RMS refers to the effective voltage, not diode conduction times.
If you look at the *sine wave* waveform itself (full-wave rectified, in this case) then you can determine the charge and discharge waveforms and that is what I have described.
If you can get a scope and do some real measurements for yourself, you'll see I am correct. For light loads on the power supply, the diode current pulses are quite short ~~ 1 ms and go only to around 5 with a heavy load.

> your guess is probably ballpark enough to be correct.

No guess here. What I described *is* the way it works. We do it when designing linear supplies all the time. You can see it with a scope. There are drawings on the web to show you what I tried to describe in words.

I didn't read all of the following web pages, so one may be easier to understand than the others.

The first shows *JUST* the rect waveform of which you speak:
http://en.wikipedia.org/wiki/Rectifiers

However, the rest of these show a capacitor input filter and the resulting waveforms and conduction characteristics I described.

The following has a movie showing very well and slowly, how the "Smoothing" capacitor works: http://www.greenandwhite.net/~chbut/rectification.htm

Ignore all the formulas in the following and about 2/3 of the way down are waveforms:
http://www.visionics.ee/curriculum/Experiments/FW%20Rectifier/Full%20Wave%20Rectifier1.html

Perhaps a simpler explanation:
http://www.play-hookey.com/ac_theory/ps_filters.html

I applaud your desire to help Paul's understanding, but you missed here.
73, Steve, K9DCI

> > So, solving for Dv. Dv = (I* dt) / C
> > If you wanted 20 amps and had 20,000 uF, You'd have (20*.005)/.02 or
3
> > volts of sag.
> > BUT! This assumes *normal* line voltage. If you DO measure as some of
the
> > others suggest, remember that you'll be using whatever line voltage is
at
> > the time. Consider when there is a brown out. Pick a low-line voltage,
say
> > 105 volts and use THAT voltage, Or the ratio 105/120 and adjust your
output
> > voltage number accordingly when calculating things.
> > You have to make sure that *Everything* that you want to power from this
> > voltage has enough voltage at the low point; series pass & Driver &
driver's
> > driver (perhaps the 723).
> > Finally, what I did to keep the required overhead to a minimum and, as a
> > result, the dissipation in the series pass transistors lower (and
guarantee
> > poorer brown-out protection, unfortunately), I *added* a few extra,
lighter
> > gauge wire turns to the *OUTPUT* winding to supply the 723 and driver
stuff.
> > Add the same number of turns to each side of the secondary (put one and
> > measure the volts-per-turn to figure out how many) and put a diode from
both
> > of them (pointing to) to another smaller filter cap. This requires, of
> > course two more diodes and filter cap, but they're smaller. You also
have
> > to watch the ripple in the same way.
> > Hope this helps. Let me know @arrl.net
> > 73, Steve, K9DCI

2709. Re: 13.8V high current power supply - update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-08 20:38:02 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1147120682.398787.7640@v46g2000cwv.googlegroups.com>
Source record: 12159

Yes sorry, Tim. I should have mentioned that the 25.5VDC is the
open-circuit voltage across the caps.
I assume this new drop is do-able because this PSU in its original
configuration provided 24VDC regulated from 40VDC unreg across the
caps. That seemed like a hell of a drop without generating heaps of
heat, but I freely admit my recollection of linear PSU design (like a
lot of other electronics-related stuff) is very, very hazy.

2710. Re: 12 volt plate tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 00:19:05 UTC
From: Straydog <asd@panix.com>
Message-ID: <Pine.NEB.4.63.0605082003590.29906@panix1.panix.com>
Source record: 12161

See down a bit....

On Mon, 8 May 2006, Allisonnospam@nouce.bellatlantic.net wrote:

> On Mon, 8 May 2006 15:39:18 -0400, Straydog <asd@panix.com> wrote:
>
>>
>> FYI,
>>
>> The tubes designed to work on 12 v for the plate might be best, but there
>> are a number of battery filament tubes that also migh give you some
>> results. eg. 1L4,1T4,1U4,1R4,1R5, etc (all 7 pin miniatures). (there was a
>> series of 8 pin octal tubes, too). Most of them ran filament voltages of
>> 1.4 volts at 50 ma current. I built a audio oscilator with a 1T4 (pentode)
>> as a kid and it would oscilate down to 7 volts on the plate!! Most of those
>> tubes were designed for up to 90 v on the plate. Power audio tubes were like
>> 3S4, 3Q4, 3A4, etc (which would run 3.0 v at 50 ma, or center taped filament
>> at 1.4 v and 100 ma). The 3A4, pentode, as RF amplifier was good for
>> something like 1/2 watt output or so, not bad for QRP and no transistors.
>
> Yep used them and the 3s4 is very happy with 18V (two 9v batteries)
> and makes a near optimum regen at 27V (three 9v batteries).
>
> I'd already mentioned the 1ad4 and 5678 these are hearing aid tubes
> that are very small with 1.4V 50ma filaments. They work very well
> with 22.5V so 18 to 27 V is both easy and work well for them.
>
> Common tubes like the 6ba6, and many of the other AA5 (6be6, 6ba6,
> 6av6 and they 12V versions) all work well at far less than 100V and
> save for the audio ouput tube (50C5) ran fine at 18V.
>
> For an oddball there is the 8058 a 12V nuvister that made a fine
> VHF osc, amp or mixer.
>
>> There was an older series of battery fillament tubes, designed for lead
>> acid cells (all were 2.0 v on filaments and not much amperage, either).
>> You'll have to consult an older tube manual for those if you want to try
>> them.
>
> Your thinking of #30, 31, 32 and 45.

Nah, don't have to go back that far. I got a RCA tube manual copyright
1960, and it shows, for example, 1D5-GP, 1G5-GT, 1D7-G, 1E7-GT, 1F4,
1F5-G, 1F6 as all 2.0 volt filament tubes, and most of them are octal
bases, and one or two are 5 or 6 pin non-octals. And, I also know there

were a couple numbers not made by RCA, but I spend most of my time with my nose in the RCA manual.

And, I'm having a lot of fun in my early retirement years building a whole (retro) tube station from partly the junkbox, partly surplus, partly new, partly Radio Shack parts. But, I didn't know too much about the 12 v plate tubes although I knew they existed. So, after this year's recent posts, I started looking up the 12??blah-blah numbers in that tube manual and there is a lot there. Now gotta decide if I want to go that route or stay with the 1L4, 1R5, 1U4, 1T4, etc., route or use 6.3 v fil-cathode tubes with 100-200 v on plate. Part of me likes the idea of octal tube bases because they are so much easier to put into and take out of sockets (because of the keyed pin). Couple times in my life I dinged up pins on miniature tubes because I didn't look carefully at the pins on the tubes and the holes on the socket to line them up. Seems neater to have the keyed post; just aim the center of the post for the big hole, and then spin it around till it pops in. :-)

1.4 v filament tubes wouldn't throw a lot of heat in the summer time, either. If I built both kinds of rigs/receivers, I guess I could use the "hot" rig in the winter as extra heat for the room. And, the "cool" rig in the summer. ;-)

Thanks for your comments, otherwise.

===== no change to below, included for reference and context =====

>
>>
>> ===== no change to below, included for reference and context =====
>>
>> On Sun, 7 May 2006, cornytheclown@hotmail.com wrote:
>>
>>> Anybody know any tubes...st or gt shape preferred that will work on 12
>>> volts plate voltage for small 1 tube regens...possibly a stage or two
>>> of amplification also.
>>>
>>> I know there were automobile radio tubes made that didnt need vibrators
>>> but dont know any numbers myself.
>>>
>>>
>
>

2711. Re: Need further info on network analysis terms...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 01:40:56 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <IqS7g.84482$dW3.21624@newssvr21.news.prodigy.com>
Source record: 12162
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Paul,

> Sorry for the delay in replying; I've been away in Europe for a few
> days.

Why do you guys call the continent "Europe"? Aren't you also Europeans?
I know, I know, you kept the pound sterling and that was probably a
smart decision.

> It's the same HP 8754A analyser that appears in another thread of mine
> hereabouts (4-1300Mhz). Probably rather too old for commercial
> development use nowadays, although I do know an RF developer in
> Brighton who still rates his one very highly and uses it daily.

That is a fine piece of equipment and not so large as the usual ones
are. IIRC it weighs under 40lbs. The difference between the 8754 and a
3577 can mean the difference between back pain and no back pain.

Regards, Joerg

http://www.analogconsultants.com

2712. Re: RS-232 Rf module

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 03:28:47 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreWorthless@dev.null>
Message-ID: <MPG.1ec9ac4e6510a77c9896dc@192.168.42.131>
Source record: 12163

In article <1147117593.825426.287010@j33g2000cwa.googlegroups.com>,
aymmmm@gmail.com (known to some as ayman) scribed...

> hi,
> I am working on an FPGA project.
> It is a CDMA-based point-to-point communication system; two FPGAs each
> works as a transceiver.
> The final stage of the project is to send the data via the serial port
> (RS-232) to an RF module.
> Can any one support me a low-cost, serial (RS-232) Rf module capable of
> managing data rates up to 1.25 Mb/s and working reliably within
> buildings giving a suitable range (>10 meters).

With that high of a data rate, I wouldn't use RS232. You'd be
better off with V.35 or perhaps RS485.

Happy tweaking.

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute
(Known to some as Bruce Lane, KC7GR)
http://www.bluefeathertech.com -- kyrrin a/t bluefeathertech d-o=t calm
"Salvadore Dali's computer has surreal ports..."

2713. Re: RS-232 Rf module

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 03:32:12 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <13U7g.2647$aq5.132155@news20.bellglobal.com>
Source record: 12164

"ayman" <aymmmm@gmail.com> wrote in message
news:1147117593.825426.287010@j33g2000cwa.googlegroups.com...
> hi,
> I am working on an FPGA project.
> It is a CDMA-based point-to-point communication system; two FPGAs each
> works as a transceiver.
> The final stage of the project is to send the data via the serial port
> (RS-232) to an RF module.
> Can any one support me a low-cost, serial (RS-232) Rf module capable of
> managing data rates up to 1.25 Mb/s and working reliably within
> buildings giving a suitable range (>10 meters).
>
Pretty demanding requirement. RS-232 at 1.25 Mb/s? I thought RS-232 topped out at 115200 or 230400 bps? That's the max you'll see for commercial RS-232 RF Modems, e.g., http://www.maxstream.net/, and they list in the low $hundreds per end.

Another approach is to use a serial device server, http://www.neteon.net/cat.aspx?clvl=3&c1=1&c2=3&c3=13, connected to a Wi-Fi network. Similar caps on serial speed, although one model claims 921.6 kbps max, the SSE-100.

Tom

2714. Re: Need further info on network analysis terms...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 04:27:03 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1147148823.025439.206140@g10g2000cwb.googlegroups.com>
Source record: 12165
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

And--I had posted something similar about length being important--it was the posting to which you replied asking about if length was important. You really would get more respect if you looked a bit more carefully at the info already posted. It would be a lot better if you would ask specific questions about what was already posted. The specific paragraph from my earlier posting is quite clear about the effects of length being important:

"You can make a decent open that's nominally the same electrical length as the load by sawing the center pin off flush with the dielectric, and a short by shorting the pin to the shell. Do it with a tiny disc of copper foil if possible--but in a pinch you can use multiple lengths of wire radially out from the center pin. All these things should have as close to ZERO lead length as possible. At 1GHz, 1 millimeter is a little over 1 degree of phase shift, with air dielectric, and more with Teflon or other dielectric. "

I can understand Wes' frustrations.

Cheers,
Tom

2715. Re: Need further info on network analysis terms...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 04:48:39 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <1v6062h2qepd4d4g8m7f3hpa6lrn817ims@4ax.com>
Source record: 12166
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On 8 May 2006 21:27:03 -0700, "K7ITM" <k7itm@msn.com> wrote:

>And--I had posted something similar about length being important--it
>was the posting to which you replied asking about if length was
>important. You really would get more respect if you looked a bit more
>carefully at the info already posted. It would be a lot better if you
>would ask specific questions about what was already posted. The
>specific paragraph from my earlier posting is quite clear about the
>effects of length being important:
>
>"You can make a decent open that's nominally the same electrical length
>as the load by sawing the center pin off flush with the dielectric, and
>a short by shorting the pin to the shell. Do it with a tiny disc of
>copper foil if possible--but in a pinch you can use multiple lengths of
>wire radially out from the center pin. All these things should have as
>close to ZERO lead length as possible. At 1GHz, 1 millimeter is a
>little over 1 degree of phase shift, with air dielectric, and more with
>Teflon or other dielectric. "
>
>I can understand Wes' frustrations.

And I your's.

Regards,

Wes

2716. SolderSmoke #21

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 06:17:30 UTC
From: bill.meara@gmail.com
Message-ID: <1147155450.042452.213610@u72g2000cwu.googlegroups.com>
Source record: 12167
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.basics,sci.astro.amateur

SolderSmoke!
A SHOW FOR ELECTRONICS HOMEBREWERS!

http://www.ourmedia.org/node/219981

Topics discussed in SolderSmoke #21:

-- Mike's new 80 meter homebrew rig
-- PSK 80 Warbler
-- Balanced modulator's: K2's '602 circuit
-- Bill's direct conversion receiver -- sweet sound
-- Verticals, slinkies, Bill's London antenna woes
-- Barbados receivers
-- Voodoo and RF amplifier construction
-- Tiddly-Wiki, VMWare, AFUKnoppix
-- Low Pass Filters
-- Barcelona SolderSmoke video
-- Telescopes & First Light for QRP rigs
-- MAILBAG: Alan, W2AEW; Nigel, M0NDE

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73 from London
Bill M0HBR N2CQR CU2JL
http://www.gadgeteer.us

2717. Re: Quadrature Hybrid Construction

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 11:51:35 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <bn%7g.141045$oL.128777@attbi_s71>
Source record: 12168

Radra, unable to contact you off group.

GM. I realize my reference is getting pretty old and may be difficult to obtain. If you'd like a .PDF of I4MK's 3-30 MHz quadrature 1982 article, I could send it to you, although it's a fairly large file. Conversely, he's still up and about and seems to be good in the QRZ call book.

His article yields the equations for a hybrid for any frequency and should (I think) give you a single solution for your needs.

Regards
W4ZCB

2718. Re: RS-232 Rf module

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 12:08:40 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1147176520.027917.118710@j73g2000cwa.googlegroups.com>
Source record: 12169

ayman wrote:
> hi,
> I am working on an FPGA project.
> It is a CDMA-based point-to-point communication system; two FPGAs each
> works as a transceiver.
> The final stage of the project is to send the data via the serial port
> (RS-232) to an RF module.
> Can any one support me a low-cost, serial (RS-232) Rf module capable of
> managing data rates up to 1.25 Mb/s and working reliably within
> buildings giving a suitable range (>10 meters).

Wow, three requirements "low-cost", "serial", and "data rates > 1.25
Mb/s via RF " that are all self-contradictory :-).

And the device already has CDMA hardware in it.

An ethernet terminal server (ala Lantronics) hooked to a
high-throughput WiFi system might begin to meet what you want, while
you won't get 1.25 Mb/s you might reliably get a tenth of that with
some latency.

I cannot guarantee anything about WiFi interacting with CDMA
performance and in fact I would be pleasantly surprised if there were
zero effect.

Why does the device need CDMA on one side *AND* improbably
high-bandwidth serial via wireless on the other?

Tim.

2719. Re: Quadrature Hybrid Construction

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 14:03:40 UTC
From: clifto <clifto@gmail.com>
Message-ID: <t2k6j3-5g8.ln1@remote.clifto.com>
Source record: 12170

Harold E. Johnson wrote:
> GM. I realize my reference is getting pretty old and may be difficult to
> obtain. If you'd like a .PDF of I4MK's 3-30 MHz quadrature 1982 article, I
> could send it to you, although it's a fairly large file.

Me too! Maybe you could put it on the web, in case there's more lurker
interest?

--
All relevant people are pertinent.
All rude people are impertinent.
Therefore, no rude people are relevant.
-- Solomon W. Golomb

2720. Re: ICOM 02-AT QUESTION

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 14:06:07 UTC
From: clifto <clifto@gmail.com>
Message-ID: <f7k6j3-5g8.ln1@remote.clifto.com>
Source record: 12171
Cross-posted to: alt.ham-radio.mods,alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Chuck Harris wrote:
> The usual way of blowing the output transistor in an 02AT is to use a battery
> pack that supplies more than 9v, or to try and power the rig directly from
> your car battery. ISTR that a short on the antenna is a third way.

I ran mine off the car battery reliably for years. Go figure.

--
All relevant people are pertinent.
All rude people are impertinent.
Therefore, no rude people are relevant.
-- Solomon W. Golomb

2721. Re: ICOM 02-AT QUESTION

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 14:25:48 UTC
From: Bert Hyman <bert@iphouse.com>
Message-ID: <Xns97BE60118855DVeebleFetzer@127.0.0.1>
Source record: 12172
Cross-posted to: alt.ham-radio.mods,alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

clifto@gmail.com (clifto) wrote in
news:f7k6j3-5g8.ln1@remote.clifto.com:

> Chuck Harris wrote:
>> The usual way of blowing the output transistor in an 02AT is to
>> use a battery pack that supplies more than 9v, or to try and power
>> the rig directly from your car battery. ISTR that a short on the
>> antenna is a third way.
>
> I ran mine off the car battery reliably for years. Go figure.

Maybe the OP was thinking of the older IC-2A. One of the battery
packs for the 2A had a jack for connecting 12V to it, which allowed
you to run the radio off the battery while it was being charged.
Applying 12V directly to the radio (only possible by removing the
battery pack) would fry it.

The IC-02A could run off 12-15V directly through a jack in the top
plate.

--
Bert Hyman | St. Paul, MN | bert@iphouse.com

2722. Re: ICOM 02-AT QUESTION

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 14:48:15 UTC
From: clfe <Nospam@clfurent.com>
Message-ID: <4460ab9c$0$3697$ecde5a14@news.coretel.net>
Source record: 12173
Cross-posted to: alt.ham-radio.mods,alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

"Bert Hyman" <bert@iphouse.com> wrote in message
news:Xns97BE60118855DVeebleFetzer@127.0.0.1...
> clifto@gmail.com (clifto) wrote in
> news:f7k6j3-5g8.ln1@remote.clifto.com:
>
>> Chuck Harris wrote:
>>> The usual way of blowing the output transistor in an 02AT is to
>>> use a battery pack that supplies more than 9v, or to try and power
>>> the rig directly from your car battery. ISTR that a short on the
>>> antenna is a third way.
>>
>> I ran mine off the car battery reliably for years. Go figure.
>
> Maybe the OP was thinking of the older IC-2A. One of the battery
> packs for the 2A had a jack for connecting 12V to it, which allowed
> you to run the radio off the battery while it was being charged.
> Applying 12V directly to the radio (only possible by removing the
> battery pack) would fry it.
>
> The IC-02A could run off 12-15V directly through a jack in the top
> plate.
>
> --
> Bert Hyman | St. Paul, MN | bert@iphouse.com

At the risk of going off topic, I recall someone mentioning that the RS 2 meter portable had an issue almost the same. The jack at the top was "supposed" to be for "vehicular" power - but I heard horror stories of the radio suffering damage when used in just that fashion. IAnd I've seen first hand - a battery pack that got smoked using vehicular power. It almost caught the guy's car on fire since it was near "cloth". I haven't looked at either the radio or schematic for so long - I can't recall exactly what the make-up is. I have though - heard many tales of guys blowing out radios in a vehicle. Hell, our Fire Department Squad Truck radio went out twice in 3 months from similar issues. I'm not sure if they actually figured out the exact reason as yet - Motorola and the original installer were to look over the situation. Seems to me, we all need to take an extra step to prevent such things from happening, since we can't rely on the manufacturers to do so. Just my 2 cents.

clfe

2723. Re: ICOM 02-AT QUESTION

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 14:57:59 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <Fb-dnVTiO75kMP3ZRVn-gg@rcn.net>
Source record: 12174
Cross-posted to: alt.ham-radio.mods,alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

clifto wrote:
> Chuck Harris wrote:
>> The usual way of blowing the output transistor in an 02AT is to use a battery
>> pack that supplies more than 9v, or to try and power the rig directly from
>> your car battery. ISTR that a short on the antenna is a third way.
>
> I ran mine off the car battery reliably for years. Go figure.

OOPS! The 02AT is ok on 12V, the 2AT has a problem with above 9V.
Sorry for the confusion.

-Chuck

2724. Re: ICOM 02-AT QUESTION

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 15:01:28 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <Fb-dnVfiO75XM_3ZRVn-gg@rcn.net>
Source record: 12175
Cross-posted to: alt.ham-radio.mods,alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

clfe wrote:

> At the risk of going off topic, I recall someone mentioning that the RS 2
> meter portable had an issue almost the same. The jack at the top was
> "supposed" to be for "vehicular" power - but I heard horror stories of the
> radio suffering damage when used in just that fashion.

I had a 2AT battery pack catch fire when charging off of the car charger.
There was no fuse in the power cord, and a wire shorted inside the pack.
Poof! It ate the wires inside of the pack, and the power cord all the
way back to the lighter outlet. A fuse would have been a *really good thing*.

-Chuck

2725. Re: 12 volt plate tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 15:45:55 UTC
From: Bill Turner <dezrat@copper.net>
Message-ID: <40e162de3c1bscln4uncoaa90bvfgnkmsk@4ax.com>
Source record: 12176

ORIGINAL MESSAGE:

On 7 May 2006 14:26:04 -0700, cornytheclown@hotmail.com wrote:

>Anybody know any tubes...st or gt shape preferred that will work on 12
>volts plate voltage for small 1 tube regens...possibly a stage or two
>of amplification also.
>
>I know there were automobile radio tubes made that didnt need vibrators
>but dont know any numbers myself.

********** REPLY SEPARATOR **********

My first job right out of high school in 1959 was repairing car radios, just when the 12-volt anode tubes were coming out. On a whim, I replaced some of the 12-volt anode types with conventional tubes such as the 12AU6 and 12BA6 and to my surprise, they worked fairly well, but with slightly lower gain. (The pin connections were the same.)

BTW, the 12-volt anode types were notorious for developing microphonics. It was an interesting design, but as soon as good transistors became available, they became history.

In other words, don't be afraid to experiment.

Bill, W6WRT

2726. Re: ICOM 02-AT QUESTION

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 18:10:03 UTC
From: Dunkirk <dunkirk@ispwest.com>
Message-ID: <4460DAFB.1000105@ispwest.com>
Source record: 12178
Cross-posted to: alt.ham-radio.mods,alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi, Chuck -- thanks for your response...

Chuck Harris wrote:

> Dave Hildebrand wrote:
>> I have a 22-year old Icom 02-AT that has worked reliably until now, when
>> it ceased putting out any transmitter power whatsoever.
>
> Does it still receive correctly?

...yes -- the only thing that's changed is that the little bar-graph (along the bottom) doesn't appear; as though there were nothing to be measured. And, I fell out of the repeater while in QSO (full-quieting), having to sign clear on another radio.

> What usually happens, is the synthesizer quits, and it stops sending,
> or receiving.

...in my case, I can dial-up any repeater and listen -- I just can't transmit any more.

> The output transistor is a T05 (TO39) type package, and is soldered to the
> metal frame that surrounds the radio. It is very special, in that the case
> of the transistor is connected to the emitter. Most transistors in that
> package have the case connected to the collector. This is done so that
> they
> could run the emitter grounded (as is usual) and not need any insulated
> heatsinking hardware.

...are they (the transistors) a real bitch to replace?

> The usual way of blowing the output transistor in an 02AT is to use a
> battery
> pack that supplies more than 9v, or to try and power the rig directly from
> your car battery. ISTR that a short on the antenna is a third way.

...the jack on the top's supposed to have an internal regulator, and I've used it in my truck on occasion since the radio was new with no negative consequences (not like the HTX-202, which was made by Maxon under license by Icom for Radio Schlock, and had issues with its external power-jack).

Maybe infrequent long-winded transmissions over the last 22 years is the culprit for the transmitter's untimely demise? (It's kept my hands warm in the cool outdoors more than once.) I've long since misplaced (or

lost) the original manual, which had a schematic.

If I crack it open, I should be able to measure the voltages on the device, itself to see if it's blown. Right now, the final seems like the prime suspect. Thanx...

...Dave, N6BHU

2727. Re: ICOM 02-AT QUESTION

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 18:16:53 UTC
From: Dunkirk <dunkirk@ispwest.com>
Message-ID: <4460DC95.5020407@ispwest.com>
Source record: 12179
Cross-posted to: alt.ham-radio.mods,alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Yeah, I've had a few experiences myself, in years past that taught me
there's no such thing as too many fuses.

My glove-compartment has an assortment of fuses of varying vintages, all
acquired for that "rainy day" that some times never comes.

Chuck Harris wrote:
> clfe wrote:
>
>> At the risk of going off topic, I recall someone mentioning that the
>> RS 2 meter portable had an issue almost the same. The jack at the top
>> was "supposed" to be for "vehicular" power - but I heard horror
>> stories of the radio suffering damage when used in just that fashion.
>
> I had a 2AT battery pack catch fire when charging off of the car charger.
> There was no fuse in the power cord, and a wire shorted inside the pack.
> Poof! It ate the wires inside of the pack, and the power cord all the
> way back to the lighter outlet. A fuse would have been a *really good
> thing*.
>
> -Chuck

2728. Re: ICOM 02-AT QUESTION

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 18:21:04 UTC
From: dplatt@radagast.org
Message-ID: <1261ncgn2e0c362@corp.supernews.com>
Source record: 12177
Cross-posted to: alt.ham-radio.mods,alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <4460ab9c$0$3697$ecde5a14@news.coretel.net>,
clfe <Nospam@clfurent.com> wrote:

>At the risk of going off topic, I recall someone mentioning that the RS 2
>meter portable had an issue almost the same. The jack at the top was
>"supposed" to be for "vehicular" power - but I heard horror stories of the
>radio suffering damage when used in just that fashion. IAnd I've seen first
>hand - a battery pack that got smoked using vehicular power. It almost
>caught the guy's car on fire since it was near "cloth". I haven't looked at
>either the radio or schematic for so long - I can't recall exactly what the
>make-up is. I have though - heard many tales of guys blowing out radios in a
>vehicle. Hell, our Fire Department Squad Truck radio went out twice in 3
>months from similar issues. I'm not sure if they actually figured out the
>exact reason as yet - Motorola and the original installer were to look over
>the situation. Seems to me, we all need to take an extra step to prevent
>such things from happening, since we can't rely on the manufacturers to do
>so. Just my 2 cents.

It would not surprise me much if the failures were due to a "load
dump" event.

If the alternator is running, and supplying a substantial amount of
current to a load (e.g. headlights), and the load is suddenly
disconnected (e.g. headlights turned off), it's not at all uncommon
for a very impressive voltage spike to be generated. This is due to
the same sort of inductive "kickback" which can occur when shutting
off the drive current to a motor or relay or solenoid.

My recollection is that the standard used in the automotive industry,
is that electronic devices on a "12-volt" automobile bus should be
designed to survive load-dump spikes of up to 50 volts. A radio
designed for 12 (or 13.8) volt operation, whose finals are fed
fairly directly from the battery supply, may work just fine if the
ignition is off, but could easily fail on its first load-dump event.

Some sort of fast-acting zener protection, followed by an RF choke,
would probably be a good idea when connecting such radios to an
automotive power system.

Unfortunately, a 50-volt load-dump spike could exceed the input-
to-output voltage-differential limit of common regulators such as an
LM317; hence, even if you're using a regulator of this sort to power a
radio intended for 9 volts, you'll probably need an upstream zener to
keep the regulator from popping.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2729. Re: ICOM 02-AT QUESTION

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 18:54:08 UTC
From: Dunkirk <dunkirk@ispwest.com>
Message-ID: <4460E550.7010305@ispwest.com>
Source record: 12181
Cross-posted to: alt.ham-radio.mods,alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Very (perhaps highly) plausible theory -- it's too bad that Icom didn't
learn from Motorola, and create an inexpensive (relatively to their
radio, anyway) vehicular charger for their radios (e.g. 'Convertacom'),
rather than a (potential) built-in self-destruct device.

Dave Platt wrote:
> In article <4460ab9c$0$3697$ecde5a14@news.coretel.net>,
> clfe <Nospam@clfurent.com> wrote:
>
>> At the risk of going off topic, I recall someone mentioning that the RS 2
>> meter portable had an issue almost the same. The jack at the top was
>> "supposed" to be for "vehicular" power - but I heard horror stories of the
>> radio suffering damage when used in just that fashion. IAnd I've seen first
>> hand - a battery pack that got smoked using vehicular power. It almost
>> caught the guy's car on fire since it was near "cloth". I haven't looked at
>> either the radio or schematic for so long - I can't recall exactly what the
>> make-up is. I have though - heard many tales of guys blowing out radios in a
>> vehicle. Hell, our Fire Department Squad Truck radio went out twice in 3
>> months from similar issues. I'm not sure if they actually figured out the
>> exact reason as yet - Motorola and the original installer were to look over
>> the situation. Seems to me, we all need to take an extra step to prevent
>> such things from happening, since we can't rely on the manufacturers to do
>> so. Just my 2 cents.
>
> It would not surprise me much if the failures were due to a "load
> dump" event.
>
> If the alternator is running, and supplying a substantial amount of
> current to a load (e.g. headlights), and the load is suddenly
> disconnected (e.g. headlights turned off), it's not at all uncommon
> for a very impressive voltage spike to be generated. This is due to
> the same sort of inductive "kickback" which can occur when shutting
> off the drive current to a motor or relay or solenoid.
>
> My recollection is that the standard used in the automotive industry,
> is that electronic devices on a "12-volt" automobile bus should be
> designed to survive load-dump spikes of up to 50 volts. A radio
> designed for 12 (or 13.8) volt operation, whose finals are fed
> fairly directly from the battery supply, may work just fine if the
> ignition is off, but could easily fail on its first load-dump event.
>
> Some sort of fast-acting zener protection, followed by an RF choke,
> would probably be a good idea when connecting such radios to an

> automotive power system.
>
> Unfortunately, a 50-volt load-dump spike could exceed the input-
> to-output voltage-differential limit of common regulators such as an
> LM317; hence, even if you're using a regulator of this sort to power a
> radio intended for 9 volts, you'll probably need an upstream zener to
> keep the regulator from popping.
>

2730. Re: ICOM 02-AT QUESTION

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 18:56:14 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <3tudnc5CpNJNeP3ZnZ2dnUVZ_vadnZ2d@rcn.net>
Source record: 12180
Cross-posted to: alt.ham-radio.mods,alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi Dave,

The I was thinking of the 2AT when I penned my response. The 02AT
is quite different. The synthesizer is more integrated, and there
aren't nearly as many crystals as in the 2AT. I am not certain what
the 02AT did for a final.

Assuming it is the same as the 2AT, it is a fairly simple job. You do need a
high wattage soldering iron, so you can solder the transistor quickly.
You should be able to make a few measurements, and determine if the
final is popped.

-Chuck

Dunkirk wrote:
> Hi, Chuck -- thanks for your response...
>
> Chuck Harris wrote:
>
>> Dave Hildebrand wrote:
>>> I have a 22-year old Icom 02-AT that has worked reliably until now, when
>>> it ceased putting out any transmitter power whatsoever.
>>
>> Does it still receive correctly?
>
> ...yes -- the only thing that's changed is that the little bar-graph
> (along the bottom) doesn't appear; as though there were nothing to be
> measured. And, I fell out of the repeater while in QSO (full-quieting),
> having to sign clear on another radio.

2731. Re: ICOM 02-AT QUESTION

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 22:38:34 UTC
From: clifto <clifto@gmail.com>
Message-ID: <a8i7j3-jd9.ln1@remote.clifto.com>
Source record: 12182
Cross-posted to: alt.ham-radio.mods,alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Bert Hyman wrote:
> clifto@gmail.com (clifto) wrote:
>> Chuck Harris wrote:
>>> The usual way of blowing the output transistor in an 02AT is to
>>> use a battery pack that supplies more than 9v, or to try and power
>>> the rig directly from your car battery. ISTR that a short on the
>>> antenna is a third way.
>>
>> I ran mine off the car battery reliably for years. Go figure.
>
> Maybe the OP was thinking of the older IC-2A. One of the battery
> packs for the 2A had a jack for connecting 12V to it, which allowed
> you to run the radio off the battery while it was being charged.
> Applying 12V directly to the radio (only possible by removing the
> battery pack) would fry it.

Yup. I also had a 3A and had to be careful about that.

--
All relevant people are pertinent.
All rude people are impertinent.
Therefore, no rude people are relevant.
-- Solomon W. Golomb

2732. Re: ICOM 02-AT QUESTION

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-09 22:40:43 UTC
From: clifto <clifto@gmail.com>
Message-ID: <bci7j3-jd9.ln1@remote.clifto.com>
Source record: 12183
Cross-posted to: alt.ham-radio.mods,alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Chuck Harris wrote:
> I had a 2AT battery pack catch fire when charging off of the car charger.
> There was no fuse in the power cord, and a wire shorted inside the pack.
> Poof! It ate the wires inside of the pack, and the power cord all the
> way back to the lighter outlet. A fuse would have been a *really good thing*.

I know the Icom batteries I bought with and for the 02AT had a resetting
thermal fuse inside, wired in series with the pack. I used those batteries
with the 3AT; don't know if they originally had different batteries.

--
All relevant people are pertinent.
All rude people are impertinent.
Therefore, no rude people are relevant.
-- Solomon W. Golomb

2733. Re: ICOM 02-AT QUESTION

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-10 01:17:23 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <i86dnZWs2vS0ovzZnZ2dnUVZ_uidnZ2d@rcn.net>
Source record: 12184
Cross-posted to: alt.ham-radio.mods,alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

clifto wrote:
> Chuck Harris wrote:
>> I had a 2AT battery pack catch fire when charging off of the car charger.
>> There was no fuse in the power cord, and a wire shorted inside the pack.
>> Poof! It ate the wires inside of the pack, and the power cord all the
>> way back to the lighter outlet. A fuse would have been a *really good thing*.
>
> I know the Icom batteries I bought with and for the 02AT had a resetting
> thermal fuse inside, wired in series with the pack. I used those batteries
> with the 3AT; don't know if they originally had different batteries.

Yep, but that doesn't help much when the circuitry fails between the connector
and the thermal fuse. Besides, the thermal fuse would only open if the cells
in the pack got too hot... not the 24 gauge wire.

-Chuck

2734. Re: 12 volt plate tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-10 01:47:30 UTC
From: "Clair J. Robinson" <cjr@visi.OH-NO-SPAM-OH.com>
Message-ID: <1262hhjo5oa3l98@corp.supernews.com>
Source record: 12185

cornytheclown@hotmail.com wrote:

> Anybody know any tubes...st or gt shape preferred that will work on 12
> volts plate voltage for small 1 tube regens...possibly a stage or two
> of amplification also.
>
> I know there were automobile radio tubes made that didnt need vibrators
> but dont know any numbers myself.
>

In desperation, I once wired the triode section of a 6U8 into an oscillator circuit that had been designed for one of those 12v space charge tubes. It worked that one time, anyway.

I was replacing a pair of "VHF Triode-Pentode" tubes by Sylvania (I don't remember the type number) in an FM to AM auto radio converter whose performance really sucked. The other three stages were fairly easily re-wired to work off an external 250v supply, but the oscillator didn't look promising. The effort was a success. I think I at least tripled the distance from the stations at which I could hear them.

73, CJ Kï¿½CJ

2735. Re: 12 volt plate tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-10 02:04:48 UTC
From: Bill Turner <dezrat@copper.net>
Message-ID: <eei2625ct8vslhaks9s8sekjild9qvij97@4ax.com>
Source record: 12186

ORIGINAL MESSAGE:

On Tue, 09 May 2006 20:47:30 -0500, "Clair J. Robinson"
<cjr@visi.OH-NO-SPAM-OH.com> wrote:

>In desperation, I once wired the triode section of a 6U8 into an
>oscillator circuit that had been designed for one of those 12v space
>charge tubes. It worked that one time, anyway.

********** REPLY SEPARATOR **********

That reminds me of a fun thing to do when you have too much time on
your hands. Design a tube type oscillator that will work on extremely
low plate voltage. How low can you go? 12 volts is easy. How about
three volts? Or one? Or less?

I'd be interested to hear.

Bill, W6WRT

2736. VFO output power

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-10 06:12:41 UTC
From: aadu.adok@gmail.com
Message-ID: <1147241561.722283.227940@g10g2000cwb.googlegroups.com>
Source record: 12187

hello,

My superhet receiver project is moving on. I have audio amp, BFO, DBM for BFO-IF mixing, MC1350 based IF amplifier, crystal filter, 2N3866 based IF preamp and homebrew diode-ring mixer in front of it.

Now I'm experimenting with VFO, which I choosed to be Hartley osc. As I understood my DBM needs +7dBm from VFO, which should be approx 1.5 volts peak-to-peak.

I assembled my VFO prototype and made some pictures of waveforms from several points in VFO. Please take a look at them at http://www.algonet.se/~adok/aadu/vfo/vfo.html

Here are questions I have, and I hope some clever guy can answer ;)

* why is signal at point 2 not perfect sinusoid as in point 1?
* what are those strange things at the bottom of sine in point3 (secondary winding of broadband transformer)
* why is waveform at point 4 totally messed up?
* am I correct that peak-to-peak voltage at point 4 (VFO output) (204 millivolts) is way too low to drive diode-ring mixer which is connected to VFO output?

what should I do to rise output level. maybe add turns to secondary winding of T1?

I'm very grateful for any ideas/comments.

2737. Re: VFO output power

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-10 10:58:23 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1147258703.349624.318320@j33g2000cwa.googlegroups.com>
Source record: 12188

aadu.adok@gmail.com wrote:
> hello,
>
> My superhet receiver project is moving on. I have audio amp, BFO, DBM
> for BFO-IF mixing, MC1350 based IF amplifier, crystal filter, 2N3866
> based IF preamp and homebrew diode-ring mixer in front of it.
>
> Now I'm experimenting with VFO, which I choosed to be Hartley osc. As I
> understood my DBM needs +7dBm from VFO, which should be approx 1.5
> volts peak-to-peak.
>
> I assembled my VFO prototype and made some pictures of waveforms from
> several points in VFO. Please take a look at them at
> http://www.algonet.se/~adok/aadu/vfo/vfo.html
>
> Here are questions I have, and I hope some clever guy can answer ;)
>
> * why is signal at point 2 not perfect sinusoid as in point 1?
> * what are those strange things at the bottom of sine in point3
> (secondary winding of broadband transformer)
> * why is waveform at point 4 totally messed up?
> * am I correct that peak-to-peak voltage at point 4 (VFO output) (204
> millivolts) is way too low to drive diode-ring mixer which is connected
> to VFO output?
>
> what should I do to rise output level. maybe add turns to secondary
> winding of T1?
>
> I'm very grateful for any ideas/comments.

You never get a sine wave at the input to a DBM, it gets clipped by the diodes. However, there does seem to be something wrong with your buffer as the signal at point 4 doesn't look right. Substitute a 51R resistor for the DBM and check the waveform across it, it should be a clean sine wave at about 1.5 V p-p.

73, Leon

2738. Re: VFO output power

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-10 14:32:46 UTC
From: ricknj10@hotmail.com
Message-ID: <4461f8d7.1654046@news.optonline.net>
Source record: 12189

It is a good idea to build a buffer amplifier after the vfo. If you get more than +7 dbm build a little attenuator between the amplifier and the mixer. That way you get the right amount of drive, a stable load for the vfo, a resistive load for the mixer.

If you want to spare the time, you can send me the vfo and I will look at it on a spectrum analyzer for you and also tell you accurate power level into 50 ohms. I am in NJ.

Rick K2XT

2739. Re: VFO output power

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-10 15:07:13 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1147273633.730071.122950@v46g2000cwv.googlegroups.com>
Source record: 12190

I suspect, without going through a thorough analysis, that the output transformer, T1, has a self-resonance at perhaps 4 times (or 6 times) the oscillation frequency. Does the waveform change noticably when you change the VFO frequency? In addition, the amplifier stages, Q2 and Q3, are most likely being driven too hard to maintain a sinewave at the output. One thing that can mess up the sinewave is too heavy a loading at the output.

You might like to get a Spice program (there's a free one on the Linear Technology web site, as "switcher cad" I think it is, that's very respectable and does full spice, not just switchers), and simulate your circuit. Substitute a sine generator input for your first stage. I would model the transformer first as just an inductor with some parallel stray capacitance, and the output load reflected through the turns ratio across the inductance...that is, 33 ohms * (20/5)^2 = 33*16 ohms.

By the way, one clue I have that the transformer has a significant self resonance is that the waveforms are so different as you move the scope probe around. The scope probe capacitance changes the resonance. It drops it to the lowest frequency when across the primary, and a higher frequency when across the secondary, and has least effect when isolated by the 51 ohm resistor. Also, I just noticed that your schematic is labelled "3MHz VFO" and you are apparently running it at 15+MHz. Your output transformer should perhaps be different for the rather much higher frequency. Is yours like the schematic, or different? And the 2N3904s may well be behaving a bit differently than they would at 3MHz, too. Their hfe (ac current gain) will be noticably less at the higher frequency. Also, your construction technique as shown in the pix will allow for lots of parasitic self-resonances up in the 100+ MHz region, and that could be contributing.

Hope one or more of those random thoughts hits the target...

Cheers,
Tom

2740. Re: VFO output power

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-10 15:27:01 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <jo6dnQ0bNsSnm__ZnZ2dnUVZ_vOdnZ2d@web-ster.com>
Source record: 12191

Rick wrote:

> It is a good idea to build a buffer amplifier after the vfo. If you
> get more than +7 dbm build a little attenuator between the amplifier
> and the mixer. That way you get the right amount of drive, a stable
> load for the vfo, a resistive load for the mixer.
>
> If you want to spare the time, you can send me the vfo and I will look
> at it on a spectrum analyzer for you and also tell you accurate power
> level into 50 ohms. I am in NJ.
>
> Rick K2XT

What are Q2 and Q3 if not a buffer amplifier? Q1 is the VFO proper.
One would hope that Q2 and Q3 don't oscillate at all.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

2741. Re: VFO output power

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-10 15:37:13 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <a9idnRjtw4M_lf_ZnZ2dnUVZ_vqdnZ2d@web-ster.com>
Source record: 12192

aadu.adok@gmail.com wrote:

> hello,
>
> My superhet receiver project is moving on. I have audio amp, BFO, DBM
> for BFO-IF mixing, MC1350 based IF amplifier, crystal filter, 2N3866
> based IF preamp and homebrew diode-ring mixer in front of it.
>
> Now I'm experimenting with VFO, which I choosed to be Hartley osc. As I
> understood my DBM needs +7dBm from VFO, which should be approx 1.5
> volts peak-to-peak.
>
> I assembled my VFO prototype and made some pictures of waveforms from
> several points in VFO. Please take a look at them at
> http://www.algonet.se/~adok/aadu/vfo/vfo.html
>
> Here are questions I have, and I hope some clever guy can answer ;)
>
> * why is signal at point 2 not perfect sinusoid as in point 1?

Harmonic distortion.

> * what are those strange things at the bottom of sine in point3
> (secondary winding of broadband transformer)

Bumps. As K7ITM pointed out your output transformer probably has a
self-resonance, which is excited by harmonics in the incoming signal.
You need a good wideband transformer there, or you need a tuned tank
circuit (which will help suppress those harmonics).

> * why is waveform at point 4 totally messed up?

I'll go with K7ITM's answer.

> * am I correct that peak-to-peak voltage at point 4 (VFO output) (204
> millivolts) is way too low to drive diode-ring mixer which is connected
> to VFO output?

Yes. You need an amplifier with approximately 50 ohms output impedance
that will put 1.4V on the diodes -- less than that and they just won't
turn on.
>
> what should I do to rise output level. maybe add turns to secondary
> winding of T1?
>
> I'm very grateful for any ideas/comments.
>

To raise output level I would work on your buffer/final amplifier.
These things always amplify less than one would want.

I would also change your VFO design a bit. I'd keep the output tap at the hot end of L1, but move the feedback tap to the source of Q1 up to 11 turns or so from the hot end -- the signal that Q1 sees is between it's gate and source, which is huge with your circuit.

Once you've done that you can get a lot more signal to Q2 by bypassing the 10K resistor with a cap. This will load your VFO more, but will get you more power out -- it's a tradeoff you'll have to make one way or another.

If it were me I'd bias Q2 and Q3 separately. The schematic you has saves a few resistors but it makes everything in your output circuit depend on everything else. If you separate your bias circuits then you can design Q2 to be the World's Best Buffer Amplifier then concentrate on making Q3 to be the World's Best Power Amplifier. Sticking a Q4 in there to get the gain up even more may not be a bad idea.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

2742. Re: VFO output power

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-10 15:44:23 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1147275863.902102.8480@j73g2000cwa.googlegroups.com>
Source record: 12193

aadu.adok@gmail.com wrote:
> I assembled my VFO prototype and made some pictures of waveforms from
> several points in VFO. Please take a look at them at
> http://www.algonet.se/~adok/aadu/vfo/vfo.html
>
> Here are questions I have, and I hope some clever guy can answer ;)
>
> * why is signal at point 2 not perfect sinusoid as in point 1?

First of all: at point 1 you're very close to a high-Q tuned circuit.
If you look at the gate of Q1 you will see an even more perfect
sinusoid.

At point 2: You seem to be clipping on the positive peaks. Shifting the
bias of Q2/Q3 let you at least somewhat equalize positive/negative
clipping. I think your Q2/Q3 was designed as a Darlington pair with
some degeneration BUT it looks like there is a poor choice of bias
point. Tweaking resistor values will give you good control over bias
(although if your rig has to run over a wide voltage range you probably
want a very different bias network.)

Suggestion at point 2: going to a push-pull pair will make the clipping
be more symmetrical (e.g. get rid of most of the 2nd harmonic).

At point 2 you're broadband so no high-Q tuned circuit to make things
look like nice fundamental sine waves anymore.

> * what are those strange things at the bottom of sine in point3
> (secondary winding of broadband transformer)

Point 3 is *roughly* an inverted version of what you have at point 2
(this is consistent with the phasing you indicate on the schematic.)
There's a little bit of ringing.

> * why is waveform at point 4 totally messed up?

I think point 4 would be the same as point 3 except for the 51 ohm
resistor in series, right? I think what you're seeing is capacitive
coupling of higher-frequency harmonics around the resistor. Essentially
the resistor/scope probe combination is making a high-pass filter that
makes the signal look worse. If anything, to make the signal look nicer
you want low-pass filtering.

> * am I correct that peak-to-peak voltage at point 4 (VFO output) (204
> millivolts) is way too low to drive diode-ring mixer which is connected
> to VFO output?

It's not ideal, but things will kinda-sorta work with poor performance.

> what should I do to rise output level. maybe add turns to secondary
> winding of T1?

I would change your buffer stages to a couple of class-A WELL-BIASED gain stages. Or go to push-pull. And then add some low-pass to only let the fundamental through.

A trivial example of a CMOS "push-pull" gain stage would be a 74HC04 powered by 5V for example, capacitively coupled into and with DC point set by a 100K etc. resistor from output to input. You'll get nice 5V rail-to-rail trapezoidal (almost square!) waves with this with an output impedance in the low hundreds of ohms. From this you do some low-pass filtering if you want it to look nice, but your mixer may indeed be happier with square waves, and you may indeed want to generate an 180-degree out of phase square wave.

Tim.

2743. Re: Need further info on network analysis terms...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-10 16:37:17 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1147279037.027876.172520@j33g2000cwa.googlegroups.com>
Source record: 12194
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Okay, thanks for that clarification (likewise to others who've chipped in, too).
I'm building up a picture, but it's not so easy in this text-only medium.
Okay, so I think it's overwhelmingly clear that adding or subtracting any electrical length from this "baseline" - (or "reference plain" as I think it's also called) introduces measurement error which must be allowed for/accounted for in some way to maintain accuracy.

Let's say I make up a short and an open using N-type plugs as described elsewhere on this thread, using identical, high quality plugs. Can I then use these with my proprietory Suhner 50 Ohm precision N-type load by calibrating out any differences between the home-made jobs and the proprietory one?
Further, I now know that a "through" is simply that U-shaped patch lead that's often seen sticking out of the front of VNAs in catalogue pictures. I also know that you can't make one of these with zero coax length for obvious reasons. Given the fact then that it has an unavoidable length; does it have to be any *specific* length in relation to the open, short and 50 ohm terminations?
Thanks.

2744. Re: 13.8V high current power supply - update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-10 16:59:36 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1147280376.352051.67700@j73g2000cwa.googlegroups.com>
Source record: 12195

Interesting. There are all sorts of protections one can build into PSUs
of course and it's a job to know where to stop with some of them. I'm
just wondering why there's a need to limit this inrush current. What is
it you're seeking to protect here?

2745. Re: 13.8V high current power supply - update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-10 17:32:50 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1147282370.003175.163900@g10g2000cwb.googlegroups.com>
Source record: 12196

paul@burridge8333.fsbusiness.co.uk wrote:
> Yes sorry, Tim. I should have mentioned that the 25.5VDC is the
> open-circuit voltage across the caps.
> I assume this new drop is do-able because this PSU in its original
> configuration provided 24VDC regulated from 40VDC unreg across the
> caps. That seemed like a hell of a drop without generating heaps of
> heat, but I freely admit my recollection of linear PSU design (like a
> lot of other electronics-related stuff) is very, very hazy.

A MUCH more relevant number would be the average DC voltage and minimum DC voltage across the caps under pretty much full load.

A good dummy load for an unregulated supply is auto bulbs/headlamps in series/parallel as appropriate.

The average DC voltage under full load is very relevant to overall heat dissipation.

The minimum DC voltage (that is, put it on a scope and observe the bottom of the ripple) under full load is very relevant to making sure you have enough headroom for your regulator.

If you don't have a scope you can guess what the ripple is from average DC and rectifier type (half or full wave). Guess won't be far off from reality unless you've got abysmal ESR caps or really really sucky transformer.

As to headroom: Typically for a high-current supply on a 723 chip, there would be a "secondary" supply at higher DC voltage that helped you develop drive to the pass transistor. Without this you need several extra volts headroom.

So far you haven't given us an awful lot to go on :-).

Tim.

2746. TS-940S Sub-Display Fades In and Out

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-10 17:34:15 UTC
From: KC2PIH@gmail.com
Message-ID: <1147282454.997353.45540@i40g2000cwc.googlegroups.com>
Source record: 12197

Hello! I have a 20 million serial# TS-940S (Mint!).
The Sub-Display currently has two problems - I think they are
unrelated - but this is a guess.

1. Ever since I had the radio (4 years ago), the LCD display fades in
and out. The actual black liquid crystal letters fade away almost
completely and then fade back in, randomly. Not related to activating
any function of the radio or temperature. Its almost the effect you
get when viewing the display from an off-angle how the characters
displayed tend to get dimmer. However - I am viewing it straight on
and it changes in intensity. I think there is a contrast adjustment
and its as if that is not holding its value. Need some advice on this
one. I am NOT referring to the light bulbs here - they are both fine
and hold a constant lux. The Kenwood "Erratic LCD" TSB doesn't seem to
fit my problem and I think my 20 million serial number isn't included.

2. The LCD display itself is now (recent) showing just "stars" (all
LCD blocks are lit). None of the display buttons change
what is displayed. I have read elsewhere that this could be from
the internal battery going dead.

I know I should replace the internal battery for starters, but I think
the
fading display is another issue that I would like to troubleshoot
before I order just a battery.

Any and all advice appreciated!

-Scott, WU2X

2747. Re: Need further info on network analysis terms...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-10 17:53:06 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <6Mp8g.70440$F_3.43303@newssvr29.news.prodigy.net>
Source record: 12198
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Paul,

> Okay, so I think it's overwhelmingly clear that adding or subtracting
> any electrical length from this "baseline" - (or "reference plain" as I
> think it's also called) introduces measurement error which must be
> allowed for/accounted for in some way to maintain accuracy.
>

Depends on how much you are talking about. Man often only needs this
much precision ;-)

> Let's say I make up a short and an open using N-type plugs as described
> elsewhere on this thread, using identical, high quality plugs. Can I
> then use these with my proprietory Suhner 50 Ohm precision N-type load
> by calibrating out any differences between the home-made jobs and the
> proprietory one?

Let me describe what the three cal devices look like that came with our
HP4191A (after all, this is the stuff that Hewlett-Packard has deemed
acceptable):

The "Short" is a flat nut with a closed end. It puts a flat plate
directly across the face of the DUT connector. No length there.

The "Open" is a longer threaded tube with a hollow inside, about an inch
or so long and closed off at the far end.

The "50 Ohm" is something I wasn't able to open w/o special tools but
will some day. It looks like the resistor is about 1/2" to 3/4" up there
from the DUT connector surface, firmly encapsulated.

All gold-plated, of course.

> Further, I now know that a "through" is simply that U-shaped patch lead
> that's often seen sticking out of the front of VNAs in catalogue
> pictures. I also know that you can't make one of these with zero coax
> length for obvious reasons. Given the fact then that it has an
> unavoidable length; does it have to be any *specific* length in
> relation to the open, short and 50 ohm terminations?

The HP4191A has that, too. It needs to match the length that makes the
DUT and ref path equal. The one on the HP4191A is about 1-1/2" for a
zero length on the DUT. In order for the analyzer to be useful in
settings where the DUT has to be a bit remote, like in a vacuum chamber,
you can remove a little face plate, remove the "through" and install
your own longer "through". It's made from rigid coax.

Regards, Joerg

http://www.analogconsultants.com

2748. Re: Quadrature Hybrid Construction

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-10 18:23:48 UTC
From: Radra <radra@adelphia.net>
Message-ID: <1147285428.479910.292470@i40g2000cwc.googlegroups.com>
Source record: 12199

I am attempting to contact the author of that paper, G. W. Horn (I4MK), to see if he will permit me to publish his paper on the web for a few months. If I am successful, I will post the web link on this list.

I have another paper which may be of interest: "A Broadband Quadrature Coupler", Microwave Journal, May 1983, pp. 216-219. The authors employ a pair of four-port directional couplers and a balun. Now all I have to do is figure out how to construct a four-port directional coupler for the 0.5-2.0 MHz band!

Vinton

2749. Re: 13.8V high current power supply - update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-10 21:25:20 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e3tlo2rvq1@avnika.corp.mot.com>
Source record: 12201

One is that to properly fuse it, you can't have an excessive in-russ, or
you'll need a really big fuse and it might be too big to protect the smoke
hinside.
Another is that you reqally don't want to pound either the diodes or the
filter caps if you don't have to.

73, Steve, K9DCI

<paul@burridge8333.fsbusiness.co.uk> wrote in message
news:1147280376.352051.67700@j73g2000cwa.googlegroups.com...
> Interesting. There are all sorts of protections one can build into PSUs
> of course and it's a job to know where to stop with some of them. I'm
> just wondering why there's a need to limit this inrush current. What is
> it you're seeking to protect here?
>

2750. Re: 13.8V high current power supply - update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-10 21:26:55 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e3tlqvrvt1@avnika.corp.mot.com>
Source record: 12202

Paul,

If you didn't understand where I was going, Tim's is a good summary of my original post.

73, Steve, K9DCI

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message news:1147282370.003175.163900@g10g2000cwb.googlegroups.com...
> paul@burridge8333.fsbusiness.co.uk wrote:
> > Yes sorry, Tim. I should have mentioned that the 25.5VDC is the
> > open-circuit voltage across the caps.
> > I assume this new drop is do-able because this PSU in its original
> > configuration provided 24VDC regulated from 40VDC unreg across the
> > caps. That seemed like a hell of a drop without generating heaps of
> > heat, but I freely admit my recollection of linear PSU design (like a
> > lot of other electronics-related stuff) is very, very hazy.
>
> A MUCH more relevant number would be the average DC voltage and minimum
> DC voltage across the caps under pretty much full load.
>
> A good dummy load for an unregulated supply is auto bulbs/headlamps in
> series/parallel as appropriate.
>
> The average DC voltage under full load is very relevant to overall heat
> dissipation.
>
> The minimum DC voltage (that is, put it on a scope and observe the
> bottom of the ripple) under full load is very relevant to making sure
> you have enough headroom for your regulator.
>
> If you don't have a scope you can guess what the ripple is from
> average DC and rectifier type (half or full wave). Guess won't be far
> off from reality unless you've got abysmal ESR caps or really really
> sucky transformer.
>
> As to headroom: Typically for a high-current supply on a 723 chip,
> there would be a "secondary" supply at higher DC voltage that helped
> you develop drive to the pass transistor. Without this you need several
> extra volts headroom.
>
> So far you haven't given us an awful lot to go on :-).
>
> Tim.
>

2751. Re: Need further info on network analysis terms...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-10 21:47:20 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1147297640.551680.305260@i40g2000cwc.googlegroups.com>
Source record: 12200
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Okay, thanks for that description. I'm pleased to hear your standards
are all different lengths to such a degree that it's apparent by visual
inspection. Hope for mine yet, then!
I guess I could check the accuracy of the short and open I fabricate by
reference to the known good 50 ohm standard? For example, say I begin
with the 50 ohm load and calibrate so I get a single spot dead in the
center of the screen.
If I then substitute the short and the open in turn I would expect to
see that spot shift to the far left then the far right edge of the
Smith chart overlay. If it doesn't do so and deviates to any extent
from these ideals across the whole frequency range, then I've screwed
up their construction. Does that make sense?

2752. Re: 13.8V high current power supply - update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-10 21:56:20 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1147298180.874554.20550@i40g2000cwc.googlegroups.com>
Source record: 12203

Okay Tim, thanks. I'm not short of test equipment; only the savvy to
use much of it. ;-)
Seriously, in this instance I can easily measure the ripple nadir under
full load - if I can source some headlamps from someplace. This may
take a few days so I'll report back in due course.

2753. Re: 13.8V high current power supply - update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-11 08:35:57 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <4rt562pa8vn5frfk7t8medr0nr3dhhvuqn@4ax.com>
Source record: 12204

On Thu, 11 May 2006 01:04:23 GMT, Allisonnospam@nouce.bellatlantic.net wrote:

>Limiting inrush current is mostly to protect the diodes as the first
>charge the caps. For the first few ac cycles those caps look like a
>dead short or mightly close. Under those conditions the diodes have
>to stand the short circuit current the transformer can provide which
>can easily exceed diode rating if care is not taken.

Also if a toroid mains transformer is used, the transformer start-up current can be huge for a large (say 1 kVA) transformer, which could harm the house wiring or burn the fuses in the main distribution panel.

Depending at what mains cycle phase angle the transformer was previously disconnected and on what phase angle it is reconnected to the mains, the start-up peak can be insignificant or the current can be huge, which is limited just by the copper resistance of the primary.

Paul OH3LWR

2754. Re: 13.8V high current power supply - update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-11 14:39:40 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <QcudndvWjuI_0f7ZRVnyrg@pipex.net>
Source record: 12205

>>> Limiting inrush current is mostly to protect the diodes as the first
>>> charge the caps. For the first few ac cycles those caps look like a
>>> dead short or mightly close. Under those conditions the diodes have
>>> to stand the short circuit current the transformer can provide which
>>> can easily exceed diode rating if care is not taken.
>> Also if a toroid mains transformer is used, the transformer start-up
>> current can be huge for a large (say 1 kVA) transformer, which could
>> harm the house wiring or burn the fuses in the main distribution
>> panel.
>>
>
> As far as harming house fuses or wiring, here in the USA and I'd bet
> most elsewhere the electrical codes provide for time delay fuses
> for surge loads and house wiring that is sufficently robust to
> withstand the rated current of the distribution fuses. That should
> not be an issue and the power supply should have it's own fusing.
> It could be a nusance if the power supply has a massive enough
> surge to open the mains fuse but there is not safety issue unless
> the mains fuse or wiring is improper.
==========
When switching on an Astron 13.8 V - 50 Amperes PSU ,the surge current is that high that it (usually)trips the mains 'over-current breaker ' in the switchboard. I shall now include a soft start facility (resistor in 230V supply) which is by-passed as soon as DC output is established.

Talking about 'mains fuses' : In Britain and many other European countries most (modern) domestic supply boards no longer have traditional (melting) wire fuses but (resettable) fast acting 'over current' cut-out devices .
There are 100 Amperes wire fuses in each phase of the incoming supply cable ,but these can only be replaced by the electricity supply company ,since these fuses are each fitted inside a separate 'wired-lead-sealed' box.

BTW the over-current breakers are separate from earth leak detection cut-out devices ,officially called residual current detectors (RCDs).

Frank GM0CSZ / KN6WH

2755. Re: 13.8V high current power supply - update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-11 18:18:56 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <126701f6kpcp691@corp.supernews.com>
Source record: 12206

Paul Keinanen wrote:
>
> Also if a toroid mains transformer is used, the transformer start-up
> current can be huge for a large (say 1 kVA) transformer, which could
> harm the house wiring or burn the fuses in the main distribution
> panel.
>
> Depending at what mains cycle phase angle the transformer was
> previously disconnected and on what phase angle it is reconnected to
> the mains, the start-up peak can be insignificant or the current can
> be huge, which is limited just by the copper resistance of the
> primary.

This might be a good time to mention that light bulbs, which I've seen recommended here as a test load, have a resistance when cold that's only about a tenth their resistance when hot. So you'll get some pretty awesome current when you first connect one. A supply with foldback current limiting probably won't light one at all unless the voltage is raised slowly.

Roy Lewallen, W7EL

2756. TCXO Substitution?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-11 18:49:10 UTC
From: KC2PIH@gmail.com
Message-ID: <1147373350.498396.182210@i39g2000cwa.googlegroups.com>
Source record: 12207

I have been searching for a Kenwood SO-1 temperature compensated crystal oscillator for the last 4 years. When I did find them (eBay), they went for a fortune because I must not be the only looking for one. I believe the SO-1 runs at 20Mhz...are there other units that could be substituted? I believe the Kenwood SO-2, with also runs at 20Mhz, is still available. Can the SO-2 be wired in place of the SO-1? Or is there more to it than that?

Thanks,
Scott, WU2X

2757. Re: 13.8V high current power supply - update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-11 18:52:40 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <e4015o$c5s$3@puck.litech.org>
Source record: 12208

Roy Lewallen <w7el@eznec.com> wrote:

> This might be a good time to mention that light bulbs, which I've seen
> recommended here as a test load, have a resistance when cold that's only
> about a tenth their resistance when hot. So you'll get some pretty
> awesome current when you first connect one. A supply with foldback
> current limiting probably won't light one at all unless the voltage is
> raised slowly.

That's a cool thing to know.

Hmmmm ...

Bobbie Barmore was discussing IOT power supplies and their crowbars on
the GowBugs list a few months back. Seems that the test to see if the
crowbar's good is pretty simple:

1) Turn everything off
2) Safety tag and padlock all the breakers and the START switch
3) Ground everything that even might think about biting
4) Put a piece of (?) 32-gauge wire between HV and ground.
5) Pull the shorting sticks, button everything up, unlock and
untag the breakers, untag the START switch
6) Make sure everyone's clear and safe
7) Push the START switch

The power supply's good for something like 700 mA at 35 KVDC, and it is
a _really_ bad idea to get across it if you might pass less than abount
700 mA. But the wire's good for more than 700 mA, and so will look like a
short to the PS.

If the wire melts, vaporizes, or explodes, then the crowbar circuit is bad.
It should be unaffected by the test. Put 35 KV across a piece of 32ga wire
without blowing it up.

Hydrogen thyratrons to dump the power, and fast-acting circuit breakers to
Shut Things Down NOW, appear to be the way to protect the wire from the PS.
Fascinating technology.

Homebrew _that_.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

2758. Re: TCXO Substitution?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-11 19:57:27 UTC
From: dplatt@radagast.org
Message-ID: <12675p7pbagk02d@corp.supernews.com>
Source record: 12209

In article <1147373350.498396.182210@i39g2000cwa.googlegroups.com>,
<KC2PIH@gmail.com> wrote:

>I have been searching for a Kenwood SO-1 temperature compensated
>crystal oscillator for the last 4 years. When I did find them (eBay),
>they went for a fortune because I must not be the only looking for one.
> I believe the SO-1 runs at 20Mhz...are there other units that could be
>substituted? I believe the Kenwood SO-2, with also runs at 20Mhz, is
>still available. Can the SO-2 be wired in place of the SO-1? Or is
>there more to it than that?

Perhaps check out http://www.icmfg.com/tcxofaqs.html and see if they
make a TXCO which is suitable, or can be adapted to work with the
supply voltages and output-signal requirements of whatever piece of
(Kenwood?) equipment you plan to use this with? They say that their
TXCOs are available at frequencies of up to 20 MHz, as standard items,
and that higher frequencies may be available.

There are probably other manufacturers of TXCOs that you could adapt.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2759. Re: TCXO Substitution?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-11 20:43:20 UTC
From: w2aew <w2aew@yahoo.com>
Message-ID: <1147380200.511783.261050@j33g2000cwa.googlegroups.com>
Source record: 12210

KC2PIH@gmail.com wrote:
> I have been searching for a Kenwood SO-1 temperature compensated
> crystal oscillator for the last 4 years. When I did find them (eBay),
> they went for a fortune because I must not be the only looking for one.
> I believe the SO-1 runs at 20Mhz...are there other units that could be
> substituted? I believe the Kenwood SO-2, with also runs at 20Mhz, is
> still available. Can the SO-2 be wired in place of the SO-1? Or is
> there more to it than that?
>
> Thanks,
> Scott, WU2X

Scott, the SO-2 runs at 10MHz, so it wouldn't be a substitute for the
SO-1 (if the SO-1 is 20MHz).

2760. Re: TCXO Substitution?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-11 21:10:58 UTC
From: KC2PIH@gmail.com
Message-ID: <1147381858.912160.188940@j73g2000cwa.googlegroups.com>
Source record: 12211

I thought the SO-2 was 20Mhz: See:

http://home.computer.net/~pritch/images/so2hole.jpg

That is the source of my SO-2 info. The Kenwood TS-940S service manual specifies the ocillating frequency of the the SO-1 as "20 Mhz".

-Scott, WU2X

2761. Re: 13.8V high current power supply - update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-11 23:24:58 UTC
From: Straydog <asd@panix.com>
Message-ID: <Pine.NEB.4.63.0605111918370.20609@panix1.panix.com>
Source record: 12212

On Thu, 11 May 2006, Mike Andrews wrote:

> Roy Lewallen <w7el@eznec.com> wrote:
>
>> This might be a good time to mention that light bulbs, which I've seen
>> recommended here as a test load, have a resistance when cold that's only
>> about a tenth their resistance when hot. So you'll get some pretty
>> awesome current when you first connect one. A supply with foldback
>> current limiting probably won't light one at all unless the voltage is
>> raised slowly.
>
> That's a cool thing to know.

FYI, vacuum tube filaments show the same thing. Lower ohms when cold.

More below...

> Hmmmm ...
>
> Bobbie Barmore was discussing IOT power supplies and their crowbars on
> the GowBugs list a few months back. Seems that the test to see if the
> crowbar's good is pretty simple:
>
> 1) Turn everything off
> 2) Safety tag and padlock all the breakers and the START switch
> 3) Ground everything that even might think about biting
> 4) Put a piece of (?) 32-gauge wire between HV and ground.
> 5) Pull the shorting sticks, button everything up, unlock and
> untag the breakers, untag the START switch
> 6) Make sure everyone's clear and safe
> 7) Push the START switch
>
> The power supply's good for something like 700 mA at 35 KVDC, and it is
> a _really_ bad idea to get across it if you might pass less than abount
> 700 mA. But the wire's good for more than 700 mA, and so will look like a
> short to the PS.
>
> If the wire melts, vaporizes, or explodes, then the crowbar circuit is bad.
> It should be unaffected by the test. Put 35 KV across a piece of 32ga wire
> without blowing it up.
>
> Hydrogen thyratrons to dump the power, and fast-acting circuit breakers to
> Shut Things Down NOW, appear to be the way to protect the wire from the PS.
> Fascinating technology.
>

> Homebrew _that_.

35 KV at 700 ma? Exploding wires might not dump all the charge (what size capacitor?). Maybe need 2-3 dozen carbon resistors in series with a milliamp meter to monitor remaining voltage?

> --
> Mike Andrews, W5EGO
> mikea@mikea.ath.cx
> Tired old sysadmin
>

2762. Re: 13.8V high current power supply - update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-12 05:48:44 UTC
From: clifto <clifto@gmail.com>
Message-ID: <s6kdj3-30g.ln1@remote.clifto.com>
Source record: 12213

Allisonnospam@nouce.bellatlantic.net wrote:
> Limiting inrush current is mostly to protect the diodes as the first
> charge the caps. For the first few ac cycles those caps look like a
> dead short or mightly close. Under those conditions the diodes have
> to stand the short circuit current the transformer can provide which
> can easily exceed diode rating if care is not taken.

That's what was cool about choke-input filters. Hmmm, wonder if I have
a 100 mH, 100A choke in the junkbox...

--
All relevant people are pertinent.
All rude people are impertinent.
Therefore, no rude people are relevant.
-- Solomon W. Golomb

2763. Re: VFO output power

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-12 06:25:04 UTC
From: aadu.adok@gmail.com
Message-ID: <1147415104.249154.15630@j33g2000cwa.googlegroups.com>
Source record: 12214

ok,

I replaced my buffer stages with a single class-A stage (used the same 2N3904). I even used the same broadband transformer. Good looking 4v p-p sine appeared on secondary winding. After adding 6db attenuator I finally got my 1.5 volts p-p going towards diode-ring mixer..

thanks guys!

2764. Want Yaesu schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-12 07:00:01 UTC
From: Roberto IZ5FCY <iz5fcy_NOSPAMPLEASE_@arrl.net>
Message-ID: <1ruoygoftx29z.147wtdg4twq27$.dlg@40tude.net>
Source record: 12215

Hi to everyone,
I'm looking for the Yaesu FTV-1000 6m Transverter schematic.
Can you send me a copy?
Many thanks in advance.
--
73's de IZ5FCY Roberto

2765. Re: VFO output power

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-12 08:36:34 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1147422994.686895.74930@j73g2000cwa.googlegroups.com>
Source record: 12216

aadu.adok@gmail.com wrote:
> ok,
>
> I replaced my buffer stages with a single class-A stage (used the same
> 2N3904). I even used the same broadband transformer. Good looking 4v
> p-p sine appeared on secondary winding. After adding 6db attenuator I
> finally got my 1.5 volts p-p going towards diode-ring mixer..
>
> thanks guys!

I can't really see why the original buffer didn't work properly, it's a
circuit from the Handbook which I've used without any problems. I think
I simulated it to make sure it's OK.

Leon

2766. Re: VFO output power

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-12 08:44:31 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1268ioekr9pcl8b@corp.supernews.com>
Source record: 12217

aadu.adok@gmail.com wrote:
> ok,
>
> I replaced my buffer stages with a single class-A stage (used the same
> 2N3904). I even used the same broadband transformer. Good looking 4v
> p-p sine appeared on secondary winding. After adding 6db attenuator I
> finally got my 1.5 volts p-p going towards diode-ring mixer..
>
> thanks guys!

I usually try to make my buffer output impedance 50 ohms (which you should have from the attenuator assuming it's a 50 ohm attenuator), and about 2.5 volts p-p open circuit (when not connected to the mixer). This makes sure the mixer diodes get turned on good and hard. When connected to the mixer, you should see a squarish waveform, not just a slightly flattened sine wave.

Roy Lewallen, W7EL

2767. Re: VFO output power

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-12 11:00:11 UTC
From: aadu.adok@gmail.com
Message-ID: <1147431611.429264.160840@i39g2000cwa.googlegroups.com>
Source record: 12218

Should I add a low pass chebyshev filter between VFO and mixer?
I mean - does it give real benefit (or only in theory)?

2768. Re: VFO output power

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-12 11:51:28 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1147434688.161592.212690@g10g2000cwb.googlegroups.com>
Source record: 12219

Leon wrote:
> aadu.adok@gmail.com wrote:
> > ok,
> >
> > I replaced my buffer stages with a single class-A stage (used the same
> > 2N3904). I even used the same broadband transformer. Good looking 4v
> > p-p sine appeared on secondary winding. After adding 6db attenuator I
> > finally got my 1.5 volts p-p going towards diode-ring mixer..
> >
> > thanks guys!
>
> I can't really see why the original buffer didn't work properly, it's a
> circuit from the Handbook which I've used without any problems. I think
> I simulated it to make sure it's OK.

It looks like a degenerated darlington pair (with some "pull-down" to
help clear out base charge) to me. Lots of isolation between in and out
I'm sure, but really class C into a broadband transformer which means
you'll get lots of harmonics out.

Tim.

2769. Re: VFO output power

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-12 13:39:25 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1147441165.102031.34280@d71g2000cwd.googlegroups.com>
Source record: 12220

aadu.adok@gmail.com wrote:
> Should I add a low pass chebyshev filter between VFO and mixer?
> I mean - does it give real benefit (or only in theory)?

If the harmonics are coming in such that they make the LO injection look asymmetrical, then they could be bad and should be eliminated.

Harmonics that are fairly symmetrical (e.g. odd multiples of the fundamental) are not so bad.

Front end selectivity ahead of the mixer will matter some.

Any parasitic oscillations (e..g. things that look like spikes at certain points in the waveform possibly due to resonances/"ringing" in active or passive devices or parasitics) are very bad and can cause broadband noise that even your chebyshev low-pass will have a hard time removing. Making sure that all the buffers are firmly biased in class A will help make sure you don't have any parasitics to begin with. If you've got parasitics in your LO chain then no amount of filtering will help!

Tim.

2770. Re: VFO output power

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-12 13:42:59 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1147441379.706346.53680@d71g2000cwd.googlegroups.com>
Source record: 12221

Tim Shoppa wrote:
> Leon wrote:
> > aadu.adok@gmail.com wrote:
> > > ok,
> > >
> > > I replaced my buffer stages with a single class-A stage (used the same
> > > 2N3904). I even used the same broadband transformer. Good looking 4v
> > > p-p sine appeared on secondary winding. After adding 6db attenuator I
> > > finally got my 1.5 volts p-p going towards diode-ring mixer..
> > >
> > > thanks guys!
> >
> > I can't really see why the original buffer didn't work properly, it's a
> > circuit from the Handbook which I've used without any problems. I think
> > I simulated it to make sure it's OK.
>
> It looks like a degenerated darlington pair (with some "pull-down" to
> help clear out base charge) to me. Lots of isolation between in and out
> I'm sure, but really class C into a broadband transformer which means
> you'll get lots of harmonics out.

It's an ordinary DC-coupled pair circuit, there shouldn't be any
distortion. I've used something similar as a microphone amplifier.

Leon

2771. Re: VFO output power

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-12 14:01:43 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1147442503.583641.252230@u72g2000cwu.googlegroups.com>
Source record: 12222

Leon wrote:
> > It looks like a degenerated darlington pair (with some "pull-down" to
> > help clear out base charge) to me. Lots of isolation between in and out
> > I'm sure, but really class C into a broadband transformer which means
> > you'll get lots of harmonics out.
>
> It's an ordinary DC-coupled pair circuit, there shouldn't be any
> distortion. I've used something similar as a microphone amplifier.

It may have been the intention for there to be little distortion but
the waveforms really make it look like it was being driven into cutoff
(the flat-topping at point 2).

Even though it was being driven into cutoff the amplitudes are still
small so something is out of whack with biasing. Maybe there was
supposed to be a blocking capacitor in series with the 10K on Q2's
base.

Tim.

2772. 15-->>28 MAY - BIG TSUNAMI ATLANTIC !!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-12 14:57:35 UTC
From: SATURNE <APACHE9999@caramail.com>
Message-ID: <1147445855.434154.98410@d71g2000cwd.googlegroups.com>
Source record: 12223

15-->>28 MAY - BIG TSUNAMI ATLANTIC !!!!!!

http://www.savelivesinmay.com/

TRANSLATION FRENCH -->> ENGLISH
http://translate.google.com/translate_t
http://www.erenouvelle.com/newsrazm.php
http://www.erenouvelle.com/newsraz2.php
http://www.erenouvelle.com/newsraz3.php

LOVE AND PEACE
MCE

2773. REALISTIC DX-302 HAM-SHORTWAVE RECEIVER-MINT-$150

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-12 16:06:15 UTC
From: "DesertBob Jr." <winchester1886@hotmail.com>
Message-ID: <1147449975.823534.261070@j33g2000cwa.googlegroups.com>
Source record: 12224

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=9724283116&rd=1&sspagename=STRK%3AMESE%3AIT&rd=1

DX-302 REALISTIC SHORTWAVE RECEIVER..MANUFACTURED IN THE EARLY 1980'S..THE DX-302 SELECTIVITY SWITCH IS A TRUE IF FILTER WITH WIDE AND NARROW..WILL ALSO RUN ON BATTERY POWER..HAS A PRESELECTOR TUNE SWITCH..30 BANDS OF 1MHZ ON THE INNER TUNING DIAL..AND THE OUTER TUNING DIAL TUNES EVERY 1 KHZ...RECEIVES FROM 050 KHZ THROUGH 30 MHZ..HAS ATTEN SWITCH TO CUT DOWN STRONG SIGNALS..AND BFO PITCH FOR LSB/USB/CW...RF GAIN AND AF GAIN/POWER SWITCH..HEADPHONE JACK AND COAX AND SCREW TYPE ANTENNA CONNECTOR..THIS RECEIVER IS IN MINT LIKE NEW CONDITION.NO SCRATCHES OR OTHER PROBLEMS WITH IT. .READOUT IS BRIGHT RED AND ALL LIGHTS ARE IN WORKING ORDER AND DIALS TURN FREELY.

This is a communications receiver that covers 10kc - 30 mc in 1 mc bands. This radio is in MINT condition. Original knobs, crisp lettering, cabinet and front panel are excellent. Rear battery box is complete with battery tubes. Large red LED readout, wide and narrow selectivity, AM/SSB/CW capable and much more make this a fun receiver. Original cabinet paint is PERFECT.

2774. Buy and Sell Tube Gear!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-12 18:42:30 UTC
From: "Jeff James, W2NBC" <w2nbc@optonline.net>
Message-ID: <rG49g.37$KQ3.13@fe11.lga>
Source record: 12225

The Boatanchor Classifieds
http://www.dealamerica.com/deal/cgi-bin/ads/bcads.cgi
Dedicated to Vintage Amateur Radio..

2775. Re: VFO output power

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-12 18:45:17 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1147459517.215074.271460@g10g2000cwb.googlegroups.com>
Source record: 12226

Allisonnospam@nouce.bellatlantic.net wrote:
> The bias point is non optimum, nearly class C whenit sould be class A
> with the total collector current in the 8-15ma range.

I agree that the circuit as built exhibited class C behavior in the buffer. My guesstimate is like 40% of the cycle has conduction.

But the same identical circuit has been floating around for at least a decade and has supposedly been built into many many different varities of rigs with great success.

I'm wondering if one or more of the following is true:

1) For most applications it doesn't matter that the buffer is running class C
2) If the circuit's bias is insensitive to normal variations in real transistors
3) If "bad luck" out-of-nominal-tolerance transistors contribute to the particular example built and scoped out.

Leon said he simulated it (SPICE?) and it worked OK there but a single simulation using nominal transistor parameters is hardly enough to guarantee real-world bias being stable.

My reaction to finding the buffer only in conduction for less than half a cycle would've been similar to yours, Allison, with maybe more brute force and a little less finesse in trying different resistor values :-).

Tim.

2776. FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-12 19:12:04 UTC
From: glenron@ntlworld.com
Message-ID: <8659g.23076$mX1.20976@newsfe2-gui.ntli.net>
Source record: 12227
Cross-posted to: alt.electronics.manufacture.circuitboard,alt.engineering.electrical,aus.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.equipment,uk.radio.amateur

FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus

The shipping with online verification is expensive from the uk .N But this equipmenst may be worth it if you bid right !!

http://cgi.ebay.co.uk/ws/eBayISAPI.dll?ViewItem&rd=1&item=7618143523

emial me on glenron@ntlworld.com

2777. Re: 15-->>28 MAY - BIG TSUNAMI ATLANTIC !!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-12 20:49:56 UTC
From: "John L. Sielke" <w2agnNOSPAM@w2agn.net>
Message-ID: <mqWdneOlI7BtafnZRVn-rA@comcast.com>
Source record: 12228

SATURNE wrote:
> 15-->>28 MAY - BIG TSUNAMI ATLANTIC !!!!!!
>
> http://www.savelivesinmay.com/
>
>
> TRANSLATION FRENCH -->> ENGLISH
> http://translate.google.com/translate_t
> http://www.erenouvelle.com/newsrazm.php
> http://www.erenouvelle.com/newsraz2.php
> http://www.erenouvelle.com/newsraz3.php
>
>
> LOVE AND PEACE
> MCE
>
Another Frenchman looking for someone to surrender to!

2778. Re: FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-12 23:48:40 UTC
From: Roger <Delete-Invallid.stuff.groups@tm.net>
Message-ID: <mf7a62lskgb745tiq7g4bs0bpnmpd9hl6j@4ax.com>
Source record: 12229
Cross-posted to: alt.electronics.manufacture.circuitboard,alt.engineering.electrical,aus.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.equipment,uk.radio.amateur

On Fri, 12 May 2006 19:12:04 GMT, <glenron@ntlworld.com> wrote:

>FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus
>
>The shipping with online verification is expensive from the uk .N But this
>equipmenst may be worth it if you bid right !!
>
>http://cgi.ebay.co.uk/ws/eBayISAPI.dll?ViewItem&rd=1&item=7618143523

At one time I had several rack mount Kiethley's in the 600 series but
their imput impedance was extremely high. I don't remember the numbers
now but they were far higher than normal VTVMs. We workd with
resistances where a fingerprint on the tubes (they used pencil tubes)
could mess up the readings.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com

>
>emial me on glenron@ntlworld.com
>

2779. Re: REALISTIC DX-302 HAM-SHORTWAVE RECEIVER-MINT-$150

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-13 14:01:11 UTC
From: NudoSmasher <thenudofamily@epix.net>
Message-ID: <ljpb629d65hcvh28575f1ho1c3cfb6v2iq@4ax.com>
Source record: 12230
Cross-posted to: rec.radio.amateur.homebrew,fr.rec.radio.amateur,nl.radio.amateur,rec.radio.shortwave,alt.collecting.8-track-tapes

On 12 May 2006 at 09:09:07 -700, "Charlie Nudo"
<nativebrookie@hotmail.com> spammed:

http://cgi.ebay<snip>

STOP THIS SPAMMER!

Google Groupers:

Click on "Show Options," click on "Show Original," cut and paste the
whole message including headers, and send in a spam complaint to:

groups-abuse"AT"google.com
abuse"AT"epix.net
spam"AT"ebay.com (Spammer's eBay account is "66fourdoor")

This spammer shows up under various trash (MAPI) email accounts:

trippin28track"AT"yahoo.com
winchester1886"AT"hotmail.com
nativebrookie"AT"hotmail.com

Due to Google Groups shutting down some of his other MAPI accounts,
the fool is now also spamming from his own POP3 accounts:

analog"AT"epix.net
bb69"AT"epix.net

His home ISP is Epix. His main POP3 account is
thenudofamily"AT"epix.net. ALL his spam eminates from Epix IP blocks.

Those using real newsreaders will already know what to do with this
spamming pest and eBay fraudster. His spam posts are a violation of
eBay's Terms of Service pertaining to Usenet Policy. Be sure to
include that in your report to eBay.

2780. Re: REALISTIC DX-302 HAM-SHORTWAVE RECEIVER-MINT-$150

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-13 15:28:55 UTC
From: Runge <philsa@bigfoot.com>
Message-ID: <4465fa8e$0$21282$8fcfb975@news.wanadoo.fr>
Source record: 12231
Cross-posted to: rec.radio.amateur.homebrew,fr.rec.radio.amateur,nl.radio.amateur,rec.radio.shortwave,alt.collecting.8-track-tapes

Duh

"NudoSmasher" <thenudofamily@epix.net> a crit dans le message de news:
ljpb629d65hcvh28575f1ho1c3cfb6v2iq@4ax.com...
> On 12 May 2006 at 09:09:07 -700, "Charlie Nudo"
> <nativebrookie@hotmail.com> spammed:
>
> http://cgi.ebay<snip>
>
> STOP THIS SPAMMER!
>
> Google Groupers:
>
> Click on "Show Options," click on "Show Original," cut and paste the
> whole message including headers, and send in a spam complaint to:
>
> groups-abuse"AT"google.com
> abuse"AT"epix.net
> spam"AT"ebay.com (Spammer's eBay account is "66fourdoor")
>
> This spammer shows up under various trash (MAPI) email accounts:
>
> trippin28track"AT"yahoo.com
> winchester1886"AT"hotmail.com
> nativebrookie"AT"hotmail.com
>
> Due to Google Groups shutting down some of his other MAPI accounts,
> the fool is now also spamming from his own POP3 accounts:
>
> analog"AT"epix.net
> bb69"AT"epix.net
>
> His home ISP is Epix. His main POP3 account is
> thenudofamily"AT"epix.net. ALL his spam eminates from Epix IP blocks.
>
> Those using real newsreaders will already know what to do with this
> spamming pest and eBay fraudster. His spam posts are a violation of
> eBay's Terms of Service pertaining to Usenet Policy. Be sure to
> include that in your report to eBay.

2781. Re: REALISTIC DX-302 HAM-SHORTWAVE RECEIVER-MINT-$150

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-13 16:21:07 UTC
From: Fatts Proffitt <nativebrookie@hotmail.com>
Message-ID: <1147537267.177063.105370@i40g2000cwc.googlegroups.com>
Source record: 12232
Cross-posted to: rec.radio.amateur.homebrew,fr.rec.radio.amateur,nl.radio.amateur,rec.radio.shortwave,alt.collecting.8-track-tapes

Duh...read my blog

http://blog.myspace.com/index.cfm?fuseaction=blog&Mytoken=89DF4CC2-15C1-4555-AA11E82453582A2F710049406

2782. SPRING SALE-SW/HAM RADIO-PA SYSTEM AMP-TAPES-ANTIQUES-LP'S-MORE-$$$$$$$$$$$

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-13 16:22:55 UTC
From: Fatts Proffitt <nativebrookie@hotmail.com>
Message-ID: <1147537375.398284.102060@i39g2000cwa.googlegroups.com>
Source record: 12233
Cross-posted to: rec.radio.amateur.homebrew,fr.rec.radio.amateur,nl.radio.amateur,rec.radio.shortwave,alt.collecting.8-track-tapes

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZ66fourdoor

2783. Re: REALISTIC DX-302 HAM-SHORTWAVE RECEIVER-MINT-$150

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-13 16:33:53 UTC
From: Fatts Proffitt <nativebrookie@hotmail.com>
Message-ID: <1147538033.846260.314890@d71g2000cwd.googlegroups.com>
Source record: 12234
Cross-posted to: rec.radio.amateur.homebrew,fr.rec.radio.amateur,nl.radio.amateur,rec.radio.shortwave,alt.collecting.8-track-tapes

http://login.myspace.com/index.cfm?fuseaction=login&nextPage=fuseaction%3Dblog%2EblogringMembers%26BlogringID%3D295258%26Mytoken%3D9B6555F6%2D2683%2D4582%2D8AD67CD9C215900E799279265

2784. Re: TS-940S Sub-Display Fades In and Out

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-13 16:43:54 UTC
From: "g. beat"
Message-ID: <koudnRK8h9pQkfvZnZ2dnUVZ_vOdnZ2d@comcast.com>
Source record: 12235

<KC2PIH@gmail.com> wrote in message
news:1147282454.997353.45540@i40g2000cwc.googlegroups.com...
> Hello! I have a 20 million serial# TS-940S (Mint!).
> The Sub-Display currently has two problems - I think they are
> unrelated - but this is a guess.
>
> 1. Ever since I had the radio (4 years ago), the LCD display fades in
> and out. The actual black liquid crystal letters fade away almost
> completely and then fade back in, randomly. Not related to activating
> any function of the radio or temperature. Its almost the effect you
> get when viewing the display from an off-angle how the characters
> displayed tend to get dimmer. However - I am viewing it straight on
> and it changes in intensity. I think there is a contrast adjustment
> and its as if that is not holding its value. Need some advice on this
> one. I am NOT referring to the light bulbs here - they are both fine
> and hold a constant lux. The Kenwood "Erratic LCD" TSB doesn't seem to
> fit my problem and I think my 20 million serial number isn't included.
>
> 2. The LCD display itself is now (recent) showing just "stars" (all
> LCD blocks are lit). None of the display buttons change
> what is displayed. I have read elsewhere that this could be from
> the internal battery going dead.
>
> I know I should replace the internal battery for starters, but I think
> the
> fading display is another issue that I would like to troubleshoot
> before I order just a battery.
>
> Any and all advice appreciated!
>
> -Scott, WU2X
>

Scott -

As N5IW knows from practical experience -- the main problem with most of the
Kenwood radios (TS-940S and others) built during the late 1980's involved
poor solder technique (quality control during assembly) and possibly the
usage of sub-standard solders.
http://www.qsl.net/n5iw/ts940.html

A thorough re-work of the most accessible boards (those most suspect to
prior owner tampering, poking, wiggling, and plug/unplug) may yield the
greatest results. As you can imagine; this process takes some time.
In summary, N5IW's total repair work on his TS-940S involved:

Correcting and reassembling 2 completely disconnected plug bodies
12 to 14 visually obvious cold-solder connections (complete removal of solder and resolder with a quality US brand)
30 or so suspected bad connections on various plugs and components (resistors, capacitors, etc.).

The cure for these intermittent issues is the comprehensive and careful examination of the multitude of plug connectors and their solder points used heavily through-out the rigs. This requires modest electronic skills (soldering, and careful attention to detail - you must have good discriminating eyes) and can be completed by the most novice technicians or ham operators.

w9gb

2785. Re: SPRING SALE-SW/HAM RADIO-PA SYSTEM AMP-TAPES-ANTIQUES-LP'S-MORE-$$$$$$$$$$$

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-13 21:13:48 UTC
From: mb500sec-NOSPAM-@hot-ten-tot-not-mail.com
Message-ID: <44664b9d.211907703@news.xs4all.nl>
Source record: 12236
Cross-posted to: rec.radio.amateur.homebrew,fr.rec.radio.amateur,nl.radio.amateur,rec.radio.shortwave,alt.collecting.8-track-tapes

On 13 May 2006 09:22:55 -0700, "Fatts Proffitt"
<nativebrookie@hotmail.com> wrote:

>http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZ66fourdoor

SPRING SALE-SW/HAM RADIO-PA SYSTEM AMP-TAPES

Ja dat zeg ik,

Donderdagavond 18 mei is er weer de voorjaarsverkoping van de afdeling
Den Haag.

Willem

>

2786. Re: REALISTIC DX-302 HAM-SHORTWAVE RECEIVER-MINT-$150

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-14 11:52:52 UTC
From: Fatts Proffitt <nativebrookie@hotmail.com>
Message-ID: <1147607572.696824.64390@i40g2000cwc.googlegroups.com>
Source record: 12237
Cross-posted to: rec.radio.amateur.homebrew,fr.rec.radio.amateur,nl.radio.amateur,rec.radio.shortwave,alt.collecting.8-track-tapes

bwahahahahaha- Boob gets flamed wth one word- what a burn !

2787. Re: 12 volt plate tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-14 14:10:21 UTC
From: cornytheclown@hotmail.com
Message-ID: <1147615821.856109.86990@j33g2000cwa.googlegroups.com>
Source record: 12238

thanks for all the replies and info

2788. Re: FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-14 19:12:35 UTC
From: "Roy L. Fuchs" <roylfuchs@urfargingicehole.org>
Message-ID: <l70f62pu6h880c700hb0lghjn9moindili@4ax.com>
Source record: 12239
Cross-posted to: alt.electronics.manufacture.circuitboard,alt.engineering.electrical,aus.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.equipment,uk.radio.amateur

On Fri, 12 May 2006 19:12:04 GMT, <glenron@ntlworld.com> Gave us:

>FA KEITHLEY

You posted to only ONE correct group. The posts in the rest of the
groups are all SPAM, asshole.

2789. Re: FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-14 21:44:51 UTC
From: Ross Mac <this.is.a.mung@example.invalid>
Message-ID: <-5GdndVPALJIOfrZnZ2dnUVZ_vqdnZ2d@comcast.com>
Source record: 12240
Cross-posted to: alt.electronics.manufacture.circuitboard,alt.engineering.electrical,aus.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.equipment,uk.radio.amateur

"Roy L. Fuchs" <roylfuchs@urfargingicehole.org> wrote in message
news:l70f62pu6h880c700hb0lghjn9moindili@4ax.com...
> On Fri, 12 May 2006 19:12:04 GMT, <glenron@ntlworld.com> Gave us:
>
>>FA KEITHLEY
>
> You posted to only ONE correct group. The posts in the rest of the
> groups are all SPAM, asshole.

Wrong again Dimbulb...do your homework.....

2790. japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-15 01:29:45 UTC
From: cornytheclown@hotmail.com
Message-ID: <1147656585.645561.130290@j73g2000cwa.googlegroups.com>
Source record: 12241
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

Thought some here might like seeing this.

modern japanese science kit of a tube radio....looks neat.....book condenser, three miniature tubes..loop antenna with what looks like cloth wire.....

http://shop.gakken.co.jp/otonanokagaku/vol18.html

2791. Re: VFO output power

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-15 01:40:53 UTC
From: Uncle Pete <radioconnectionNO@SPAMcox.net>
Message-ID: <V_Q9g.59741$IZ2.15275@dukeread07>
Source record: 12242

<aadu.adok@gmail.com> wrote in message
news:1147431611.429264.160840@i39g2000cwa.googlegroups.com...
> Should I add a low pass chebyshev filter between VFO and mixer?
> I mean - does it give real benefit (or only in theory)?
>

Put it before any attenuator to keep the port broadly terminated at 50 ohms.

Pete

2792. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-15 01:44:50 UTC
From: Jeffrey D Angus <jangus@socal.rr.com>
Message-ID: <m2R9g.3213$uM4.2811@tornado.socal.rr.com>
Source record: 12243
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

Use
http://babelfish.altavista.com/babelfish/tr

To get a sort of english translation of that page.
It is rather fascinating.

Jeff

cornytheclown@hotmail.com wrote:
> Thought some here might like seeing this.
>
> modern japanese science kit of a tube radio....looks neat.....book
> condenser, three miniature tubes..loop antenna with what looks like
> cloth wire.....
>
> http://shop.gakken.co.jp/otonanokagaku/vol18.html
>

--
RESTRICTED AREA. Anyone intruding shall immediately become subject to
the jurisdiction of military law. Intruders will be subject to lethal
force, without warning, and on sight. USE OF DEADLY FORCE IS AUTHORIZED
under the Internal Security Act of 1950.

2793. Re: FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-15 02:14:42 UTC
From: "Roy L. Fuchs" <roylfuchs@urfargingicehole.org>
Message-ID: <gvof629spp34fho2k68kvv340b0memcg0r@4ax.com>
Source record: 12244
Cross-posted to: alt.electronics.manufacture.circuitboard,alt.engineering.electrical,aus.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.equipment,uk.radio.amateur

On Sun, 14 May 2006 17:44:51 -0400, "Ross Mac"
<this.is.a.mung@example.invalid> Gave us:

>
>"Roy L. Fuchs" <roylfuchs@urfargingicehole.org> wrote in message
>news:l70f62pu6h880c700hb0lghjn9moindili@4ax.com...
>> On Fri, 12 May 2006 19:12:04 GMT, <glenron@ntlworld.com> Gave us:
>>
>>>FA KEITHLEY
>>
>> You posted to only ONE correct group. The posts in the rest of the
>> groups are all SPAM, asshole.
>
>Wrong again Dimbulb...do your homework.....
>
Not in school, you stupid fucktard.

2794. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-15 02:32:30 UTC
From: Gary Tayman <caradio@verizon.net>
Message-ID: <2LR9g.4669$UY6.2171@trnddc08>
Source record: 12245
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

It definitely beats the heck out of that "genuine" Atwater-Kent breadboard radio with miniature tubes that was posted on eBay a few months ago. For one thing it has a speaker.

I can't read Japanese, and don't want to install one of those language programs, but it appears to be sold as just what it is -- a cute kit. For the tinkerer, it can make for a neat little radio that can be a conversation piece in the corner of any living room or office.

--
Gary E. Tayman/Tayman Electrical
Sound Solutions For Classic Cars
http://www.taymanelectrical.com

<cornytheclown@hotmail.com> wrote in message
news:1147656585.645561.130290@j73g2000cwa.googlegroups.com...
> Thought some here might like seeing this.
>
> modern japanese science kit of a tube radio....looks neat.....book
> condenser, three miniature tubes..loop antenna with what looks like
> cloth wire.....
>
> http://shop.gakken.co.jp/otonanokagaku/vol18.html
>

2795. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-15 02:50:17 UTC
From: Steven <thisjukeboxplays33rpm@yahoo.com>
Message-ID: <1147661417.266298.259470@j55g2000cwa.googlegroups.com>
Source record: 12246
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

You don't have to IIRC...paste the URL into the translator.

2796. SolderSmoke #22: RF Amp woes, LPfilters, Loads, Rally, Lasers, Binaurals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-15 05:02:15 UTC
From: bill.meara@gmail.com
Message-ID: <1147669335.286374.108600@g10g2000cwb.googlegroups.com>
Source record: 12247
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,sci.electronics.basics

SolderSmoke!
A SHOW FOR ELECTRONICS HOMEBREWERS!

CHECK OUT BILL'S NEW WEB SITE:
http://www.gadgeteer.us
Please feel free to link, bookmark, and send feedback.

Topics discussed in SolderSmoke #22:

-- Mike's RF amplifier struggles
-- Good RF citizenship: Bill installs LP filter
-- Loads and power out in RF amps
-- Bill's amazing UK hamfest (rally) adventure.
-- Fun with lasers and UV
-- Doomed to build a Binaural receiver
-- Website update, Google and Amazon ads

Listen at:
http://www.ourmedia.org/node/223906

Background:
Tired of listening to Led Zepplin or NPR on your I-Pod? Wouldn't you like to be able to carry with you the kinds of ham radio conversations that you listen to while in your radio shack?
Mike, KL7R, in Juneau, Alaska, and Bill, M0HBR, in London, England meet regularly on the ECHOLINK system to discuss their homebrew radio projects. We are making them available as PODCASTS.

NEW RSS FEED: You can subscribe to the program, have them downloaded to your MP-3 player, and listen to them at your convenience. To subscribe, just cut and paste this URL into your I-poder (or similar) software. We've been having trouble with our Ourmedia RSS feed, so Mike (software wizard that he is) has homebrewed his own RSS feed. In order to subscribe to SolderSmoke, point your podcast software to:

http://kl7r.ham-radio.ch/soldersmoke.rss

If you don't have an MP3 player you can just go to the site below and listen to the latest program (and earlier editions) using the audio software on your computer.

http://www.ourmedia.org/node/223906

Here's the homepage for our show. All our programs are available here. There is also a blog and links to some of the sites and documents we've been discussing: http://www.ourmedia.org/user/36170

We hope you enjoy the program. Please send us feedback.

73 from London
Bill M0HBR N2CQR CU2JL
http://www.gadgeteer.us

2797. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-15 06:12:42 UTC
From: biascomms <biascomms@blueyonder.co.uk>
Message-ID: <uZU9g.69426$wl.62442@text.news.blueyonder.co.uk>
Source record: 12098
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

Gary Tayman wrote:

> I can't read Japanese, and don't want to install one of those language
> programs,

You don't need to /install/ anything - "babelfish" just redirects the page you want translated to another web site that does the translation, then displays it in your browser just like any other web page. It's one of the most sophisticated web applications, but the translations (obviously) aren't perfect, and can sometimes be hilarious!

Bob

--
Everything gets easier with practice, except getting up in the morning!

2798. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-15 07:01:55 UTC
From: - exray - <exray@coqui.net>
Message-ID: <126g9rbc134ju53@corp.supernews.com>
Source record: 12099
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

cornytheclown@hotmail.com wrote:

> Thought some here might like seeing this.
>
> modern japanese science kit of a tube radio....looks neat.....book
> condenser, three miniature tubes..loop antenna with what looks like
> cloth wire.....
>
> http://shop.gakken.co.jp/otonanokagaku/vol18.html
>

Dietary Fiber-challenged "Ron" will probably make his soup out of my shorts again but I homebrewed my own version of this set sans anything made of plastic or the weenie 20-25cm loop and phony horn. These sets are available on ebay and not so bad a bargain for a guy that wants to build a set but not go chasing around for individual components. You can find the schematic and details on other ebay listings. There's some yakk on ARF for those wanting to investigate deeper.
Its further evidence of my "blue butchering period" of fake tubes like the Radio LL :)
Its a cute little receiver - nothing to write home about and struggles to drive a horn, fake or otherwise, on anything but locals. Maybe over-represented in that regard. Toss the horn and use phones and its quite respectable for 'radio' person.
http://www.sparkbench.com/gekken/gekken.html
Its a clean sounding rig and shouldn't be any disappointment in its price class unless you compare it to an old plastic $5 clock radio. Its the kit that counts!

-Bill (the Butcher)

2799. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-15 07:11:19 UTC
From: Steven <thisjukeboxplays33rpm@yahoo.com>
Message-ID: <1147677079.106354.289410@v46g2000cwv.googlegroups.com>
Source record: 12100
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

How about if I patch my halli into my 120 watt Pioneer that "looks"
like a Icom, Drake or Yaesu?

http://www.silverpioneer.netfirms.com/fluorscan%20receivers.htm go to
the bottom

2800. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-15 07:23:53 UTC
From: Jeffrey D Angus <jangus@socal.rr.com>
Message-ID: <d0W9g.3258$uM4.2863@tornado.socal.rr.com>
Source record: 12101
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

- exray - wrote:
> I homebrewed my own version of this set
>
> http://www.sparkbench.com/gekken/gekken.html

You tease... Where's the schematic?

Jeff

--
RESTRICTED AREA. Anyone intruding shall immediately become subject to
the jurisdiction of military law. Intruders will be subject to lethal
force, without warning, and on sight. USE OF DEADLY FORCE IS AUTHORIZED
under the Internal Security Act of 1950.

2801. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-15 07:26:59 UTC
From: Jeffrey D Angus <jangus@socal.rr.com>
Message-ID: <73W9g.3259$uM4.2179@tornado.socal.rr.com>
Source record: 12102
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

Steven wrote:

> How about if I patch my halli into my 120 watt Pioneer that "looks"
> like a Icom, Drake or Yaesu?

That's twice now you've posted that link.

I doesn't look anything at all like an Icom or Yaesu. And most certainly not like a Drake. If anything, it looks like an over priced midrange consumer radio from the 80s. Which it is.

Jeff

--
RESTRICTED AREA. Anyone intruding shall immediately become subject to the jurisdiction of military law. Intruders will be subject to lethal force, without warning, and on sight. USE OF DEADLY FORCE IS AUTHORIZED under the Internal Security Act of 1950.

2802. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-15 08:05:57 UTC
From: - exray - <exray@coqui.net>
Message-ID: <126gdjb5ge3i5f@corp.supernews.com>
Source record: 12103
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

Jeffrey D Angus wrote:

> - exray - wrote:
>
>> I homebrewed my own version of this set
>>
>> http://www.sparkbench.com/gekken/gekken.html
>
>
> You tease... Where's the schematic?
>
> Jeff
>
How's this?
http://www.sparkbench.com/gekken/gekken.gif

-Bill

2803. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-15 11:08:45 UTC
From: Steven <thisjukeboxplays33rpm@yahoo.com>
Message-ID: <1147691325.373013.197800@i39g2000cwa.googlegroups.com>
Source record: 12104
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

Jeffrey D Angus wrote:
> Steven wrote:
>
> > How about if I patch my halli into my 120 watt Pioneer that "looks"
> > like a Icom, Drake or Yaesu?
>
> That's twice now you've posted that link.
>
> I doesn't look anything at all like an Icom or Yaesu. And most
> certainly not like a Drake. If anything, it looks like an over
> priced midrange consumer radio from the 80s. Which it is.
>
> Jeff

MSRP was $800, Jeff. Around 350-400 shy of the SX-1980, which was still
in some stores when this came out. THAT was 270 wpc.

When did you buy a common 46 pound stereo?

They aren't exactly common anyway. LOLOL

2804. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-15 12:45:41 UTC
From: Jeffrey D Angus <jangus@socal.rr.com>
Message-ID: <VJ_9g.3186$G95.1995@tornado.socal.rr.com>
Source record: 12105
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

- exray - wrote:
> How's this?
> http://www.sparkbench.com/gekken/gekken.gif
>
> -Bill

Thankies Mr. Bill.

Jeff

--
RESTRICTED AREA. Anyone intruding shall immediately become subject to
the jurisdiction of military law. Intruders will be subject to lethal
force, without warning, and on sight. USE OF DEADLY FORCE IS AUTHORIZED
under the Internal Security Act of 1950.

2805. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-15 12:49:34 UTC
From: Brian Hill <good@it.net>
Message-ID: <zN_9g.8$wW.4@fe04.lga>
Source record: 12106
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

"- exray -" <exray@coqui.net> wrote in message
news:126g9rbc134ju53@corp.supernews.com...
> cornytheclown@hotmail.com wrote:
>
>> Thought some here might like seeing this.
>>
>> modern japanese science kit of a tube radio....looks neat.....book
>> condenser, three miniature tubes..loop antenna with what looks like
>> cloth wire.....
>>
>> http://shop.gakken.co.jp/otonanokagaku/vol18.html
>>

I like your version of the peanut tube Bill. They got a little of that
Arcturus sheen to em too. Cool!!

--

Regards
B.H.

Brian's Basement
http://webpages.charter.net/brianhill/6.htm

Brian's Radio Universe
http://webpages.charter.net/brianhill/500.htm

2806. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-15 15:23:43 UTC
From: jbyrns@rcn.com
Message-ID: <jbyrns-1505061023440001@216-80-74-97.d.enteract.com>
Source record: 12107
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

In article <126g9rbc134ju53@corp.supernews.com>, - exray -
<exray@coqui.net> wrote:

> Dietary Fiber-challenged "Ron" will probably make his soup out of my
> shorts again but I homebrewed my own version of this set sans anything
> made of plastic or the weenie 20-25cm loop and phony horn. These sets
> are available on ebay and not so bad a bargain for a guy that wants to
> build a set but not go chasing around for individual components. You
> can find the schematic and details on other ebay listings. There's some
> yakk on ARF for those wanting to investigate deeper.

What is "ARF", I hope it's not one of those alternative forums?

Regards,

John Byrns

Surf my web pages at, http://users.rcn.com/jbyrns/

2807. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-15 15:50:47 UTC
From: - exray - <exray@coqui.net>
Message-ID: <126h8qta39f393@corp.supernews.com>
Source record: 12108
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

John Byrns wrote:

>
> What is "ARF", I hope it's not one of those alternative forums?
>
>
> Regards,
>
> John Byrns

http://antiqueradios.com/forums/

2808. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-15 16:05:03 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrne6h9qd.1ga8.bit-bucket@shell.config.com>
Source record: 12109
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

On Mon, 15 May 2006 12:45:41 GMT, Jeffrey D Angus wrote:
> - exray - wrote:
>> How's this?
>> http://www.sparkbench.com/gekken/gekken.gif
>>
>
> Thankies Mr. Bill.

I really miss the Olde Tyme Wireless Apparatus where you ran the
B+ through the earphones!! :-)

Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
38.24N 104.55W | @ config.com | Jonesy | OS/2
*** Killfiling google posts: <http//jonz.net/ng.htm>

2809. Subscribe FREE to the K9YA Telegraph

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-15 23:30:36 UTC
From: K9YA Telegraph <no_reply@yahoo.com>
Message-ID: <wa8ag.87094$dW3.27274@newssvr21.news.prodigy.com>
Source record: 12110

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http://www.k9ya.org

2810. Re: FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-15 23:42:38 UTC
From: Ross Mac <this.is.a.mung@example.invalid>
Message-ID: <O-qdnd1TSvVujPTZnZ2dnUVZ_tWdnZ2d@comcast.com>
Source record: 12111
Cross-posted to: alt.electronics.manufacture.circuitboard,alt.engineering.electrical,aus.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.equipment,uk.radio.amateur

"Roy L. Fuchs" <roylfuchs@urfargingicehole.org> wrote in message
news:gvof629spp34fho2k68kvv340b0memcg0r@4ax.com...
> On Sun, 14 May 2006 17:44:51 -0400, "Ross Mac"
> <this.is.a.mung@example.invalid> Gave us:
>
>>
>>"Roy L. Fuchs" <roylfuchs@urfargingicehole.org> wrote in message
>>news:l70f62pu6h880c700hb0lghjn9moindili@4ax.com...
>>> On Fri, 12 May 2006 19:12:04 GMT, <glenron@ntlworld.com> Gave us:
>>>
>>>>FA KEITHLEY
>>>
>>> You posted to only ONE correct group. The posts in the rest of the
>>> groups are all SPAM, asshole.
>>
>>Wrong again Dimbulb...do your homework.....
>>
> Not in school, you stupid fucktard.

Oh...you must be...you use schoolyard lingo!
That's the best you can do Hey Dimbulb?
Wrong and wrong again....what else is new....
Big on mouth and small on brains.....

2811. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-16 02:09:09 UTC
From: Warren Weber <"hiview68NO SPAM"@1236bresnan.net>
Message-ID: <vq-dnaK8p--XqfTZnZ2dnUVZ_tCdnZ2d@bresnan.com>
Source record: 12112
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

"- exray -" <exray@coqui.net> wrote in message
news:126g9rbc134ju53@corp.supernews.com...
> cornytheclown@hotmail.com wrote:
>
>> Thought some here might like seeing this.
>>
>> modern japanese science kit of a tube radio....looks neat.....book
>> condenser, three miniature tubes..loop antenna with what looks like
>> cloth wire.....
>>
>> http://shop.gakken.co.jp/otonanokagaku/vol18.html
>>
>
> Dietary Fiber-challenged "Ron" will probably make his soup out of my
> shorts again but I homebrewed my own version of this set sans anything
> made of plastic or the weenie 20-25cm loop and phony horn. These sets are
> available on ebay and not so bad a bargain for a guy that wants to build a
> set but not go chasing around for individual components. You can find the
> schematic and details on other ebay listings. There's some yakk on ARF for
> those wanting to investigate deeper.
> Its further evidence of my "blue butchering period" of fake tubes like the
> Radio LL :)
> Its a cute little receiver - nothing to write home about and struggles to
> drive a horn, fake or otherwise, on anything but locals. Maybe
> over-represented in that regard. Toss the horn and use phones and its
> quite respectable for 'radio' person.
> http://www.sparkbench.com/gekken/gekken.html
> Its a clean sounding rig and shouldn't be any disappointment in its price
> class unless you compare it to an old plastic $5 clock radio. Its the kit
> that counts!
>
> -Bill (the Butcher)

Beautiful workmanship. My stuff won't look that good because I am "A non
practicing perfectionist." Warren

2812. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-16 02:09:09 UTC
From: Warren Weber <"hiview68NO SPAM"@1236bresnan.net>
Message-ID: <mcqdnTxcypX_q_TZnZ2dnUVZ_vednZ2d@bresnan.com>
Source record: 12114
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

"- exray -" <exray@coqui.net> wrote in message
news:126g9rbc134ju53@corp.supernews.com...
> cornytheclown@hotmail.com wrote:
>
>> Thought some here might like seeing this.
>>
>> modern japanese science kit of a tube radio....looks neat.....book
>> condenser, three miniature tubes..loop antenna with what looks like
>> cloth wire.....
>>
>> http://shop.gakken.co.jp/otonanokagaku/vol18.html
>>
>
> Dietary Fiber-challenged "Ron" will probably make his soup out of my
> shorts again but I homebrewed my own version of this set sans anything
> made of plastic or the weenie 20-25cm loop and phony horn. These sets are
> available on ebay and not so bad a bargain for a guy that wants to build a
> set but not go chasing around for individual components. You can find the
> schematic and details on other ebay listings. There's some yakk on ARF for
> those wanting to investigate deeper.
> Its further evidence of my "blue butchering period" of fake tubes like the
> Radio LL :)
> Its a cute little receiver - nothing to write home about and struggles to
> drive a horn, fake or otherwise, on anything but locals. Maybe
> over-represented in that regard. Toss the horn and use phones and its
> quite respectable for 'radio' person.
> http://www.sparkbench.com/gekken/gekken.html
> Its a clean sounding rig and shouldn't be any disappointment in its price
> class unless you compare it to an old plastic $5 clock radio. Its the kit
> that counts!
>
> -Bill (the Butcher)

Beautiful workmanship. My stuff won't look that good because I am "A non
practicing perfectionist." Warren

--

I am using the free version of SPAMfighter for private users.
It has removed 303 spam emails to date.
Paying users do not have this message in their emails.
Try www.SPAMfighter.com/pro for free now!

2813. Re: Subscribe FREE to the K9YA Telegraph

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-16 02:14:58 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1147745698.277303.134980@u72g2000cwu.googlegroups.com>
Source record: 12113

just howmany ngs did you hit with this spam?

2814. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-16 02:44:04 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrne6if8n.2u8o.bit-bucket@shell.config.com>
Source record: 12115
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

```
["Followup-To:" header set to rec.radio.amateur.homebrew.]
On Mon, 15 May 2006 20:09:09 -0600, Warren Weber wrote:
> "- exray -" <exray@coqui.net> wrote in message
> news:126g9rbc134ju53@corp.supernews.com...
>> cornytheclown@hotmail.com wrote:
>>
>>> Thought some here might like seeing this.
>>>
>>> modern japanese science kit of a tube radio....looks neat.....book
>>> condenser, three miniature tubes..loop antenna with what looks like
>>> cloth wire.....
>>>
>>> http://shop.gakken.co.jp/otonanokagaku/vol18.html
>>
>> Dietary Fiber-challenged "Ron" will probably make his soup out of my
>> shorts again but I homebrewed my own version of this set sans anything
>> made of plastic or the weenie 20-25cm loop and phony horn. These sets are
>> available on ebay and not so bad a bargain for a guy that wants to build a
>> set but not go chasing around for individual components. You can find the
>> schematic and details on other ebay listings. There's some yakk on ARF for
>> those wanting to investigate deeper.
>> Its further evidence of my "blue butchering period" of fake tubes like the
>> Radio LL :)
>> Its a cute little receiver - nothing to write home about and struggles to
>> drive a horn, fake or otherwise, on anything but locals. Maybe
>> over-represented in that regard. Toss the horn and use phones and its
>> quite respectable for 'radio' person.
>> http://www.sparkbench.com/gekken/gekken.html
>> Its a clean sounding rig and shouldn't be any disappointment in its price
>> class unless you compare it to an old plastic $5 clock radio. Its the kit
>> that counts!
>
> Beautiful workmanship. My stuff won't look that good because I am "A non
> practicing perfectionist." Warren

Beautiful photography, too! FB OM!!

73
Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
38.24N 104.55W | @ config.com | Jonesy | OS/2
*** Killfiling google posts: <http//jonz.net/ng.htm>
```

2815. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-16 06:26:17 UTC
From: cornytheclown@hotmail.com
Message-ID: <1147760777.223576.272860@u72g2000cwu.googlegroups.com>
Source record: 12116
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

Thanks for the babelfish link..thats pretty neat too.

Anyhow I just thought this kit is kinda neat...dont see something like this everyday...only things close usually have a cassette player or cd player jammed into them...and no tubes.... I bet it is all plastic too....the base, the horn everything...

150.00 USD on ebay ~:>....kinda steep..... if they were 30 bucks I'd buy one just to get an up close look at it.

The tube "strainer" that accompanys the kit was kinda funny....I guess thats something that got lost in translation.

2816. low pass filter between vfo and mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-16 09:43:28 UTC
From: aadu.adok@gmail.com
Message-ID: <1147772607.946164.5780@j55g2000cwa.googlegroups.com>
Source record: 12117

hi,

I have chosen the IF frequency to be 8mhz (since I have crystals for
that freq) in my superhet project. So, VFO frequencies should be:

band (mhz) VFO (mhz)
--- ---
1.8 9.8
3.5 11.5
7.0 15.0
14.0 6.0
21.0 13.0
28.0 20.0

Well..now here is a question: can I use single chebyshev low-pass
filter for all those frequencies? Or maybe it's better to use different
filters with different cut-off frequencies?

thanks!

2817. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-16 12:09:05 UTC
From: - exray - <exray@coqui.net>
Message-ID: <126jg72pqfdp9f8@corp.supernews.com>
Source record: 12118
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

cornytheclown@hotmail.com wrote:

> Thanks for the babelfish link..thats pretty neat too.
>
> Anyhow I just thought this kit is kinda neat...dont see something like
> this everyday...only things close usually have a cassette player or cd
> player jammed into them...and no tubes.... I bet it is all plastic
> too....the base, the horn everything...
>
> 150.00 USD on ebay ~:>....kinda steep..... if they were 30 bucks I'd
> buy one just to get an up close look at it.

These can be purchased directly from Gakken for about $100 with direct express shipping from JA. It is all plastic.

-Bill

2818. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-16 16:10:23 UTC
From: Theo <theodore.twyler@ntlworld.com>
Message-ID: <PPmag.3$1Y6.0@newsfe1-gui.ntli.net>
Source record: 12119
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

"Driving 006P9V with 45V which 5 these series is done.!"
Don't ye jest lurve those Japanese - English translations!

2819. Re: TCXO Substitution?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-16 16:49:33 UTC
From: fmmck@aol.com
Message-ID: <fmmck-1605061249330001@ac8304aa.ipt.aol.com>
Source record: 12120

In article <1147373350.498396.182210@i39g2000cwa.googlegroups.com>,
KC2PIH@gmail.com wrote:

> I have been searching for a Kenwood SO-1 temperature compensated
> crystal oscillator for the last 4 years. When I did find them (eBay),
> they went for a fortune because I must not be the only looking for one.
> I believe the SO-1 runs at 20Mhz...are there other units that could be
> substituted? I believe the Kenwood SO-2, with also runs at 20Mhz, is
> still available. Can the SO-2 be wired in place of the SO-1? Or is
> there more to it than that?

Scott-

You can probably find service manuals on the web for rigs that use each version. It should be possible to get an idea how the footprints compare, what voltages are used and how similar are the loads. It may be possible to find another company's TCXO that could be adapted, but it may be just as easy to adapt the SO-2.

Your best bet may be to contact Kenwood's engineering department. It is conceivable that the two might be the same, but the SO-2 has better specs. It is also possible that there is a version available from Kenwood parts, identical to the SO-1, but used in their commercial radios.

Incidentally, if you do find an SO-1, the label can be peeled back to reveal a trimmer capacitor behind a hole under the "e" in Kenwood. I adjusted mine so the 20 MHz WWV audio tone is the same on USB and LSB. It is also possible to setup A and B vfos for 19.999 MHz USB and 20.001 MHz LSB, and adjust the trimmer so the 1 KHz beat notes are the same. Either way, you need a "musical ear" to be sure the two tones are the same!

73, Fred, K4DII

2820. Re: low pass filter between vfo and mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-17 00:55:45 UTC
From: w8ji@akorn.net
Message-ID: <1147827345.484818.207100@i39g2000cwa.googlegroups.com>
Source record: 12121

> band (mhz) VFO (mhz)
> ---------------- ---------------
> 1.8 9.8
> 3.5 11.5
> 7.0 15.0
> 14.0 6.0
> 21.0 13.0
> 28.0 20.0

Hmm, did you check those frequencies for spurious responses? Low-side injection can be a real problem. Remember even if you have a very clean LO system the mixer itself has to be switching at the LO frequency and will generate some pretty significant harmonics.

With a 20 MHz VFO on 28 MHz, the second harmonic would be 40 and minus 8 would put a spur response at 32.

At 14.35 you'd have a third harmonic of 6.35*3=19.05 19.05-8=11.05

I guess you might be OK, but you should look at all of that and the bandwidth of the RF stages between the antenna and mixer.

2821. Re: japanese kit radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-17 01:14:36 UTC
From: Steven <thisjukeboxplays33rpm@yahoo.com>
Message-ID: <1147828476.506697.12510@g10g2000cwb.googlegroups.com>
Source record: 12122
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

It says that five 0006P (9V) batteries are combined in series to
produce 45V in total.

Close enough? I never looked at the item.

2822. Re: FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-17 06:51:54 UTC
From: "Roy L. Fuchs" <roylfuchs@urfargingicehole.org>
Message-ID: <0rhl629t40if5hih8t7hm85gn5s5h44qei@4ax.com>
Source record: 12123
Cross-posted to: alt.electronics.manufacture.circuitboard,alt.engineering.electrical,aus.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.equipment,uk.radio.amateur

On Mon, 15 May 2006 19:42:38 -0400, "Ross Mac"
<this.is.a.mung@example.invalid> Gave us:

>
>"Roy L. Fuchs" <roylfuchs@urfargingicehole.org> wrote in message
>news:gvof629spp34fho2k68kvv340b0memcg0r@4ax.com...
>> On Sun, 14 May 2006 17:44:51 -0400, "Ross Mac"
>> <this.is.a.mung@example.invalid> Gave us:
>>
>>>
>>>"Roy L. Fuchs" <roylfuchs@urfargingicehole.org> wrote in message
>>>news:l70f62pu6h880c700hb0lghjn9moindili@4ax.com...
>>>> On Fri, 12 May 2006 19:12:04 GMT, <glenron@ntlworld.com> Gave us:
>>>>
>>>>>FA KEITHLEY
>>>>
>>>> You posted to only ONE correct group. The posts in the rest of the
>>>> groups are all SPAM, asshole.
>>>
>>>Wrong again Dimbulb...do your homework.....
>>>
>> Not in school, you stupid fucktard.
>
>Oh...you must be...you use schoolyard lingo!

You wouldn't know. You're just an old alzheimeristic twit.

>That's the best you can do Hey Dimbulb?

My worst is two orders of magnitude better than your best.

>Wrong and wrong again....what else is new....

You should stop talking about yourself.

>Big on mouth and small on brains.....
>
You're an idiot. That is quite succinct.

This is a text forum, you retarded bastard. There are no mouths
here, dumbfuck.

2823. Re: low pass filter between vfo and mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-17 08:31:26 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <64il621hqtjo45ikibb3ljjm97mef39keh@4ax.com>
Source record: 12124

On 16 May 2006 02:43:28 -0700, aadu.adok@gmail.com wrote:

>I have chosen the IF frequency to be 8mhz (since I have crystals for
>that freq) in my superhet project. So, VFO frequencies should be:
>
>band (mhz) VFO (mhz)
>---------------- ---------------
>1.8 9.8
>3.5 11.5
>7.0 15.0
>14.0 6.0
>21.0 13.0
>28.0 20.0
>
>Well..now here is a question: can I use single chebyshev low-pass
>filter for all those frequencies? Or maybe it's better to use different
>filters with different cut-off frequencies?

Unless you are using a true multiplicative (four quadrant multiplier) as a mixer, i do not see why you would want to put a low pass filter between the VFO and the mixer.

However, if you are using some switching type double balanced mixer, such as diode ring or hard driven Gilbert cell (such as MC1496, NE602 etc.) mixer, these should be driven with a clean symmetric square wave to ensure accurate switching.

A symmetric square wave contains a rich series of odd harmonics that could mix with the signals in the antenna. With the VFO at 6 MHz and 8 MHz IF, the third LO harmonic would be at 18 MHz, forming spurious responses at 18+8=26 MHz and 18-8=10 MHz, the 5th harmonic would produce other spurious responses.

Since you are apparently not designing a general coverage receiver, but a ham band only receiver, IMHO, it is a much better idea to put the effort to build filters into the front end (e.g. band pass filters for each ham band or a constantly tunable filter) ahead of the mixer. In the example above, the 14,0-14,35 MHz front end band pass filter would strongly attenuate the spurious responses at 10 and 26 MHz. While there would still be mixing products with the harmonics of the local oscillator, with proper input filtering, the RF port of the mixer would only contain some thermal noise from the input stage(s), which at HF would not be an issue.

As others have pointed out, your VFO frequencies are quite high and would ruin the stability. Also running the VFO below the received

frequency can easily cause harmonics to fall on the RF passband or IF frequency.

For local oscillator frequency stability you might have to use the mixing method (band crystal +/- VFO) or the offset-PLL method (VCO-VFO) / divide-by-N and phase comparator. In both cases you should check that none of the auxiliary frequencies (band crystal, VFO, VCO, VCO-VFO difference, PLL reference crystal or PLL reference frequency) or their harmonics fall on the input frequency band or the IF frequency.

With a limited coverage receiver this should not be too hard to do. Put all the generated frequencies and their harmonics into a spreadsheet and check for several points on that band that all spurious signals are outside the ham band under investigation and that these frequencies do not come too close to the IF bandwidth.

Even if you do not currently plan to implement the WARC bands, it would be a good idea to include them in this spreadsheet analysis, in case you sometimes would want to implement them too.

Paul OH3LWR

2824. Re: low pass filter between vfo and mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-17 10:24:48 UTC
From: aadu.adok@gmail.com
Message-ID: <1147861488.283237.283690@38g2000cwa.googlegroups.com>
Source record: 12125

I like the idea of having 5-5.5 mhz VFO (for all bands) mixed with band crystal.
Lets take 40m band as an example:

I still must provide 15mhz to mixer (15 LO - 7 RF = 8 IF). Right?!

Now - how to produce 15 mhz from 5 mhz VFO and band crystal osc?
Obviously I need to add another mixer and feed its input ports with 5 mhz from VFO and 10 mhz from crystal osc. This new mixer would have 15 and 5 mhz at its output. Right?

Now..how to block 5 mhz and let 15 mhz go through towards my existing RF/VFO mixer?

Obviously low-pass is not an option here..

thanks guys!

2825. ** FLEA at MIT ** Sunday May 21st Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-17 22:17:46 UTC
From: w1gsl@mit.edu
Message-ID: <446ba10a$0$568$b45e6eb0@senator-bedfellow.mit.edu>
Source record: 12126
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

This comming Sunday...

+++ Now even more Buyers Parking !!!
Thanks to TKT we have use of their new parking lot
across Albany St from the SWAPFEST !!!

!! ** More Buyers PARKING is available ** for details see
http://web.mit.edu/w1gsl/Public/flyer

*** !!!! In our Traditional GARAGE and the adjacent lot !!!! ****
so come rain or shine or super heat the Flea is on !!!

********* $1 buyers discount with hardcopy of this notice ********

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS - HAM RADIO

FLEA all SUMMER at MIT
Sunday May 21st 2006
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
free, off-street parking for >2000 cars!

Buyers admission is $5 (you get $1 off if
you're lucky enough to have a copy of our ad)
and sellers spaces are $20 for the first and
$15 for each additional at the gate.

The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
time starting at 7AM.

SEASON PASS + Advance Seller Discount

A sellers discount season pass is available which
offers a 30% discount. By prepaying you get a
discount and earlier admission. See the registration form.

*** Attention Sellers ***
Prepaid vendors.. Season Pass or monthly,

will be admitted FIRST.
Separate lines will form prior to gate opening
for prepaid and nonprepaid vendors

!! RAIN or SHINE !! Have no fear of rain, a covered
well illuminated tailgate area is available for all
sellers (6'8" clearance).

Talk-in: 145.23- (PL 88.5) W1BOS/R and
W1XM/R-449.725/444.725 (PL 114.8/2A).

Sponsors: MIT Electronics Research Society
MIT UHF Repeater Association (W1XM)
MIT Radio Society (W1MX)
Harvard Wireless Club (W1AF)

For more info / advanced reservations 617 253 3776

********** $1 buyers discount with hard copy of this notice ************

<<<<<<<<<<<<<<<<<<<<<<< cut here >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

Mail the coupon below by the 5th of the month to be a Prepaid Vendor.

FLEA at MIT 2006 Rates

SELLERS

To use your prepaid spaces the named vendor MUST be present.
Rates include one admission per space.

Season Pass $99 First Space includes all 7 2006 meets
$70 each additional Space
Must be received by April 16th

Advance $17 First space
$12 Additional Spaces
Must be received by the 5th of the month.

Gate Admission $20 First Space
$15 Additional Spaces
Admission is after the prepaid vendors

Early Bird Buyer -Admission after the prepaid vendor line is admitted. ~ 7:15AM
** You may not sell. **
$15 per person at the gate.

****************************** cut here ******************************

FLEA at MIT 2006 Advance Space Application

____April ____May ____June ____ July ____Aug ___Sept ____Oct
@ $17 for the first each month + $12 each additional
____ Season Pass @$99 _____ Additional Season Spaces @$70

Name _____ Call _____ $ Included_____

Address _____ Phone _____ Make Check to
The MIT Radio Society
City _____ State _____ Zip _____ PO Box 397082
Cambridge MA 02139
E-mail _____

****
Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754
****

2826. Re: Best way to build fixed 1.6GHz locked oscillator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-17 22:50:35 UTC
From: Dan Andersson <dan@andersson.co.uk>
Message-ID: <bo-dnRbK9MYhNfbZSa8jmw@karoo.co.uk>
Source record: 12127

3flp wrote:

> Hi,
>
> I'm in the process of designing a simple scalar network analyser. The
> synthesizer will use 2 PLLs. One tuning from 1.6 to 2.6GHz and the
> second on locked to 1.6GHz. I hope to create a DC to 1GHz output. I'll
> use Minicircuits or similar for the broadband VCO. But it seems a
> little wastefull to use the same thing for the fixed frequency PLL. So
> here's the question, what would you experienced home brew gurus
> recommend?
>
> The oscillator phase noise does not have to be perfect, but it should
> not be much worse that the Minicircuits VCOs. The cumbersome
> old-fasioned multiplied crystal is not really needed. So what other
> options should I look at?
>
> Thanx for ideas,
> 74,
> VK3FLP

Hiya,

I'm using an AD9951 based 0-180MHz DDS as signal generator fed into four (or if anyone want more) AD8343's mixers - connected as doublers. The sweep I get is supposedly 0-2.8G but I can only verify up to 2.5G.

the harmonics suppression in the AD8343's are roughly around 50 to 60 dB, absolutely good enough. You do need a couple of directional couplers (or bridges) as considerations need to be taken depending on the frequency. I use tweaked broadband RF transformers from Coilcratft as directional couplers. good for 1200MHz +. If you write the measuring SW yourself, you can add the needed calibration additions as well..

There are sourcecode for this available on the net with the AD8302 as a detector. You will have an absolute limit of 60dB dynamic range and abt 2.7GHz max... Good enough for me tho'...

Quick and dirty? Yes, but it's cheap, easy to build and do the job.

Cheers

Dan / M0DFI

2827. Thank god for this

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-17 22:56:33 UTC
From: Gary McIsaac <gary.mcisaac@ntlworld.com>
Message-ID: <BSNag.1450$1Y6.28@newsfe1-gui.ntli.net>
Source record: 12128

Hi everyone

Just a quick message, does anyone actually read this news thing if so I would be glad to know why.
Is there anyone out there?

Thanks

Gary

2828. So Granny got the Jail

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-17 22:59:34 UTC
From: Gary McIsaac <gary.mcisaac@ntlworld.com>
Message-ID: <qVNag.2913$BD2.1836@newsfe4-win.ntli.net>
Source record: 12129

Hi everyone

My Granny got the jail, well kinda she got put into a homepoor wee soul.
Hope she is doing fine and settling in the new place, Jail well it must seem
like jail not that I have ever been

Cheers Gary

2829. Re: So Granny got the Jail

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-18 02:47:04 UTC
From: "Dr. Anton T. Squeegee" <SpammersBlow@dev.null>
Message-ID: <MPG.1ed58001469ccf5b98969d@news.drizzle.com>
Source record: 12130

In article <qVNag.2913$BD2.1836@newsfe4-win.ntli.net>,
gary.mcisaac@ntlworld.com (known to some as Gary McIsaac) scribed...

> Hi everyone
>
> My Granny got the jail, well kinda she got put into a homepoor wee soul.
> Hope she is doing fine and settling in the new place, Jail well it must seem
> like jail not that I have ever been

I'm sorry to hear about it, but what does it have to do with
amateur radio and the design of related electronic accessories? (which
is what 'homebrew' means in this context).

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute
(Known to some as Bruce Lane, KC7GR)
http://www.bluefeathertech.com -- kyrrin a/t bluefeathertech d-o=t calm
"Salvadore Dali's computer has surreal ports..."

2830. Les plus belles jeunes filles du web

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-18 10:04:48 UTC
From: mathilda@canadaweb.net
Message-ID: <446c46bf$0$21301$8fcfb975@news.wanadoo.fr>
Source record: 12131
Body handling: HTML body converted to readable text

[No readable article body recovered]

2831. Re: Thank god for this

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-18 20:49:06 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <655bg.7359$Go6.5368@trnddc04>
Source record: 12133

Gary McIsaac wrote:
> Hi everyone
>
> Just a quick message, does anyone actually read this news thing if so I
> would be glad to know why.
> Is there anyone out there?
>
> Thanks
>
> Gary
>
>

No. Nobody is here.

2832. Re: So Granny got the Jail

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-18 20:49:12 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <446CDD81.D588D7A4@earthlink.net>
Source record: 12134

"Dr. Anton T. Squeegee" wrote:
>
> In article <qVNag.2913$BD2.1836@newsfe4-win.ntli.net>,
> gary.mcisaac@ntlworld.com (known to some as Gary McIsaac) scribed...
>
> > Hi everyone
> >
> > My Granny got the jail, well kinda she got put into a homepoor wee soul.
> > Hope she is doing fine and settling in the new place, Jail well it must seem
> > like jail not that I have ever been
>
> I'm sorry to hear about it, but what does it have to do with
> amateur radio and the design of related electronic accessories? (which
> is what 'homebrew' means in this context).

Maybe his granny got wired on homebrew moonshine?

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2833. Re: Delay Line -- free

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-18 20:50:04 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <446CDDB4.1ED6D05F@earthlink.net>
Source record: 12135

jack wrote:
>
> I have a delay line from a Tektronix 7704 -- free if you will pay the
> postage (should fit into a USPS Flat Rate priority mail box). (the power
> supply in this thing was shot).
>
> Jack

You might want to post this one news:sci.electronics.equipment as
well.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

2834. Re: Thank god for this

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-18 23:47:43 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-4A7546.15482518052006@netnews.worldnet.att.net>
Source record: 12136

In article <655bg.7359$Go6.5368@trnddc04>,
John - KD5YI <groups5munge@verizon.net> wrote:

> Gary McIsaac wrote:
> > Hi everyone
> >
> > Just a quick message, does anyone actually read this news thing if so I
> > would be glad to know why.
> > Is there anyone out there?
> >
> > Thanks
> >
> > Gary
> >
> >
>
>
>
> No. Nobody is here.

Not only that but we really don't care if you read it or not......

Me

2835. Parts for Sale - Updated

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-19 00:49:45 UTC
From: Brian Murrey <brian@iquest.net>
Message-ID: <JC8bg.2084$921.1593@newsread4.news.pas.earthlink.net>
Source record: 12137
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have moved my junkbox surplus stuff to a new website.
http://www.hamradparts.com

1N4148 Diodes $3.00 for 100, $4.00 for 200
1N4001 - 1 Amp 50v General Purpose Rectifier Diodes - $3.00 for 50

33pf NPO Caps, SMT 0805, 50V - $3.00 for 100
150pf NPO Caps, SMT 0805, 50V - $3.00 for 100
220pf NPO Caps, SMT 0805, 50V - $3.00 for 100
390pf Caps, SMT 1206, 50V - $3.00 for 100
1500pf NPO Caps, SMT 0805, 50V - $3.00 for 100
3300pf Caps, SMT 0805, 25V - $3.00 for 100
.1uF Caps, SMT 0805, 50V - $3.00 for 100

SPECIAL SMT PACK - 50 of each listed value $9.00
350 total parts

2N3704 NPN TO92 - 20 for $2.00
2N2907 PNP TO92 Package - $4.00 for 50
2N3904 NPN TO92 Package - $4.00 for 50
2N2222 NPN TO18 (metal) Package - 5 for $1.00
MMBT4403 PNP SMT transistor - 50 for $4.00

SPECIAL: 100pcs PN2222A Motorola $7.00- FREE SHIPPING

2N2222 NPN TO92 Package - $4.00 for 50
The 2N2222 is a bulk transistor...meaning the part is not labeled.
They ship in a Zip Lock packet and the packet is clearly labeled.

2N3906 PNP TO92 Package - $4.00 for 50
The 2N3906 is a bulk transistor...meaning the part is not labeled.
They ship in a Zip Lock packet and the packet is clearly labeled.

IRF510 - MOSFET AMP TO220 - 4 for $5.00

Crystal Ladder Filters anyone?
3.575611 Mhz HC49 Crystals - 5 for $2.00
4.9152 Mhz HC49 Crystals - 10 for $3.00
9.830 Mhz Crystals (SS2 package) - 20 for $3.00
LM7805ACV 5v Positive Voltage Regulators (TO220) 5 for $2.00
LM386N-1 - Audio Amp 6 for $5.00

Sticky Back Rubber Feet for your projects, self adhesive - 8 to a strip - 2
Strips for $1.00

Panasonic Wall Warts - 12VDC, 500mA (center negative) $6.00 each
If you need center positiove, cut off the end and reverse it. I use these to

power my
rock mites, my TT2, and all of my homebrew test gear.

8pf NPO Ceramic 50 for $3.00
11pf NPO Ceramic 50 for $3.00
12pf NPO Ceramic 50 for $3.00
22pf Ceramic 50 for $3.00
470pf Ceramic 50 for $3.00
560pf Ceramic 50 for $3.00
.1 uF (104J) NPO Ceramic 50 for $3.00
.01uF (103K) Ceramic 50 for $3.00

SPECIAL PACK - 25 of each listed ceramic $10.00
200 parts total

Cash, check, paypal now accepted

Paypal to: orders@hamradparts.com

Add $3.00 shipping to any order under $50.00 unless you are ordering the
special Motorola PN2222 transistors.

Brian Murrey
47 Grassy Drive
New Whiteland IN 46184

73 de KB9BVN

--
==========
Radio Amateurs - Fill your junk box, from my junkbox!
http://www.hamradparts.com
73 de KB9BVN
==========

2836. Delay Line -- free

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-19 00:58:42 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <fNWdnXFZ2Pzc8vHZRVn-ug@comcast.com>
Source record: 12132

I have a delay line from a Tektronix 7704 -- free if you will pay the postage (should fit into a USPS Flat Rate priority mail box). (the power supply in this thing was shot).

Jack

2837. Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-19 02:56:21 UTC
From: Tony Angerame <tangerame@earthlink.net>
Message-ID: <W8SdndNbbsVRrvDZRVn-rA@comcast.com>
Source record: 12138

I've acquired a high power 50 watts plus tube type hifi output transformer. I'd like to try modulating a pair of 6146's with a hifi amp. The circuits I see use a modulating inductor in series with the B+ to the final to keep single ended dc off the transformer secondary.

Here's the rub. Where do you find a 30-50 henry inductor for 800+ volts? I was thinking of checking out the secondary of a tv transformer? (Not many left used to be common whatever happened to those tv's).

Anyone have any ideas on winding one? Seems to me taking an old transformer apart and scramble winding as much wire as one can afford might do the trick?

Ideas?

Thanks,

Tony,

WA6LZH

2838. Re: So Granny got the Jail

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-19 04:08:17 UTC
From: "Dr. Anton T. Squeegee" <SpammersBlow@dev.null>
Message-ID: <MPG.1ed6e48d6c70280b98969f@news.drizzle.com>
Source record: 12139

In article <446CDD81.D588D7A4@earthlink.net>, mike.terrell@earthlink.net
(known to some as Michael A. Terrell) scribed...

<snippety>

>
> Maybe his granny got wired on homebrew moonshine?

...Or constructed a moonshine-driven battery? Be interesting to try
running a QRP rig off that... ;-)

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute
(Known to some as Bruce Lane, KC7GR)
http://www.bluefeathertech.com -- kyrrin a/t bluefeathertech d-o=t calm
"Salvadore Dali's computer has surreal ports..."

2839. Re: low pass filter between vfo and mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-19 08:45:59 UTC
From: aadu.adok@gmail.com
Message-ID: <1148028359.874163.254270@y43g2000cwc.googlegroups.com>
Source record: 12140

does anybody have a link to any project/schematic of heterodyne
frequency generator?

2840. Re: Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-19 11:45:09 UTC
From: Telstar Electronics <briangriffey@sbcglobal.net>
Message-ID: <1148039109.790739.193550@y43g2000cwc.googlegroups.com>
Source record: 12141

Where did you get the 30-50 henry inductor figure?

www.telstar-electronics.com

2841. Re: Thank god for this

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-19 12:51:52 UTC
From: Butch Magee <lynyrd@cableone.net>
Message-ID: <126rfrch57bbgcf@corp.supernews.com>
Source record: 12142

Me wrote:
> In article <655bg.7359$Go6.5368@trnddc04>,
> John - KD5YI <groups5munge@verizon.net> wrote:
>
>
>>Gary McIsaac wrote:
>>
>>>Hi everyone
>>>
>>>Just a quick message, does anyone actually read this news thing if so I
>>>would be glad to know why.
>>>Is there anyone out there?
>>>
>>>Thanks
>>>
>>>Gary
>>>
>>>
>>
>>
>>
>>No. Nobody is here.
>
>
> Not only that but we really don't care if you read it or not......
>
>
> Me
I heard one of 'em on here a few weeks ago, you can notice them by the odor too, if you don't happen to be watching the screen, but that one wasn't too bad. Havn't seen or smelled one since. They can't read you know, but they sure can figure!

Butch

2842. Re: Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-19 13:41:29 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <ekir62poqal48dp6mbv6si6i423221ilko@4ax.com>
Source record: 12143

I assume you are talking AM modulation and that you really want plate
modulation.

Otherwise you are discovering why screen modulation was so popular
with 6146 finals!

de W8CCW John

On Thu, 18 May 2006 19:56:21 -0700, Tony Angerame
<tangerame@earthlink.net> wrote:

>I've acquired a high power 50 watts plus tube type hifi output
>transformer. I'd like to try modulating a pair of 6146's with a hifi
>amp. The circuits I see use a modulating inductor in series with the B+
>to the final to keep single ended dc off the transformer secondary.
>
>Here's the rub. Where do you find a 30-50 henry inductor for 800+ volts?
>I was thinking of checking out the secondary of a tv transformer? (Not
>many left used to be common whatever happened to those tv's).
>
>Anyone have any ideas on winding one? Seems to me taking an old
>transformer apart and scramble winding as much wire as one can afford
>might do the trick?
>
>Ideas?
>
>
>Thanks,
>
>
>Tony,
>
>WA6LZH
John Ferrell W8CCW

2843. New program - HELIX_2

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-19 17:13:00 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <8JqdnSElU_P4YPDZRVnyhQ@bt.com>
Source record: 12144

Short helically-wound monopole antennas.

Enter helical height, diameter and frequency - calculate number of
turns and wire gauge for 1/4-wave resonance. Plus efficiency and
other characteristics.

Download program HELIX_2 from website below. 45 kilo-bytes.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

2844. Re: Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-19 17:32:56 UTC
From: Telstar Electronics <briangriffey@sbcglobal.net>
Message-ID: <1148059976.764499.190990@38g2000cwa.googlegroups.com>
Source record: 12145

Yes... I think he should seriously consider low-level modulation
instead of high-level modulation.

www.telstar-electronics.com

2845. Re: Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-19 19:12:53 UTC
From: Pete Bertini <radioconnection@cox.net>
Message-ID: <1Nobg.67954$IZ2.50975@dukeread07>
Source record: 12146

"John Ferrell" <johnferrell@sprintmail.com> wrote in message
news:ekir62poqal48dp6mbv6si6i423221ilko@4ax.com...
>I assume you are talking AM modulation and that you really want plate
> modulation.
>
> Otherwise you are discovering why screen modulation was so popular
> with 6146 finals!
>
> de W8CCW John
>

I suspect he is talking Heising modulation, which normally is used
with a single-ended Class A modulator whose plate is directly tied
to the PA plate (the choke is used to provide a high impedance to
the filter chokes. But, what I wonder, a 50 watt tube audio amp is
very substantial, and is probably running Class B P-P. I don't see
how Heising modulation would work in that application.

Pete

2846. Re: Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-19 19:14:21 UTC
From: Pete Bertini <radioconnection@cox.net>
Message-ID: <pOobg.67955$IZ2.26832@dukeread07>
Source record: 12147

Tony

What you need to do is to find a universal modulation transformer and replace the audio output transformer used on the audio amplifier. That is the most practical solution to your quest.

Pete

2847. Re: Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-19 23:13:44 UTC
From: Pete Bertini <radioconnection@cox.net>
Message-ID: <Qisbg.68752$IZ2.13374@dukeread07>
Source record: 12048

<Allisonnospam@nouce.bellatlantic.net> wrote in message
news:iefs629eetdc847cl956v36g2lu7hdtvka@4ax.com...
> On Fri, 19 May 2006 15:12:53 -0400, "Pete Bertini"
> <radioconnection@cox.net> wrote:
>
>>
>>"John Ferrell" <johnferrell@sprintmail.com> wrote in message
>>news:ekir62poqal48dp6mbv6si6i423221ilko@4ax.com...
>>>I assume you are talking AM modulation and that you really want plate
>>> modulation.
>>>
>>> Otherwise you are discovering why screen modulation was so popular
>>> with 6146 finals!
>>>
>>> de W8CCW John
>>>
>>
>>I suspect he is talking Heising modulation, which normally is used
>>with a single-ended Class A modulator whose plate is directly tied
>>to the PA plate (the choke is used to provide a high impedance to
>>the filter chokes. But, what I wonder, a 50 watt tube audio amp is
>>very substantial, and is probably running Class B P-P. I don't see
>>how Heising modulation would work in that application.
>>
>>Pete
>
> Thats one form. The other is to use a huge plate inductor and couple
> with a cap (usually 8 to 20uf) to the plate side of the inductor.
> The modulator can be either single ended or PP and the plate side of
> the Mod amp couples through the cap to the mod inductor.
>
> Reason for doing this. At 6146 power level you seeing 600-800V
> DC power for plates and modulation will take this to over 1200.
> Those numbers are manageable. For bigger tubes (say a pair of
> 3-500s) the plate voltage can be 2000V or higher and with modulation
> peaks hit 4000. By using an inductor the PP transformer is isolated
> from the really high volts. Choke with required insulation are/were
> common in big transmitters for broadcast and HF. However mod
> transformers that can stand 1000V on one side (say PP plates) and
> 2-5000V on the other side can be hard to come by. Gets the big DC off
> stuff even though there are some impressive AC voltages with
> modulation.
>
> The trick for 6146 size amps is a big choke on the final plates DC and

> a good 8uF 1000V cap and you can then use a tube amp of suitable
> power if you couple the cap to the plate side of the output
> transformer. You can even use a solid state amp with a 8ohm to few
> thousand ohm transformer that doesnt have to stand 600-900V dc.
> Cheap 8ohm to plate(say 2000ohm) transformer? Try a 6V to 220
> control transformer backward or maybe a transformer out of an old
> (tube before transformerless) TV.
>
>
> Allison

Agreed, but the choke must be able to stand the high DC standing
current without going into saturation. Also, the choke method
somewhat limits the maximum modulation unless a few
additional steps are taken. I'd be leary about some of the
suggestions regarding the use of pwr. transformer windings
to accomplish the task.

Pete

2848. Looking for article in 73 magazine, October 1994

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-19 23:27:38 UTC
From: CB <temp1@tomochka.com>
Message-ID: <1148081258.687673.106780@g10g2000cwb.googlegroups.com>
Source record: 12049

The one entitled:
QUICKIE CHEAPIE TENER 1W CW 10M TRANSMITTER

Can someone sell me the mag or a copy of the article, please?

tnx es 73,

C

2849. Re: Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-20 00:15:29 UTC
From: Lynn Coffelt <coffelt2@comcast.net>
Message-ID: <e4lmv1$7dm$1@emma.aioe.org>
Source record: 12050

"Tony Angerame" <tangerame@earthlink.net> wrote in message
news:W8SdndNbbsVRrvDZRVn-rA@comcast.com...
> I've acquired a high power 50 watts plus tube type hifi output
> transformer. I'd like to try modulating a pair of 6146's with a hifi
> amp. The circuits I see use a modulating inductor in series with the B+
> to the final to keep single ended dc off the transformer secondary.
>
> Here's the rub. Where do you find a 30-50 henry inductor for 800+ volts?
> I was thinking of checking out the secondary of a tv transformer? (Not
> many left used to be common whatever happened to those tv's).
>
> Anyone have any ideas on winding one? Seems to me taking an old
> transformer apart and scramble winding as much wire as one can afford
> might do the trick?
>
> Ideas?
>
>
A blast from the past: Oftentimes the voltage rating of chokes was more
a limitation of breakdown from conductor/windings to the core or case rather
than interwinding breakdown. So..... a quick method of cheating on the
rating was to mount the choke on standoff insulators or at least insulating
the choke from any metal in the chassis or frame of the RF or modulator
deck. Only thing then is to be sure to treat that choke core or case as if
it might be at high voltage potential......yikes!
Although Choke modulation (or Heising as one respondent mentioned) is
"high level" modulation if applied to the RF final plate/s, it takes a lot
of tinkering to achieve 100% modulation (balanced, above and below zero).
Almost always a compromise in Amateur gear, and some broadcast gear came
close, but at great expense.
Many will throw rocks at me for this, but "low level" modulation is a
huge waste of RF power, and in the good (?) old days, was just another
weakly modulated hetrodyne the howling AM section of the bands. OH, OUCH,
OWEE, HEY!
Old Chief Lynn W7LTQ

2850. 5.0 - 5.5 mHz. VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-20 01:48:03 UTC
From: k9jri <kn9jri@gmail.com>
Message-ID: <1148089683.117088.14490@j73g2000cwa.googlegroups.com>
Source record: 12051

I am looking for a contruction artical or some other starting point for a solid state 5 to 5.5 mHz. VFO to use with my PSK-20. Hopefully somebody can point me to a contruction project, a kit or a source of a VFO.

2851. Re: 5.0 - 5.5 mHz. VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-20 02:06:17 UTC
From: dplatt@radagast.org
Message-ID: <126sucptkqp1ic2@corp.supernews.com>
Source record: 12052

In article <1148089683.117088.14490@j73g2000cwa.googlegroups.com>,
k9jri <kn9jri@gmail.com> wrote:

>I am looking for a contruction artical or some other starting point for
>a solid state 5 to 5.5 mHz. VFO to use with my PSK-20. Hopefully
>somebody can point me to a contruction project, a kit or a source of a
>VFO.

Buying a copy of "Experimental Methods in RF Design" (the successor
text to "Solid-State Design for the Radio Amateur") would be a very
good place to start reading. These guys have written down a vast
amount of very practical information and experience about how to do
this sort of thing well and reliably.

http://www.bright.net/~kanga/kanga/KK7B/uvfo.htm is a "universal" VFO
kit which you might be able to adapt for your needs.

Doug Demaw W1FB had another "universal VFO" design in his "QRP
Notebook" (a great book if you can find a copy). You can buy a kit
for it (board, semiconductors, air-variable cap, copy of the
construction article) for $30 from

http://www.danscloseoutsandspecialdeals.com/kitcloseouts.html

I've bought stuff from Dan a couple of times and have always been
satisfied with what I've received.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2852. Transformer for PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-20 09:50:12 UTC
From: 5itu <noSpam@wanadoo.fr>
Message-ID: <446ee646$0$19697$8fcfb975@news.wanadoo.fr>
Source record: 12053

Hello,

I'm building the "FARA"amplifier (QST June 2003).
Unfortunately, I 'm not able to get the T-3/4 cores, so I wonder whether I couldn't take two ferrite cores used to avoid the RFI made by the wiring of computers ?
Obviously, I will try it but I would like to get some advices before...

73 Daniel

2853. Direct Conversion Receiver with NPN transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-20 10:13:44 UTC
From: Nev <a@b.com>
Message-ID: <446eebb5_2@news.tm.net.my>
Source record: 12054

Does anyone have any schematic for Direct Conversion receiver that does not use any FETs, Valves or ICs (e.g. NE602) but uses NPN transistors?

2854. Re: 5.0 - 5.5 mHz. VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-20 10:40:44 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <kLydnWDdQsixb_PZRVn-hA@bright.net>
Source record: 12055

I'm pretty sure every issue of the ARRL Handbook ever published has had
a schematic for just such a critter...haven't got one for several years,
but they USED to have a design...

Scott

Dave Platt wrote:

> In article <1148089683.117088.14490@j73g2000cwa.googlegroups.com>,
> k9jri <kn9jri@gmail.com> wrote:
>
>
>>I am looking for a contruction artical or some other starting point for
>>a solid state 5 to 5.5 mHz. VFO to use with my PSK-20. Hopefully
>>somebody can point me to a contruction project, a kit or a source of a
>>VFO.
>
>
> Buying a copy of "Experimental Methods in RF Design" (the successor
> text to "Solid-State Design for the Radio Amateur") would be a very
> good place to start reading. These guys have written down a vast
> amount of very practical information and experience about how to do
> this sort of thing well and reliably.
>
> http://www.bright.net/~kanga/kanga/KK7B/uvfo.htm is a "universal" VFO
> kit which you might be able to adapt for your needs.
>
> Doug Demaw W1FB had another "universal VFO" design in his "QRP
> Notebook" (a great book if you can find a copy). You can buy a kit
> for it (board, semiconductors, air-variable cap, copy of the
> construction article) for $30 from
>
> http://www.danscloseoutsandspecialdeals.com/kitcloseouts.html
>
> I've bought stuff from Dan a couple of times and have always been
> satisfied with what I've received.
>

2855. Re: 5.0 - 5.5 mHz. VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-20 11:28:17 UTC
From: amdx <amdx@knology.net>
Message-ID: <d86b7$446efd41$45011502$7964@KNOLOGY.NET>
Source record: 12056

"k9jri" <kn9jri@gmail.com> wrote in message
news:1148089683.117088.14490@j73g2000cwa.googlegroups.com...
> I am looking for a contruction artical or some other starting point for
> a solid state 5 to 5.5 mHz. VFO to use with my PSK-20. Hopefully
> somebody can point me to a contruction project, a kit or a source of a
> VFO.
>
I think there was an article in QST within the last ten years that
described a 5 to 5.5 mhz VFO.
Mike

2856. Re: Direct Conversion Receiver with NPN transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-20 11:30:32 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1148124632.697502.109970@i39g2000cwa.googlegroups.com>
Source record: 12057

Here's a direct conversion transceiver that might give you some ideas

http://www.intio.or.jp/jf10zl/3trcw.htm

I don't think you will find that this is a particularly good receiver,
but it is the only IC-free DC receiver I know of on the web (and its
VERY clever!).

Or, if you have a circuit that uses a CA3028 mixer, you can easily make
up the equivalent from 3 NPN transistors and some resistors.

73,
Steve VE3SMA

2857. Re: 5.0 - 5.5 mHz. VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-20 16:45:39 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <sradndGLIMIo2vLZ4p2dnA@web-ster.com>
Source record: 12058

My 1933 ARRL Handbook does not have a schematic for a 5 to 5.5MHz VFO,
much less a solid state one.

Receivers that used 5MHz VFOs didn't start appearing until the mid '50s
(judging from my meager collection of handbooks -- I only have eight
spanning '33 to '76), with VFO SSB transmitters appearing about the same
time.

Someone who was actually alive at the time, or with a more extensive
collection, may be able to contribute more.

Scott wrote:

> I'm pretty sure every issue of the ARRL Handbook ever published has had
> a schematic for just such a critter...haven't got one for several years,
> but they USED to have a design...
>
> Scott
>
>
>
> Dave Platt wrote:
>
>> In article <1148089683.117088.14490@j73g2000cwa.googlegroups.com>,
>> k9jri <kn9jri@gmail.com> wrote:
>>
>>
>>> I am looking for a contruction artical or some other starting point for
>>> a solid state 5 to 5.5 mHz. VFO to use with my PSK-20. Hopefully
>>> somebody can point me to a contruction project, a kit or a source of a
>>> VFO.
>>
>>
>>
>> Buying a copy of "Experimental Methods in RF Design" (the successor
>> text to "Solid-State Design for the Radio Amateur") would be a very
>> good place to start reading. These guys have written down a vast
>> amount of very practical information and experience about how to do
>> this sort of thing well and reliably.
>>
>> http://www.bright.net/~kanga/kanga/KK7B/uvfo.htm is a "universal" VFO
>> kit which you might be able to adapt for your needs.
>>
>> Doug Demaw W1FB had another "universal VFO" design in his "QRP
>> Notebook" (a great book if you can find a copy). You can buy a kit

>> for it (board, semiconductors, air-variable cap, copy of the
>> construction article) for $30 from
>>
>> http://www.danscloseoutsandspecialdeals.com/kitcloseouts.html
>>
>> I've bought stuff from Dan a couple of times and have always been
>> satisfied with what I've received.
>>

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

2858. Re: Direct Conversion Receiver with NPN transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-20 16:53:54 UTC
From: dplatt@radagast.org
Message-ID: <126uid2h89nv9a5@corp.supernews.com>
Source record: 12059

>Does anyone have any schematic for Direct Conversion receiver that does not
>use any FETs, Valves or ICs (e.g. NE602) but uses NPN transistors?

"Experimental Methods in RF design", section 1.8, page 1.13, has the
schematic for a DC receiver which uses NPN transistors throughout most
of its design (including the product detector). Tuning is done via a
varactor-based VCO - you might be able to substitute a reverse-biased
junction in an NPN transistor for the varactor.

There are two ICs - an LM7805 voltage regulator (for which you could
probably substitute a shunt regulator such as a zener diode or an NPN
transistor wired up as a Vbe-multiplier) and an LM386 audio amplifier
(for which you could substitute the discrete-NPN audio amp design on
the previous page of the book).

I'd say there's a good chance you could modify this design so that
every single semiconductor in it was an NPN transistor such as a
2N3904 or 2N2222 or a similar jellybean.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2859. Re: Direct Conversion Receiver with NPN transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-20 17:19:28 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <8MOdnUv_9LoC0vLZnZ2dnUVZ_tSdnZ2d@web-ster.com>
Source record: 12060

Dave Platt wrote:
>>Does anyone have any schematic for Direct Conversion receiver that does not
>>use any FETs, Valves or ICs (e.g. NE602) but uses NPN transistors?
>
>
> "Experimental Methods in RF design", section 1.8, page 1.13, has the
> schematic for a DC receiver which uses NPN transistors throughout most
> of its design (including the product detector). Tuning is done via a
> varactor-based VCO - you might be able to substitute a reverse-biased
> junction in an NPN transistor for the varactor.
>
> There are two ICs - an LM7805 voltage regulator (for which you could
> probably substitute a shunt regulator such as a zener diode or an NPN
> transistor wired up as a Vbe-multiplier) and an LM386 audio amplifier
> (for which you could substitute the discrete-NPN audio amp design on
> the previous page of the book).
>
> I'd say there's a good chance you could modify this design so that
> every single semiconductor in it was an NPN transistor such as a
> 2N3904 or 2N2222 or a similar jellybean.
>
-- or for the shunt regulator you could use a back-biased base-emitter
junction in a 2N2222. It trashes the transistor, but it makes an
adequate zener.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

2860. Re: 5.0 - 5.5 mHz. VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-20 17:51:17 UTC
From: "g. beat"
Message-ID: <uqKdnaNzduiAyvLZRVn-jg@comcast.com>
Source record: 12061

"k9jri" <kn9jri@gmail.com> wrote in message
news:1148089683.117088.14490@j73g2000cwa.googlegroups.com...
>I am looking for a contruction artical or some other starting point for
> a solid state 5 to 5.5 mHz. VFO to use with my PSK-20. Hopefully
> somebody can point me to a contruction project, a kit or a source of a
> VFO.
>

A Drake TR-5 PTO will work for that application.

2861. Re: 5.0 - 5.5 mHz. VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-20 17:54:42 UTC
From: "g. beat"
Message-ID: <zaydnbUELdJ-yvLZRVn-og@comcast.com>
Source record: 12062

"k9jri" <kn9jri@gmail.com> wrote in message
news:1148089683.117088.14490@j73g2000cwa.googlegroups.com...
>I am looking for a contruction artical or some other starting point for
> a solid state 5 to 5.5 mHz. VFO to use with my PSK-20. Hopefully
> somebody can point me to a contruction project, a kit or a source of a
> VFO.
>

You may wish to look at the WA6OTP PTO Kit - sounds like a possible fit.
http://www.wa6otp.com/pto.htm

2862. Re: 5.0 - 5.5 mHz. VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-20 18:54:58 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <e4nom2$c3u$1@theodyn.ncf.ca>
Source record: 12063

Tim Wescott (tim@seemywebsite.com) writes:
> My 1933 ARRL Handbook does not have a schematic for a 5 to 5.5MHz VFO,
> much less a solid state one.
>
> Receivers that used 5MHz VFOs didn't start appearing until the mid '50s
> (judging from my meager collection of handbooks -- I only have eight
> spanning '33 to '76), with VFO SSB transmitters appearing about the same
> time.
>
I'm sure that was exageration, but they do have a point. 5MHz VFOs have
to be one of the more common items in the magazines and books over the years.
Even before 5MHz came along for use with a 9MHz IF, the books and magazines
were full of VFOs that could be shifted to 5MHz. There was a period when
6MHz was a common VFO frequency, for use with multiplying VHF transmitters,
and those would be even easier to shift to 5MHz than a 3.5 or 7Mhz VFO.

If someone is asking about a 5MHz VFO, they've not looked far. Now,
the case may be that they are looking for something more specific, but
in that case it makes sense to be specific.

If someone wants out of the book, yes they won't find a 5MHz vfo in the
1933 Handbook. But, once they go that far back not only will they be
tubes, but stability will likely be an issue. 1933 either predates the
laws requiring "crystal-like" stability, or such laws were recently passed.
Look at the diagrams from that era, and a lot of later concerns in
construction haven't come into common place.

Michael VE2BVW

> Someone who was actually alive at the time, or with a more extensive
> collection, may be able to contribute more.
>
> Scott wrote:
>
>> I'm pretty sure every issue of the ARRL Handbook ever published has had
>> a schematic for just such a critter...haven't got one for several years,
>> but they USED to have a design...
>>
>> Scott
>>
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>>
>> Dave Platt wrote:
>>
>>> In article <1148089683.117088.14490@j73g2000cwa.googlegroups.com>,

>>> k9jri <kn9jri@gmail.com> wrote:
>>>
>>>
>>>> I am looking for a contruction artical or some other starting point for
>>>> a solid state 5 to 5.5 mHz. VFO to use with my PSK-20. Hopefully
>>>> somebody can point me to a contruction project, a kit or a source of a
>>>> VFO.
>>>
>>>
>>>
>>> Buying a copy of "Experimental Methods in RF Design" (the successor
>>> text to "Solid-State Design for the Radio Amateur") would be a very
>>> good place to start reading. These guys have written down a vast
>>> amount of very practical information and experience about how to do
>>> this sort of thing well and reliably.
>>>
>>> http://www.bright.net/~kanga/kanga/KK7B/uvfo.htm is a "universal" VFO
>>> kit which you might be able to adapt for your needs.
>>>
>>> Doug Demaw W1FB had another "universal VFO" design in his "QRP
>>> Notebook" (a great book if you can find a copy). You can buy a kit
>>> for it (board, semiconductors, air-variable cap, copy of the
>>> construction article) for $30 from
>>>
>>> http://www.danscloseoutsandspecialdeals.com/kitcloseouts.html
>>>
>>> I've bought stuff from Dan a couple of times and have always been
>>> satisfied with what I've received.
>>>
>
>
> --
>
> Tim Wescott
> Wescott Design Services
> http://www.wescottdesign.com
>
> Posting from Google? See http://cfaj.freeshell.org/google/
>
> "Applied Control Theory for Embedded Systems" came out in April.
> See details at http://www.wescottdesign.com/actfes/actfes.html

2863. Re: 5.0 - 5.5 mHz. VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-20 22:09:44 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <IsMbg.826$kR6.725@trnddc05>
Source record: 12064

If my memory is correct, the PSK-20 is used for, well... PSK.

That being the case, I think you might find it difficult to get adequate frequency stability using a free-running VFO. Since the PSK decoder software automatically gives you about 2KHz of tuning in software, a PLL approach would be quite easy and should produce a clean spectrum if done properly. I think a DDS solution would also be quite good for this application

Joe
W3JDR

"k9jri" <kn9jri@gmail.com> wrote in message
news:1148089683.117088.14490@j73g2000cwa.googlegroups.com...
>I am looking for a contruction artical or some other starting point for
> a solid state 5 to 5.5 mHz. VFO to use with my PSK-20. Hopefully
> somebody can point me to a contruction project, a kit or a source of a
> VFO.
>

2864. Re: Direct Conversion Receiver with NPN transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-20 23:17:58 UTC
From: sailtamarack@yahoo.ca
Message-ID: <1148167078.424706.191120@j33g2000cwa.googlegroups.com>
Source record: 12065

You might want to check out VE7BPO's site for DC receiver ideas. He has lots of experimental circuits using NPNs and he will respond to emails if you have any questions.

http://www.qrp.pops.net/

Good luck - Roger

Nev wrote:
> Does anyone have any schematic for Direct Conversion receiver that does not
> use any FETs, Valves or ICs (e.g. NE602) but uses NPN transistors?

2865. Re: Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-20 23:24:32 UTC
From: Telstar Electronics <briangriffey@sbcglobal.net>
Message-ID: <1148167472.121722.81820@i39g2000cwa.googlegroups.com>
Source record: 12066

Enjoyed reading your post Lynn...

www.telstar-electronics.com

2866. Re: Direct Conversion Receiver with NPN transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-21 00:24:49 UTC
From: Jim <kill-spam@no-spam.org>
Message-ID: <Q86dnRK8P6vILvLZRVn-gw@comcast.com>
Source record: 12067

There was an article in QST many years ago (late 1960's ??) which was one of the early direct conversion articles. This one used 88 mH filters, and a three transistor audio amplifier. It was written by Doug Demaw, if memory serves, and it is probably the simplest, but useful, direct conversion design I have ever seen.

Granted, getting 88 mH coils is not as easy as it was back then, but all in all, I think this fits the original request. The radio used NPN transistors thoughout.

Jim
N6BIU

2867. Re: Direct Conversion Receiver with NPN transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-21 02:25:11 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <e4oj27sn1@theodyn.ncf.ca>
Source record: 12068

"Jim" (kill-spam@no-spam.org) writes:
> There was an article in QST many years ago (late 1960's ??) which was
> one of the early direct conversion articles. This one used 88 mH filters,
> and a three transistor audio amplifier. It was written by Doug Demaw, if
> memory serves, and it is probably the simplest, but useful, direct
> conversion design I have ever seen.
>
But one thing about direct conversion receivers is that it took years before
they became good.

The basic premise, beating a signal directly down to audio, is as old as
the regenerative receiver. ANd of course there were explicit mixer/oscillator
type receivers in the decades after that, that all seemed to end in "dyne".

IN 1961, QST ran an article, I can't remember if it mentioned "direct
conversion", that was direct conversion as we came to know it. A mixer
and an oscillator, and if I'm remembering they used two tubes in the mixer
for a balanced mixer.

Then there's the Hayward article, there was a co-author, in 1968, that
actually did make mention of "direct conversion". It used schottkey
diodes in a balanced mixer. And that's when they took off.

But in the articles afterwards used just about any possible mixer,
with varying results. Everyone was trying to get a good direct conversion
receiver, but I'm not sure they really understood them. So the focus
was on another variation of a well-balanced mixer.

It took till 1980, before there was a real change. That's when Roy
Lewallen came out with his "optimized QRP transceiver", which featured
a terminated mixer. I'm pretty certain that's the first time a DC
receiver had a terminated mixer. I can remember the 1974 QST article when
terminated mixers for VHF converters were introduced to the amateur world.

I really do say that 1980 article of Roy's was the dividing line. Before
that, no matter how good the mixer there always seemed to be problems. Then
we moved into an area where simplicity wasn't the first consideration for
direct conversion, but performance came first.

Michael VE2BVW

> Granted, getting 88 mH coils is not as easy as it was back then, but all
> in all, I think this fits the original request. The radio used NPN
> transistors thoughout.
>
>
>

> Jim
> N6BIU
>
>
>

2868. Re: Transformer for PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-21 14:04:38 UTC
From: "g. beat"
Message-ID: <TvWdnSDE7u3n7u3ZnZ2dnUVZ_umdnZ2d@comcast.com>
Source record: 12069

"5itu" <noSpam@wanadoo.fr> wrote in message
news:446ee646$0$19697$8fcfb975@news.wanadoo.fr...
> Hello,
>
> I'm building the "FARA"amplifier (QST June 2003).
> Unfortunately, I 'm not able to get the T-3/4 cores, so I wonder whether I
> couldn't take two ferrite cores used to avoid the RFI made by the wiring
> of computers ?
> Obviously, I will try it but I would like to get some advices before...
>
> 73 Daniel
Dan -

Much of this information can be found on the FARA web site
http://www.falara.org/tektalk/tektalkfs.html

Updated parts list
http://www.falara.org/tektalk/hfpartslist.html

RF PARTS COMPANY has this specific part, they do export - but may have a
minimum order size.
(800)737-2787

You can also contact FARA directly -- if a club member has this part
available.

w9gb

2869. Re: 5.0 - 5.5 mHz. VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-21 14:11:43 UTC
From: "Dr. Jeff" <drjeff@optonline.net>
Message-ID: <1148220703.269787.22780@g10g2000cwb.googlegroups.com>
Source record: 12070

k9jri wrote:
> I am looking for a contruction artical or some other starting point for
> a solid state 5 to 5.5 mHz. VFO to use with my PSK-20. Hopefully
> somebody can point me to a contruction project, a kit or a source of a
> VFO.

The VFO used in the "Progressive Communications Receiver" by W7XZOI &
K5IRK, (QST 11/81; various ARRL Handbooks inc. 1990) is a good stable
general purpose JFET Hartley circuit VFO. It can be built to cover
frequencies from 2.5 to 10 Mhz. range.
The article has charts and calculations to derive component values for
the tuning capacitor, and inductor, etc. I've built one to cover exact
range you desire. As long as one follows good design practices, such
as: use NP0 capacitors only; tuned circuit should be lightly
coupled to the FET - i.e. use a small value like 2-3 pF cap., air
variable or small ceramic; the VFO will be stable. Power output is
around +5 to +8 dBm into 50 ohms depending upon type of dual gate
MOSFET used for the buffer amp.

Jeff

2870. Re: Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-21 14:22:52 UTC
From: JC <jcandela@prodigy.net>
Message-ID: <0J_bg.13154$fb2.5159@newssvr27.news.prodigy.net>
Source record: 12071

Tony,

I did exactly what you are describing. I used a solid state audio amp, and drove a tube type audio output transformer backwards to step up the impedance from 8 ohms to several thousand ohms. I used a 4 uf oil capacitor to couple that across a HV choke that carried the RF final amp plate current. For a choke I used a 125 watt Stancor poly-pedance modulation transformer where I used as much winding on the primary as available. It worked very well.

It might be easier to consider cathode modulation, and in this case the transformer turns ratio will be much less, and the HV problem will also be less. Maybe a 110/220 vac to 12vac 5 amp filament transformer will work out here. This is just a guess, but it might work. Cathode modulation is a combination of plate and grid 1 modulation, so the % eff is somewhere between 66% (plate) down to 33% (grid) , and might end up at about 50%. Consider the 220 vct winding where the grid return goes to the CT, and the cathode goes to the top of the 220 v winding, and the bottom of the winding goes to ground. Your turns ratio need may vary, but the concept proposed is workable.

Jim
WD5JKO

"Tony Angerame" <tangerame@earthlink.net> wrote in message
news:W8SdndNbbsVRrvDZRVn-rA@comcast.com...
> I've acquired a high power 50 watts plus tube type hifi output
> transformer. I'd like to try modulating a pair of 6146's with a hifi amp.
> The circuits I see use a modulating inductor in series with the B+ to the
> final to keep single ended dc off the transformer secondary.
>
> Here's the rub. Where do you find a 30-50 henry inductor for 800+ volts?
> I was thinking of checking out the secondary of a tv transformer? (Not
> many left used to be common whatever happened to those tv's).
>
> Anyone have any ideas on winding one? Seems to me taking an old
> transformer apart and scramble winding as much wire as one can afford
> might do the trick?
>
> Ideas?
>
>
> Thanks,
>
>

> Tony,
>
> WA6LZH
>

2871. Re: Transformer for PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-21 14:32:41 UTC
From: "g. beat"
Message-ID: <MMydnTIX0vSQ5-3ZnZ2dnUVZ_t2dnZ2d@comcast.com>
Source record: 12072

"g. beat >" <@<spam protected> wrote in message
news:TvWdnSDE7u3n7u3ZnZ2dnUVZ_umdnZ2d@comcast.com...
> "5itu" <noSpam@wanadoo.fr> wrote in message
> news:446ee646$0$19697$8fcfb975@news.wanadoo.fr...
>> Hello,
>>
>> I'm building the "FARA"amplifier (QST June 2003).
>> Unfortunately, I 'm not able to get the T-3/4 cores, so I wonder whether
>> I couldn't take two ferrite cores used to avoid the RFI made by the
>> wiring of computers ?
>> Obviously, I will try it but I would like to get some advices before...
>>
>> 73 Daniel
> Dan -
>
> Much of this information can be found on the FARA web site
> http://www.falara.org/tektalk/tektalkfs.html
>
> Updated parts list
> http://www.falara.org/tektalk/hfpartslist.html
>
> RF PARTS COMPANY has this specific part, they do export - but may have a
> minimum order size.
> (800)737-2787

Here is the RF Parts web site. They do have a $25 minimum order
http://www.rfparts.com/

>
> You can also contact FARA directly -- if a club member has this part
> available.
>
> w9gb
>

2872. Re: Direct Conversion Receiver with NPN transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-21 15:18:05 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <vw%bg.78149$Jk3.7949@bignews5.bellsouth.net>
Source record: 12073

Michael Black wrote:
> "Jim" (kill-spam@no-spam.org) writes:
>
>> There was an article in QST many years ago (late 1960's ??) which was
>>one of the early direct conversion articles. This one used 88 mH filters,
>>and a three transistor audio amplifier. It was written by Doug Demaw, if
>>memory serves, and it is probably the simplest, but useful, direct
>>conversion design I have ever seen.
>>
>
> But one thing about direct conversion receivers is that it took years before
> they became good.
>
> The basic premise, beating a signal directly down to audio, is as old as
> the regenerative receiver. ANd of course there were explicit mixer/oscillator
> type receivers in the decades after that, that all seemed to end in "dyne".
>
> IN 1961, QST ran an article, I can't remember if it mentioned "direct
> conversion", that was direct conversion as we came to know it. A mixer
> and an oscillator, and if I'm remembering they used two tubes in the mixer
> for a balanced mixer.
>
> Then there's the Hayward article, there was a co-author, in 1968, that
> actually did make mention of "direct conversion". It used schottkey
> diodes in a balanced mixer. And that's when they took off.
>
> But in the articles afterwards used just about any possible mixer,
> with varying results. Everyone was trying to get a good direct conversion
> receiver, but I'm not sure they really understood them. So the focus
> was on another variation of a well-balanced mixer.
>
> It took till 1980, before there was a real change. That's when Roy
> Lewallen came out with his "optimized QRP transceiver", which featured
> a terminated mixer. I'm pretty certain that's the first time a DC
> receiver had a terminated mixer. I can remember the 1974 QST article when
> terminated mixers for VHF converters were introduced to the amateur world.
>
> I really do say that 1980 article of Roy's was the dividing line. Before
> that, no matter how good the mixer there always seemed to be problems. Then
> we moved into an area where simplicity wasn't the first consideration for
> direct conversion, but performance came first.
>
> Michael VE2BVW
>

>
>> Granted, getting 88 mH coils is not as easy as it was back then, but all
>>in all, I think this fits the original request. The radio used NPN
>>transistors thoughout.
>>
>>
>>
>> Jim
>> N6BIU
>>
>>
>>
>
>
>
The direct conversion transceiver is what gave TenTec their start.
They had a few different models in kit, semi-kit, and assembled
formats. QST picked up the craze and there were a number of articles
on building these. Detectors were dual gate fets, CA2028's,
diode bridges, Mini-Circuit mixer modules, and later IC's with
built in vfo's.

Back in the 60's, there was an early direct conversion receiver that
used two 6SB7Y's in a balanced circuit with a B&W phase splitter run
bass-ackwards and an rf phase splitter in the vfo. This was actually
a single signal receiver using the idea of a phasing sideband modulator
in reverse. Today we'd call it an image-reject mixer.

What's old is new again.....

2873. Re: Transformer for PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-21 15:21:04 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <iz%bg.78150$Jk3.46388@bignews5.bellsouth.net>
Source record: 12074

5itu wrote:
> Hello,
>
> I'm building the "FARA"amplifier (QST June 2003).
> Unfortunately, I 'm not able to get the T-3/4 cores, so I wonder whether I
> couldn't take two ferrite cores used to avoid the RFI made by the wiring of
> computers ?
> Obviously, I will try it but I would like to get some advices before...
>
> 73 Daniel
>
>
Usually, the ferrite cores used for RFI rejection are made of the
same stuff as those used in broadband power transformers so it
might work. However those cores are split in two for easy
application. Glue them together first with a good grade of epoxy
keeping the glue layer as thin as possible. The power handling
may not be as good as the real McCoy though.....

2874. Re: FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-21 15:24:16 UTC
From: Ross Mac <this.is.a.mung@example.invalid>
Message-ID: <T9GdnaxxvPi0G-3ZnZ2dnUVZ_smdnZ2d@comcast.com>
Source record: 12075
Cross-posted to: alt.electronics.manufacture.circuitboard,alt.engineering.electrical,aus.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.equipment,uk.radio.amateur

"Roy L. Fuchs" <roylfuchs@urfargingicehole.org> wrote in message
news:0rhl629t40if5hih8t7hm85gn5s5h44qei@4ax.com...
> On Mon, 15 May 2006 19:42:38 -0400, "Ross Mac"
> <this.is.a.mung@example.invalid> Gave us:
>
>>
>>"Roy L. Fuchs" <roylfuchs@urfargingicehole.org> wrote in message
>>news:gvof629spp34fho2k68kvv340b0memcg0r@4ax.com...
>>> On Sun, 14 May 2006 17:44:51 -0400, "Ross Mac"
>>> <this.is.a.mung@example.invalid> Gave us:
>>>
>>>>
>>>>"Roy L. Fuchs" <roylfuchs@urfargingicehole.org> wrote in message
>>>>news:l70f62pu6h880c700hb0lghjn9moindili@4ax.com...
>>>>> On Fri, 12 May 2006 19:12:04 GMT, <glenron@ntlworld.com> Gave us:
>>>>>
>>>>>>FA KEITHLEY
>>>>>
>>>>> You posted to only ONE correct group. The posts in the rest of the
>>>>> groups are all SPAM, asshole.
>>>>
>>>>Wrong again Dimbulb...do your homework.....
>>>>
>>> Not in school, you stupid fucktard.
>>
>>Oh...you must be...you use schoolyard lingo!
>
> You wouldn't know. You're just an old alzheimeristic twit.
>
>>That's the best you can do Hey Dimbulb?
>
> My worst is two orders of magnitude better than your best.
>
>>Wrong and wrong again....what else is new....
>
> You should stop talking about yourself.
>
>>Big on mouth and small on brains.....
>>
> You're an idiot. That is quite succinct.
>

> This is a text forum, you retarded bastard. There are no mouths
> here, dumbfuck.

The typical moronic response expected from the likes of you Darkmatter.....

2875. Re: Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-21 17:15:00 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <9m7172hknjg8iits6h40c4cmdf97h5dmp9@4ax.com>
Source record: 12076

On Thu, 18 May 2006 19:56:21 -0700, Tony Angerame
<tangerame@earthlink.net> wrote:

>I've acquired a high power 50 watts plus tube type hifi output
>transformer. I'd like to try modulating a pair of 6146's with a hifi
>amp. The circuits I see use a modulating inductor in series with the B+
>to the final to keep single ended dc off the transformer secondary.
>
>Here's the rub. Where do you find a 30-50 henry inductor for 800+ volts?
>I was thinking of checking out the secondary of a tv transformer? (Not
>many left used to be common whatever happened to those tv's).
>
>Anyone have any ideas on winding one? Seems to me taking an old
>transformer apart and scramble winding as much wire as one can afford
>might do the trick?
>
>Ideas?
>
>
>Thanks,
>
>
>Tony,
>
>WA6LZH

It looks like AM is really becoming a "lost art". Of all the responses
here, only one or two guy knows what you are talking about.

The purpose of the choke inductor like you are describing is to keep
the DC off the secondary of the modulation transformer. This allows
the use of a modulation transformer with much less iron, which will
give better low frequency response. If the finals DC current is run
through the modulation transformer, as is commonly done, there needs
to be an air gap in the transformer to keep the core from saturating
from the DC current. The bigger the air gap the less inductance, the
greater amount of DC current it can handle before saturation and the
poorer low frequency response. To increase the inductance with a
larger air gap requires more iron (larger core) to bring the
inductance back up.

By using a choke and capacitivly coupling the audio from the
modulation transformer to the final plate there is no DC on the
secondary of the modulation transformer to cause saturation. The
modulation transformer then can be any audio transformer. It doesn't

need an air gap. The transformer can have much less iron in it for the same amount of inductance as one with an air gap. Very good low frequency response can be had this way.

By the way the screens of the final tubes need to be modulated along with the plates too. The easy way is to supply the screens through a dropping resistor from the top of the choke, the same point that feeds the plates.

THIS IS NOT HEISING MODULATION. It is regular old plate modulation just like you would do with a conventional modulation transformer.

Yes power transformers can be used quite successfully as a modulation transformer with this type of setup even though there is no air gap in the transformer. There is no worry about core saturation because there is no DC current on the transformer.

A large enough choke for this application can be had by putting several chokes in series to obtain the required inductance. Regular power supply chokes work fine. Do not use a swinging choke! It has no air gap and will saturate.

A TV transformer will not work well as a choke because it has no air gap and the core will saturate quickly with DC going through it.

Cathode modulation is very similar to grid modulation in performance. After all audio is placed between the grid and cathode just the same as it is with conventional grid modulation. The amount of cathode to plate modulation is minimal.

Screen modulation is similar in performance to grid modulation also. Efficiency is around 35% carrier efficiency. Very tricky to tune up properly.

Low level modulation with a linear amplifier behind the modulated driver also has an efficiency of around 35%. Excellent AM can be generated this way as is done with some SSB transmitters in the AM mode. If properly set up one can not tell the difference between it and a high level plate modulated transmitter except that the plate modulated transmitter will probably have higher distortion.

73
Gary K4FMX

2876. Re: Direct Conversion Receiver with NPN transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-21 19:27:12 UTC
From: Jim <kill-spam@no-spam.org>
Message-ID: <44udnTFJn8GJIu3ZnZ2dnUVZ_sSdnZ2d@comcast.com>
Source record: 12077

Ken Sharf Wrote:

>Back in the 60's, there was an early direct conversion receiver that
>used two 6SB7Y's in a balanced circuit with a B&W phase splitter run
>bass-ackwards and an rf phase splitter in the vfo. This was actually
>a single signal receiver using the idea of a phasing sideband modulator
>in reverse. Today we'd call it an image-reject mixer.
>
>What's old is new again.....
>

I remember that one !! Seems to me, it was in Single Sideband for the
Radio Amateur and I was really tempted to try to build one.

Actually, I was responding to the original request for a direct conversion
using NPN transistors. There are a lot of designs for direct conversion
rigs, and some of them are excellent.

Personally, I like the designs by KK7B and if someone wants to try their
hand at it, the Kanga website has some kits available.

http://www.bright.net/~kanga/kanga/KK7B/minir2.htm

They also carry the R2PRO which has excellent characteristics

http://www.bright.net/~kanga/kanga/KK7B/r2pro.htm

I've homebrewed from scratch some direct conversion breadboards over the
years, but these are image reject and would be a good starting point for a
complete transceiver.

Jim
N6BIU

2877. Re: FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-21 19:47:24 UTC
From: "Roy L. Fuchs" <roylfuchs@urfargingicehole.org>
Message-ID: <gtg172letiechtlciahvlssjq2nal7lbqj@4ax.com>
Source record: 12078
Cross-posted to: alt.electronics.manufacture.circuitboard,alt.engineering.electrical,aus.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.equipment,uk.radio.amateur

```
On Sun, 21 May 2006 11:24:16 -0400, "Ross Mac"
<this.is.a.mung@example.invalid> Gave us:

>
>"Roy L. Fuchs" <roylfuchs@urfargingicehole.org> wrote in message
>news:0rhl629t40if5hih8t7hm85gn5s5h44qei@4ax.com...
>> On Mon, 15 May 2006 19:42:38 -0400, "Ross Mac"
>> <this.is.a.mung@example.invalid> Gave us:
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>>>
>>>"Roy L. Fuchs" <roylfuchs@urfargingicehole.org> wrote in message
>>>news:gvof629spp34fho2k68kvv340b0memcg0r@4ax.com...
>>>> On Sun, 14 May 2006 17:44:51 -0400, "Ross Mac"
>>>> <this.is.a.mung@example.invalid> Gave us:
>>>>
>>>>>
>>>>>"Roy L. Fuchs" <roylfuchs@urfargingicehole.org> wrote in message
>>>>>news:l70f62pu6h880c700hb0lghjn9moindili@4ax.com...
>>>>>> On Fri, 12 May 2006 19:12:04 GMT, <glenron@ntlworld.com> Gave us:
>>>>>>
>>>>>>>FA KEITHLEY
>>>>>>
>>>>>> You posted to only ONE correct group. The posts in the rest of the
>>>>>> groups are all SPAM, asshole.
>>>>>
>>>>>Wrong again Dimbulb...do your homework.....
>>>>>
>>>> Not in school, you stupid fucktard.
>>>
>>>Oh...you must be...you use schoolyard lingo!
>>
>> You wouldn't know. You're just an old alzheimeristic twit.
>>
>>>That's the best you can do Hey Dimbulb?
>>
>> My worst is two orders of magnitude better than your best.
>>
>>>Wrong and wrong again....what else is new....
>>
>> You should stop talking about yourself.
>>
```

>>>Big on mouth and small on brains.....
>>>
>> You're an idiot. That is quite succinct.
>>
>> This is a text forum, you retarded bastard. There are no mouths
>> here, dumbfuck.
>
>The typical moronic response expected from the likes of you Darkmatter.....
>
You're an idiot.

2878. Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-21 22:41:13 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1148251273.804190.221090@g10g2000cwb.googlegroups.com>
Source record: 12079
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

hi guys,

After an hour or more of pushing and twiddling various buttons and knobs on my VNA I have at least established two standards: I connect a short and the (polar) spot flys off to the extreme left-hand-side and sits stably on the central horizontal axis. I then remove the short and replace it with an open and the spot jumps across 180 degrees to the extreme right-hand side on the same plane. All well and good so far. Next, I replace the open with a lab-grade 50 ohm termination and I wind up with an arc on the outermost circle of the polar chart at about two-thirds of the way round the circumference (clockwise) from "12 o'clock" as opposed to a spot in the dead center of the display as I would expect. What have I done wrong? I have checked this with 3 different 50 ohm loads and they all show an arc at the 'south west' corner of the chart. What's goin' on here, guys??
<confused>
Paul

2879. Hamfest, Georgetown, Delaware, May 27, 2006, 7 am- 5pm

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-21 23:23:05 UTC
From: Straydog <asd@panix.com>
Message-ID: <Pine.NEB.4.63.0605211917100.2629@panix1.panix.com>
Source record: 12080
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.radio.amateur.homebrew

At Sussex Tech High School, US Route 9 about a mile west of Route 113.

Admission free

Talk in 147.075 + input

more info:

n3jvt@yahoo.com
w3hrt@arrl.net
dsmith@sussex.vt.k12.de.us

Also, was mentioned in latest QST

2880. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 00:29:02 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1148257742.429945.239100@i39g2000cwa.googlegroups.com>
Source record: 12081
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

You haven't fully described your setup, so it's hard to tell. What are you using for a bridge? If I recall correctly, your VNA is an HP8754A, which won't do S-parameter measurements by itself; it requires an external bridge (an S-parameter test set, or a reflection-transmission test set, for example).

The fact that you see an arc on the outermost circle, assuming that you have it set as a unit circle on the linear reflection coefficient plane (the Smith Chart outer circle), implies that you have a (nearly) unity reflection coefficient. Is something almost disconnected so it looks like a tiny series capacitance?

2881. Re: Direct Conversion Receiver with NPN transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 00:32:46 UTC
From: JustMe <Me@your.mama>
Message-ID: <OE7cg.2017$8G3.1925@twister.nyroc.rr.com>
Source record: 12082

Try this link:
http://www.phonestack.com/farhan/xcvr1.html

"Nev" <a@b.com> wrote in message news:446eebb5_2@news.tm.net.my...
> Does anyone have any schematic for Direct Conversion receiver that does
not
> use any FETs, Valves or ICs (e.g. NE602) but uses NPN transistors?
>
>

2882. Re: FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 00:34:40 UTC
From: Ross Mac <this.is.a.mung@example.invalid>
Message-ID: <G7mdnYV-tqC-muzZ4p2dnA@comcast.com>
Source record: 12083
Cross-posted to: alt.electronics.manufacture.circuitboard,alt.engineering.electrical,aus.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.equipment,uk.radio.amateur

"Roy L. Fuchs" <roylfuchs@urfargingicehole.org> wrote in message
news:gtg172letiechtlciahvlssjq2nal7lbqj@4ax.com...
> On Sun, 21 May 2006 11:24:16 -0400, "Ross Mac"
> <this.is.a.mung@example.invalid> Gave us:
>
>>
>>"Roy L. Fuchs" <roylfuchs@urfargingicehole.org> wrote in message
>>news:0rhl629t40if5hih8t7hm85gn5s5h44qei@4ax.com...
>>> On Mon, 15 May 2006 19:42:38 -0400, "Ross Mac"
>>> <this.is.a.mung@example.invalid> Gave us:
>>>
>>>>
>>>>"Roy L. Fuchs" <roylfuchs@urfargingicehole.org> wrote in message
>>>>news:gvof629spp34fho2k68kvv340b0memcg0r@4ax.com...
>>>>> On Sun, 14 May 2006 17:44:51 -0400, "Ross Mac"
>>>>> <this.is.a.mung@example.invalid> Gave us:
>>>>>
>>>>>>
>>>>>>"Roy L. Fuchs" <roylfuchs@urfargingicehole.org> wrote in message
>>>>>>news:l70f62pu6h880c700hb0lghjn9moindili@4ax.com...
>>>>>>> On Fri, 12 May 2006 19:12:04 GMT, <glenron@ntlworld.com> Gave us:
>>>>>>>
>>>>>>>>>>>>>>FA KEITHLEY
>>>>>>>
>>>>>>> You posted to only ONE correct group. The posts in the rest of the
>>>>>>> groups are all SPAM, asshole.
>>>>>>
>>>>>>>Wrong again Dimbulb...do your homework.....
>>>>>>
>>>>>> Not in school, you stupid fucktard.
>>>>
>>>>Oh...you must be...you use schoolyard lingo!
>>>
>>> You wouldn't know. You're just an old alzheimeristic twit.
>>>
>>>>That's the best you can do Hey Dimbulb?
>>>
>>> My worst is two orders of magnitude better than your best.
>>>
>>>>Wrong and wrong again....what else is new....
>>>

>>> You should stop talking about yourself.
>>>
>>>>Big on mouth and small on brains.....
>>>>
>>> You're an idiot. That is quite succinct.
>>>
>>> This is a text forum, you retarded bastard. There are no mouths
>>> here, dumbfuck.
>>
>>The typical moronic response expected from the likes of you
>>Darkmatter.....
>>
> You're an idiot.

You resemble that remark....

2883. Re: Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 01:27:52 UTC
From: Lynn Coffelt <coffelt2@comcast.net>
Message-ID: <e4sfnm$di7$2@emma.aioe.org>
Source record: 12086

"Gary Schafer" <gaschafer@comcast.net> wrote in message
news:9m7172hknjg8iits6h40c4cmdf97h5dmp9@4ax.com...
>
> It looks like AM is really becoming a "lost art". Of all the responses
> here, only one or two guy knows what you are talking about.
>
> The purpose of the choke inductor like you are describing is to keep
> the DC off the secondary of the modulation transformer. This allows
> the use of a modulation transformer with much less iron, which will
> give better low frequency response. If the finals DC current is run
> through the modulation transformer, as is commonly done, there needs
> to be an air gap in the transformer to keep the core from saturating
> from the DC current. The bigger the air gap the less inductance, the
> greater amount of DC current it can handle before saturation and the
> poorer low frequency response. To increase the inductance with a
> larger air gap requires more iron (larger core) to bring the
> inductance back up.
>
> By using a choke and capacitivly coupling the audio from the
> modulation transformer to the final plate there is no DC on the
> secondary of the modulation transformer to cause saturation. The
> modulation transformer then can be any audio transformer. It doesn't
> need an air gap. The transformer can have much less iron in it for the
> same amount of inductance as one with an air gap. Very good low
> frequency response can be had this way.
>
> By the way the screens of the final tubes need to be modulated along
> with the plates too. The easy way is to supply the screens through a
> dropping resistor from the top of the choke, the same point that feeds
> the plates.
>
> THIS IS NOT HEISING MODULATION. It is regular old plate modulation
> just like you would do with a conventional modulation transformer.
>
> Yes power transformers can be used quite successfully as a modulation
> transformer with this type of setup even though there is no air gap in
> the transformer. There is no worry about core saturation because there
> is no DC current on the transformer.
>
> A large enough choke for this application can be had by putting
> several chokes in series to obtain the required inductance. Regular
> power supply chokes work fine. Do not use a swinging choke! It has no
> air gap and will saturate.
>

> A TV transformer will not work well as a choke because it has no air
> gap and the core will saturate quickly with DC going through it.
>
> Cathode modulation is very similar to grid modulation in performance.
> After all audio is placed between the grid and cathode just the same
> as it is with conventional grid modulation. The amount of cathode to
> plate modulation is minimal.
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> Screen modulation is similar in performance to grid modulation also.
> Efficiency is around 35% carrier efficiency. Very tricky to tune up
> properly.
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> Low level modulation with a linear amplifier behind the modulated
> driver also has an efficiency of around 35%. Excellent AM can be
> generated this way as is done with some SSB transmitters in the AM
> mode. If properly set up one can not tell the difference between it
> and a high level plate modulated transmitter except that the plate
> modulated transmitter will probably have higher distortion.
>
> 73
> Gary K4FMX

Oh, my gosh, you're right, Gary! It is not Heising modulation. For 60 years now I've had the mistaken impression that "Heising" implied simply that a series choke was used in the plate/screen supply to allow ANY modulation to be applied, either by modulator tube directly, or through a suitable capacitor.
I am embarrased. "Googling" brought up a whole lot of other aspects of high level modulation that I didn't know (or hopefully just forgot!)
Does anyone remember negative peak clipping that was the rage about 1958 or so? (Amateur only, as far as I know)..... If the scope wasn't lying, one of my home brew "high level" AM rigs was capable of modulation of over 100%. There was an awful lot of controvery at the time, and our nearest FCC chief engineer said that he didn't care if it did, it was still illegal.
Sigh.
Old Chief Lynn, W7LTQ

2884. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 09:22:08 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1148289728.231197.223160@j55g2000cwa.googlegroups.com>
Source record: 12084
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Okay, thanks. I must admit it is symptomatic of the load's center pin
not quite making contact for some reason, even though the load is fully
screwed home. But the same thing happens with 3 different loads!
I'm using the T/R test set, by the way, although I don't see how that
could explain the problem. I don't have the full S-parameter bridge but
am in the market for one.

2885. Re: 5.0 - 5.5 mHz. VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 12:39:46 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <miicg.5021$qn2.3637@trnddc04>
Source record: 12085

"k9jri" <kn9jri@gmail.com> wrote in message
news:1148089683.117088.14490@j73g2000cwa.googlegroups.com...
>I am looking for a contruction artical or some other starting point for
> a solid state 5 to 5.5 mHz. VFO to use with my PSK-20. Hopefully
> somebody can point me to a contruction project, a kit or a source of a
> VFO.
>
Google W7ZOI Progressive Receiver or check any ARRL Handbook from 1987-1994.
Mine has a worst case 5 minute warmup of +150Hz and stable +/- 20HZ
therafter in any 5 minute period.

Dale W4OP

2886. Re: Transformer for PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 16:25:11 UTC
From: 5itu <noSpam@wanadoo.fr>
Message-ID: <4471e5e3$0$21258$8fcfb975@news.wanadoo.fr>
Source record: 12087

HI,

Thanks a lot for your answers !

73, Daniel

2887. Giving away a free qrp transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 16:45:20 UTC
From: hamradio.dxer@yahoo.com
Message-ID: <1148316320.764887.85970@i39g2000cwa.googlegroups.com>
Source record: 12088

No, I'm not affiliated with them. But this company has a promotion
going this summer that you get a free qrp transmitter (it's not a kit)
if you buy one of their portable dipole antennas. Here's the promotion
page:

http://hamradiofun.com/summer-special.htm

73's from Fred

2888. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 18:22:03 UTC
From: dplatt@radagast.org
Message-ID: <12740abn01cvg07@corp.supernews.com>
Source record: 12089
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

>Okay, thanks. I must admit it is symptomatic of the load's center pin
>not quite making contact for some reason, even though the load is fully
>screwed home. But the same thing happens with 3 different loads!
>I'm using the T/R test set, by the way, although I don't see how that
>could explain the problem. I don't have the full S-parameter bridge but
>am in the market for one.

If you're using N connectors, check the center pins of the females.
Make sure that they aren't splayed open.

The local repeater association I'm a part of has had repeated problems
with splayed N connectors. They can be caused by a couple of
problems. A botched install of an N male can cause its center pin to
project too far forwards, out of the shell. We've also seen some N
adapters (Chinese-made I believe) whose center pin was larger than
usual in diameter, or was not tapered in the usual way.

In either case, if you screw an N male connector with a bad center pin
into an N female, the male's pin can force the split segments of the
center female pin outwards. Once this happens, a _good_ N male
connector's pin may not make reliable contact with the female's
damaged center pin. Intermittent nastiness can occur.

It's sometimes possible to bend the female's split pin sections back
together with needle-nose pliers, creating a repair which may or may
not be permanent. A better solution is to replace the damaged female
connectors entirely, and inspect all N male plugs and discard any
whose center pins are too large in diameter, not tapered properly, or
project too far out of the shell.

I suppose that similar problems might occur on BNC or SMA connectors
as well, for related reasons.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2889. Re: Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 18:23:00 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1148322180.668131.164920@j73g2000cwa.googlegroups.com>
Source record: 12090

Low level modulation is a huge waste of RF power?? Hey, _AM_ is a huge waste of RF power, and of spectrum to boot! Except with unusual modulating waveforms, >2/3 of the power is in a useless carrier. Now, compared with plate modulation of the PA, low level AM modulation followed by a linear amp may be somewhat less efficient (though a waste of DC power, not RF power), but remember, the modulator, presumably being a linear audio amplifier, isn't all that efficient either. In addition, there ARE ways to generate AM with low level modulation and efficient RF amplification--they have been used in AM broadcast transmitters.

For the cost of a good high-level modulator, how many kilowatt-hours can you buy?

Cheers,
Tom

2890. Re: Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 19:21:14 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <1p3472dgf4naqcbiv1feesst244slrc9qo@4ax.com>
Source record: 12091

On 19 May 2006 10:32:56 -0700, "Telstar Electronics"
<briangriffey@sbcglobal.net> wrote:

>Yes... I think he should seriously consider low-level modulation
>instead of high-level modulation.
>
>www.telstar-electronics.com

Looking at your web site I see you seem to manufacture CB amplifiers?
I also see you fail to post the 3rd and 5th order intermodulation
performance info. They must be pretty bad.
Also no low pass filter to attenuate the harmonics. -30 db second and
third harmonics are unacceptable. And those are at below power spec
on the amplifier.

How do you measure peak envelope power?
Where do you come up with PEP at 3 times carrier power?
What makes you think that PEP is going to be any greater than the CW
power output capability of the amplifier?

73
Gary K4FMX

2891. Re: Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 19:33:59 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <kg44721maekqdvg9qu8h5o0qntllok4np6@4ax.com>
Source record: 12092

On Sun, 21 May 2006 18:27:52 -0700, "Lynn Coffelt"
<coffelt2@comcast.net> wrote:

>
>"Gary Schafer" <gaschafer@comcast.net> wrote in message
>news:9m7172hknjg8iits6h40c4cmdf97h5dmp9@4ax.com...
>>
>> It looks like AM is really becoming a "lost art". Of all the responses
>> here, only one or two guy knows what you are talking about.
>>
>> The purpose of the choke inductor like you are describing is to keep
>> the DC off the secondary of the modulation transformer. This allows
>> the use of a modulation transformer with much less iron, which will
>> give better low frequency response. If the finals DC current is run
>> through the modulation transformer, as is commonly done, there needs
>> to be an air gap in the transformer to keep the core from saturating
>> from the DC current. The bigger the air gap the less inductance, the
>> greater amount of DC current it can handle before saturation and the
>> poorer low frequency response. To increase the inductance with a
>> larger air gap requires more iron (larger core) to bring the
>> inductance back up.
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>> By using a choke and capacitivly coupling the audio from the
>> modulation transformer to the final plate there is no DC on the
>> secondary of the modulation transformer to cause saturation. The
>> modulation transformer then can be any audio transformer. It doesn't
>> need an air gap. The transformer can have much less iron in it for the
>> same amount of inductance as one with an air gap. Very good low
>> frequency response can be had this way.
>>
>> By the way the screens of the final tubes need to be modulated along
>> with the plates too. The easy way is to supply the screens through a
>> dropping resistor from the top of the choke, the same point that feeds
>> the plates.
>>
>> THIS IS NOT HEISING MODULATION. It is regular old plate modulation
>> just like you would do with a conventional modulation transformer.
>>
>> Yes power transformers can be used quite successfully as a modulation
>> transformer with this type of setup even though there is no air gap in
>> the transformer. There is no worry about core saturation because there
>> is no DC current on the transformer.
>>
>> A large enough choke for this application can be had by putting

>> several chokes in series to obtain the required inductance. Regular
>> power supply chokes work fine. Do not use a swinging choke! It has no
>> air gap and will saturate.
>>
>> A TV transformer will not work well as a choke because it has no air
>> gap and the core will saturate quickly with DC going through it.
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>> Cathode modulation is very similar to grid modulation in performance.
>> After all audio is placed between the grid and cathode just the same
>> as it is with conventional grid modulation. The amount of cathode to
>> plate modulation is minimal.
>>
>> Screen modulation is similar in performance to grid modulation also.
>> Efficiency is around 35% carrier efficiency. Very tricky to tune up
>> properly.
>>
>> Low level modulation with a linear amplifier behind the modulated
>> driver also has an efficiency of around 35%. Excellent AM can be
>> generated this way as is done with some SSB transmitters in the AM
>> mode. If properly set up one can not tell the difference between it
>> and a high level plate modulated transmitter except that the plate
>> modulated transmitter will probably have higher distortion.
>>
>> 73
>> Gary K4FMX
>
> Oh, my gosh, you're right, Gary! It is not Heising modulation. For 60
>years now I've had the mistaken impression that "Heising" implied simply
>that a series choke was used in the plate/screen supply to allow ANY
>modulation to be applied, either by modulator tube directly, or through a
>suitable capacitor.
> I am embarrased. "Googling" brought up a whole lot of other aspects of
>high level modulation that I didn't know (or hopefully just forgot!)
> Does anyone remember negative peak clipping that was the rage about
>1958 or so? (Amateur only, as far as I know)..... If the scope wasn't
>lying, one of my home brew "high level" AM rigs was capable of modulation of
>over 100%. There was an awful lot of controvery at the time, and our nearest
>FCC chief engineer said that he didn't care if it did, it was still illegal.
>Sigh.
>Old Chief Lynn, W7LTQ
>

Hello Chief Lynn,

You are a couple of years ahead of me. I didn't get started until
around 1960.
I built a small modulator a few years ago and played around with
negative peak clipping. Never could get it to sound good though.
It will allow higher positive peak modulation without over modulating
in the negative direction but the clipping on the negative side
created a lot of distortion.

Broadcast stations regularly run around 120% positive peaks and near 100% negative but they usually do it with clipping at low levels and clean things up after the clipping.

I remember hearing about the FCC being in a quandary about some of the super modulation schemes like the Taylor system that could create upwards of 150% or greater positive modulation.

73
Gary K4FMX

2892. Re: Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 19:41:00 UTC
From: biascomms <biascomms@blueyonder.co.uk>
Message-ID: <gtocg.73755$wl.9745@text.news.blueyonder.co.uk>
Source record: 12093

K7ITM wrote:

> Low level modulation is a huge waste of RF power?? Hey, _AM_ is a huge
> waste of RF power, and of spectrum to boot! Except with unusual
> modulating waveforms, >2/3 of the power is in a useless carrier. Now,
> compared with plate modulation of the PA, low level AM modulation
> followed by a linear amp may be somewhat less efficient (though a waste
> of DC power, not RF power), but remember, the modulator, presumably
> being a linear audio amplifier, isn't all that efficient either. In
> addition, there ARE ways to generate AM with low level modulation and
> efficient RF amplification--they have been used in AM broadcast
> transmitters.
>
> For the cost of a good high-level modulator, how many kilowatt-hours
> can you buy?
>
> Cheers,
> Tom

The only modulation method that I've ever found to be of any real efficiency in generating AM is "outphasing" or "ampliphase". You can use the /most/ effective PA designs - optimised FET-based Class E stages can be over 90% efficient! This approach completely obviates all the problems with modulation transformers or big chokes. Haven't tried it with valves ("tubes" - US) - perhaps that should be a future project.

Bob

--
Everything gets easier with practice, except getting up in the morning!

2893. Re: Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 19:47:14 UTC
From: biascomms <biascomms@blueyonder.co.uk>
Message-ID: <6zocg.73764$wl.3258@text.news.blueyonder.co.uk>
Source record: 12094

Gary Schafer wrote:

> Cathode modulation is very similar to grid modulation in performance.
> After all audio is placed between the grid and cathode just the same
> as it is with conventional grid modulation. The amount of cathode to
> plate modulation is minimal.

Correct, and the distortion can be pretty nasty, too.

> Screen modulation is similar in performance to grid modulation also.
> Efficiency is around 35% carrier efficiency. Very tricky to tune up
> properly.

It was the /only/ type of AM I used at first, as I was unable to get big mod transformers. It worked well enough, though it was difficult to get close to 100% mod. Lots of envelope feedback cured the non-linearity distortions.

> Low level modulation with a linear amplifier behind the modulated
> driver also has an efficiency of around 35%. Excellent AM can be
> generated this way as is done with some SSB transmitters in the AM
> mode. If properly set up one can not tell the difference between it
> and a high level plate modulated transmitter except that the plate
> modulated transmitter will probably have higher distortion.

Low-level mod with a linear is very inefficient (with respect to DC input), but is sometimes the only really practical way to proceed. Again, lots of envelope feedback can sort out the distortions caused by less than perfect PAs!

Bob
--
Everything gets easier with practice, except getting up in the morning!

2894. Re: Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 20:15:33 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <du64729gcr3i3jbat79negjel5vkemgv40@4ax.com>
Source record: 12095

On Mon, 22 May 2006 19:47:14 GMT, biascomms
<biascomms@blueyonder.co.uk> wrote:

>Gary Schafer wrote:
>
>> Cathode modulation is very similar to grid modulation in performance.
>> After all audio is placed between the grid and cathode just the same
>> as it is with conventional grid modulation. The amount of cathode to
>> plate modulation is minimal.
>
>Correct, and the distortion can be pretty nasty, too.
>
>> Screen modulation is similar in performance to grid modulation also.
>> Efficiency is around 35% carrier efficiency. Very tricky to tune up
>> properly.
>
>It was the /only/ type of AM I used at first, as I was unable to get big mod
>transformers. It worked well enough, though it was difficult to get close
>to 100% mod. Lots of envelope feedback cured the non-linearity
>distortions.
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>> driver also has an efficiency of around 35%. Excellent AM can be
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>> mode. If properly set up one can not tell the difference between it
>> and a high level plate modulated transmitter except that the plate
>> modulated transmitter will probably have higher distortion.
>
>Low-level mod with a linear is very inefficient (with respect to DC input),
>but is sometimes the only really practical way to proceed. Again, lots of
>envelope feedback can sort out the distortions caused by less than perfect
>PAs!
>
>Bob

Plate modulated transmitters are not all that low distortion in
general. It is much easier to get a very clean low distortion AM
signal by doing it at low levels and amplifying with a linear amp,
provided the amplifier is run properly.
At low levels modulation can be done with class A modulation stages as
opposed to typical class B high level modulators and non linear
modulation transformers.

Even with 33% carrier efficiency of the linear amp the total amount of
AC power required from the power company isn't much different. With

the linear amp there are no large modulator tube filaments to light, screen, bias and plate supplies to run the modulator.

With the new FCC rules limiting the peak envelope power to 1500 watts it makes more sense to use low level modulation and an amplifier than it did with the old rules. Now plate efficiency does not matter, you can still put the same amount of power into the antenna no matter what the efficiency of the transmitter is. In the past you wanted the highest plate efficiency that you could muster to get the most power into the antenna.

I believe that the thinking of the past that "plate modulation is the only way to go" has more to do with not coming to grips with the fact that it is about how much power we can put into the antenna and not how much plate input we run as in the past.

73
Gary K4FMX

2895. Re: Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 21:05:10 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <NKKdnWKf27QUuu_ZRVnygg@pipex.net>
Source record: 12096

> I believe that the thinking of the past that "plate modulation is the
> only way to go" has more to do with not coming to grips with the fact
> that it is about how much power we can put into the antenna and not
> how much plate input we run as in the past.
==========
Question : Do the new FCC rules, eg 1500 W PEP mean ,transmitter output power or power to the antenna , the latter meaning that any feeder losses may be compensated by a higher max. transmitter output ?

The latter is the case pertaining to the UK amateur radio licences. With a maximum output of 26dBW = 400 W PEP (on most bands) , in the case of 3dB feeder loss ,the permitted transmitter power is 800 W PEP.

Frank GM0CSZ / KN6WH (who has NOT read as yet the 'new' FCC max power rules)

2896. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 21:59:54 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1148335194.730224.215060@j73g2000cwa.googlegroups.com>
Source record: 12097
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Okay, thanks for that guys.
One clue that might assist in tracking down this problem is that the aforementioned arc that appears at about '37 minutes past the hour' on the outermost polar circle when the 50 ohm termination is fully screwed in first begins to appear at just before 12 o'clock and gradually circumambulates around this outer circle anticlockwise to its final position as it's fully screwed home. I'd have (intuitively) thought that once the centre pin makes proper contact with its counterpart, the trace would suddenly flick to close to the centre. But with no experience of VNAs, that's just a hunch. Any suggestions?

2897. Re: Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 22:13:19 UTC
From: MadEngineer <glenn.b.dixon@gmail.com>
Message-ID: <1148335999.860662.268520@j73g2000cwa.googlegroups.com>
Source record: 11998

The FCC allows broadcast stations to compensate for losses before the antenna, but not amateur stations. You are legally limited to 1500 WPEP output at the transmitter.

Glenn AC7ZN

2898. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 22:23:42 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1148336621.978729.250170@j33g2000cwa.googlegroups.com>
Source record: 11999
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Dave Platt wrote, among other things,
"In either case, if you screw an N male connector with a bad center pin into an N female, the male's pin can force the split segments of the center female pin outwards. Once this happens, a _good_ N male connector's pin may not make reliable contact with the female's damaged center pin. Intermittent nastiness can occur."

I've seen people suggest that you can mate an N plug with a BNC jack in a pinch, but what you describe is _exactly_ why you should never do that. The N plug center pin is a distinctly larger diameter than a BNC center pin.

Also note that there exist 75-ohm N connectors. Do not try to mate them with 50 ohm versions. A 75 ohm plug in a 50 ohm jack is likely to not make good contact, and a 50 ohm plug in a 75 ohm jack may cause damage to the jack.

2899. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 22:50:30 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1148338230.671355.176490@j55g2000cwa.googlegroups.com>
Source record: 12000
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Suggestions? You bet! Get out your RFSim99 and build a model of what you are putting on the RT test set test port, including any connecting cable. Play with the model to see what will get you the sort of performance you are seeing.

Note that you haven't really told us what you are plotting. I'm assuming it's a plot of the complex reflection coefficient on a display that's scaled to a unit circle. Are you using a standard Smith chart overlay?

The normal interpretation of the result you describe, however, doesn't make much sense, since the load seems to go from something like a nearly pure inductance with reactance equal to the reference resistance at the center of the plot (50 ohms?), and wanders around to become a very low impedance (at the left edge, -1+j0 reflection coefficient), and then around to become capacitive with moderate reactance (35 ohms?). Could you possibly be using some other scaling? What happens if you are trying to display a value beyond full scale on your display?

I suspect something is not what you think it is in the measuring instrument, and from past experience, I'd say it could be just about anything. Careful visual inspections often reveal problems.

Cheers,
Tom

2900. Re: Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 23:22:03 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <86-dnZJzcfED2u_ZnZ2dnUVZ8qednZ2d@pipex.net>
Source record: 12001

MadEngineer wrote:
> The FCC allows broadcast stations to compensate for losses before the
> antenna, but not amateur stations. You are legally limited to 1500
> WPEP output at the transmitter.
>
> Glenn AC7ZN
==========
Tnx Glenn .

Frank GM0CSZ / KN6WH

2901. Re: Modulation Inductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-22 23:32:38 UTC
From: JC <jcandela@prodigy.net>
Message-ID: <qSrcg.13744$fb2.8949@newssvr27.news.prodigy.net>
Source record: 12002

>>
>>www.telstar-electronics.com
>
> Looking at your web site I see you seem to manufacture CB amplifiers?
> I also see you fail to post the 3rd and 5th order intermodulation
> performance info. They must be pretty bad.
> Also no low pass filter to attenuate the harmonics. -30 db second and
> third harmonics are unacceptable. And those are at below power spec
> on the amplifier.
>
> How do you measure peak envelope power?
> Where do you come up with PEP at 3 times carrier power?
> What makes you think that PEP is going to be any greater than the CW
> power output capability of the amplifier?
>
> 73
> Gary K4FMX
>

Gary,

I think you are on to something. On another group I ran across something similar, and this guy rated his amp at 100 watts AM or 180 watts PEP. I never got through to the guy. In his defense, CB'ers rate amps on 'S' meter reading, not audio quality, bandwidth, or harmonic suppression. With that crowd, a keyed mic that pins the 'S' meter rules.

I am pasting one of my emails to the dude:

"andy" <pirateradiofm@xtra.co.nz> wrote in message
news:DK27f.2241$S24.156539@news.xtra.co.nz...
> hmmm, i designed this amp, built the prototype and tested it, now RF parts
> sell it on behalf and at no time did it mis-perform as jc says it will,
> his
> ideas are based on unread schematic drawings and he has never tested this
> amp.
>

Andy,

You are correct that I haven't seen it, or tested it. I don't have to. The specifications you supply are impossible to achieve. Your math is wrong. I'll go through this again:

>Power levels: 100Watts AM, 180Watts PEP

** If the power is really 180 watts PEP, then the AM carrier power maximum is 25% of that or 45 watts ---NOT 100 watts. In fact to be clean, and linear I wouldn't run more than 25 watts output on AM (100 watts PEP).

FACT: When you modulate AM with voice to 100% positive modulation, the peak power rises 4X from the carrier power, and the average power rises about 10-15% depending on the voice, and level.
FACT: When you modulate AM with a sine wave to 100% positive modulation, the peak power rises to 4X the carrier power, and the average power rises 50%

These 2 facts assume the amplifier has the upward headroom for 4X the power from the resting carrier level. Your amp cannot do this unless you de-rate the AM power to < 50 watts (more like 25), OR reduce the maximum modulation percentage to something much lower than 100%. . Here is a reference on this:

http://www.icycolors.com/nu9n/am.html#4:
If we produce a 100w carrier, and the modulation level is at 100%, the peak envelope power is 400 watts. But, the peak envelope voltage max is twice the peak envelope voltage of the carrier alone. So, for example; if the carrier alone produced 20v RF peak to peak, then 100% positive modulation will produce 2 x 20v which equals 40v peak to peak voltage.
Since power changes with the square of the voltage, then the power during 100% positive modulation will increase by the square, so the power increases 2 squared or 4 times! So, 100% positive modulation will produce 2 times the RF voltage and 4 times the RF power.

So Andy, do you want to stand by your specifications as is, or revise them? Do your specifications assume the amplifier is being overdriven, or are you asumming the amp is kept linear by reducing the modulation percentage? You cannot have 100 watts AM and 180 watts pep without either splattering like crazy, or reducing the modulation percentage considerably.

My earlier comments about splatter and distortion are important. To some in the CB crowd, they would rather emit a distorted S9+40 signal instead of a nice clean sounding S9+30 signal. To them bigger is better. I think we all know what crowd your trying to market this kit to, and as others have pointed out, this is the wrong place for that.

I recall a similar amp in Motorola application notes from the late 1980's, and it was marketed by Communication Concepts for many years. This was a well engineered amplifier, and the application notes had full specifications, and scope pictures. Even this amp had gain compression on AM, even though the AM power rating was much lower than yours, and the PEP rating was similar. I'll try to find that big fat blue Motorola RF power book tonight. I think I still got it.

Andy, since this forum is for posting schematics, and talking technical about them, please post your schematic. I look forward to seeing it.

Regards,
Jim

2902. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 02:06:00 UTC
From: w8ji@akorn.net
Message-ID: <1148349960.688130.228200@i40g2000cwc.googlegroups.com>
Source record: 12003
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Dave Platt wrote:
> >Okay, thanks. I must admit it is symptomatic of the load's center pin
> >not quite making contact for some reason, even though the load is fully
> >screwed home. But the same thing happens with 3 different loads!
> >I'm using the T/R test set, by the way, although I don't see how that
> >could explain the problem. I don't have the full S-parameter bridge but
> >am in the market for one.
>
> If you're using N connectors, check the center pins of the females.
> Make sure that they aren't splayed open.
>
> The local repeater association I'm a part of has had repeated problems
> with splayed N connectors. They can be caused by a couple of
> problems. A botched install of an N male can cause its center pin to
> project too far forwards, out of the shell. We've also seen some N
> adapters (Chinese-made I believe) whose center pin was larger than
> usual in diameter, or was not tapered in the usual way.

Sounds like someone has mixed 75 ohm N connectors with 50 ohm N
connectors.

50 ohm N males will damage a 75 ohm N female by spreading its contacts,
often to the point of damage.

75 ohm N males will fit loose in a 50 ohm N.

Many people obtain N connectors without actually knowing which one they
are getting.

2903. wanted sockets and chimney for 4CX250

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 02:12:43 UTC
From: Big Al <tjtrucker@hotmail.com>
Message-ID: <vcucg.182433$P01.28666@pd7tw3no>
Source record: 12004

I'm building an amp using four Eimac 4CX250 series tubes and I'm still in need of two sockets with chimneys or what have you of similar type, either old military or civilian types.

Please email off list to ve7agw(at)shaw.ca you now what to do with the "(at)"

Thanks and 73...de ve7agw,
Al

2904. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 09:34:06 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1148376846.131725.149370@j55g2000cwa.googlegroups.com>
Source record: 12005
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Oh dear. It appears you may be right.
I've just checked with the suppliers and they tell me the plugs I bought are 75 ohm ones. This really stinks as in their catalogue, although they don't specifiy the impedance of these plugs, they do clearly state that they're suitable for RG214 coax. AFAIK, RG214 is only available in 50 ohm - if anyone knows otherwise please tell me. It took me a good deal of time and trouble to make up these patch leads so all in all, I ain't exactly pleased.
Here's the URL for the catalogue page so you guys can tell who's at fault here:

http://cpc.farnell.com/jsp/endecaSearch/partDetail.jsp?SKU=CN06870&N=411

2905. Control Unit for Home Built Rotator from Pitch-Prop Motor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 09:52:19 UTC
From: Kevin & Natalia <sparc_man@hotmail.com>
Message-ID: <1148377755.519950@ftpsrv1>
Source record: 12006
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi All,

I acquired a Pitch-Prop motor a number of years ago, with the intention of building a antenna rotator.
I still have the intention of doing this, and have checked the motor for operation. This works out very nice, and was able to control it to different speeds with different voltage.
I have a construction design for the mounting of the motor and gearbox to the tower, and antenna.

The problem I have now, is I wish to construct a suitable control unit, with digital readout, and the possibility of controlling via a mini PIC control, or via PC.

I have searched the internet without much success, so my next course of action was to see if anyone on these groups might be of help.
So I put my hands up for HELP! :)

Any help would be gratefully received.

Thanks in Advance.

Kevin, ZL1KFM.

2906. Re: Best Way to build a calibrated S meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 11:16:27 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <sdWdnSbcRYCKbe_ZRVnyvw@bt.com>
Source record: 12007

Replace the meter scale with a white card and calibrate it yourself
with pen and ink. You will also need a signal generator and an
attenuator.

Don't forget, an S-meter is a power or wattmeter. It indicates signal
STRENGTH. S9 = 50 pico-watts.

Reg.

2907. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 11:30:54 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1148383854.891849.41040@j55g2000cwa.googlegroups.com>
Source record: 12008
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Since posting earlier I've been on to the actual manufacturers and they
reckon these plugs are actually 50 ohms. So the supplier's insist
they're 75 and the makers say they're 50! I need to know for sure, as
one or the other is in error. How can one tell, by visual inspection
and or physical measurement, which type is which? There must be
something that's visibly different about the two types.
THanks.

2908. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 11:59:26 UTC
From: Jeroen Belleman <jeroen@nospam.please>
Message-ID: <e4uteu$s7j$1@sunnews.cern.ch>
Source record: 12009
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

paul@burridge8333.fsbusiness.co.uk wrote:
> Since posting earlier I've been on to the actual manufacturers and they
> reckon these plugs are actually 50 ohms. So the supplier's insist
> they're 75 and the makers say they're 50! I need to know for sure, as
> one or the other is in error. How can one tell, by visual inspection
> and or physical measurement, which type is which? There must be
> something that's visibly different about the two types.

Yes, look at the thickness of the central pin. A 50 Ohm connector has
a central pin of some 1.6mm thick. The 75 Ohm version is a mere needle,
something like 0.8mm.

It's one of my long-time gripes about coaxial connectors that N and
BNC series of the two impedance levels are sufficiently compatible
to mate together, but not enough to do so without damage. In a lab
with someone ignorant of this fact, it's a source of endless trouble.

Jeroen Belleman

2909. WTB 7855 Tube

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 12:19:27 UTC
From: acamil <acamil@gmail.com>
Message-ID: <1148386767.199782.116530@i40g2000cwc.googlegroups.com>
Source record: 12010

I need 1 piece of ML7855. Could be made by EIMAC/CPI,
Machlett/Raytheeon, GE/MPD.
Please let me know price and condition by email.
Thank you.

2910. Re: Best Way to build a calibrated S meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 13:14:26 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <8qqdnZNYh90Vlu7ZnZ2dnUVZ8qWdnZ2d@bt.com>
Source record: 12011

<Allisonnospam@nouce.bellatlantic.net> wrote
> Only by coincidence and only in a 50 ohm system elsewhere
> S9 is 50 uV (microVolts) equals 50pW.

==========
Allison, I'm afraid you are not quite correct about coincidences.

The beauty of calibrating an S-meter in watts is that the result is independent of receiver impedance.

Of course, there must be a conjugate match between antenna and receiver. And there usually is. This is taken care of in the calibration process.

The received signal STRENGTH is indicated in watts, which is all one wants to know. When reading the meter, who cares about what impedance the measuring instrument happens to be?

To sum up : There is a transmitter of given power output. There is a radio path which is an attenuator, And there is a received signal signal strength meter which indicates watts.

The overall loss between transmitter and power meter may be deduced in terms of decibels. Professional radio engineers do it all the time.

It can be misleading to think in terms of S9 = 50 uV when one doesn't know what the receiver input impedance is.

Reg, G4FGQ

2911. Re: Best Way to build a calibrated S meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 13:26:50 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <9m0672t4afp02rttvafmrgfa7k8k7aa35g@4ax.com>
Source record: 12012

On Tue, 23 May 2006 12:16:27 +0100, "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>Replace the meter scale with a white card and calibrate it yourself
>with pen and ink. You will also need a signal generator and an
>attenuator.

If you derive the S-meter reading from the a.g.c. control voltage, be prepared to perform the calibration at various temperatures, since the gain of simple IF-strips vary with temperature (and thus need a different amount of a.g.c.), unless the gain is controlled by passive components only.

With various front end filter for various frequency bands and attenuation depending of the frequency, you would have to perform the calibration on several frequencies.

Instead of a pen and ink, it would be more practical to use a micro controller with sufficient non-volatile storage for the conversion tables and use analog inputs for a.g.c. voltage and temperature and some kind of input for the frequency being received. With these inputs and the conversion table, a voltage proportional of the log of the antenna terminal power could be generated.

Paul OH3LWR

2912. Re: Control Unit for Home Built Rotator from Pitch-Prop Motor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 14:20:42 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <hOmdnZarFMOuh-7ZnZ2dnUVZ_vqdnZ2d@web-ster.com>
Source record: 12013
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Kevin & Natalia wrote:

> Hi All,
>
> I acquired a Pitch-Prop motor a number of years ago, with the intention of
> building a antenna rotator.
> I still have the intention of doing this, and have checked the motor for
> operation. This works out very nice, and was able to control it to different
> speeds with different voltage.
> I have a construction design for the mounting of the motor and gearbox to
> the tower, and antenna.
>
> The problem I have now, is I wish to construct a suitable control unit, with
> digital readout, and the possibility of controlling via a mini PIC control,
> or via PC.
>
> I have searched the internet without much success, so my next course of
> action was to see if anyone on these groups might be of help.
> So I put my hands up for HELP! :)
>
> Any help would be gratefully received.
>
> Thanks in Advance.
>
> Kevin, ZL1KFM.
>
>

Excepting the readout, this should be a fairly routine motor control problem. Depending on what you want to do your control box could be as simple as a current-limited power supply and a couple of switches or as complex as a fully fed-back motion control system.

How's your electronics skills, and how fancy do you want it to be?

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

2913. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 14:35:29 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1148394928.476606.61360@g10g2000cwb.googlegroups.com>
Source record: 12014
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Thanks, Jeroen.
Well on that basis, all the plugs I have here are indeed 50 ohms, then.
In fact I pulled a centre pin out of a new packet from the same batch
and it fits the sockets in the VNA perfectly. They all accept the pin
with a nice snug fit and what's more the sockets show no signs of ever
sustaining any damage/spreading/flairing/bending and that goes for
those on the T/R bridge, too. On reconnecting everything, however, the
problem still persists, although the 50 ohm load is now showing as very
close to a dead short; virtually the same spot on the Smith chart
overlay as when the socket is shorted, in fact. Once again, the other
loads do likewise and they all check out fine as 50 ohms with a DVM.
Very strange! I wonder if there's some setting I may have got wrong
somewhere. :-/

2914. Re: Best Way to build a calibrated S meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 14:49:51 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <9PydnUbJBYp2vO7ZRVny1w@bt.com>
Source record: 12015

"Will" wrote
> I just wonder how field strength meters are designed, especially the
new
> solid state ones. Spectrum analyzers too have a pretty flat
response. I
> want to build this ability into my homebrew receiver much the same
way
> a selective level meter works. Maybe someone has done it.
>
==========

The accuracy of S-meters varies from one band to another because the receiver input impedance varies from one band to another. Even from one end of a band to the other, especially if the input stage is tuned.

Also, the stage-gain of an RF stage can vary very much from one band to another.

To ensure a consistent gain it is necessary to convert to the intermediate frequency (IF) at the very first stage of a receiver. Preferably using a high-level, balanced diode-bridge, modulator.

The IF stages can be assumed to have a constant, wide-band gain, except, of course, for the automatic gain control (AGC) action.

Then ensure that the receiver input impedance is constant (usually 50 ohms) over the whole HF range of the receiver. Remember the S-meter is a power or watt-meter.

It so happens that with dual-gate FET's, and 3 or 4 IF amplifier stages, a meter which responds to AGC volts will fairly accurately indicate S-units and dB above S9 in a linear fashion.

However, below about S4 the linearity of S-meter readings begins to fail. And you will have to make and calibrate your own meter scale. There's no way of avoiding it! That is unless you can mentally visualise what the scale ought to look like as you use it.

Accurate commercial field strength meters use antennas dedicated to the job, conjugate-matched to the receiver, are insensitive to weak signals, are narrow band and are very expensive.

To obtain an S-meter scale to be proud of, you will have to use pen and ink with a signal generator and 100-dB stepped attenuator. Attempts to calibrate the scale with clever, highly complicated electronics will get you nowhere in a long time. And will cost you

more than the remainder of the receiver.

Sorry to be so despondent.

Reg, G4FGQ

2915. Re: Best Way to build a calibrated S meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 15:26:43 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <MrudnYGD450Fsu7ZRVny0Q@bt.com>
Source record: 12019

"Paul Keinanen" <keinanen@sci.fi> wrote in message
news:9m0672t4afp02rttvafmrgfa7k8k7aa35g@4ax.com...
> On Tue, 23 May 2006 12:16:27 +0100, "Reg Edwards"
> <g4fgq.regp@ZZZbtinternet.com> wrote:
>
> >Replace the meter scale with a white card and calibrate it yourself
> >with pen and ink. You will also need a signal generator and an
> >attenuator.
>
> If you derive the S-meter reading from the a.g.c. control voltage,
be
> prepared to perform the calibration at various temperatures, since
the
> gain of simple IF-strips vary with temperature (and thus need a
> different amount of a.g.c.), unless the gain is controlled by
passive
> components only.
>
> With various front end filter for various frequency bands and
> attenuation depending of the frequency, you would have to perform
the
> calibration on several frequencies.
>
> Instead of a pen and ink, it would be more practical to use a micro
> controller with sufficient non-volatile storage for the conversion
> tables and use analog inputs for a.g.c. voltage and temperature and
> some kind of input for the frequency being received. With these
inputs
> and the conversion table, a voltage proportional of the log of the
> antenna terminal power could be generated.
>
> Paul OH3LWR
==========

I don't doubt that the problem is capable of being solved.

Just throw enough electronic hardware and software at it.

The cost can be estimated at 100,000 Euros.

The size and weight of the receiver will be quadrupled.

No amateur would be able to afford buying one.

American tax-payers would prevent NASA from doing the research and
development work. Even Bush would object.

As for me and most other amateurs, I'm quite happy with an S-meter reading which puts signal strength reports in the right ball-park. Very strong, very weak, or indifferent.

Reg.

2916. Re: Control Unit for Home Built Rotator from Pitch-Prop Motor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 15:31:29 UTC
From: "n3ox.dan@gmail.com" <n3ox.dan@gmail.com>
Message-ID: <1148398289.804642.102440@i40g2000cwc.googlegroups.com>
Source record: 12016
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I'm going to recommend against electronic feedback unless you are a control systems hobbyist... I did PID (proportional-integral-derivative) servo on a homebrew rotating mast so I didn't need a readout and eventually decided to go with a rotation sensing pot, a voltage-to-current converter, and a surplus meter.

This was after I tweaked the PID to get rid of the oscillations but still had some average position errors...

I guess with a digital system it would be easier to optimize. Mine was all analog... and only one op amp, so the settings interacted :-)

Making the motor go and watching the meter is a more sensitive and intelligent form of feedback, as long as you've got a system you can't break by turning too far.

A simple pulse-width-modulator for speed control might be in the cards though. That way you send a variable duty cycle full-on full-off pulse train to the motor. Good torque and you don't need a variable power supply just to run the rotor.

I'm going to add one to my rotator soon... I've got that on manual right now... pulsing the switch makes a nice slow smooth rotation!

If you do like electronics projects for the sake of electronics projects, feedback control is an interesting way to go, though.

73,
Dan
N3OX

2917. Re: Control Unit for Home Built Rotator from Pitch-Prop Motor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 15:33:09 UTC
From: "n3ox.dan@gmail.com" <n3ox.dan@gmail.com>
Message-ID: <1148398389.824086.224190@j73g2000cwa.googlegroups.com>
Source record: 12017
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Oh, my bad. you're going to NEED some feedback to control it with a
PC.

OK, so let me retract the advice against it... possibly you could do it
all in software...

Dan
N3OX

2918. Re: Best Way to build a calibrated S meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 15:41:43 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <64Gcg.177511$bm6.76448@fed1read04>
Source record: 12018

Will take a look at URL:
http://www.ac6v.com/sunit.htm

Maybe the National Semiconductor NE604 IF amplifier IC would be worth looking into. Claims say it provides an accurate signal strength logarithmic output that closely tracks the input signal level over a wide dynamic range that could possibly be used for driving an S meter circuit.

--
CL -- I doubt, therefore I might be !

"Will" <bluehyhena@hotmail.com> wrote in message
news:44727d43$1_1@news.iprimus.com.au...
>I was wondering how commercial equipment go about calibrating the S meter
>and whats the best way of building a calibrated S meter that would be
>reliable as a professional field strength meter?
>
> Since most S meters just read AGC voltage and it would be easy to build
> some interface with a CPU to read voltages and calibrate this way. The
> question is this, is a S meter calibrated this way actually reading in a
> accurate way whats occurring at the antennas terminal. Since most antenna
> inputs are not 50 ohms J0, how would you design a system like a spectrum
> analyzer that measures signal voltage at the antenna terminal?. I would be
> interested in some ideas, i am homebrewing a shortwave receiver however i
> wanted a calibrated S meter in Dbuv, Dbm, S units and Millivolts. I also
> want to use a calibrated antenna for a Antenna factor input to have a
> meaningful long term view of propagation signal strength.
>
> Thanks
> Will

2919. Re: Control Unit for Home Built Rotator from Pitch-Prop Motor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 16:11:42 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9jc6729qird5h3v6eb2gvg9ag6b41ttkhf@4ax.com>
Source record: 12021
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On 23 May 2006 08:31:29 -0700, "n3ox.dan@gmail.com"
<n3ox.dan@gmail.com> wrote:

>This was after I tweaked the PID to get rid of the oscillations but
>still had some average position errors...
>
>I guess with a digital system it would be easier to optimize. Mine was
>all analog... and only one op amp, so the settings interacted :-)

Hi Dan,

If anything, going digital has all the prospects of thrashing the
antenna into shreds. The oscillations you speak of are eminently
suited for an analog solution - you simply have to understand the
nature of resonance, coupling (over, critical, and under), and attack.
If you don't, translating them into binary code will be impossible.

For instance, your average position errors were probably due to
under/overshoot and a too heavily dampened system with too much gain.
No computer program is going to improve that.

73's
Richard Clark, KB7QHC

2920. Re: Control Unit for Home Built Rotator from Pitch-Prop Motor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 16:12:02 UTC
From: Robert Kubichek <bobn9lvu@sbcglobal.net>
Message-ID: <4dgqilF1987e2U1@individual.net>
Source record: 12020
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Kevin & Natalia wrote:
> Hi All,
>
> I acquired a Pitch-Prop motor a number of years ago, with the intention of
> building a antenna rotator.
> I still have the intention of doing this, and have checked the motor for
> operation. This works out very nice, and was able to control it to different
> speeds with different voltage.
> I have a construction design for the mounting of the motor and gearbox to
> the tower, and antenna.
>
> The problem I have now, is I wish to construct a suitable control unit, with
> digital readout, and the possibility of controlling via a mini PIC control,
> or via PC.
>
> I have searched the internet without much success, so my next course of
> action was to see if anyone on these groups might be of help.
> So I put my hands up for HELP! :)
>
> Any help would be gratefully received.
>
> Thanks in Advance.
>
> Kevin, ZL1KFM.
>
>

It is entirely doable, check here
"http://forums.parallax.com/forums/default.aspx" for ideas on how to implement
your project using a Basic Stamp...
I would do it with digital position sensing, with an lcd display showing
direction of antenna..

Bob N9LVU

2921. Re: Control Unit for Home Built Rotator from Pitch-Prop Motor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 16:13:07 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <q2d67291pmbmpl0hpv6scoueecc1hpiplo@4ax.com>
Source record: 12022
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On 23 May 2006 08:33:09 -0700, "n3ox.dan@gmail.com"
<n3ox.dan@gmail.com> wrote:

>Oh, my bad. you're going to NEED some feedback to control it with a
>PC.
>
>OK, so let me retract the advice against it... possibly you could do it
>all in software...

Hi Dan,

To underline my last point about software, did software prevent this
error? [Hint, eyes were an analog solution.]

73's
Richard Clark, KB7QHC

2922. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 16:30:33 UTC
From: fmmck@aol.com
Message-ID: <fmmck-2305061230330001@aca7c897.ipt.aol.com>
Source record: 12023
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <1148394928.476606.61360@g10g2000cwb.googlegroups.com>,
paul@burridge8333.fsbusiness.co.uk wrote:

> On reconnecting everything, however, the
> problem still persists, although the 50 ohm load is now showing as very
> close to a dead short; virtually the same spot on the Smith chart
> overlay as when the socket is shorted, in fact. Once again, the other
> loads do likewise and they all check out fine as 50 ohms with a DVM.
> Very strange! I wonder if there's some setting I may have got wrong
> somewhere. :-/

Paul-

What would be the result of calibrating the system with an inductive
"short"? If it can be done, results of testing with a good 50 Ohm load
might be skewed.

Fred

2923. Re: Control Unit for Home Built Rotator from Pitch-Prop Motor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 16:38:07 UTC
From: "n3ox.dan@gmail.com" <n3ox.dan@gmail.com>
Message-ID: <1148402287.144951.51340@y43g2000cwc.googlegroups.com>
Source record: 12024
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Richard,
Agreed on the suitability of an analog solution... I certainly made some steps toward critically damped operation. My circuit design was bad, though.

I didn't have a very analyzable problem; the rotator rotates one of those fiberglass surplus military masts with respect to another, so I get a lot of stick-slip, especially if there's a breeze (there are 12 feet of mast above this thing).

This is not to say a suitable set of P, I and D couldn't be found, and it would have been pretty slick if I'd set up right for empirical loop tuning, but I hadn't done that. I got pretty close by soldering components in and out.

I would have had a better time with a real multiple op amp circuit with a knob for each of P, I and D.

I think you hit the nail on the head regarding too heavily dampened with too much gain in the antenna rotator case. I just couldn't really tune the thing.

In my case, I just decided to throw up my hands and go to the simplest method so I could get on the air with a rotating antenna. I have a quite successful analog servo going every day with my remote antenna tuner (www.n3ox.net/projects/servo). That one is ever-so-slightly underdamped, proportional only, and works nicely. There's a little bit of hysteresis and it certainly could be improved, but I stopped at the good-enough-for-daily-operation level.

I guess what I meant by "going digital" was that depending on whether you're more comfortable with programming than a soldering iron (not me!) you might think about having a simple motor drive circuit and implement the admittedly complex PID loop in software/firmware.

You're absolutely right that you can't do this if you don't know how to do the analog...

73,
Dan
N3OX

2924. Re: Control Unit for Home Built Rotator from Pitch-Prop Motor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 16:45:06 UTC
From: "n3ox.dan@gmail.com" <n3ox.dan@gmail.com>
Message-ID: <1148402706.618224.273650@j73g2000cwa.googlegroups.com>
Source record: 12025
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

hahaha!

Dude, I've got baaaaad software.

Took me a long time to get that.

CU,
Dan

2925. Re: Best Way to build a calibrated S meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 16:48:18 UTC
From: fmmck@aol.com
Message-ID: <fmmck-2305061248180001@aca7c897.ipt.aol.com>
Source record: 12026

In article <0k7672tnoml74egmhoufl62mnaor633quj@4ax.com>,
Allisonnospam@nouce.bellatlantic.net wrote:

> Two caveats, rarely are RX input impedences 50 ohms and there is no
> guarentee that the antenna is 50 ohms.

Allison-

Such is life. However you can assume that both are 50 Ohms and use a resistive pad between the signal generator and the receiver when calibrating. When making a reading, use a pad between the unknown signal source and the receiver.

Without a sophisticated system capable of determining impedances while making measurements, this may be the best you can do.

Fred

2926. Re: Control Unit for Home Built Rotator from Pitch-Prop Motor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 16:54:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8cf672pr5af9uv5iad1insf6m963fna96j@4ax.com>
Source record: 12027
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On 23 May 2006 09:38:07 -0700, "n3ox.dan@gmail.com"
<n3ox.dan@gmail.com> wrote:

>You're absolutely right that you can't do this if you don't know how to
>do the analog...

Hi Dan, All,

The single loudest voice on these matters is Robert Pease at National
Semiconductor. For streaming courses/lectures on this very topic,
visit:
http://www.national.com/nationaltv/index.html

I've been following Bob's no-nonsense contributions for more than 25
years now.

73's
Richard Clark, KB7QHC

2927. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 19:01:40 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <yPSdneqoXt-Swe7ZRVnyvw@pipex.net>
Source record: 12028
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Having had a look in my (junk)box with N-connectors I found that most
silver plated (professional) units have 50 Ohms stamped into the body
,whereas the nickel plated units either have no identification or a
specific manufacturer's code .
The Farnell catalogue you referred says these N-connectors are nickel
plated . Try to find any stamped code on your units . If any I'll be
happy to compare with those on my connectors.

Frank GM0CSZ / KN6WH
==
> Since posting earlier I've been on to the actual manufacturers and they
> reckon these plugs are actually 50 ohms. So the supplier's insist
> they're 75 and the makers say they're 50! I need to know for sure, as
> one or the other is in error. How can one tell, by visual inspection
> and or physical measurement, which type is which? There must be
> something that's visibly different about the two types.
> THanks.
>

2928. Re: Best Way to build a calibrated S meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 19:25:37 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <6tidnfEXbsoo_O7ZRVny2g@pipex.net>
Source record: 12029

That's why for the HF bands S9 is defined as a receiver input signal of
50 microvolts at 50 Ohms input impedance , translated as -73dBm
For frequencies higher than 30 MHz S9 is defined as 5 microvolts at 50
Ohms input impedance , translated as -93dBm.

The S9 signal strength was first set by Art Collins of Collins Radio
fame during the 1940s and was later accepted by IARU.
This organisation also adopted the 5 microvolt level for a S9 signal for
VHF and higher frequency bands.

Frank GM0CSZ / KN6WH

==========
> It can be misleading to think in terms of S9 = 50 uV when one doesn't
> know what the receiver input impedance is.
> ----
> Reg, G4FGQ

2929. Re: Best Way to build a calibrated S meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 20:35:13 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <C_udnazEPqJh7O7ZRVnygA@pipex.net>
Source record: 12030

> To obtain an S-meter scale to be proud of, you will have to use pen
> and ink with a signal generator and 100-dB stepped attenuator.
> Attempts to calibrate the scale with clever, highly complicated
> electronics will get you nowhere in a long time. And will cost you
> more than the remainder of the receiver.
>
> Sorry to be so despondent.
> ----
> Reg, G4FGQ
==========
Just an idea ; if one is really 'dead keen' to have an 'accurate ? '
S-meter readout, you could construct an indicator with individual
threshold opamp comparators (up to 4 in a DIL package) each driving a LED.
When calibrating with a signal gen as a 50 Ohms source ,starting with
S-9 being 50 microvolts being -73dBm (or 5 microvolts being -93dBm for
VHF and higher) the relevant LEDs can then be set separately below that
level with 6dB steps and above S-9 with 10 dB steps by accepting the
quasi-log voltage range generated by the AGC as fed to the traditional
analogue S-meter
A fancy feature would be different colour LEDs showing signal strength
above S-9. I feel that ,while accepting any 'professional'
comments,this would be a practical 'amateur ' (low cost) solution .

Frank GM0CSZ / KN6WH an 'Amateur'

2930. Re: Control Unit for Home Built Rotator from Pitch-Prop Motor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 21:27:17 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <iKednQqE672t4-7ZRVny3w@pipex.net>
Source record: 12031
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> If you do like electronics projects for the sake of electronics
> projects, feedback control is an interesting way to go, though.
==========
Talking rotor position feedback ,instead of the traditional potmeter in bridge circuit with analogue meter readout ,you could try a low cost synchro system utilising 2 stepper motors from discarded hard drives , dot-matrix printers or flat bed scanners ,with 1 stepper motor mechanically coupled (either directly or via a reversed rotational reducer) to the rotor ,the other in the shack as a readout device. The circuit I found on the web (via Google)needs 5 wires between the stepper motor coupled to the rotor and the control unit ,located with the other stepper motor in the shack.
The circuit includes 4 TIP120 NPN transistors 2 LM324 dual Opamps and a few diodes and resistors. The stepper motor in the shack could either be provided with a rotating or sliding pointer (the latter from an old 1950-60s radio) , or be mechanically linked to a counter (for example from a discarded tape recorder)

A potential 'recycled components' project.

Frank GM0CSZ / KN6WH

2931. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 22:06:39 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1148421999.392455.211650@j33g2000cwa.googlegroups.com>
Source record: 12032
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Good thinking, Fred. That's theoretically possible, I guess. But I'm carrying out these checks purposely at only around 5Mhz to minimise such high frequency effects. You may well be on the right lines, though!

2932. Re: Best Way to build a calibrated S meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 22:33:23 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e502jlmgq1@avnika.corp.mot.com>
Source record: 12033

"Caveat Lector" <UALLBeware@9984reader.com> wrote in message
news:64Gcg.177511$bm6.76448@fed1read04...
> Will take a look at URL:
> http://www.ac6v.com/sunit.htm
>
>
> Maybe the National Semiconductor NE604 IF amplifier IC would be worth
> looking into. Claims say it provides an accurate signal strength
logarithmic
> output that closely tracks the input signal level over a wide dynamic
range
> that could possibly be used for driving an S meter circuit.
>
> --
> CL -- I doubt, therefore I might be !

This is ok, but the one thing is that any Signal strength IC like the 604 has a constant slope and the S-Meter will be rather compressed in the 0-9 s-units range compared to the over S9 range (obviously fixable with meter scale). I don't recall the 604's dynamic range. You could make a two slope correction above S9, but I'd have to do some scratch paper work to figure out the circuit [probably as simple as a resister and diode in the right place]. Or use two of them and change the gain into one to get the different slope. I don't recall the 604's dynamic range. I have some SLx16...oops can't remember the numbers (? 1316?... 1613?) , that are cascaded for large dynamic range log amps.

Just some ideas.

73, Steve, K9DCI

2933. Re: 13.8V high current power supply - update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 22:45:22 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e503a3mii1@avnika.corp.mot.com>
Source record: 12034

Mike,
I'm confused. The "crowbar" I am familiar with is an over voltage protection device. If the supply output voltage goes up too high, it triggers, turns on providing a very lo resistance load and effectively shorting the output. Thus it initiates the over current protection device, whatever that is.

If I read this correctly, it appears you are PLACING a short on the supply and testing the over current protector...

It sounds like "Crowbar" is also used for an over- current protector...

I always thought the term came from using a real 1 inch diameter steel crowbar (the tipe used in Christmas Story to open the crate containing the leg lamp) to short the output of a power supply as a really good way to get to zero volts in a hurry - but only in principle, of course.

73, Steve, K9DCI

"Mike Andrews" <mikea@mikea.ath.cx> wrote in message news:e4015o$c5s$3@puck.litech.org...
> Hmmmm ...
>
> Bobbie Barmore was discussing IOT power supplies and their crowbars on
> the GowBugs list a few months back. Seems that the test to see if the
> crowbar's good is pretty simple:
>
> 1) Turn everything off
> 2) Safety tag and padlock all the breakers and the START switch
> 3) Ground everything that even might think about biting
> 4) Put a piece of (?) 32-gauge wire between HV and ground.
> 5) Pull the shorting sticks, button everything up, unlock and
> untag the breakers, untag the START switch
> 6) Make sure everyone's clear and safe
> 7) Push the START switch
>
> The power supply's good for something like 700 mA at 35 KVDC, and it is
> a _really_ bad idea to get across it if you might pass less than abount
> 700 mA. But the wire's good for more than 700 mA, and so will look like a
> short to the PS.
>
> If the wire melts, vaporizes, or explodes, then the crowbar circuit is bad.
> It should be unaffected by the test. Put 35 KV across a piece of 32ga wire
> without blowing it up.
>

> Hydrogen thyratrons to dump the power, and fast-acting circuit breakers to
> Shut Things Down NOW, appear to be the way to protect the wire from the
PS.
> Fascinating technology.
>
> Homebrew _that_.
>
> --
> Mike Andrews, W5EGO
> mikea@mikea.ath.cx
> Tired old sysadmin

2934. Re: 13.8V high current power supply - update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 23:38:02 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <e506cqafv2@puck.litech.org>
Source record: 12035

Steve N. <stuevue.nouskuowuicuz@moutouroula.com> wrote:
> Mike,
> I'm confused. The "crowbar" I am familiar with is an over voltage
> protection device. If the supply output voltage goes up too high, it
> triggers, turns on providing a very lo resistance load and effectively
> shorting the output. Thus it initiates the over current protection device,
> whatever that is.

> If I read this correctly, it appears you are PLACING a short on the supply
> and testing the over current protector...

> It sounds like "Crowbar" is also used for an over- current protector...

> I always thought the term came from using a real 1 inch diameter steel
> crowbar (the tipe used in Christmas Story to open the crate containing the
> leg lamp) to short the output of a power supply as a really good way to get
> to zero volts in a hurry - but only in principle, of course.

> 73, Steve, K9DCI

You're on the money as to what gets done to save the IOT. It's a lot
more expensive than the entire power supply, and so the PS gets to
suck it up between the time the hydrogen thyratron (or ignitron or
whatever) turns on and the time the overcurrent limiter or magnetic-
controlled breaker on the PS input decides to Turn Things Off Right
Damnit _Now_.

You're also on the money about crowbars being used as overcurrent
protection as well as overvoltage protection.

My experience with crowbars involves both the voltage-foldback flavor
and the current-foldback flavor. Sometimes you'll be running something
at constant current and want to limit the voltage across it; for that,
you fold the curent back to keep from exceeding the max voltage.
Sometimes you'll be running something at constant voltage and want
to limit the current through it; for that, you fold the voltage back
to keep from exceeding the max current. In the extreme case, you cut
the voltage across, or current through, a device off by putting a
short across the PS output. We had some lab PSes at the NASA Manned
Spacecraft Center with adjustable voltage _and_ current limits,
though none with high-capacity crowbars involving ignitrons, hydrogen
thyratrons, and such (to me) exotic devices. But both voltage and
current limits came in very handy.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx

Tired old sysadmin

2935. Re: Control Unit for Home Built Rotator from Pitch-Prop Motor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-23 23:52:31 UTC
From: Kevin & Natalia <sparc_man@hotmail.com>
Message-ID: <1148428168.920547@ftpsrv1>
Source record: 12036
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi Tim,

My electronics skills are fairly good, I have built many projects over the time.
What I was wanting to do, is have a control box in the shack with a readout and left/right controls. And have the provision to also be able to have a PC control it.
I like the Pitch-prop motor, as it is strong, and can be controlled easy.

The way I control it at the moment, is via a 2 voltage system.
The pitch-prop runs at 36volts for full speed, and when I wish to slow it down for small movements, I use a second set of controls at 15volts. Not the best way of doing it, but it works.
I then look out the window and see where it is pointing. I know where N, E, S, W are on my section.

As to price on the parts, I would like to keep it down to around a couple of hundred dollars. :)

Regards and thanks for your input.

Kevin, ZL1KFM
www.qsl.net/zl1hk

"Tim Wescott" <tim@seemywebsite.com> wrote in message
news:hOmdnZarFMOuh-7ZnZ2dnUVZ_vqdnZ2d@web-ster.com...
>>
>>
> Excepting the readout, this should be a fairly routine motor control
> problem. Depending on what you want to do your control box could be as
> simple as a current-limited power supply and a couple of switches or as
> complex as a fully fed-back motion control system.
>
> How's your electronics skills, and how fancy do you want it to be?
>
> --
>
> Tim Wescott
> Wescott Design Services
> http://www.wescottdesign.com
>
> Posting from Google? See http://cfaj.freeshell.org/google/
>
> "Applied Control Theory for Embedded Systems" came out in April.
> See details at http://www.wescottdesign.com/actfes/actfes.html

2936. Re: Direct Conversion Receiver with NPN transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 00:03:44 UTC
From: Brian Murrey <brian@iquest.net>
Message-ID: <ApNcg.4243$921.355@newsread4.news.pas.earthlink.net>
Source record: 12037

Did u see this one?

http://www.qrp4u.de/index_en.html

--
==========
Radio Amateurs - Fill your junk box, from my junkbox!
http://www.hamradparts.com
73 de KB9BVN
==========

"Nev" <a@b.com> wrote in message news:446eebb5_2@news.tm.net.my...
> Does anyone have any schematic for Direct Conversion receiver that does
not
> use any FETs, Valves or ICs (e.g. NE602) but uses NPN transistors?
>
>

2937. Re: Best Way to build a calibrated S meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 00:14:20 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1148429660.396672.45970@u72g2000cwu.googlegroups.com>
Source record: 12038

The way that spectrum analyzers are built is typically to use calibrated attenuators and linear gain stages that have very low distortion (and similarly low "compression"). Then it becomes a matter of determining the voltage after amplification. They do NOT use AGC voltage, or at least not anything like the AGC used in a typical ham receiver. The way we do it here is to digitize the RF signal and do some appropriate digital signal processing on it (e.g., FFT) to display the spectrum and to calculate amplitudes and band powers and the like. Modern digitizers are very linear indeed and can be used to measure signal amplitudes over a range in excess of 120dB with relative accuracy far better than an S meter over most of that range, and still considerably better even at the bottom end of the range. It doesn't even take a huge number of bits in the digitization to do it; consider that a typical delta-sigma ADC is a one-bit converter followed by lots of processing gain.

The way it can be done "on the cheap" is to use a calibrated attenuator and a single known signal level. Then you compare your known signal level with the unknown, adjusting the attenuator to bring your (typically large) signal down to the same amplitude as the unknown.

For S-meter levels of accuracy, linear non-AGC'd stages feeding one of the RF power detectors from Analog Devices, Linear Technology or others will work fine. Most of them have an output voltage proportional to the log of the input voltage, and so can be calibrated to read dB linearly on a linear meter scale. If your receiver has a good front end, it shouldn't need AGC up through the filter following the mixer, and you could pick off there after the filter to drive the meter circuit. That seems overkill, but it would get you a _good_ S-meter. Then you'd have to calibrate out the front-end gain at least per band, assuming you have at least some front end filtering that doesn't have the same gain (loss) on each band.

Field strength meters that accurately measure an RF electromagnetic field are basically spectrum analyzers fed by calibrated antennas.

That may be beyond what you wanted to know or do, but it should give you a pretty accurate picture of how modern commercial gear actually does make RF voltage measurements. You could add calibration (for absolute amplitude accuracy as well as spectral flatness) to all that as a whole 'nuther topic, though. For example, the amplitude characteristics of any filters the signal passes through in the spectrum analyzer must be properly accounted for, as must temperature drifts in instruments with high accuracy.

Cheers,
Tom

2938. Re: Control Unit for Home Built Rotator from Pitch-Prop Motor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 00:50:47 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <ceKdnXgZqq59MO7Z4p2dnA@web-ster.com>
Source record: 12039
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

n3ox.dan@gmail.com wrote:

> Richard,
> Agreed on the suitability of an analog solution... I certainly made
> some steps toward critically damped operation. My circuit design was
> bad, though.
>
> I didn't have a very analyzable problem; the rotator rotates one of
> those fiberglass surplus military masts with respect to another, so I
> get a lot of stick-slip, especially if there's a breeze (there are 12
> feet of mast above this thing).
>
> This is not to say a suitable set of P, I and D couldn't be found, and
> it would have been pretty slick if I'd set up right for empirical loop
> tuning, but I hadn't done that. I got pretty close by soldering
> components in and out.
>
> I would have had a better time with a real multiple op amp circuit with
> a knob for each of P, I and D.
>
> I think you hit the nail on the head regarding too heavily dampened
> with too much gain in the antenna rotator case. I just couldn't really
> tune the thing.
>
>
> In my case, I just decided to throw up my hands and go to the simplest
> method so I could get on the air with a rotating antenna. I have a
> quite successful analog servo going every day with my remote antenna
> tuner (www.n3ox.net/projects/servo). That one is ever-so-slightly
> underdamped, proportional only, and works nicely. There's a little bit
> of hysteresis and it certainly could be improved, but I stopped at the
> good-enough-for-daily-operation level.
>
> I guess what I meant by "going digital" was that depending on whether
> you're more comfortable with programming than a soldering iron (not
> me!) you might think about having a simple motor drive circuit and
> implement the admittedly complex PID loop in software/firmware.
>
> You're absolutely right that you can't do this if you don't know how to
> do the analog...
>
> 73,
> Dan

> N3OX
>
Written with the implicit assumption that you'd want to do it in
software, but quite applicable to analog solutions:
http://www.wescottdesign.com/articles/Friction/friction.html

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

2939. FS 4CX800 and socket $125 + shipping

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 00:52:02 UTC
From: SNOWDEN <me@zx.com>
Message-ID: <S6Ocg.5883$x4.1511@newsread3.news.pas.earthlink.net>
Source record: 12040
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

4xc800 unused.

socket used excellent.

Doug N4IJ
Harrah, OK

2940. Re: Control Unit for Home Built Rotator from Pitch-Prop Motor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 00:55:17 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <wvCdnU0znYNsM-7ZnZ2dnUVZ_vednZ2d@web-ster.com>
Source record: 12041
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hey Kevin:

http://www.wescottdesign.com/articles/pidwophd.html
http://www.wescottdesign.com/articles/Friction/friction.html

If you want to control it from a PC I'd suggest that you drive an H bridge from a microprocessor, with a PID controller in there to make it go. The biggest key to making a PID loop without doing a bunch of math is to keep your ambition under control -- if you have to go fast, then you need to delve into theory.

As pointed out, PID control can be tricky -- even though I'm a control systems professional there's a good chance that if I did it rev 1.0 would just use the micro to implement virtual buttons, with feedback control for rev 1.1. You definitely want to make sure all the pieces are working before you close the loop.

Kevin & Natalia wrote:

> Hi Tim,
>
> My electronics skills are fairly good, I have built many projects over the
> time.
> What I was wanting to do, is have a control box in the shack with a readout
> and left/right controls. And have the provision to also be able to have a PC
> control it.
> I like the Pitch-prop motor, as it is strong, and can be controlled easy.
>
> The way I control it at the moment, is via a 2 voltage system.
> The pitch-prop runs at 36volts for full speed, and when I wish to slow it
> down for small movements, I use a second set of controls at 15volts. Not the
> best way of doing it, but it works.
> I then look out the window and see where it is pointing. I know where N, E,
> S, W are on my section.
>
> As to price on the parts, I would like to keep it down to around a couple of
> hundred dollars. :)
>
> Regards and thanks for your input.
>
> Kevin, ZL1KFM
> www.qsl.net/zl1hk
>
> "Tim Wescott" <tim@seemywebsite.com> wrote in message
> news:hOmdnZarFMOuh-7ZnZ2dnUVZ_vqdnZ2d@web-ster.com...

>
>>>
>>Excepting the readout, this should be a fairly routine motor control
>>problem. Depending on what you want to do your control box could be as
>>simple as a current-limited power supply and a couple of switches or as
>>complex as a fully fed-back motion control system.
>>
>>How's your electronics skills, and how fancy do you want it to be?
>>
>>--
>>
>>Tim Wescott
>>Wescott Design Services
>>http://www.wescottdesign.com
>>
>>Posting from Google? See http://cfaj.freeshell.org/google/
>>
>>"Applied Control Theory for Embedded Systems" came out in April.
>>See details at http://www.wescottdesign.com/actfes/actfes.html
>
>
>

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

2941. Re: Best Way to build a calibrated S meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 02:31:19 UTC
From: Jim <kill-spam@no-spam.org>
Message-ID: <yLednXpzCpzlWO7ZnZ2dnUVZ_sCdnZ2d@comcast.com>
Source record: 12042

I think I'd follow K7ITM's advice.

I'd split the signal right after the IF filters. Feed one of them into the rest of the Rx chain, and the other one into one of the Analog devices logarithmic detector chips.

This is assuming there is no AGC prior to the IF filters.

There are two major choices for the detector chip, AD8307, which is a power detector, or a true RMS detector (AD8326??)

Feed the output into a A/D coinverter, and then digitally add correction factors for the front end gain and possible different sensitivity on different bands.

So, once you have the calibration factors, this wouls be a fairly accurate iindicator of the input signal. Granted, it is assuming a matched 50 ohm antenna, and you will get an error due to antenna reactances and so on. However, it is as precise as an amateur radio system is likely to be able to get and a heck of a lot more meaningful than most 'S' meters I've seen.

Jim
N6BIU

2942. Re: Best Way to build a calibrated S meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 08:53:03 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2006.05.24.08.53.03.335620@oceanfree.net>
Source record: 12043

On Wed, 24 May 2006 15:55:36 +1000, Will wrote:

> Regardless how hard it is i think its worthwile pursuing a accurate S
> meter.
>
> Will

It will make you very unpopular. People who are used to
getting S9+30dB reports get quite upset when you give
the a 57 :-)

73, Ed. EI9GQ.

--
Linux 2.6.16
Remove 'X' to reply by e-mail.
Yes, my username really is: nospam

2943. Re: Best Way to build a calibrated S meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 09:28:11 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <s_-dnWiXosi4uunZnZ2dnUVZ8sidnZ2d@pipex.net>
Source record: 12044

```
>> Regardless how hard it is i think its worthwile pursuing a accurate S
>> meter.
>>
>> Will
>
> It will make you very unpopular. People who are used to
> getting S9+30dB reports get quite upset when you give
> the a 57 :-)
====================================

Why would a serious radio amateur trying hard to use his equipment in
the best way possible be required to be popular ?

Frank GM0CSZ / KN6WH
```

2944. Re: Best Way to build a calibrated S meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 11:58:23 UTC
From: - exray - <exray@coqui.net>
Message-ID: <1278ij3jd2ms788@corp.supernews.com>
Source record: 12046

Highland Ham wrote:

>> It will make you very unpopular. People who are used to getting
>> S9+30dB reports get quite upset when you give the a 57 :-)
>
> ====================================
>
> Why would a serious radio amateur trying hard to use his equipment in
> the best way possible be required to be popular ?
>
> Frank GM0CSZ / KN6WH

Zoom!

2945. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 12:01:26 UTC
From: rick H <rik_nntp@dsl.pipex.com>
Message-ID: <qWXcg.30424$_k2.531928@news2.nokia.com>
Source record: 12045
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In sci.electronics.design paul@burridge8333.fsbusiness.co.uk wrote:
> Good thinking, Fred. That's theoretically possible, I guess. But I'm
> carrying out these checks purposely at only around 5Mhz to minimise
> such high frequency effects. You may well be on the right lines, though!
>

Have you tried buzzing your home-made leads through with a DVM to
confirm that they're ok (at dc) - both centre and shield of the coaxial
connectors?

Try discarding the test-set for a moment and just connecting Ref to the
A and B inputs on the VNA (configured to measure loss/gain). If you know
that your coaxial leads are ok, then you'll be checking that all the
I/O ports on the VNA are working correctly.

Have you confirmed that the test-set is correctly connected to the VNA?

Try terminating unused I/O ports with a 50 Ohm load or with a pad (a
10dB pad makes a reasonable 50 Ohm load) and then repeating the cal
and measurement.

Try calibrating the VNA/test-set without the leads, just using a
Male-Male adaptor instead. Then see what happens when you measure gamma
with 50 Ohms dangling off the adaptor.

Cheers,
Rick

2946. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 15:32:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1278v4fqbibh08d@corp.supernews.com>
Source record: 12047
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Jeroen Belleman wrote:
> . . .
> It's one of my long-time gripes about coaxial connectors that N and
> BNC series of the two impedance levels are sufficiently compatible
> to mate together, but not enough to do so without damage. In a lab
> with someone ignorant of this fact, it's a source of endless trouble.

All the 75 ohm BNC connectors I have, have the same diameter center pin in the connection region as 50 ohm connectors. The difference is in the thickness of the dielectric around the pin in the connection region, being much thinner in the 75 ohm connectors. The pin of the 75 ohm connector is smaller only where it's in solid dielectric at the bottom of the connector.

Roy Lewallen, W7EL

2947. what's up with eham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 18:57:24 UTC
From: larry d clark <buddycl@nospam_swbell.net>
Message-ID: <o02dg.84107$H71.14432@newssvr13.news.prodigy.com>
Source record: 11948

what's up with eham? haven't been able to hit the
site for several days from here in the dallas area?

larry
kd5foy

2948. Re: what's up with eham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 19:13:46 UTC
From: dplatt@radagast.org
Message-ID: <1279c3alj3said0@corp.supernews.com>
Source record: 11949

In article <o02dg.84107$H71.14432@newssvr13.news.prodigy.com>,
larry d clark <buddycl@nospam_swbell.net> wrote:

>what's up with eham? haven't been able to hit the
>site for several days from here in the dallas area?

I don't know the underlying cause, but I do see the same outage here.
The server for "eham.net" doesn't respond to pings, although the two
machines with immediately-adjacent IP addresses do.

Looks as if the server's off the air.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2949. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 19:40:51 UTC
From: Mike Monett <No@email.adr>
Message-ID: <Xns97CD9F24549EENoemailadr@208.49.80.251>
Source record: 11950
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Roy Lewallen <w7el@eznec.com> wrote:

> Jeroen Belleman wrote:

>> It's one of my long-time gripes about coaxial connectors that N
>> and BNC series of the two impedance levels are sufficiently
>> compatible to mate together, but not enough to do so without
>> damage. In a lab with someone ignorant of this fact, it's a
>> source of endless trouble.

>> All the 75 ohm BNC connectors I have, have the same diameter
>> center pin in the connection region as 50 ohm connectors. The
>> difference is in the thickness of the dielectric around the pin
>> in the connection region, being much thinner in the 75 ohm
>> connectors. The pin of the 75 ohm connector is smaller only where
>> it's in solid dielectric at the bottom of the connector.

> Roy Lewallen, W7EL

Hi Roy,

There's lots of room for confusion. The Kings tool FAQ implies the
center contact diameter got smaller when the pin was redesigned and
the old crimp die set would not work:

~~~~~~
Why won't my Kings 2025-X-9 die set work with the 2065-X-9
connectors?

With the redesign of the True 75 Ohm BNC connectors, the center
contact diameter got smaller to maintain a constant 75 Ohm
impedance through the connector. Consequently, the center contact
crimp dimension got smaller also.

The problem with the inability of the die set to crimp this new
connector is probably because it is the older, larger die
dimension. The Kings website has a Cross-Reference Search that
lists the applicable die set for most Kings connector part
numbers.

http://www.kingselectronics.com/ResourceGuide/FAQs/tabid/74/Default.aspx

~~~~~~
However, another manufacturer claims their new 75 ohm hardware is
interchangeable with 50 ohm connectors:

~~~~~~

TRUE 75 Ohm BNC & Connectors

Where Controlled Impedance is a Necessity

Emerson Network Power Connectivity Solutions is introducing its premium line of TRUE 75 Ohm BNC connectors and adapters. These flexible cable 3 Piece BNC Connectors are essential for analog and digital high frequency signals.

They have been designed around MIL-STD-202 for up to a 3GHz frequency range, and are constructed of high performance materials including a machined nickel plated over brass housing, a teflon dielectric and gold plated brass contacts. These connectors are designed to eliminate distortion and impedance mismatching caused by using 50 ohm connectors on 75 ohm cables, and they safely inter-mate with standard 50 Ohm BNC connectors.

http://emersonnetworkpower.com/webapp/wcs/stores/servlet/ESC/pdfs/True-75-Ohm.pdf

~~~~~~

If your junkbox is anything like mine, it may have stuff purchased 20 years ago mixed with more recent purchases. So it might be worthwhile to check carefully before mating different hardware.

Regards,

Mike Monett

2950. Re: what's up with eham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 19:51:03 UTC
From: gsm@mendelson.com
Message-ID: <slrne79dqv.aot.gsm@cable.mendelson.com>
Source record: 11952

Dave Platt wrote:
>
> Looks as if the server's off the air.

Couldn't happen to nicer people in my opinion. When I complained that they had Google ads on their site which directly supported BPL, the owner of the site told me that BPL was an INTERNET technology and since his site was RADIO related, it wasn't his concern.

He also said that without Google ads, he could not keep the site alive, so he choose Google and BPL.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 IL Fax: 972-2-648-1443 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

2951. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 20:02:34 UTC
From: Mike Monett <No@email.adr>
Message-ID: <Xns97CDA2D29FFA4Noemailadr@208.49.80.251>
Source record: 11953
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Mike Monett <No@email.adr> wrote:

> So it might be
> worthwhile to check carefully before mating different hardware.

So the thought finally strikes me. How do you check the female socket dimension? Do you stick a male pin in and see how much friction there is? That could bend the contacts and damage the pin.

How about checking the male pin diameter when it is already installed on a connector? There's not enough room for calipers to reach the pin.

I often find the BNC connectors on my scope go intermittent due to a loose center pin. Often the only choice is to use a pair of pliers to squeeze the contacts together again. The damage appears to have been caused by some off-brand 50 ohm terminators that require an unusual mount of force to seat on the connector. But the repair doesn't last. Once the female pin has been forced open, it quickly goes intermittent again. This is a big problem since the scope connector is usually a special item that is difficult to get.

Regards,

Mike Monett

2952. FS: UG-58A/U Type N Panel Mount Connector

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 20:13:11 UTC
From: AAA RF Products <sales@aaarfproducts.com>
Message-ID: <583dg.3895$rS6.1889@fed1read11>
Source record: 11954
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.cb

UG-58A/U Type N Panel Mount Connector made in USA. One piece solid nickel plated brass body. Captive silver plated contact, teflon insulation. Unlimited quantity availabe from stock.

1 to 99 ------ $2.95 each

100 to 499----$2.75 each

500+----------$2.50 each

New Catalog Available

Please email sales@AAARFProducts.com

or call 949 481 3154 (San Clemente, CA, USA)

2953. Re: Best Way to build a calibrated S meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 20:20:43 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <0fa972h8phc13p6vq6kqva3g9vg4rrhu6l@4ax.com>
Source record: 11955

On Tue, 23 May 2006 16:26:43 +0100, "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>"Paul Keinanen" <keinanen@sci.fi> wrote in message
>news:9m0672t4afp02rttvafmrgfa7k8k7aa35g@4ax.com...
>> On Tue, 23 May 2006 12:16:27 +0100, "Reg Edwards"
>> <g4fgq.regp@ZZZbtinternet.com> wrote:
>>
>> >Replace the meter scale with a white card and calibrate it yourself
>> >with pen and ink. You will also need a signal generator and an
>> >attenuator.
>>
>> If you derive the S-meter reading from the a.g.c. control voltage, be
>> prepared to perform the calibration at various temperatures, since the
>> gain of simple IF-strips vary with temperature (and thus need a
>> different amount of a.g.c.), unless the gain is controlled by passive
>> components only.
>>
>> With various front end filter for various frequency bands and
>> attenuation depending of the frequency, you would have to perform the
>> calibration on several frequencies.
>>
>> Instead of a pen and ink, it would be more practical to use a micro
>> controller with sufficient non-volatile storage for the conversion
>> tables and use analog inputs for a.g.c. voltage and temperature and
>> some kind of input for the frequency being received. With these inputs
>> and the conversion table, a voltage proportional of the log of the
>> antenna terminal power could be generated.
>>
>> Paul OH3LWR
>==
>
>I don't doubt that the problem is capable of being solved.
>Just throw enough electronic hardware and software at it.
>The cost can be estimated at 100,000 Euros.
>The size and weight of the receiver will be quadrupled.
>No amateur would be able to afford buying one.
>American tax-payers would prevent NASA from doing the research and
>development work. Even Bush would object.

While NASA might have needed such sums in the 1960's, the
functionality suggested above should be doable these days with any
micro controller with a few kilobytes of non-volatile storage.

While the frequency, power level and temperature calibration points might require a three dimensional array, in practice, it should be acceptable to get a few single dimensional vectors for each amateur band. One vector for a specific band might contain the front end frequency response for 5-10 frequencies within and around a band.

Getting the a.g.c. setting for different power levels for a fixed station at three different temperatures (say +10, +20 and +30 C) or five for a mobile station (with additional values for, say -50 and +70 C) should be enough. A few kilobytes should be more than enough to get the sample points for interpolation.

>As for me and most other amateurs, I'm quite happy with an S-meter
>reading which puts signal strength reports in the right ball-park.
>Very strong, very weak, or indifferent.

Exchanging RS(T) reports is so stupid, so I try to avoid it.

The only meaningful exchange would be to exchange the field strength (V/m) or the power density (W/mï¿½) in order to study the propagation conditions. Even if we could reliably measure the antenna terminal voltage (e.g. in dBuV) or power (dBm), we still would have to measure the antenna efficiency and capture area to get any meaningful readings.

Paul OH3LWR

2954. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 21:29:28 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1279k1sebg0l07e@corp.supernews.com>
Source record: 11956
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Mike Monett wrote:
>
> Hi Roy,
>
> There's lots of room for confusion. The Kings tool FAQ implies the
> center contact diameter got smaller when the pin was redesigned and
> the old crimp die set would not work:

> . . .

> However, another manufacturer claims their new 75 ohm hardware is
> interchangeable with 50 ohm connectors:

> . . .

> If your junkbox is anything like mine, it may have stuff purchased
> 20 years ago mixed with more recent purchases. So it might be
> worthwhile to check carefully before mating different hardware.

For sure. It looks like it's not safe to mate a 75 ohm connector with anything, even another 75 ohm connector, without checking pin diameter.

Roy Lewallen, W7EL

2955. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 21:31:18 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <4474D197.2080708@nettally.com>
Source record: 11957
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Maybe your "N" female connector has "splayed" leaves on the center
contact. This sometimes happens when someone tries to screw a PL-259 UHF
connector in place by accident.

paul@burridge8333.fsbusiness.co.uk wrote:

>Okay, thanks. I must admit it is symptomatic of the load's center pin
>not quite making contact for some reason, even though the load is fully
>screwed home. But the same thing happens with 3 different loads!
>I'm using the T/R test set, by the way, although I don't see how that
>could explain the problem. I don't have the full S-parameter bridge but
>am in the market for one.
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

2956. Suggestions how to fix a 2-m xcvr problem?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 23:07:48 UTC
From: mcalhoun@ksu.edu
Message-ID: <e52p04$6m0@unix1.cc.ksu.edu>
Source record: 11958
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

NOTE: Crossposted to rec.radio.amateur.equipment and rec...homebrew.

For some years, I've had a Kenwood TM-251A 2-meter xcvr (with 440 rcv) hanging from the ceiling of my pickup truck, and recently the TouchTone pad (in the microphone) quit working and, while PTT causes plenty of RF output, there's no AUDIO output.

I'm pretty sure the problem is in the microphone electronics OR its 8-wire cord. I've "beeped" the cord from the telephone/data-like (RJ-45?) connector to solder joints on the mike PC board (it's quite a full little board!) and don't find anything wrong (but it's hard to hold a probe on each end and wiggle everything in the middle!). I'd replace the cord in a flash except I can't handle that %$#@! RJ connector.

The only microphone detail in the xcvr Service Manual other than the connector pinout:
UP
+8 volts (I measued +7.25)
GROUND
PTT
ME (Mike Earth?)
MIKE
RD (Read Detect? An output, perhaps for use with a TNC?)
DOWN
is the fact that PTT, UP, DOWN, CALL, VFO, MR, and PF are connected to three analog-inputs (and ground), thus "using up" four of the seven input wires and leaving just two wires (MIKE and ME) to handle the remaining 16 TouchTone keys AND audio!

PTT, UP, DOWN, CALL, VFO, MR, and PF do work as they are supposed to.

With "Remote Control Mode" ON, letter "A" on the TT pad is supposed to start frequency input from the keypad, but it does NOT. With an oscilloscope probe on the MIKE and ME wires, pushing "A" gives no visible change in the trace, but my jury-rig setup would probably miss a single tone-burst, so that is probably an inconclusive test other than the xcvr CPU didn't respond, either.

Any suggestions?

--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

2957. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-24 23:56:42 UTC
From: Mike Monett <No@email.adr>
Message-ID: <Xns97CDCA8512880Noemailadr@208.49.80.251>
Source record: 11959
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Roy Lewallen <w7el@eznec.com> wrote:

> For sure. It looks like it's not safe to mate a 75 ohm connector with
> anything, even another 75 ohm connector, without checking pin diameter.
>
> Roy Lewallen, W7EL

Or even 50 ohms, for that matter. But how do you check the pin diameter on an existing connector? A caliper won't go in there. Also, the diameter could be correct but the pin could be assembled incorrectly and stick out too far. This will damage the female pin.

Or maybe you know of some other non-destructive method to tell if you can mate an existing male and female coax connector without damage?

The vulnerable part is the female pin. Once those legs get splayed there's no way to put them back. All it takes is one event to effectively ruin a brand-new scope.

Regards,

Mike Monett

2958. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-25 01:40:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <127a2ous33lp5bb@corp.supernews.com>
Source record: 11960
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Mike Monett wrote:
> Roy Lewallen <w7el@eznec.com> wrote:
>
>> For sure. It looks like it's not safe to mate a 75 ohm connector with
>> anything, even another 75 ohm connector, without checking pin diameter.
>>
>> Roy Lewallen, W7EL
>
> Or even 50 ohms, for that matter. But how do you check the pin diameter on
> an existing connector? A caliper won't go in there. Also, the diameter
> could be correct but the pin could be assembled incorrectly and stick out
> too far. This will damage the female pin.
>
> Or maybe you know of some other non-destructive method to tell if you can
> mate an existing male and female coax connector without damage?
>
> The vulnerable part is the female pin. Once those legs get splayed there's
> no way to put them back. All it takes is one event to effectively ruin a
> brand-new scope.

Well, a scope will have a 50 ohm female connector, which should tolerate
any kind of male without damage. The only vulnerable connector should be
a 75 ohm female connector of the sort which has a smaller pin diameter.
I don't believe I've ever seen one of those, and you'll certainly never
see one on any commercial equipment except only possibly some
video-related units.

Roy Lewallen, W7EL

2959. Re: what's up with eham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-25 02:04:34 UTC
From: "Dr. Anton T. Squeegee" <SpammersBlow@dev.null>
Message-ID: <MPG.1edeb092beb305489896a7@news.drizzle.com>
Source record: 11961

In article <slrne79dqv.aot.gsm@cable.mendelson.com>, gsm@mendelson.com
(known to some as Geoffrey S. Mendelson) scribed...

> Dave Platt wrote:
> >
> > Looks as if the server's off the air.
>
> Couldn't happen to nicer people in my opinion. When I complained that they
> had Google ads on their site which directly supported BPL, the owner of the
> site told me that BPL was an INTERNET technology and since his site was
> RADIO related, it wasn't his concern.

<boggle>

Sheesh... If the site comes back up, I'm yanking my account. I must
not have seen the ads thanks to my ad blockers...

> He also said that without Google ads, he could not keep the site alive,
> so he choose Google and BPL.

Fooey. There have to be other ads he can have up there without
supporting a spectrum-destructive technology.

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute
(Known to some as Bruce Lane, KC7GR)
http://www.bluefeathertech.com -- kyrrin a/t bluefeathertech d-o=t calm
"Salvadore Dali's computer has surreal ports..."

2960. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-25 02:54:43 UTC
From: Mike Monett <No@email.adr>
Message-ID: <Xns97CDE8B20F9EANoemailadr@208.49.80.251>
Source record: 11962
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Roy Lewallen <w7el@eznec.com> wrote:

> Well, a scope will have a 50 ohm female connector, which should
> tolerate any kind of male without damage.

That's what I was talking about earlier. I ruined the BNC inputs on some of my older TEK scopes by using off-brand 50 ohm terminators that were difficult to install. Apparently the male pin extended too far into the female and spread the pins. Some cheap commercial coax cable had the same problem. The scope bnc connectors are special and had the multiplier contact for 10X probes, and were too difficult and expensive to get and install.

I would often waste time debugging strange waveforms when it turned out the problem was in the scope connector. Squeezing the pins gently would make it work for a while, then it would come right back.

You often see the problem on used equipment like spectrum analyzers, sig generators and counters. Evidently someone went in with needlenose pliers to try to tighten the legs, but instead squashed them into a square instead of a circle. They don't make reliable connections after that.

After discussing this, I'm inclined to get a handful of female connectors to test the male coax hardware. If it ruins the connector and cannot be fixed, toss it in the garbage where it belongs.

> The only vulnerable connector should be a 75 ohm female connector
> of the sort which has a smaller pin diameter.

> I don't believe I've ever seen one of those, and you'll certainly
> never see one on any commercial equipment except only possibly
> some video-related units.

That's good - I don't think I've ever used or seen any 75 ohm hardware, but maybe someone working on TV might run into the problem.

> Roy Lewallen, W7EL

Regards,

Mike Monett

2961. Re: Suggestions how to fix a 2-m xcvr problem?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-25 03:04:04 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <44751EA3.5010303@invalid.invalid>
Source record: 11963
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

mcalhoun@ksu.edu wrote:
> each end and wiggle everything in the middle!). I'd replace the cord in
> a flash except I can't handle that %$#@! RJ connector.

Look for a Cat5 computer LAN patch cable; cut off one end. It won't be
coiled but it will be flexible & the plug will already be there for you.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

2962. Re: what's up with eham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-25 06:07:23 UTC
From: notbob <notbob@nothome.com>
Message-ID: <bvKdnUFYHu8G1OjZnZ2dnUVZ_vOdnZ2d@comcast.com>
Source record: 11964

On 2006-05-24, Dave Platt <dplatt@radagast.org> wrote:

> I don't know the underlying cause, but I do see the same outage here.
> The server for "eham.net" doesn't respond to pings, although the two
> machines with immediately-adjacent IP addresses do.

I did get through yesterday morning, but incredibly slow. Now (Wed
night), I'm getting "The connection was refused when attempting to
contact www.eham.net", despite successful pings to server. This
sometimes due to max number of connections has been reached.

More info:

http://toolbar.netcraft.com/site_report?url=http://www.eham.net

nb

2963. Re: Suggestions how to fix a 2-m xcvr problem?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-25 06:16:08 UTC
From: biascomms <biascomms@blueyonder.co.uk>
Message-ID: <IYbdg.75299$wl.49729@text.news.blueyonder.co.uk>
Source record: 11965
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

mcalhoun@ksu.edu wrote:

> NOTE: Crossposted to rec.radio.amateur.equipment and rec...homebrew.
>
> For some years, I've had a Kenwood TM-251A 2-meter xcvr (with 440 rcv)
> hanging from the ceiling of my pickup truck, and recently the TouchTone
> pad (in the microphone) quit working and, while PTT causes plenty of RF
> output, there's no AUDIO output.
>
> I'm pretty sure the problem is in the microphone electronics OR its
> 8-wire cord. I've "beeped" the cord from the telephone/data-like (RJ-45?)
> connector to solder joints on the mike PC board (it's quite a full little
> board!) and don't find anything wrong (but it's hard to hold a probe on
> each end and wiggle everything in the middle!). I'd replace the cord in
> a flash except I can't handle that %$#@! RJ connector.
>
> The only microphone detail in the xcvr Service Manual other than the
> connector pinout:
> UP
> +8 volts (I measued +7.25)
> GROUND
> PTT
> ME (Mike Earth?)
> MIKE
> RD (Read Detect? An output, perhaps for use with a TNC?)
> DOWN
> is the fact that PTT, UP, DOWN, CALL, VFO, MR, and PF are connected to
> three analog-inputs (and ground), thus "using up" four of the seven
> input wires and leaving just two wires (MIKE and ME) to handle the
> remaining 16 TouchTone keys AND audio!
>
> PTT, UP, DOWN, CALL, VFO, MR, and PF do work as they are supposed to.
>
> With "Remote Control Mode" ON, letter "A" on the TT pad is supposed
> to start frequency input from the keypad, but it does NOT. With an
> oscilloscope probe on the MIKE and ME wires, pushing "A" gives no
> visible change in the trace, but my jury-rig setup would probably miss
> a single tone-burst, so that is probably an inconclusive test other
> than the xcvr CPU didn't respond, either.
>
> Any suggestions?
>

Have you checked at the rig end? I've had broken or intermittent
connections to the mic socket - the socket pins have poor soldered joints.

Bob

--
Everything gets easier with practice, except getting up in the morning!

2964. Bergen Hamfest 5/27/06 weekend

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-25 07:45:23 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <__-dndjEabgTKunZnZ2dneKdnZydnZ2d@comcast.com>
Source record: 11951

www.bara.org

Saturday May 27th, 2006

Annual Spring Hamfest Located at:
Westwood Regional High School
701 Ridgewood Road
The Township of Washington, New Jersey 07676

8:00 AM till 2:00 PM
Rain or Shine- the Hamfest will have Indoor spaces and Outdoor Tailgating spaces.
Amateur Testing: Novice thru Extra 8:00 AM to 10:00 AM ONLY,
Please bring original FCC license, a photo-copy and photo ID.
The fee for Amateur testing is $14.00
DXCC Card Checking courtesy of NJDXA
Admission is $5.00 per person (wives and children free).
Vendors $15.00 (per space- includes one free admission).
No reservations are required for these spaces.
A limited number of Indoor spaces are available with electrical power.
You must reserve these spaces in advance.
Lots of Parking
Lots of great Bargains and Goodies.
The Hamfest is open for vendors at 6AM, and at 8AM for buyers.
Rest Room Facilities
Refreshments
Talk-in on 146.19/79 Repeater PL 141.3 & 146.52 Simplex

2965. Re: Flash Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-25 10:25:37 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1148552737.079739.65880@i40g2000cwc.googlegroups.com>
Source record: 11966

Will wrote:
> Hi
>
> www.expandedspectrumsystems.com
>
> Anyone have one of these flash crystal units? Are they clean enough to
> use for receiver testing. I see no phase noise figures on their web page.
>
> Will

It uses the LMX2306 PLL chip with a VCO, presumably. As the tuning
range is limited to 10%-20% of the centre frequency the phase noise is
probably quite low.

73, Leon

2966. Re: 5.0 - 5.5 mHz. VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-25 11:06:59 UTC
From: amdx <amdx@knology.net>
Message-ID: <18fe2$44758fcd$45011502$27338@KNOLOGY.NET>
Source record: 11967

"k9jri" <kn9jri@gmail.com> wrote in message
news:1148089683.117088.14490@j73g2000cwa.googlegroups.com...
> I am looking for a contruction artical or some other starting point for
> a solid state 5 to 5.5 mHz. VFO to use with my PSK-20. Hopefully
> somebody can point me to a contruction project, a kit or a source of a
> VFO.
>
QST June 1991 pg 27 has a VFO that does 5.0 to 5.5 mhz.
The article is written by Doug Demaw.

2967. Re: what's up with eham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-25 14:35:01 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <pgjdg.177632$bm6.91868@fed1read04>
Source record: 11968

"Dr. Anton T. Squeegee" <SpammersBlow@dev.null> wrote in message
news:MPG.1edeb092beb305489896a7@news.drizzle.com...
> In article <slrne79dqv.aot.gsm@cable.mendelson.com>, gsm@mendelson.com
> (known to some as Geoffrey S. Mendelson) scribed...
>
>> Dave Platt wrote:
>> >
>> > Looks as if the server's off the air.
>>
>> Couldn't happen to nicer people in my opinion. When I complained that
>> they
>> had Google ads on their site which directly supported BPL, the owner of
>> the
>> site told me that BPL was an INTERNET technology and since his site was
>> RADIO related, it wasn't his concern.
>
> <boggle>
>
> Sheesh... If the site comes back up, I'm yanking my account. I must
> not have seen the ads thanks to my ad blockers...
>
>> He also said that without Google ads, he could not keep the site alive,
>> so he choose Google and BPL.
>
> Fooey. There have to be other ads he can have up there without
> supporting a spectrum-destructive technology.
>
>

The website owner doesn't choose the ads to appear, Google does that
automatically, based on keywords.
But Google adSense has a filter option to trash any undesired ad. A simple
matter to put the "offending" ad in the filter list.

Eham has been a valuable resource for hams. With the high cost of running a
Mega Site such as eham, I suggest we support the site, otherwise it may go
away.

You will notice a lot of the Ham Megasites are using Google AdSense. Why?
It is bloody expensive to run a megasite. When the site gets popular, a
"Normal" provider will add outrageous costs for excess bandwidth, forcing a
web master to get a server. Servers ain't cheap. There are other costs as
well, main provider, link checkers, domain name costs, computer maintenance,
anti-virus checkers, software, etc.This says nothing about the Web Master's
labor to keep the site running. Many of the mega sites are free - such a

deal.

AND - you buy a magazine -- full of ads, Movie rental - full of ads, cable TV - full of ads, etc.
I suspect the ads income on Mega Sites don't come near the covering the cost of running a Mega Site. Even if it did, so what - you don't have to click on the ads or read them. Can't do that with magazines (;-)

RE: The BPL ads -- maybe run your own Anti-BPL ad Huh

--
CL -- I doubt, therefore I might be !

2968. Re: MA110 specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-25 15:42:19 UTC
From: "Dana H. Myers" <dana.myers@gmail.com>
Message-ID: <weSdnfqL_-XHTejZnZ2dnUVZ_u2dnZ2d@comcast.com>
Source record: 11969

Bob Headrick wrote:
>
> "Dave Platt" <dplatt@radagast.org> wrote in message
> news:125l6npf9nkid4e@corp.supernews.com...
>> In article <445A6C5C.6010807@nowhere.com>,
>> Leif Holmgren <nobody@nowhere.com> wrote:
>
>>> I have been searching for a datasheet for a diode called MA110 for a few
>>> days without any luck. Dozens of dealers are offering to sell me
>>> anything from 1000 to six hundred thousands of them but noone has any
>>> kind of data sheet.
>>>
>>> I need to replace a single burnt one so buying even 1000 would be quite
>>> an overkill.
>>>
>>> Does anyone know what's so special with this one? It's used in the
>>> battery charger in a ICOM IC2-SET and as far as I can remember one of a
>>> few of it's kind in that rig. Would you say it can be replaced with just
>>> about any 1N4148 (or whatever it's surface mount variant is called) or
>>> are there some special parameters that I need to look for?
>
> http://www.partstore.com/ModelDetail.aspx?ModelCatCode=070.010&ModelID=95158
> lists it as 40V, 3nS switching, 100mA. Cost $1.10 in single unit.
> Google is your friend....

Sure sounds like a 1N4148 would be a suitable replacement.

http://www.semiconductors.philips.com/acrobat_download/datasheets/1N4148_1N4448_5.pdf

Dana K6JQ

2969. Re: what's up with eham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-25 17:41:04 UTC
From: gsm@mendelson.com
Message-ID: <slrne7bqqp.9k4.gsm@cable.mendelson.com>
Source record: 11970

Caveat Lector wrote:
> RE: The BPL ads -- maybe run your own Anti-BPL ad Huh

You miss the point.

ALL Google ads are BPL adds. Google uses the money they get from Adsense to finance BPL networks. That's right, Google invested a lot of money in BPL. Using Adsense supports BPL, using Google supports BPL, buying Google stock supports BPL.

Got it? Google and BPL are connected.

As for supporting those sites, "you pays your money and you makes your choice". A click on a Google Adsense ad helps pay for BPL. There are other online "click here" advertising companies. He chose Google. I chose not to support him.

IMHO it's like running a pro-enviornmentweb site and using the proceeds from advertising to fund toxic waste dumping.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 IL Fax: 972-2-648-1443 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

2970. femmes mures en manque de sexe cherchent hommes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-25 18:24:52 UTC
From: christiane@dunet.web
Message-ID: <4475f673$0$23264$8fcfb975@news.wanadoo.fr>
Source record: 11971
Body handling: HTML body converted to readable text

[No readable article body recovered]

2971. jeune fille 18 ans innocente

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-25 18:24:55 UTC
From: cinthia@eurasia.net
Message-ID: <4475f676$0$18343$8fcfb975@news.wanadoo.fr>
Source record: 11972
Body handling: HTML body converted to readable text

[No readable article body recovered]

2972. jeunes filles 18 ans tres chaudes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-25 18:24:55 UTC
From: coralie@canaweb.ca
Message-ID: <4475f676$0$3191$8fcfb975@news.wanadoo.fr>
Source record: 11973
Body handling: HTML body converted to readable text

[No readable article body recovered]

2973. Re: what's up with eham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-25 22:30:14 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <Vdqdg.177653$bm6.48055@fed1read04>
Source record: 11974

"Geoffrey S. Mendelson" <gsm@mendelson.com> wrote in message
news:slrne7bqqp.9k4.gsm@cable.mendelson.com...
> Caveat Lector wrote:
>> RE: The BPL ads -- maybe run your own Anti-BPL ad Huh
>
> You miss the point.
>
> ALL Google ads are BPL adds. Google uses the money they get from Adsense
> to finance BPL networks. That's right, Google invested a lot of money in
> BPL. Using Adsense supports BPL, using Google supports BPL, buying Google
> stock supports BPL.
>
> Got it? Google and BPL are connected.
>
> As for supporting those sites, "you pays your money and you makes your
> choice".
> A click on a Google Adsense ad helps pay for BPL. There are other online
> "click here" advertising companies. He chose Google. I chose not to
> support
> him.
>
> IMHO it's like running a pro-enviornmentweb site and using the proceeds
> from advertising to fund toxic waste dumping.
>
> Geoff.
>
> --
> Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
> IL Voice: (07)-7424-1667 IL Fax: 972-2-648-1443 U.S. Voice:
> 1-215-821-1838
> Visit my 'blog at http://geoffstechno.livejournal.com/

Well if I boycotted every biz that had policies I disagree with, wouldn't be
alot left.

So your quarrel is with Goggle not e-ham.

Strange but just about every major Ham web site is now using Google AdSense.

Guess you will have to start up your own Ham website

2974. Re: what's up with eham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-25 22:38:56 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <2mqdg.177654$bm6.126442@fed1read04>
Source record: 11975

BTW -- when you buy consumer products, do you determine where the product was made, if made in a country that you disagree with their policies, do you boycott the product and store ???

Can't imagine you are not buying gasoline, some of their policies are in question.

--
CL -- I doubt, therefore I might be !

"Caveat Lector" <UALLBeware@9984reader.com> wrote in message news:Vdqdg.177653$bm6.48055@fed1read04...
>
>
>
>
>
>
>
>
>
> "Geoffrey S. Mendelson" <gsm@mendelson.com> wrote in message
> news:slrne7bqqp.9k4.gsm@cable.mendelson.com...
>> Caveat Lector wrote:
>>> RE: The BPL ads -- maybe run your own Anti-BPL ad Huh
>>
>> You miss the point.
>>
>> ALL Google ads are BPL adds. Google uses the money they get from Adsense
>> to finance BPL networks. That's right, Google invested a lot of money in
>> BPL. Using Adsense supports BPL, using Google supports BPL, buying Google
>> stock supports BPL.
>>
>> Got it? Google and BPL are connected.
>>
>> As for supporting those sites, "you pays your money and you makes your
>> choice".
>> A click on a Google Adsense ad helps pay for BPL. There are other online
>> "click here" advertising companies. He chose Google. I chose not to
>> support
>> him.
>>
>> IMHO it's like running a pro-enviornmentweb site and using the proceeds
>> from advertising to fund toxic waste dumping.
>>

>> Geoff.
>>
>> --
>> Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
>> IL Voice: (07)-7424-1667 IL Fax: 972-2-648-1443 U.S. Voice:
>> 1-215-821-1838
>> Visit my 'blog at http://geoffstechno.livejournal.com/
>
> Well if I boycotted every biz that had policies I disagree with, wouldn't
> be alot left.
>
> So your quarrel is with Goggle not e-ham.
>
> Strange but just about every major Ham web site is now using Google
> AdSense.
>
> Guess you will have to start up your own Ham website
>
>
>
>

2975. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-25 22:46:53 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1148597213.516759.155070@i39g2000cwa.googlegroups.com>
Source record: 11976
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

We've built some equipment with 75 ohm connectors. In those network analyzers that use a separate S-parameter test set, you can often get the test set in a 75 ohm version as well as the more common 50 ohm. But the 75 ohm units are (as far as I know, _always_) labeled with a caution about using the right impedance connectors.

Cheers,
Tom

2976. Re: what's up with eham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-25 23:14:58 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <poydnWorZqD1p-vZnZ2dnUVZ8tKdnZ2d@pipex.net>
Source record: 11977

> ALL Google ads are BPL adds. Google uses the money they get from Adsense
> to finance BPL networks. That's right, Google invested a lot of money in
> BPL. Using Adsense supports BPL, using Google supports BPL, buying Google
> stock supports BPL.
>
> Got it? Google and BPL are connected.
==========
I am not a supporter of BPL .....full stop.
Apart from that , in the UK (A)DSL is widely available ,so BPL (or PLC)
is not an issue eg a threat to Amateur Radio in this part of the world.
However there is BPL and BPL.
Most of us on this NG know that ARRL is fighting against the
introduction of 'certain BPL systems' which pollute the HF and up
spectrum ,but NOT BPL in principle.
On the ARRL premises Motorola have installed a BPL system that according
to ARRL does not pollute the spectrum .

So when addressing Google's support for BPL , it seems only sensible to
adopt a more balanced opinion .
Google is an effective search engine ,that's why I use it. There is no
other reason.

Frank GM0CSZ / KN6WH

2977. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-26 01:57:03 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <Pftdg.3158$1i1.2627@attbi_s72>
Source record: 11978
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"K7ITM" <k7itm@msn.com> wrote in message
news:1148597213.516759.155070@i39g2000cwa.googlegroups.com...
> We've built some equipment with 75 ohm connectors. In those network
> analyzers that use a separate S-parameter test set, you can often get
> the test set in a 75 ohm version as well as the more common 50 ohm.
> But the 75 ohm units are (as far as I know, _always_) labeled with a
> caution about using the right impedance connectors.
>
> Cheers,
> Tom

You've built a hell of a lot of it. All the stuff for the Telco's. like my
backup HP-313 that I mod'd back to 50 Ohms.

Regards
W4ZCB
>

2978. Re: Best Way to build a calibrated S meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-26 02:47:46 UTC
From: Richard Knoppow <dickburk@ix.netcom.com>
Message-ID: <m%tdg.7814$y4.1325@newsread2.news.pas.earthlink.net>
Source record: 11979

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in
message news:8qqdnZNYh90Vlu7ZnZ2dnUVZ8qWdnZ2d@bt.com...
>
> <Allisonnospam@nouce.bellatlantic.net> wrote
>> Only by coincidence and only in a 50 ohm system
>> elsewhere
>> S9 is 50 uV (microVolts) equals 50pW.
>
> ==
> Allison, I'm afraid you are not quite correct about
> coincidences.
>
> The beauty of calibrating an S-meter in watts is that the
> result is
> independent of receiver impedance.
>
> Of course, there must be a conjugate match between antenna
> and
> receiver. And there usually is. This is taken care of in
> the
> calibration process.
>
> The received signal STRENGTH is indicated in watts, which
> is all one
> wants to know. When reading the meter, who cares about
> what impedance
> the measuring instrument happens to be?
>
> To sum up : There is a transmitter of given power output.
> There is a
> radio path which is an attenuator, And there is a
> received signal
> signal strength meter which indicates watts.
>
> The overall loss between transmitter and power meter may
> be deduced in
> terms of decibels. Professional radio engineers do it all
> the time.
>
> It can be misleading to think in terms of S9 = 50 uV when
> one doesn't
> know what the receiver input impedance is.
> ----
> Reg, G4FGQ

>
Tradionally S-9 has been defined as 50uV, but there
really is not a standard. The S numbers are taken from the
old R-S-T system of reporting signals (Readability,
Strength, Tone). While the meter can be calibrated using a
calibrated signal generator the reading for 50uV will vary
with the gain of the receiver so it will not be the same on
all bands or even from one end of a band to the other.
Some receivers have meters calibrated in something other
than S units. For instance, the old Hammarlund SP-600. The
meters on these are usually calibrated for RF in db above 1
uv. But, the same thing applies, the receiver gain varies
with band and frequency, the AGC is not linear, and the
reading only an indication of relative strength rather than
any actual value.

--

Richard Knoppow
Los Angeles, CA, USA
dickburk@ix.netcom.com

2979. Re: Vector network analysis question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-26 03:27:55 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1148614075.283647.7930@u72g2000cwu.googlegroups.com>
Source record: 11980
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Well, yeah, I guess we have. In fact, not long ago I was cleaning up a lab bench and found some of the old Telco style connectors, all gold plated and pretty. I couldn't bear to toss them, even though the chances of us ever using them again are somewhere between slim and none, toward the none end of that scale. I suppose that any special-impedance market that was large enough, we built for. Of course the older audio generators (200CD et al) were 600 ohm.

Cheers,
Tom

2980. Re: what's up with eham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-26 05:21:03 UTC
From: gsm@mendelson.com
Message-ID: <slrne7d3l2.8bv.gsm@cable.mendelson.com>
Source record: 11981

Highland Ham wrote:
> I am not a supporter of BPL ....full stop.
> Apart from that , in the UK (A)DSL is widely available ,so BPL (or PLC)
> is not an issue eg a threat to Amateur Radio in this part of the world.

The same in the United States. Due to the overspending on infrastructure without demand in late 1990's there is plenty of "dark" (unused) fibre.

> However there is BPL and BPL.
> Most of us on this NG know that ARRL is fighting against the
> introduction of 'certain BPL systems' which pollute the HF and up
> spectrum ,but NOT BPL in principle.

The problem with the system Google funded is that they do polute spectrum, just not ham radio spectrum (for now). Therefore the studies the ARRL has done which inlcudes going there and driving around show there is no problem.

If you think of Google's BPL as the electromagnetic equivalent of toxic waste dumping, the ARRL is more like the AAA (or AA in the U.K.) than Greenpeace. As long as they dump "off road", there is little they can do.

It is interesting that in this case, Ed Hare, W1RFI, the ARRL's BPL expert has tried to interest U.S. radio user's groups besides the ARRL and no one was interested in his data. AFIK the only country where anyone has complained about the effect of BPL on commercial traffic was Austrailia.

The problem is that the notching out of ham bands is something that can easily be undone. It may even be as simple as the operator of a system entering filter parameters into a control computer. In fact it would have to be, or they could not react to complaints.

That means there is nothing to stop a system operator, once they are established from using the ham bands.

> On the ARRL premises Motorola have installed a BPL system that according
> to ARRL does not pollute the spectrum .

I don't know much about it. I've read claims as such, that there is NO RF polution by the Motorola system, but have seen no hard data. If it does or not, the Google supported system does pollute, they just make sure that no one with an organized voice are the targets of their polution.

> So when addressing Google's support for BPL , it seems only sensible to
> adopt a more balanced opinion .
> Google is an effective search engine ,that's why I use it. There is no
> other reason.

There are lots of effective search engines. Google has been terrible for a long time. When Google first started, you could put in a subject and get a hit on the first page for THE web site as opposed to it now being on the fourth or fifth page.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 IL Fax: 972-2-648-1443 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

2981. Repairing moving coil meters.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-26 15:01:20 UTC
From: dick on the langwang <dick@ravelrig01.demon.co.uk>
Message-ID: <1148655680.773573.261290@j33g2000cwa.googlegroups.com>
Source record: 11982

Has anyone experience of repairing moving coil meters and/or able give me to any useful pointers. One of my (many !!) restoration projects is being held up by an u/s meter & from inspection I suspect although the coil/pointer move freely one of the fine wire connections to the coil has gone open circuit, due to corrosion. I'm happy stripping down & repairing clocks but have no experience of doing the same to meters. In the end I'll probably have to find a replacement but it would be nice to try & get the original meter working again.

2982. Re: what's up with eham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-26 15:04:51 UTC
From: "John L. Sielke" <w2agnNOSPAM@w2agn.net>
Message-ID: <wL-dnXMvOpSRhOrZnZ2dnUVZ_sOdnZ2d@comcast.com>
Source record: 11983

Caveat Lector wrote:

Eham has been a valuable resource for hams. With the high cost of running a Mega Site such as eham, I suggest we support the site, otherwise it may go away.

Good Riddance to eHam.
An unsuspecting ham posted the following on an email reflector.

Folks,

I wrote a short piece about the 'K2 versus all them big new rigs'

several weeks ago, but I guess it isn't going to make it where anyone

can read it on the front page or subsequent pages on eHam.

Perhaps sites that depend on advertising revenue don't like ruffled

vendor feathers? :-)

In any event, you can view and comment on it here:

http://www.eham.net/articles/8800

AB7RG of Eham took affront, and posted the following:

Actually, it was this comment, "Perhaps sites that

depend on advertising revenue don't like ruffled

vendor feathers?" -- that is what really did it.

Especially when:

http://www.eham.net/about/showadvertisers

Look seven down, that says it all...

Next time get your facts straight first, Jeff. Then

if you have a question or concern e-mail me privately

and I will be more than happy to let you know

approximately if/when your article will be posted on

eHam's homepage. Like I said, I can only run so many

at a time, and we receive TONS of submissions. And I

would have glady ran yours in just a few more days if

you had just been patient.

Bottom line: You show me some common courtesy and a

little respect and I will happily return it.

Now that would not be so bad, although he also removed the mentioned article from eHam in a fit of pique, and engaged in a bit of email harassment.

Folks,

There is nothing spooky or scary going on here.

I submitted an article on July 12 for publication on eHam. If you know

anything about that process it takes time and you also get an

auto-generated response telling you that your article "may" or "may not"

be selected for front page publication.

Given that it has been three weeks, and that other, more recent articles

have been published I just *assumed* that mine was not selected for

publication. They receive a lot of submissions and that wouldn't have

been unusual. So this morning, I sent the link to this list so that even

though the story didn't make the front page, other Elecrafter's could

read it. In my posting, I included the URL and this one comment:

"Perhaps sites that depend on advertising revenue don't like ruffled

vendor feathers? :-)"

I thought that the little smiley guy :-) conveyed that I was joking and

I wasn't actually implying that eHam was doing anything devious in

choosing not to publish the article.

However, the Articles Manager had a much different take on the matter

and proceeded to send me several emails that asked for my "respect" and

my "courtesy" or that article would be pulled. I told him deleting the

article would be fine with me and he has done that. There were several

other messages between us where he sent me the dictionary definition of

the word "libel" and such, and ended it all by saying that I was banned

from posting articles on eHam until I learn to be more courteous, and

that he was deleting any follow-up messages from me, etc.

Obviously I'm not thrilled by all this, and his public posting to this

list was an obvious attempt to "set me straight" in front of a public

audience. I wouldn't have replied at all but I started receiving emails

from this list asking why the link on eHam couldn't be reached and what

all this was about.

I would REALLY appreciate if this could end now. I have always hated OT

posts and long, meandering threads that have no value, and this one

certainly has none at this point.

I apologize to the list for the messages it has already spawned, and

hope that you will take my plea to heart and NOT FOLLOW THIS UP.

Thanks and see you all on the bands!

I also emailed AB7RG, and received a nasty email telling me I 'was not very smart' and reminding me of how he had to ï¿½throw me offï¿½ the Argonaut V reflector. He certainly did. I DARED to suggest that the ArgoV was not up to the performance of the Elecraft K2.

Then, he ï¿½modifiedï¿½ my profile on Eham.net, adding ï¿½and making trouble on eham.netï¿½ to my hobbies. When I saw this, I added under ï¿½Things I want to doï¿½ that one would NOT be contributing to eHam, when they dared to modify my profile. Now I see my profile has been totally deleted, and my email address changed to ï¿½JoeBlow@anywhere.com,ï¿½ to insure I can not re-enter it.

UPDATE

Now the arrogant, childish a**hole has fixed it so I can't edit my ï¿½Profileï¿½ nor can I post on any of the Forums. It is really sad that he has to do this to feel like a ï¿½big shot.ï¿½ I guess his ï¿½significant otherï¿½ must have laughed at the size of his......antenna.

2983. Re: Repairing moving coil meters.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-26 18:08:03 UTC
From: fmmck@aol.com
Message-ID: <fmmck-2605061408030001@acacd82a.ipt.aol.com>
Source record: 11984

In article <1148655680.773573.261290@j33g2000cwa.googlegroups.com>, "dick on the langwang" <dick@ravelrig01.demon.co.uk> wrote:

> Has anyone experience of repairing moving coil meters and/or able give
> me to any useful pointers. One of my (many !!) restoration projects is
> being held up by an u/s meter & from inspection I suspect although the
> coil/pointer move freely one of the fine wire connections to the coil
> has gone open circuit, due to corrosion. I'm happy stripping down &
> repairing clocks but have no experience of doing the same to meters. In
> the end I'll probably have to find a replacement but it would be nice
> to try & get the original meter working again.

Dick-

As I recall, current is conducted via upper and lower springs, to the moving coil. If you can determine that the coil itself is still conducting, you may be able to repair connections to the other components.

If the needle cannot be zeroed with the mechanical adjustment, it is possible one of the springs has broken or come loose at one end.

It would be handy if you have an Ohmmeter with a beeper, that sounds with very low current conduction.

(I've had very few movements with open coils, but have obversed several cases where plating of the pole pieces peeled and jammed the movement.)

As far as replacement, look near the bottom of the meter scale. You may find the meter sensitivity listed. It might be something like "FS=1mA" or "FS=50uA". If you determine the sensitivity, any meter with the same size and sensitivity may be useable by swapping meter scales.

Fred
K4DII

2984. Re: Dead bugs!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-26 19:00:14 UTC
From: Frank <Frank.28fodd@news.radiobanter.com>
Message-ID: <Frank.28fodd@news.radiobanter.com>
Source record: 11985

Frank Wrote:
> I'm going to attempt to build one of my ghost receievers dead bug style.
> The goal being to take something that I usually mount in an old PC case,
> and fit it into a cigar box. I've never tried dead bug, or ugly
> construction, but figure it should be the most spacerous mehtod, and I
> cany use both side of a board for seperate functions.
>
> As far as my ghost receivers, just remember those proclaiming
> something is impossible are interupted by someone doing it. Believe
> it or not, like it or not, the dead talk! This IS the next frontier in
> electronics!
>
> http://franksumption.tripod.com/
>
> I still haven't quite gotten the LNM3820 to work the way I want it to.
> It works on the bread board, but not on a PCB.
>
> Frank

Okay, I tried Dead Bug construtcion, and it seems it is absolutly
wortheless for complicated circuits. Most the hams I see pushing this
method are only using a couple components, try it with about 50, and
see how well it works---NOT. I made two of my systems with it, and an
amp, all are crappy!!

Frank

--
Frank

2985. Re: what's up with eham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-26 22:46:02 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <071f721gg7ltb2fslagdn62i3g851p1jqd@4ax.com>
Source record: 11986

On Fri, 26 May 2006 11:04:51 -0400, "John L. Sielke"
<w2agnNOSPAM@w2agn.net> wrote:

Could someone actually quote this so I can understand who said what?

>Caveat Lector wrote:
>
>
> Eham has been a valuable resource for hams. With the high cost of running a
> Mega Site such as eham, I suggest we support the site, otherwise it may go
> away.
>
>Good Riddance to eHam.
> An unsuspecting ham posted the following on an email reflector.
>
> Folks,
>
>
>
> I wrote a short piece about the 'K2 versus all them big new rigs'
>
> several weeks ago, but I guess it isn't going to make it where anyone
>
> can read it on the front page or subsequent pages on eHam.
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>
> Perhaps sites that depend on advertising revenue don't like ruffled
>
> vendor feathers? :-)
>
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>
> In any event, you can view and comment on it here:
>
>
>
> http://www.eham.net/articles/8800
>
>
>
> AB7RG of Eham took affront, and posted the following:
>
> Actually, it was this comment, "Perhaps sites that
>

> depend on advertising revenue don't like ruffled
>
> vendor feathers?" -- that is what really did it.
>
> Especially when:
>
>
>
> http://www.eham.net/about/showadvertisers
>
>
>
> Look seven down, that says it all...
>
>
>
> Next time get your facts straight first, Jeff. Then
>
> if you have a question or concern e-mail me privately
>
> and I will be more than happy to let you know
>
> approximately if/when your article will be posted on
>
> eHam's homepage. Like I said, I can only run so many
>
> at a time, and we receive TONS of submissions. And I
>
> would have glady ran yours in just a few more days if
>
> you had just been patient.
>
>
>
> Bottom line: You show me some common courtesy and a
>
> little respect and I will happily return it.
>
>
>
> Now that would not be so bad, although he also removed the mentioned article
>from eHam in a fit of pique, and engaged in a bit of email harassment.
>
> Folks,
>
>
>
> There is nothing spooky or scary going on here.
>
>

> I submitted an article on July 12 for publication on eHam. If you know
> anything about that process it takes time and you also get an
> auto-generated response telling you that your article "may" or "may not"
> be selected for front page publication.
>
>
> Given that it has been three weeks, and that other, more recent articles
> have been published I just *assumed* that mine was not selected for
> publication. They receive a lot of submissions and that wouldn't have
> been unusual. So this morning, I sent the link to this list so that even
> though the story didn't make the front page, other Elecrafter's could
> read it. In my posting, I included the URL and this one comment:
>
>
> "Perhaps sites that depend on advertising revenue don't like ruffled
> vendor feathers? :-)"
>
>
> I thought that the little smiley guy :-) conveyed that I was joking and
> I wasn't actually implying that eHam was doing anything devious in
> choosing not to publish the article.
>
>
> However, the Articles Manager had a much different take on the matter
> and proceeded to send me several emails that asked for my "respect" and
> my "courtesy" or that article would be pulled. I told him deleting the
> article would be fine with me and he has done that. There were several
> other messages between us where he sent me the dictionary definition of
> the word "libel" and such, and ended it all by saying that I was banned

>
> from posting articles on eHam until I learn to be more courteous, and
>
> that he was deleting any follow-up messages from me, etc.
>
>
>
> Obviously I'm not thrilled by all this, and his public posting to this
>
> list was an obvious attempt to "set me straight" in front of a public
>
> audience. I wouldn't have replied at all but I started receiving emails
>
> from this list asking why the link on eHam couldn't be reached and what
>
> all this was about.
>
>
>
> I would REALLY appreciate if this could end now. I have always hated OT
>
> posts and long, meandering threads that have no value, and this one
>
> certainly has none at this point.
>
>
>
> I apologize to the list for the messages it has already spawned, and
>
> hope that you will take my plea to heart and NOT FOLLOW THIS UP.
>
>
>
> Thanks and see you all on the bands!
>
> I also emailed AB7RG, and received a nasty email telling me I 'was not very
>smart' and reminding me of how he had to ï¿½throw me offï¿½ the Argonaut V
>reflector. He certainly did. I DARED to suggest that the ArgoV was not up to the
>performance of the Elecraft K2.
>
>
>
> Then, he ï¿½modifiedï¿½ my profile on Eham.net, adding ï¿½and making trouble on
>eham.netï¿½ to my hobbies. When I saw this, I added under ï¿½Things I want to doï¿½
>that one would NOT be contributing to eHam, when they dared to modify my
>profile. Now I see my profile has been totally deleted, and my email address
>changed to ï¿½JoeBlow@anywhere.com,ï¿½ to insure I can not re-enter it.
>
>
>

> UPDATE
>
> Now the arrogant, childish a**hole has fixed it so I can't edit my ï¿½Profileï¿½
>nor can I post on any of the Forums. It is really sad that he has to do this to
>feel like a ï¿½big shot.ï¿½ I guess his ï¿½significant otherï¿½ must have laughed at the
>size of his......antenna.

2986. Re: what's up with eham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-26 22:55:12 UTC
From: notbob <notbob@nothome.com>
Message-ID: <B86dnb2EJ9PNGurZnZ2dnUVZ_tOdnZ2d@comcast.com>
Source record: 11987

On 2006-05-26, Wes Stewart <n7ws*@*yahoo.com> wrote:

> Could someone actually quote this so I can understand who said what?

Could you actually learn Usenet etiquette rather than re-posting 200+
lines for one single line of reply!

nb

2987. Re: what's up with eham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-26 23:50:27 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <6t4f72puq24u301hr8u56o77hlvbn40r6m@4ax.com>
Source record: 11988

On Fri, 26 May 2006 17:55:12 -0500, notbob <notbob@nothome.com> wrote:

>On 2006-05-26, Wes Stewart <n7ws*@*yahoo.com> wrote:
>
>> Could someone actually quote this so I can understand who said what?
>
>Could you actually learn Usenet etiquette rather than re-posting 200+
>lines for one single line of reply!

Kiss my ass.

That succinct enough for you?

2988. Re: what's up with eham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-27 00:04:01 UTC
From: notbob <notbob@nothome.com>
Message-ID: <--ednbR0S-HsCurZnZ2dnUVZ_v6dnZ2d@comcast.com>
Source record: 11989

On 2006-05-26, Wes Stewart <n7ws*@*yahoo.com> wrote:

> Kiss my ass.

Must be a circus act.

nb

2989. Re: what's up with eham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-27 02:26:56 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <e58ddgqbk1@puck.litech.org>
Source record: 11990

Wes Stewart <n7ws*@*yahoo.com> wrote:
> On Fri, 26 May 2006 17:55:12 -0500, notbob <notbob@nothome.com> wrote:

>>On 2006-05-26, Wes Stewart <n7ws*@*yahoo.com> wrote:
>>
>>> Could someone actually quote this so I can understand who said what?
>>
>>Could you actually learn Usenet etiquette rather than re-posting 200+
>>lines for one single line of reply!

> Kiss my ass.

> That succinct enough for you?

Good enough to get you in my killfile. Ah, the sigmonster has a truly
uncanny ability to choose an appropriate sigfile. This one must have
been chosen with you in mind.

--
About a deceased operator:
I'm still more than a bit surprised that he was able to operate
the weapon in such a fashion that it would fire. This is grossly
inconsistent with _my_ experience of his abilities.

2990. Re: what's up with eham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-27 03:37:13 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <JPPdg.41519$Lm5.7350@newssvr12.news.prodigy.com>
Source record: 11991

Wes Stewart wrote:
> On Fri, 26 May 2006 17:55:12 -0500, notbob <notbob@nothome.com> wrote:
>
>
>>On 2006-05-26, Wes Stewart <n7ws*@*yahoo.com> wrote:
>>
>>
>>>Could someone actually quote this so I can understand who said what?
>>
>>Could you actually learn Usenet etiquette rather than re-posting 200+
>>lines for one single line of reply!
>
>
> Kiss my ass.
>
> That succinct enough for you?
>

My sentiments, exactly.
73,
Tom Donaly, KA6RUH

2991. Re: Suggestions how to fix a 2-m xcvr problem?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-27 05:26:05 UTC
From: john graesser <graesser@tca.net>
Message-ID: <127fofpqdbtahf3@corp.supernews.com>
Source record: 11992
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

<mcalhoun@ksu.edu> wrote in message news:e52p04$6m0@unix1.cc.ksu.edu...
> NOTE: Crossposted to rec.radio.amateur.equipment and rec...homebrew.
>
> For some years, I've had a Kenwood TM-251A 2-meter xcvr (with 440 rcv)
> hanging from the ceiling of my pickup truck, and recently the TouchTone
> pad (in the microphone) quit working and, while PTT causes plenty of RF
> output, there's no AUDIO output.
>
> I'm pretty sure the problem is in the microphone electronics OR its
> 8-wire cord. I've "beeped" the cord from the telephone/data-like (RJ-45?)
> connector to solder joints on the mike PC board (it's quite a full little
> board!) and don't find anything wrong (but it's hard to hold a probe on
> each end and wiggle everything in the middle!). I'd replace the cord in
> a flash except I can't handle that %$#@! RJ connector.
>
> The only microphone detail in the xcvr Service Manual other than the
> connector pinout:
> UP
> +8 volts (I measued +7.25)
> GROUND
> PTT
> ME (Mike Earth?)
> MIKE
> RD (Read Detect? An output, perhaps for use with a TNC?)
> DOWN
> is the fact that PTT, UP, DOWN, CALL, VFO, MR, and PF are connected to
> three analog-inputs (and ground), thus "using up" four of the seven
> input wires and leaving just two wires (MIKE and ME) to handle the
> remaining 16 TouchTone keys AND audio!
>
> PTT, UP, DOWN, CALL, VFO, MR, and PF do work as they are supposed to.
>
> With "Remote Control Mode" ON, letter "A" on the TT pad is supposed
> to start frequency input from the keypad, but it does NOT. With an
> oscilloscope probe on the MIKE and ME wires, pushing "A" gives no
> visible change in the trace, but my jury-rig setup would probably miss
> a single tone-burst, so that is probably an inconclusive test other
> than the xcvr CPU didn't respond, either.
>
> Any suggestions?

Our local university club had one of these that was flakey as well, it had
been hit by lightning and both receivers worked, but from the testing I did

on it, the ptt no longer worked as ptt, one of the freq change buttons now worked as ptt, but locked on when pressed once, then turned off when pressed again. The other buttons on the mic were similarly mangled up. No one wanted to spend money to actually fix the piece of junk, so it just got shoved in a box and stored away. Good luck on getting yours running, I was not impressed by the recieve audio, and with the transmit problems with the one we had I never did listen to its transmit audio.
thanks, John.
KC5DWD

2992. Re: Repairing moving coil meters.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-27 09:31:02 UTC
From: dick on the langwang <dick@ravelrig01.demon.co.uk>
Message-ID: <1148722262.605754.259700@j73g2000cwa.googlegroups.com>
Source record: 11993

Already know the sensitivity (250 microamps) but thanks for the tip about peeling pole piece plating, don't think it's that though because the coil/needle rotate freely. Reason I suspect the o/c is because there's a 'green, furry blob' (due damp storage sometime in the past ?) halfway along the fine coil connection wire, possibly surrounding a joint. Job for a fine brush & steady hand I think !!

2993. Re: Dead bugs!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-27 11:54:37 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1148730877.611442.288460@j73g2000cwa.googlegroups.com>
Source record: 11994

Frank wrote:
> Frank Wrote:
> > I'm going to attempt to build one of my ghost receievers dead bug style.
> > The goal being to take something that I usually mount in an old PC case,
> > and fit it into a cigar box. I've never tried dead bug, or ugly
> > construction, but figure it should be the most spacerous mehtod, and I
> > cany use both side of a board for seperate functions.
> >
> > As far as my ghost receivers, just remember those proclaiming
> > something is impossible are interupted by someone doing it. Believe
> > it or not, like it or not, the dead talk! This IS the next frontier in
> > electronics!
> >
> > http://franksumption.tripod.com/
> >
> > I still haven't quite gotten the LNM3820 to work the way I want it to.
> > It works on the bread board, but not on a PCB.
> >
> > Frank
>
>
> Okay, I tried Dead Bug construtcion, and it seems it is absolutly
> wortheless for complicated circuits. Most the hams I see pushing this
> method are only using a couple components, try it with about 50, and
> see how well it works---NOT. I made two of my systems with it, and an
> amp, all are crappy!!

I wouldn't even consider it for anything at all complex, although it
might not be too bad if you split the circuit into smaller modules
rather than trying to get everything on one board. I prefer what could
be called 'live bug' construction, with the chips the right way up. I
have a good home PCB process, so I tend to use that these days.

Perhaps the ghosts from your dead bugs are causing interference. 8-)

73, Leon

2994. SolderSmoke #23: Indian Hamsat, Mike's DSB, Airband, ATV, parasitics,SSB vs. CW

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-27 12:18:20 UTC
From: bill.meara@gmail.com
Message-ID: <1148732300.115326.85210@j73g2000cwa.googlegroups.com>
Source record: 11995
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.basics,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc

SolderSmoke!
A SHOW FOR ELECTRONICS HOMEBREWERS!

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CHECK OUT BILL'S NEW Gadgeteer Blog:
http://usgadgeteer.blogspot.com/

Topics discussed in SolderSmoke #23:

-- Mike solves DSB rig problems
-- Low frequency parasitics
-- More on ladder filters
-- Adjusting SSB rigs
-- Listening to ham satellite from India
-- Monitoring aircraft radios from the kitchen
-- London Amateur Television
-- 747s as high band passive reflectors
-- CW advantage? SSB advantage?
-- MAILBAG (with new GONG!): Mark, KA6WKE; Merv, M3LYJ; Terry, WA0ITP; Jack, G3PVG; Nigel, M0NDE; Paulo, CT1EFL; Mike, KD5KXF.

Listen at: http://www.ourmedia.org/node/229696

Background:
Tired of listening to Led Zepplin or NPR on your I-Pod? Wouldn't you like to be able to carry with you the kinds of ham radio conversations that you listen to while in your radio shack?
Mike, KL7R, in Juneau, Alaska, and Bill, M0HBR, in London, England meet regularly on the ECHOLINK system to discuss their homebrew radio projects. We are making them available as PODCASTS.

NEW RSS FEED: You can subscribe to the program, have them downloaded to your MP-3 player, and listen to them at your convenience. To subscribe, just cut and paste this URL into your I-poder (or similar) software. We've been having trouble with our Ourmedia RSS feed, so Mike (software wizard that he is) has homebrewed his own RSS feed. In order to subscribe to SolderSmoke, point your podcast software to:

http://kl7r.ham-radio.ch/soldersmoke.rss

If you don't have an MP3 player you can just go to the site below and listen to the latest program (and earlier editions) using the audio software on your computer.

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Here's the homepage for our show. All our programs are available here. There is also a blog and links to some of the sites and documents we've been discussing: http://www.ourmedia.org/user/36170

We hope you enjoy the program. Please send us feedback.

73 from London
Bill M0HBR N2CQR CU2JL
http://www.gadgeteer.us

2995. Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-27 16:39:04 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <lg%dg.121$9W1.45101@news.sisna.com>
Source record: 11996

I just got a very good "homebrew" PCB process set up using gloss photo paper printed in a laser printer ironed onto the board for the resist and muriatic acid / hydrogen peroxide for the etchant. Is this the way you are making boards?

Jim

>I
> have a good home PCB process, so I tend to use that these days.
>
> Perhaps the ghosts from your dead bugs are causing interference. 8-)
>
> 73, Leon
>

2996. Re: Repairing moving coil meters.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-27 19:16:51 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <n19h725c6j2vn0d0mhpqh3pqn6qbbj0ae5@4ax.com>
Source record: 11997

I have not worked on a meter movement in many years due to lower costs
replacements and better personal finances. When I did work on them I
recall being pretty successful.
If you spend enough time preparing, it almost always works out. The
safest way to verify an open movement is to take it in your hand and
see how much you can shake it around. If the needle shows a difference
in damping with and without the terminals shorted it is not open.

Bearing problems due to mechanical shock are common.

Broken pointers can be repaired with a tiny droplet of black paint.
Use a single hair from a paint brush to apply.

Be innovative, if you are motivated, it will work!

de W8CCW John

On 26 May 2006 08:01:20 -0700, "dick on the langwang"
<dick@ravelrig01.demon.co.uk> wrote:

>Has anyone experience of repairing moving coil meters and/or able give
>me to any useful pointers. One of my (many !!) restoration projects is
>being held up by an u/s meter & from inspection I suspect although the
>coil/pointer move freely one of the fine wire connections to the coil
>has gone open circuit, due to corrosion. I'm happy stripping down &
>repairing clocks but have no experience of doing the same to meters. In
>the end I'll probably have to find a replacement but it would be nice
>to try & get the original meter working again.
John Ferrell W8CCW

2997. E-Ham is back up

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-27 19:58:40 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <Qb2eg.177787$bm6.117197@fed1read04>
Source record: 11898

--
CL -- I doubt, therefore I might be !

2998. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-27 21:28:45 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1148765325.809427.286270@j73g2000cwa.googlegroups.com>
Source record: 11899

RST Engineering wrote:
> I just got a very good "homebrew" PCB process set up using gloss photo paper
> printed in a laser printer ironed onto the board for the resist and muriatic
> acid / hydrogen peroxide for the etchant. Is this the way you are making
> boards?
>

No, I use conventional UV exposure and FeCl3. With artwork printed on
an inkjet printer I can reliably do 8 mil tracks.

Leon

2999. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-27 23:29:28 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <IlidnV0dtv1UfeXZRVny1w@pipex.net>
Source record: 11900

Leon wrote:
> No, I use conventional UV exposure and FeCl3. With artwork printed on
> an inkjet printer I can reliably do 8 mil tracks.
==========
Leon , How do you dispose of spent ferichloride?
Do you take it to the local Council waste yard ?

Frank GM0CSZ / KN6WH

3000. Re: Network Anaysis - a possible fault uncovered

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-27 23:54:36 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1148774075.947429.236740@i40g2000cwc.googlegroups.com>
Source record: 11901
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Thanks, Rene and nice to hear you're still posting here, despite all
the political BS that's sadly still thrown around by some of our
regulars.
I'm afraid this unit doesn't have any software as such; it's circa 1980
vintage (which is why it appealed to me as it's truly servicable with
no custom chips etc.). As for the spectrum analyser, I sold my last one
about 4 years ago and regretted it within 2 weeks. I've never replaced
it. :-(However, I still have some pretty mean scopes, so all is not
quite lost! What do you suspect the problem is: signal level or
spectral purity?
Paul.

3001. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-28 06:34:21 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1148798061.072427.295730@j73g2000cwa.googlegroups.com>
Source record: 11902

Highland Ham wrote:
> Leon wrote:
> > No, I use conventional UV exposure and FeCl3. With artwork printed on
> > an inkjet printer I can reliably do 8 mil tracks.
> ========================
> Leon , How do you dispose of spent ferichloride?
> Do you take it to the local Council waste yard ?
>
> Frank GM0CSZ / KN6WH

I just flush it down the toilet. I think that ferric chloride is used for water treatment and I can't see the small amount of copper doing any harm by the time it has been diluted millions of times. It's only a litre ot so every six months - it's negligible.

73, Leon

3002. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-28 10:54:00 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2006.05.28.10.53.59.561831@oceanfree.net>
Source record: 11903

On Sat, 27 May 2006 14:28:45 -0700, Leon wrote:

> No, I use conventional UV exposure and FeCl3. With artwork printed on an
> inkjet printer I can reliably do 8 mil tracks.
>
> Leon

Do you use the inkjet to print directly on transparent film? Is the
contrast/opacity good enough or do you need to stack two or more sheets?

I use a laser printer and OHP film. Even with the toner density set to
maximum, I find I need to use two sheets of film for best results.

73, Ed. EI9GQ.

--
Linux 2.6.16
Remove 'X' to reply by e-mail.
Yes, my username really is: nospam

3003. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-28 12:29:21 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1148819361.906180.270200@38g2000cwa.googlegroups.com>
Source record: 11904

Eamon Skelton wrote:
> On Sat, 27 May 2006 14:28:45 -0700, Leon wrote:
>
> > No, I use conventional UV exposure and FeCl3. With artwork printed on an
> > inkjet printer I can reliably do 8 mil tracks.
> >
> > Leon
>
> Do you use the inkjet to print directly on transparent film? Is the
> contrast/opacity good enough or do you need to stack two or more sheets?

I print directly on special JetStar film, from Mega Electronics in the
UK. Opacity is fine.

>
> I use a laser printer and OHP film. Even with the toner density set to
> maximum, I find I need to use two sheets of film for best results.
>

I never found OHP film much good when I used a laser printer, I used to
use LaserStar film or tracing paper. The latter is fine for most boards
and very cheap.

Leon

3004. TS520 dismantling....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-28 14:01:04 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1148824863.994074.273130@j55g2000cwa.googlegroups.com>
Source record: 11905

Yes, I know this is homebrew and not equipment - my theory is people who build also reapir/modify. (Thankfully, not all radios are menu driven YET.....)

Fixing a TS520 Kenwood for a friend - the 160m coil wont tune on receive alignment - how the hell do you get the RF board out to service the rotten thing? - its a mechanical nightmare!

>From what I can see, (to get it out topwise) its remove front panel, unbolt enought of the switches to enable you to swing it clear of the bandswitch. Then remove the 2 nuts from the fron of the bandswitch, remove the wafer, and then - nah, that wont work - still not enough clearance to get to the boards - if you could somehow manouvre the support shafts of the bandswitch assembly out of the way....(and I am not even mentioning the inevitable washers/spacers/nuts/small children that are going to fall into another time/space dimension...)

This is after dismantling all the preselector tuning chain drives etc, and the PA tuneing and loading controls.......woooo......

Otherwise, un wirewrap every one of the coil PCB's and lift it out that way .- from the bottom.

Anyone done it? - one of the previous owners hasnt, looks like much stuffing around with a big soldring iron and a small crowbar in there - not pretty....

There MUST be an easier way, or is this just a real pig of a radio....

Andrew VK3BFA.

3005. Re: TS520 dismantling....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-28 14:48:16 UTC
From: "g. beat"
Message-ID: <loSdneQ0_eCoJeTZnZ2dnUVZ_vudnZ2d@comcast.com>
Source record: 11906

"Andrew VK3BFA" <ablight@alphalink.com.au> wrote in message
news:1148824863.994074.273130@j55g2000cwa.googlegroups.com...
> Yes, I know this is homebrew and not equipment - my theory is people
> who build also reapir/modify. (Thankfully, not all radios are menu
> driven YET.....)
>
> Fixing a TS520 Kenwood for a friend - the 160m coil wont tune on
> receive alignment - how the hell do you get the RF board out to service
> the rotten thing? - its a mechanical nightmare!
>
>>From what I can see, (to get it out topwise) its remove front panel,
> unbolt enought of the switches to enable you to swing it clear of the
> bandswitch. Then remove the 2 nuts from the fron of the bandswitch,
> remove the wafer, and then - nah, that wont work - still not enough
> clearance to get to the boards - if you could somehow manouvre the
> support shafts of the bandswitch assembly out of the way....(and I am
> not even mentioning the inevitable washers/spacers/nuts/small children
> that are going to fall into another time/space dimension...)
>
> This is after dismantling all the preselector tuning chain drives etc,
> and the PA tuneing and loading controls.......woooo......
>
> Otherwise, un wirewrap every one of the coil PCB's and lift it out that
> way .- from the bottom.
>
> Anyone done it? - one of the previous owners hasnt, looks like much
> stuffing around with a big soldring iron and a small crowbar in there -
> not pretty....
>
> There MUST be an easier way, or is this just a real pig of a radio....
>
> Andrew VK3BFA.
>

Do you have the Kenwood Service Manual for this radio? If not, GET ONE.

Almost all of them show with pictorials and descriptions how to take apart
radio.
Some use exploding parts diagrams.

3006. APRSpoint: memorial day special

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-28 17:42:03 UTC
From: "hxc98@yahoo.com" <hxc98@yahoo.com>
Message-ID: <1148838123.846744.110310@38g2000cwa.googlegroups.com>
Source record: 11907

APRSPoint is the latest APRS implementation and it is being used in vehicle tracking, search and rescue, emergency communication and many other areas. It allows you to track persons or objects via rf or internet. It is constantly being updated with new features and improvements. We are offerring a special discount for this memorial day weekend. Please visit http://www.aprspoint.com for details and lots of helpful information about APRS. Thanks.

3007. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-28 17:59:29 UTC
From: dplatt@radagast.org
Message-ID: <127jp81ig9c5hde@corp.supernews.com>
Source record: 11908

In article <1148798061.072427.295730@j73g2000cwa.googlegroups.com>,
Leon <leon.heller@bulldoghome.com> wrote:

>I just flush it down the toilet. I think that ferric chloride is used
>for water treatment and I can't see the small amount of copper doing
>any harm by the time it has been diluted millions of times. It's only a
>litre ot so every six months - it's negligible.

By the time you dump it in this way, you aren't dumping pure ferric chloride by any means! You're dumping a residual amount of ferric chloride, plus a bunch of copper chloride.

The waste-treatment authorities in this area are very much against having soluble copper dumped into the sewage system. The copper eventually ends up in San Francisco Bay (after having caused some amount of interference to the biological sewage-digestion/treatment system). Multiplied by a large number of potential sources, the copper load can have an injurious effect on the Bay ecosystem... it's toxic to algae and to many other natural microorganisms.

This problem can be prevented, quite easily, by simply titrating some sodium hydroxide (lye) or sodium carbonate (washing soda, soda ash) into the exhausted etchant. It may bubble a bit, with the bubbling ceasing as the pH rises to the point of being mildly alkaline (pH of 7 to 8... use pH paper to monitor). The copper remaining in the solution will precipitate out as an insoluble solid. Allow it to settle and pour off the remaining liquid... MG says that the liquid can now be poured down the toilet safely. The solid (copper hydroxide or copper carbonate, I believe) should be disposed of according to local requirements.

I've used the same precipitate-with-soda-ash trick when using sodium monopersulphate as an etchant (it's surely work with the somewhat faster-acting ammonium persulphate). It's quite striking in this case... the clear blue-green copper-loaded etchant turns a milky green, the precipitate settles out, and you're left with a clear near-colorless liquid which contains little or no copper.

I've heard of people disposing of copper-loaded used etchant by mixing in some Portland cement powder. This raises the pH, converts the copper to an insoluble form, and then binds it into (in effect) solid rock which can be disposed of in a landfill without causing significant leaching of copper. The same trick could no doubt be used to solidify the precipitated copper from a lye or soda-ash neutralization of spent etchant.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3008. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-28 21:10:57 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2006.05.28.21.10.56.598189@oceanfree.net>
Source record: 11909

On Sun, 28 May 2006 05:29:21 -0700, Leon wrote:

> I print directly on special JetStar film, from Mega Electronics in the UK.
> Opacity is fine.

Thanks for the tip.

> I never found OHP film much good when I used a laser printer, I used to
> use LaserStar film or tracing paper. The latter is fine for most boards
> and very cheap.
>
> Leon

I get very good results with Staedtler Lumocolor film and
a HP 1200 dpi laser. The UV light source is a 500W halogen
floodlight.

73, Ed. EI9GQ.

--
Linux 2.6.16
Remove 'X' to reply by e-mail.
Yes, my username really is: nospam

3009. Identifying Surplus Toroid Material

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-28 22:12:37 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1148854357.331638.81030@y43g2000cwc.googlegroups.com>
Source record: 11911

I was rummaging around for a core for a small switching power supply and came across some 1.00" OD, 0.55" ID, 0.39" high (25x14x10 mm) toroids. A 50 turn coil measures about 1 mH (by measuring resonance at 200-500 kHz). This appears to indicate a permeability around 600, by comparing it with various catalogues. But the Q is rather low (equivalent series resistance is roughly 250 ohms at 500 kHz and 120 ohms at 200 kHz). Doesn't look likely to be good enough for a switching supply, so they may have to be relegated to EMI jobs (which I seem to recall they were used for in a piece of equipment I took apart).

But does anyone have any idea what material they might be ? Doesn't at first glance appear to be anything similar to what Fair-Rite makes. There's a good chance it is of Asian origin, I think.

73,
Steve VE3SMA

3010. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-28 22:42:04 UTC
From: Chris Jones <lugnut808@nospam.yahoo.com>
Message-ID: <127k65ispogb45f@corp.supernews.com>
Source record: 11910

Dave Platt wrote:

> In article <1148798061.072427.295730@j73g2000cwa.googlegroups.com>,
> Leon <leon.heller@bulldoghome.com> wrote:
>
>>I just flush it down the toilet. I think that ferric chloride is used
>>for water treatment and I can't see the small amount of copper doing
>>any harm by the time it has been diluted millions of times. It's only a
>>litre ot so every six months - it's negligible.
>
> By the time you dump it in this way, you aren't dumping pure ferric
> chloride by any means! You're dumping a residual amount of ferric
> chloride, plus a bunch of copper chloride.
>
> The waste-treatment authorities in this area are very much against
> having soluble copper dumped into the sewage system. The copper
> eventually ends up in San Francisco Bay (after having caused some
> amount of interference to the biological sewage-digestion/treatment
> system). Multiplied by a large number of potential sources, the
> copper load can have an injurious effect on the Bay ecosystem... it's
> toxic to algae and to many other natural microorganisms.
>
> This problem can be prevented, quite easily, by simply titrating some
> sodium hydroxide (lye) or sodium carbonate (washing soda, soda ash)
> into the exhausted etchant. It may bubble a bit, with the bubbling
> ceasing as the pH rises to the point of being mildly alkaline (pH of 7
> to 8... use pH paper to monitor). The copper remaining in the
> solution will precipitate out as an insoluble solid. Allow it to
> settle and pour off the remaining liquid... MG says that the liquid
> can now be poured down the toilet safely. The solid (copper hydroxide
> or copper carbonate, I believe) should be disposed of according to
> local requirements.
>
> I've used the same precipitate-with-soda-ash trick when using sodium
> monopersulphate as an etchant (it's surely work with the somewhat
> faster-acting ammonium persulphate). It's quite striking in this
> case... the clear blue-green copper-loaded etchant turns a milky
> green, the precipitate settles out, and you're left with a clear
> near-colorless liquid which contains little or no copper.
>
> I've heard of people disposing of copper-loaded used etchant by mixing
> in some Portland cement powder. This raises the pH, converts the
> copper to an insoluble form, and then binds it into (in effect) solid
> rock which can be disposed of in a landfill without causing

> significant leaching of copper. The same trick could no doubt be used
> to solidify the precipitated copper from a lye or soda-ash
> neutralization of spent etchant.
>

I've also heard of putting steel wool into spent ferric chloride etchant, which I think gets the copper out in a metallic form and probably replaces it with iron. Whether that would be better I don't know.

Chris

3011. Re: TS520 dismantling....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-28 22:53:07 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1148856787.519972.110370@u72g2000cwu.googlegroups.com>
Source record: 11912

g. beat wrote:
>
>
> Do you have the Kenwood Service Manual for this radio? If not, GET ONE.
>
> Almost all of them show with pictorials and descriptions how to take apart
> radio.
> Some use exploding parts diagrams.

I have the service manual. It doesnt show it.

Andrew VK3BFA.

3012. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-29 00:36:27 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <gmreg.30$rv6.60476@news.sisna.com>
Source record: 11913

Since ferric chloride is another name for iron chloride, I'm not sure how that would work, since there is already an abundance of iron in the solution, but I've never tried it so I'm not going to say it won't work. However, I'd like to hear from somebody who HAS tried it, for better or for worse.

Jim

>>
>
> I've also heard of putting steel wool into spent ferric chloride etchant,
> which I think gets the copper out in a metallic form and probably replaces
> it with iron. Whether that would be better I don't know.
>
> Chris

3013. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-29 08:54:56 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1148892895.924679.57910@j33g2000cwa.googlegroups.com>
Source record: 11914

Dave Platt wrote:
> In article <1148798061.072427.295730@j73g2000cwa.googlegroups.com>,
> Leon <leon.heller@bulldoghome.com> wrote:
>
> >I just flush it down the toilet. I think that ferric chloride is used
> >for water treatment and I can't see the small amount of copper doing
> >any harm by the time it has been diluted millions of times. It's only a
> >litre ot so every six months - it's negligible.
>
> By the time you dump it in this way, you aren't dumping pure ferric
> chloride by any means! You're dumping a residual amount of ferric
> chloride, plus a bunch of copper chloride.

Small quantities are acceptable, here in the UK.

Leon

3014. Re: TS520 dismantling....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-29 13:54:44 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <5l2dnWO8xdu4YOfZnZ2dnUVZ_s2dnZ2d@bright.net>
Source record: 11915

The 520 is a PEACH of a radio, however, you have discovered it's only short-coming. I tried to do something similar with mine years ago and gave up and accepted a weaker receive sensitivity on 15 and 10 Meters. Wish I could be of more help. Do you have the SERVICE manual for it? I believe I have one and will take a look and see if I can find any info for you...

Scott
N0EDV

Andrew VK3BFA wrote:

> not pretty....
>
> There MUST be an easier way, or is this just a real pig of a radio....
>
> Andrew VK3BFA.
>

3015. HBR receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-29 16:48:31 UTC
From: Brian Hill <good@it.net>
Message-ID: <ABFeg.266$rG3.42@fe03.lga>
Source record: 11916

Hi guys. I just lucked out and got this nice old HBR receiver. I haven't received it yet but was woundering if any of you recognize it? I checked Kees site and didn't see any that may resemble it. It lookes very well built from the pics. Check it out:

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=9732180863&rd=1&sspagename=STRK%3AMEWN%3AIT&rd=1

--

Regards
B.H.

Brian's Radio Universe
http://webpages.charter.net/brianhill/500.htm

3016. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-29 19:07:54 UTC
From: Mike <nomtrxspam@comcast.net>
Message-ID: <7ldm7294d7a6gdi4tubfsrtqn38ml6t7dl@4ax.com>
Source record: 11917

On Sat, 27 May 2006 09:39:04 -0700, "RST Engineering"
<jim@rstengineering.com> wrote:

>I just got a very good "homebrew" PCB process set up using gloss photo paper
>printed in a laser printer ironed onto the board for the resist and muriatic
>acid / hydrogen peroxide for the etchant. Is this the way you are making
>boards?
>
>Jim

Hello Jim

I use a similar setup to make boards all the time and it works reasonably well. No 8mil tracks tho. I just discovered some paper and haven't tried to see how small I can make the traces yet. I've been pretty sick for a few months and just haven't felt like messing with it. The one board I did make using it had much sharper defined edges and the drill guide holes etched nicely also with no residue left on the board. I never did find any photo paper that didn't leave the residue that needed cleaned off especially in the 25mil drill guide holes. The paper is made by Pulsar and is Digi-Key P/N 182-1003-ND. If you want to try it get the "GreenTRF" film to go with it, P/N 182-1021-ND. The GreenTRF film is just applied over the toner after it is transfered from the paper and leaves the image on the board completely sealed with a glossy green finish. I believe the paper was about $1 per 8.5x11 sheet and I don't remember how much the "GreenTRF" cost me, but it wasn't much for an 8in by 15ft piece.
I was making enough boards that I got myself a press designed for making T-shirts. Actually my wife got tired of me complaining about having to press so hard with the iron and bought it for me. It allows me to set the temperature and the clamping force precisely and repeatably, and it works great for transfering the image to the board. The press was kinda pricey, I think she paid about $300 for it. Now that's true love!
I've been using ammonium persulfate for etchant and just picked up some peroxide and acid so I can try making my own etchant.
I have a drill stand for my Dremel Moto-tool that was made by Dremel that I use for drilling the boards. I use a #10 Opti-Visor and have no trouble drilling the boards even with my pathetic eyesight. The etched drill guide holes in the center of the pads really helps hitting the holes dead center. With just a little care drills will last until they get dull. As a matter of fact the only time I break one is when I get careless trying to go too fast.
I'm feeling pretty good this afternoon, so I think I'll try making a board with a test pattern to see how fine I can get my tracks.

If I can run a track between 0.1" spaced pads and I'll be happy.
I think you'll like with your setup after you get the hang of doing
it.

Mike

3017. Re: HBR receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-29 19:08:58 UTC
From: "g. beat"
Message-ID: <LImdnW5F6KZM2-bZnZ2dnUVZ_vGdnZ2d@comcast.com>
Source record: 11918

"Brian Hill" <good@it.net> wrote in message
news:ABFeg.266$rG3.42@fe03.lga...
> Hi guys. I just lucked out and got this nice old HBR receiver. I haven't
> received it yet but was woundering if any of you recognize it? I checked
> Kees site and didn't see any that may resemble it. It lookes very well
> built from the pics. Check it out:
>
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=9732180863&rd=1&sspagename=STRK%3AMEW
N%3AIT&rd=1
>
>
> --
>
> Regards
> B.H.
>

Brian -

The Eddystone dial and the coils used -- appear to confirm its a HBR-16

The ARRL's QST magazine presented in several construction articles in the
late 1950s until the late 1960s (and in The Radio Handbook, 17th Edition)
for the HBR receiver (e.g. HBR-14, HBR-16, HBR-8, HBR-11, HBR-12, and
HBR-13C).
http://www.qsl.net/k5bcq/HBR/hbr.html#QST

Tube compliment?
http://www.qsl.net/k5bcq/HBR/hbr.html#Tube

Photos of various HBR receivers (the current collection)
http://www.qsl.net/k5bcq/HBR/hbr.html#Pic

W0VLZ restoration of this classic
http://www.io.com/~nielw/hbr16/index.html

HBR Receiver Web site. Lorne Barber (VE7BOX) and Bob Cole (W4RLC) are both
longtime HBR Receiver (and homebrew) enthusiasts - and provided much of the
web site information.
http://www.qsl.net/k5bcq/HBR/hbr.html

w9gb

3018. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-29 20:16:51 UTC
From: "John Jardine." <john@jjdesigns.fsnet.co.uk>
Message-ID: <e5fkrjaju1@news6.svr.pol.co.uk>
Source record: 11919

"Leon" <leon.heller@bulldoghome.com> wrote in message
news:1148819361.906180.270200@38g2000cwa.googlegroups.com...
>
> Eamon Skelton wrote:
> > On Sat, 27 May 2006 14:28:45 -0700, Leon wrote:
> >
> > > No, I use conventional UV exposure and FeCl3. With artwork printed on
an
> > > inkjet printer I can reliably do 8 mil tracks.
> > >
> > > Leon
> >
> > Do you use the inkjet to print directly on transparent film? Is the
> > contrast/opacity good enough or do you need to stack two or more sheets?
>
> I print directly on special JetStar film, from Mega Electronics in the
> UK. Opacity is fine.
>
> >
> > I use a laser printer and OHP film. Even with the toner density set to
> > maximum, I find I need to use two sheets of film for best results.
> >
>
> I never found OHP film much good when I used a laser printer, I used to
> use LaserStar film or tracing paper. The latter is fine for most boards
> and very cheap.
>
> Leon
>

Yes. Tracing paper/greaseproof paper seems distinctly better than clear
film. Bit queer, as I'd have thought the 'frosted-glass' finish would have
dispersed the UV light, much the same way as there still being daylight
after the sun has set. Maybe clear OHP film happily allows UV to bounce
around within the film thickness.

Last week did some quickie SOT23 to DIL adapters. Samsung ML-2250 laser,
600dpi. Single sheet. Very nice results.
john

3019. spice models

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-29 22:12:33 UTC
From: "Herb.Breitenfellner" <breit.h.@aon.at>
Message-ID: <hkrf5e-u42.ln@ricos.qrp>
Source record: 11927

Hi,
i am looking for a 2N3866, 2N5109 spice model.(LT-Spice) Other RF models
also welcome.May someone can point me in the right direction.

Vy 73 de Herb - OE5BRL

3020. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-29 22:34:51 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <iGKeg.31$Jk.121976@news.sisna.com>
Source record: 11920

>
> Hello Jim
>
> I use a similar setup to make boards all the time and it works
> reasonably well. No 8mil tracks tho.

15 mils is easy. 10 mils with some care. Below that, no promises.

The paper is made by Pulsar and is Digi-Key P/N 182-1003-ND. If
> you want to try it get the "GreenTRF" film to go with it, P/N
> 182-1021-ND. The GreenTRF film is just applied over the toner after it
> is transfered from the paper and leaves the image on the board
> completely sealed with a glossy green finish. I believe the paper was
> about $1 per 8.5x11 sheet and I don't remember how much the "GreenTRF"
> cost me, but it wasn't much for an 8in by 15ft piece.

I use the glossy photo basic paper from Staples, or Costco, or Sam's Club,
or whatever branded private label -- it works better than the "premium"
variety photo paper for whatever reason. It all seems to work the same.
The trick is to use copper-brite scouring powder made specifically for
copper and brass along with one of those green dish scouring pads to clean
and microscratch the bejabbers out of the board before applying the resist.
It also helps to preheat the board for about 5 minutes at 150F in a toaster
oven after cleaning but before ironing on the resist.

> I've been using ammonium persulfate for etchant and just picked up
> some peroxide and acid so I can try making my own etchant.

I've used ferric chloride, ammonium persulfate, and muriatic acid - hydrogen
peroxide and I MUCH prefer the muriatic-peroxide combination. What I have
NOT perfected in the etch process yet is a method of agitation for the
etchant. Right now I'm using an aquarium with an air pump and a "bubbling
stone", but would love to find another method. Perhaps I'll work on a
magnet with shrink sleeving and RTV to seal the ends and another magnet on a
motor underneath the aquarium bottom. That seems like a lot of hassle for a
simple agitation, but I haven't found a better way.

> I have a drill stand for my Dremel Moto-tool that was made by Dremel
> that I use for drilling the boards. I use a #10 Opti-Visor and have no
> trouble drilling the boards even with my pathetic eyesight. The etched
> drill guide holes in the center of the pads really helps hitting the
> holes dead center. With just a little care drills will last until they
> get dull. As a matter of fact the only time I break one is when I get
> careless trying to go too fast.

The school I teach for has a half dozen good PCB drills, so I'm not yet forced into that corner. I've also got a BIG pcb shop down the hill a bit, and they throw away carbide drills by the sackful. I've gotten them to throw a few sacks my way.

Jim

3021. Re: TS520 dismantling....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-29 22:55:33 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <FZKeg.2328$oa1.635@news02.roc.ny>
Source record: 11921

Andrew VK3BFA wrote:
> Yes, I know this is homebrew and not equipment - my theory is people
> who build also reapir/modify. (Thankfully, not all radios are menu
> driven YET.....)
>
> Fixing a TS520 Kenwood for a friend - the 160m coil wont tune on
> receive alignment

Be sure you really need to get that board out, I had an 820 that had the same symptom on 40m and the real problem was a dirty switch contact.

Also be sure to check all the solder joints and all the grounds, especially grounds via mounting hardware, that's not a young radio you have there.

Of course, if you've tried all that all I have to add is
Good luck!
Galen, W8LNA

3022. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-29 23:20:32 UTC
From: Mike <nomtrxspam@comcast.net>
Message-ID: <e8vm72ppfc284qcq6utsbk7926qdvclnas@4ax.com>
Source record: 11922

>
>15 mils is easy. 10 mils with some care. Below that, no promises.
>
I believe it'll take a 10mil track to go between 63mil pads of a dip
pkg, so it'll be close.
>
>I use the glossy photo basic paper from Staples, or Costco, or Sam's Club,
>or whatever branded private label -- it works better than the "premium"
>variety photo paper for whatever reason. It all seems to work the same.
>The trick is to use copper-brite scouring powder made specifically for
>copper and brass along with one of those green dish scouring pads to clean
>and microscratch the bejabbers out of the board before applying the resist.
>It also helps to preheat the board for about 5 minutes at 150F in a toaster
>oven after cleaning but before ironing on the resist.
>
I better go find me some copper-brite. I've been using comet.
>

>I've used ferric chloride, ammonium persulfate, and muriatic acid - hydrogen
>peroxide and I MUCH prefer the muriatic-peroxide combination. What I have
>NOT perfected in the etch process yet is a method of agitation for the
>etchant. Right now I'm using an aquarium with an air pump and a "bubbling
>stone", but would love to find another method. Perhaps I'll work on a
>magnet with shrink sleeving and RTV to seal the ends and another magnet on a
>motor underneath the aquarium bottom. That seems like a lot of hassle for a
>simple agitation, but I haven't found a better way.
>
Yeah, the persulfate is way too slow without a catalyst even when
heated and agitated, and ferric chloride is just too messy.

Is it really necessary to mix up the peroxide/acid for each session?
Could it be poured back into an airtight dark jug?

I too thought about the magnet stirrer. I just wonder if the magnets
would really setup any circulation in the tank.

>The school I teach for has a half dozen good PCB drills, so I'm not yet
>forced into that corner. I've also got a BIG pcb shop down the hill a bit,
>and they throw away carbide drills by the sackful. I've gotten them to
>throw a few sacks my way.
>
No such luck in my garage.
>
>Jim
>

3023. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-29 23:36:32 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <3ALeg.35$gj.45101@news.sisna.com>
Source record: 11923

The peroxide has oxidized to oxygen and water within half an hour after mixing, so all you really have is some diluted muriatic acid after each session. Besides, for $2 in chemistry, you can have an etched board.

Jim

"Mike" <nomtrxspam@comcast.net> wrote in message news:e8vm72ppfc284qcq6utsbk7926qdvclnas@4ax.com...

>
> Is it really necessary to mix up the peroxide/acid for each session?
> Could it be poured back into an airtight dark jug?

3024. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-30 09:19:41 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1148980781.643930.100710@i40g2000cwc.googlegroups.com>
Source record: 11924

RST Engineering wrote:
> >
> > Hello Jim
> >
> > I use a similar setup to make boards all the time and it works
> > reasonably well. No 8mil tracks tho.
>
> 15 mils is easy. 10 mils with some care. Below that, no promises.
>
>
> The paper is made by Pulsar and is Digi-Key P/N 182-1003-ND. If
> > you want to try it get the "GreenTRF" film to go with it, P/N
> > 182-1021-ND. The GreenTRF film is just applied over the toner after it
> > is transfered from the paper and leaves the image on the board
> > completely sealed with a glossy green finish. I believe the paper was
> > about $1 per 8.5x11 sheet and I don't remember how much the "GreenTRF"
> > cost me, but it wasn't much for an 8in by 15ft piece.
>
> I use the glossy photo basic paper from Staples, or Costco, or Sam's Club,
> or whatever branded private label -- it works better than the "premium"
> variety photo paper for whatever reason. It all seems to work the same.
> The trick is to use copper-brite scouring powder made specifically for
> copper and brass along with one of those green dish scouring pads to clean
> and microscratch the bejabbers out of the board before applying the resist.
> It also helps to preheat the board for about 5 minutes at 150F in a toaster
> oven after cleaning but before ironing on the resist.
>
>
> > I've been using ammonium persulfate for etchant and just picked up
> > some peroxide and acid so I can try making my own etchant.
>
> I've used ferric chloride, ammonium persulfate, and muriatic acid - hydrogen
> peroxide and I MUCH prefer the muriatic-peroxide combination. What I have
> NOT perfected in the etch process yet is a method of agitation for the
> etchant. Right now I'm using an aquarium with an air pump and a "bubbling
> stone", but would love to find another method. Perhaps I'll work on a
> magnet with shrink sleeving and RTV to seal the ends and another magnet on a
> motor underneath the aquarium bottom. That seems like a lot of hassle for a
> simple agitation, but I haven't found a better way.

I just rock the container continuously by hand in a larger container of
hot water. It only takes a few minutes.

>
> > I have a drill stand for my Dremel Moto-tool that was made by Dremel

> > that I use for drilling the boards. I use a #10 Opti-Visor and have no
> > trouble drilling the boards even with my pathetic eyesight. The etched
> > drill guide holes in the center of the pads really helps hitting the
> > holes dead center. With just a little care drills will last until they
> > get dull. As a matter of fact the only time I break one is when I get
> > careless trying to go too fast.
>
> The school I teach for has a half dozen good PCB drills, so I'm not yet
> forced into that corner. I've also got a BIG pcb shop down the hill a bit,
> and they throw away carbide drills by the sackful. I've gotten them to
> throw a few sacks my way.

I buy reground ones. They are a little shorter than new ones but that
doesn't matter for manual drilling and they are much cheaper.

Leon

3025. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-30 11:05:34 UTC
From: jack2004fb@126.com
Message-ID: <1148987134.225126.288150@i40g2000cwc.googlegroups.com>
Source record: 11925

You can try this EnergyKey
http://www30.webSamba.com/SmartStudio
This may be help you.
Now I always use EnergyKey, it helps me so much in my work.

3026. Re: HBR receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-30 14:06:59 UTC
From: "John L. Sielke" <w2agnNOSPAM@w2agn.net>
Message-ID: <zKadnVkfNYEdzOHZnZ2dnUVZ_uqdnZ2d@comcast.com>
Source record: 11926

Brian Hill wrote:
> Hi guys. I just lucked out and got this nice old HBR receiver. I haven't
> received it yet but was woundering if any of you recognize it? I checked
> Kees site and didn't see any that may resemble it. It lookes very well built
> from the pics. Check it out:
>
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=9732180863&rd=1&sspagename=STRK%3AMEWN%3AIT&rd=1
>
>
You really did luck out. HBR-16'sw have been going for $300+ If the seller had known what he had, and advertised it correctly, he would have gotten twice as much.

Congratulations!

3027. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-30 18:45:41 UTC
From: Mike <nomtrxspam@comcast.net>
Message-ID: <nl4p72dhcibt3av32tdg8u4bsdl9h5nbcr@4ax.com>
Source record: 11928

On 30 May 2006 04:05:34 -0700, jack2004fb@126.com wrote:

>You can try this EnergyKey
>http://www30.webSamba.com/SmartStudio
>This may be help you.
>Now I always use EnergyKey, it helps me so much in my work.

It looks interesting, Thanks.

3028. Re: spice models

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-30 19:32:06 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1149017525.948716.274160@j73g2000cwa.googlegroups.com>
Source record: 11929

Looks like the company that put out the following PDF:

http://home.earthlink.net/~wksands/nonlin.pdf

has spice models. I suppose you have to pay for them, though. I'm surprised a Google search didn't turn up any free models. How accurate do they need to be? You can bulid your own, certainly...you can use the BJT model and add the package parasitic inductances, resistances, and capacitances, and probably get decent correspondence with the way real parts perform. I have a book about building Spice semiconductor models, but haven't done any of that for a long time and never was into it deeply enough to think I'm good at it.

www.duncanamps.com has quite a bit of spice stuff, including some transistor models and links (some broken by now) to manufacturers' spice stuff.

Cheers,
Tom

3029. Re: spice models

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-30 20:03:01 UTC
From: Gary Morton <gary@alma.demon.co.uk>
Message-ID: <Vx1fg.78358$wl.23793@text.news.blueyonder.co.uk>
Source record: 11930

Herb.Breitenfellner wrote:
> Hi,
> i am looking for a 2N3866, 2N5109 spice model.(LT-Spice) Other RF models
> also welcome.May someone can point me in the right direction.
>
> Vy 73 de Herb - OE5BRL

Herb,

I've also searched for the same Spice models and also any RF power transistor models. I didn't turn up anything except some very recent power devices with very very high (GHz) Ft. I was hoping to simulate a linear amplifier.

If you find anything please post again with details.

--Gary

3030. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-30 22:48:10 UTC
From: Chris Jones <lugnut808@nospam.yahoo.com>
Message-ID: <127pfcmdfis7p8a@corp.supernews.com>
Source record: 11931

RST Engineering wrote:

> Since ferric chloride is another name for iron chloride, I'm not sure how
> that would work, since there is already an abundance of iron in the
> solution, but I've never tried it so I'm not going to say it won't work.
> However, I'd like to hear from somebody who HAS tried it, for better or
> for worse.
>
> Jim
>
>
>>>
>>
>> I've also heard of putting steel wool into spent ferric chloride etchant,
>> which I think gets the copper out in a metallic form and probably
>> replaces
>> it with iron. Whether that would be better I don't know.
>>
>> Chris

It's possible that I have confused myself and it might have been spent ammonium persulfate etchant instead, that the steel wool was to be put into. I don't enough about chemistry to say which would make more sense.

The one thing I have learnt about etchant is: Don't store ammonium persulfate etchant in a sealed (airtight) container. My bottle of etchant burst and went everywhere.

Chris

3031. Re: spice models

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-30 23:28:43 UTC
From: Mike Monett <No@email.adr>
Message-ID: <Xns97D3C619E871ANoemailadr@208.49.80.251>
Source record: 11932

"Herb.Breitenfellner" <breit.h.@aon.at> wrote:

> Hi,
> i am looking for a 2N3866, 2N5109 spice model.(LT-Spice) Other RF
> models also welcome.May someone can point me in the right direction.

> Vy 73 de Herb - OE5BRL

Sorry, no luck on the 2N5109 but here's data on the 2N3866 from Sandia
Labs.

Regards,

Mike Monett

```
* Library of bipolar transistor model parameters
*
* Copyright OrCAD, Inc. 1998 All Rights Reserved.
*
* $Revision: 1.21 $
* $Author: RPEREZ $
* $Date: 16 Apr 1998 13:19:46 $

*-------------------------------------------------------------------------
* OrCAD, Incorporated would like to acknowledge Sandia National
Laboratories
* for the contribution of their measurement-based models included in this
* library.
* The parameters in this model library were derived from the data sheets
for
* each part. Each part was characterized using the Parts option.
*-------------------------------------------------------------------------

* TYPE: TRANSISTOR
* SUBTYPE: BIPOLAR SS GP
* 1 TEMPERATURE DEPENDENT MODEL OF THE 2N3866A TRANSISTOR.
* PARAMETER SET EXTRACTED FROM MEASURED DATA
* CAN BE USED FOR ALL OF THE FOLLOWING DEVICES:
* 2N3866
* 2N3866A
*
*************************************************************************
*
* PLEASE NOTE: TEMPERATURE COMPENSATED PARAMETER
* SET(S) SHOULD BE USED WITH A ".TEMP"
* STATEMENT OVER THE RANGE OF -55 C TO 125 C.
*************************************************************************
```

```
*
*
* TEMPERATURE: -55C TO 125C
* RADIATION LEVEL: NONE
*
* AN INDICATION OF SATURATED SWITCHING TIME ACCURACY USING
* IC(NOMINAL) = 50MA , AND FORCED BETA = 10, IS CONTAINED IN THE
* FOLLOWING TABLE:
*
*
* T-ON MEASURED SIMULATED T-OFF MEASURED SIMULATED
* -55C 19 NSEC 16 NSEC -55C 404 NSEC 342 NSEC
* +27C 17 NSEC 15 NSEC +27C 765 NSEC 756 NSEC
* +125C 17 NSEC 14 NSEC +125C 1180 NSEC 1522 NSEC
*
*
.model 2N3866 NPN (
+ IS = 9.798605E-15
+ BF = 145.568899
+ NF = 1.007933
+ VAF = 64.3030691
+ IKF = 0.3661244
+ ISE = 1.806705E-14
+ NE = 1.6207001
+ BR = 10.471
+ NR = 1.0003673
+ VAR = 8.322
+ IKR = 0.1449443
+ ISC = 3.326752E-15
+ NC = 1.1076801
+ RB = 15.986
+ IRB = 2.530217E-3
+ RBM = 0.01
+ RE = 0.02604
+ RC = 1.0359
+ CJE = 9.055532E-12
+ VJE = 0.6761546
+ MJE = 0.2754969
+ TF = 1.25476E-10
+ XTF = 13.0616413
+ VTF = 0.4699
+ ITF = 0.2828
+ PTF = 18.9645325
+ CJC = 7.054363E-12
+ VJC = 0.5769848
+ MJC = 0.3139067
+ XCJC = 1
+ TR = 5.698362E-8
+ CJS = 0
+ VJS = .75
```

```
+ MJS = 0
+ XTB = 1.831
+ EG = 1.11
+ XTI = 5.0205
+ KF = 0
+ AF = 1
+ FC = 0.9
+ )
*$
*
* RAD: PRERAD
* TEMP= -55
*
* THE FOLLOWING IS AN INDICATION OF SATURATED SWITCHING TIME ACCURACY FOR
THIS
* MODEL:
*
* IC(NOMINAL) = 50MA FB=10
*
* MEASURED SIMULATED
* TON 19NS 16NS
* TOFF 404NS 410NS
*
.model 2N3866/-55C NPN (
+ IS = 6.690591E-15
+ BF = 164.3867171
+ NF = 0.9978112
+ VAF = 64.3030691
+ IKF = 0.3839062
+ ISE = 7.986937E-14
+ NE = 1.8448648
+ BR = 13.222
+ NR = 0.9930583
+ VAR = 9.322
+ IKR = 0.190096
+ ISC = 3.243018E-15
+ NC = 1.1685383
+ RB = 15.986
+ IRB = 2.530217E-3
+ RBM = 0.01
+ RE = 0.02604
+ RC = 1.0359
+ CJE = 9.055532E-12
+ VJE = 0.6761546
+ MJE = 0.2754969
+ TF = 1.25476E-10
+ XTF = 13.0616413
+ VTF = 0.4699
+ ITF = 0.2828
+ PTF = 18.9645325
```

```
+ CJC = 7.054363E-12
+ VJC = 0.5769848
+ MJC = 0.3139067
+ XCJC = 1
+ TR = 4.338362E-8
+ CJS = 0
+ VJS = .75
+ MJS = 0
+ XTB = 2.2143057
+ EG = 1.135
+ XTI = 4.781947
+ KF = 0
+ AF = 1
+ FC = 0.9
+ )
*$
*
* RAD: PRERAD
* TEMP= 125
*
* THE FOLLOWING IS AN INDICATION OF SATURATED SWITCHING TIME ACCURACY FOR
THIS
* MODEL:
*
* IC(NOMINAL) = 50MA FB=10
*
* MEASURED SIMULATED
* TON 17NS 15NS
* TOFF 1.18US 1.19US
*
.model 2N3866/125C NPN (
+ IS = 1.030386E-14
+ BF = 146.261776
+ NF = 1.0006549
+ VAF = 64.3030691
+ IKF = 0.2510151
+ ISE = 1.271481E-14
+ NE = 2.0088721
+ BR = 19.2859759
+ NR = 0.996204
+ VAR = 10.322
+ IKR = 0.1454366
+ ISC = 3.597785E-15
+ NC = 1.0385543
+ RB = 15.986
+ IRB = 2.530217E-3
+ RBM = 0.01
+ RE = 0.02604
+ RC = 1.836
+ CJE = 9.055532E-12
```

```
+ VJE = 0.6761546
+ MJE = 0.2754969
+ TF = 1.25476E-10
+ XTF = 13.0616413
+ VTF = 0.4699
+ ITF = 0.2828
+ PTF = 18.9645325
+ CJC = 7.054363E-12
+ VJC = 0.5769848
+ MJC = 0.3139067
+ XCJC = 1
+ TR = 6.038362E-8
+ CJS = 0
+ VJS = .75
+ MJS = 0
+ XTB = 1.3254955
+ EG = 1.11
+ XTI = 3.8007143
+ KF = 0
+ AF = 1
+ FC = 0.9
+ )
*$
*
* TYPE: TRANSISTOR
* SUBTYPE: BIPOLAR SS GP
* THIS FILE CONTAINS 4 MODELS AT VARIOUS TEMPS AND RAD LEVELS OF THE
2N3866A
* TRANSISTOR.
* THESE MODELS CAN BE USED FOR ALL OF THE FOLLOWING DEVICES:
* 2N3866
* 2N3866A
* PARAMETER MODELS EXTRACTED FROM MEASURED DATA
*
*
* RAD: PRERAD
* TEMP= 27
*
* THE FOLLOWING IS AN INDICATION OF SATURATED SWITCHING TIME ACCURACY FOR
THIS
* MODEL:
*
* IC(NOMINAL) = 50MA FB=10
*
* MEASURED SIMULATED
* TON 17NS 16NS
* TOFF 765NS 755NS
*
.model 2N3866/27C NPN (
+ IS = 9.798605E-15
```

```
+ BF = 145.568899
+ NF = 1.007933
+ VAF = 64.3030691
+ IKF = 0.3661244
+ ISE = 1.806705E-14
+ NE = 1.6207001
+ BR = 10.471
+ NR = 1.0003673
+ VAR = 8.322
+ IKR = 0.1449443
+ ISC = 3.326752E-15
+ NC = 1.1076801
+ RB = 15.986
+ IRB = 2.530217E-3
+ RBM = 0.01
+ RE = 0.02604
+ RC = 1.0359
+ CJE = 9.055532E-12
+ VJE = 0.6761546
+ MJE = 0.2754969
+ TF = 1.25476E-10
+ XTF = 13.0616413
+ VTF = 0.4699
+ ITF = 0.2828
+ PTF = 18.9645325
+ CJC = 7.054363E-12
+ VJC = 0.5769848
+ MJC = 0.3139067
+ XCJC = 1
+ TR = 9.098362E-8
+ CJS = 0
+ VJS = .75
+ MJS = 0
+ XTB = 1.831
+ EG = 1.11
+ XTI = 5.0205
+ KF = 0
+ AF = 1
+ FC = 0.9
+ )
*$
*
*
* TYPE: TRANSISTOR
* SUBTYPE: BIPOLAR SS GP
* 1 RADIATION PARAMETER SET OF THE 2N3866A TRANSISTOR.
* EXTRACTED FROM MEASURED DATA
* CAN BE USED FOR ALL OF THE FOLLOWING DEVICES:
* 2N3866
* 2N3866A
```

```
*
**********************************************************************
*
* PLEASE NOTE: PARAMETER SET(S) SHOULD BE USED
* ONLY AT NOTED TEMPERATURE AND RADIATION LEVELS
*
**********************************************************************
*
* NEUTRON FLUENCE: 2.19E12/CM^2
* TEMPERATURE: 27C
*
* AN INDICATION OF SATURATED SWITCHING TIME ACCURACY USING
* IC(NOMINAL) = 50MA , AND FORCED BETA = 10, IS CONTAINED IN THE
* FOLLOWING TABLE:
*
* MEASURED SIMULATED
* TON 17 NS 17 NS
* TOFF 570 NS 564 NS
*
.model 2N3866/27C/RAD NPN (
+ IS = 8.714373E-15
+ BF = 143.5047248
+ NF = 1.0002768
+ VAF = 59.3901441
+ IKF = 0.2740451
+ ISE = 9.784869E-14
+ NE = 1.6270958
+ BR = 8.490218
+ NR = 0.9923014
+ VAR = 11.915
+ IKR = 0.192
+ ISC = 1.260822E-11
+ NC = 1.5199759
+ RB = 9.358
+ IRB = 2.516274E-4
+ RBM = 3.9674546
+ RE = 9.88E-3
+ RC = 2.297
+ CJE = 8.741855E-12
+ VJE = 0.6500288
+ MJE = 0.2629484
+ TF = 1.47E-10
+ XTF = 10.832
+ VTF = 0.5116
+ ITF = 0.1864797
+ PTF = 17.2221871
+ CJC = 6.629258E-12
+ VJC = 0.4968602
+ MJC = 0.2789381
+ XCJC = 1
```

```
+ TR = 6.802579E-08
+ CJS = 0
+ VJS = .75
+ MJS = 0
+ XTB = 1.75
+ EG = 1.11
+ XTI = 6.22
+ KF = 0
+ AF = 1
+ FC = 0.9
+ )
```

3032. New program. Dipole+Line+Balun+Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-31 00:09:35 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <hI2dnYwQvrs0feHZRVnyvg@bt.com>
Source record: 11933

New Program : LINELEN.exe

This program calculates dipole feedpoint impedance, transmission line
input impedance, and balun input impedance, versus frequency.

Dipole and line can be of any length. Line Zo can be of any
impedance.

Power lost in antenna and line is calculated. Also overall loss.

In addition to its educational value, this program will assist users
to change line length when the impedance presented to the tuner is
beyond its capability to transform it to a resistive 50 ohms.

Download self-contained program LINELEN, file size = 53 K-bytes, from
website below.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

3033. Re: spice models

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-31 01:30:36 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1149039036.674587.57920@y43g2000cwc.googlegroups.com>
Source record: 11934

A bit more about spice models for RF transistors...

www.duncanamps.com has transistor models for some parts, as I noted before. Specifically, there are several models for Motorola RF parts, with the Moto numbers like MMBR931.

Some manufacturers provide spice models for current production parts, if not for obsolete ones. For example, if you download the Philips RF manual (as a PDF), you will find a page (current edition it's page 31) of links to parts with spice models. The links take you to the Philips page for that part; look for a link to the spice model on that page.

There seem to be some spice models on the ON semiconductor website, but I don't know how to search them very efficiently. Maybe there's a way...

Avago Technologies (used to be part of Agilent, used to be part of HP) generally has a good set of S-parameters for various bias conditions for their parts. Since the parts are generally intended for linear amplifier service, that's reasonable.

It would be nice to have a place on the web to archive at least links to models, if not (for copyright reasons) the models themselves. Anyone know of such a site?

3034. Re: TS520 dismantling....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-31 04:56:25 UTC
From: charles <charles@incharge.com>
Message-ID: <447D21F7.3567700A@incharge.com>
Source record: 11935

take a look here, should give you idea on what you need to do.

http://www.k4eaa.com/bandswitch.html

good luck !

chuck

3035. Re: spice models

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-31 05:46:00 UTC
From: charlesh3@msn.com
Message-ID: <c9SdnfOSVc4JsODZ4p2dnA@giganews.com>
Source record: 11936

Herb:

Take a look at http://www.sss-mag.com/pdf/rfosc.pdf and you'll find a 2N5109 SPICE model in the article.

Sorry, I don't have a 2N5179 model. Since there was a 5109 model, maybe enough patience will get you a model on Google.

Chuck

3036. Re: Identifying Surplus Toroid Material

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-31 07:31:13 UTC
From: Alan Peake <adpeake@killspam.internode.on.net>
Message-ID: <447D4641.4020705@killspam.internode.on.net>
Source record: 11937

skavanagh72nospam@yahoo.ca wrote:
> I was rummaging around for a core for a small switching power supply
> and came across some 1.00" OD, 0.55" ID, 0.39" high (25x14x10 mm)
> toroids. A 50 turn coil measures about 1 mH (by measuring resonance
> at 200-500 kHz). This appears to indicate a permeability around 600,
> by comparing it with various catalogues. But the Q is rather low
> (equivalent series resistance is roughly 250 ohms at 500 kHz and 120
> ohms at 200 kHz). Doesn't look likely to be good enough for a
> switching supply, so they may have to be relegated to EMI jobs (which
> I seem to recall they were used for in a piece of equipment I took
> apart).
>
> But does anyone have any idea what material they might be ? Doesn't
> at first glance appear to be anything similar to what Fair-Rite
> makes. There's a good chance it is of Asian origin, I think.
>
> 73, Steve VE3SMA
>
Steve, the usual reason for the apparent low Q is that it is not being measured at the frequency that will give highest Q. Try fewer turns and higher frequencies as a first attempt. I've measured many cores this way. If you like, I can email you an XL spreadsheet with the all the cores I've measured so far. Switchmode cores seems to have permeabilities quite a bit higher than 600.
Alan
VK2ADB

3037. Re: spice models

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-31 10:44:36 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1149072276.800289.48000@i39g2000cwa.googlegroups.com>
Source record: 11938

charlesh3@msn.com wrote:
> Herb:
>
> Take a look at http://www.sss-mag.com/pdf/rfosc.pdf and you'll find a 2N5109
> SPICE model in the article.
>
> Sorry, I don't have a 2N5179 model. Since there was a 5109 model, maybe
> enough patience will get you a model on Google.

Zetex has one, they make the 2N5179 in SMT (FFMT5179). I've got it in
my library, with two for other manufacturers.

Leon

3038. Re: TS520 dismantling....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-31 11:01:27 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1149073287.758251.165210@y43g2000cwc.googlegroups.com>
Source record: 11939

charles wrote:
> take a look here, should give you idea on what you need to do.
>
> http://www.k4eaa.com/bandswitch.html
>
> good luck !
>
> chuck

Thanks chuck - what a beautifully designed website, will certainly book mark it for future reference.

Alas, its not germane to the TS520 - which has the coils and switches on the bottom of the PCB. The switch mechanism is lonber than the chassis, so it cant be pulled up vertically.

The only way I can see of doing it (and, hopefully, the Radio Pixies will come into my workshop over night so I dont HAVE to) is :-

1.Dont touch anything above the chassis line. Its a pig to re-align the chain drive on the 3 tuning capacitors. Turn radio upside down, make sure telephone is switched off and guard dog primed.
2.Remove metal shields between PCB coil/switch assemblies.
3.Not 100% sure this will work due clearance issues, BUT - undo 2 screws RHS outside chassis where the cage that is soldered to the RHS of the boards. Unsolder all the coils/pcb where they are soldered to the other side of the chassis rails. A big iron is needed for this - dont even THINK of doing it with your 40w temperature controlled esd safe for micro size things one....
4.Remove switch shaft by undoing coupling into pa cage. CAUTION - take notes, take pictures of wafer alignment for re-assembly. Its a PIG to redo from scratch....
5..Un wirewrap the 4 PCB's, vis the driver, antenna, mixer and oscillator boards. done from top. Not easy to see, but in a plane with the boards underneath.
6. Lift out whole switch/coil assembly - when there is enough clearance, undo the front facing wafer (the xtal oscillator board) and DO NOT lose any of the little weird size nuts, springwashers, and fibre washers. You can now put the front wafer to one side as it has heaps of wires soldered to it.
5.This SHOULD have the switch assembly free of the radio.If you have enough clearance on the RHS with the bracket still attatched, all is good. If you dont, then de-solder the RHS same as for the left.
5. Taking careful notes/drawings/photographs, dismantle the 2 rods each side of the band switch wafers, taking note of spacer positions.

To re-assemble - you can either solder the boards back in place AFTER you have mounted it back into the radio (be sure of physical alignment/clearances) or make up a simple wire wrap tool - if anyones interested, can email drawing. A slight pain to make up, but will make re-installing the boards electrically dead easy. And Murphys Law says you may (hah!) need to pull it out again.....
.....

You are now left with the coil and bandswitch pack for a 20 year old radio. Hopefully, some butcher hasnt been in there before you and totally wrecked it beyond repair.

73 de VK3BFA Andrew.

3039. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-31 11:37:48 UTC
From: analog <me@nospam.com>
Message-ID: <127r00cs6slrh2a@corp.supernews.com>
Source record: 11940

Chris Jones wrote:
>
> I've also heard of putting steel wool into spent ferric chloride etchant,
> which I think gets the copper out in a metallic form and probably replaces
> it with iron. Whether that would be better I don't know.
>

I recall hearing this method used for recovering
silver from spent photographic developer.

3040. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-31 11:50:26 UTC
From: analog <me@nospam.com>
Message-ID: <127r0o2cs2e3j13@corp.supernews.com>
Source record: 11941

"John Jardine." wrote:

> Yes. Tracing paper/greaseproof paper seems distinctly better than clear
> film. Bit queer, as I'd have thought the 'frosted-glass' finish would have
> dispersed the UV light, much the same way as there still being daylight
> after the sun has set. Maybe clear OHP film happily allows UV to bounce
> around within the film thickness.

We had the same problem making holograms.
The film was temporarily stuck to a glass plate
with a thin layer of naptha. Under certain conditions
the light would bounce around inside the glass like
an optical fiber leaving unwanted tracks on the film.

>
> Last week did some quickie SOT23 to DIL adapters. Samsung ML-2250 laser,
> 600dpi. Single sheet. Very nice results.
> john

3041. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-05-31 11:51:02 UTC
From: analog <me@nospam.com>
Message-ID: <127r0p6o84dse31@corp.supernews.com>
Source record: 11942

"John Jardine." wrote:

> Yes. Tracing paper/greaseproof paper seems distinctly better than clear
> film. Bit queer, as I'd have thought the 'frosted-glass' finish would have
> dispersed the UV light, much the same way as there still being daylight
> after the sun has set. Maybe clear OHP film happily allows UV to bounce
> around within the film thickness.

We had the same problem making holograms.
The film was temporarily stuck to a glass plate
with a thin layer of naptha. Under certain conditions
the light would bounce around inside the glass like
an optical fiber leaving unwanted tracks on the film.

>
> Last week did some quickie SOT23 to DIL adapters. Samsung ML-2250 laser,
> 600dpi. Single sheet. Very nice results.
> john

3042. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-01 00:19:21 UTC
From: "Dr. Grok" <DRGrok@munged.net>
Message-ID: <doqfg.11456$ho6.769@trnddc07>
Source record: 11943

"RST Engineering" <jim@rstengineering.com> wrote in
news:iGKeg.31$Jk.121976@news.sisna.com:

>>
>> Hello Jim
>>
>> I use a similar setup to make boards all the time and it works
>> reasonably well. No 8mil tracks tho.
>
> 15 mils is easy. 10 mils with some care. Below that, no promises.
>
>
> The paper is made by Pulsar and is Digi-Key P/N 182-1003-ND. If
>> you want to try it get the "GreenTRF" film to go with it, P/N
>> 182-1021-ND. The GreenTRF film is just applied over the toner after
>> it is transfered from the paper and leaves the image on the board
>> completely sealed with a glossy green finish. I believe the paper
was
>> about $1 per 8.5x11 sheet and I don't remember how much the
>> "GreenTRF" cost me, but it wasn't much for an 8in by 15ft piece.
>
> I use the glossy photo basic paper from Staples, or Costco, or Sam's
> Club, or whatever branded private label -- it works better than the
> "premium" variety photo paper for whatever reason. It all seems to
> work the same. The trick is to use copper-brite scouring powder made
> specifically for copper and brass along with one of those green dish
> scouring pads to clean and microscratch the bejabbers out of the
board
> before applying the resist. It also helps to preheat the board for
> about 5 minutes at 150F in a toaster oven after cleaning but before
> ironing on the resist.
>
>
>> I've been using ammonium persulfate for etchant and just picked up
>> some peroxide and acid so I can try making my own etchant.
>
> I've used ferric chloride, ammonium persulfate, and muriatic acid -
> hydrogen peroxide and I MUCH prefer the muriatic-peroxide
combination.
> What I have NOT perfected in the etch process yet is a method of
> agitation for the etchant. Right now I'm using an aquarium with an
> air pump and a "bubbling stone", but would love to find another
> method. Perhaps I'll work on a magnet with shrink sleeving and RTV
to

> seal the ends and another magnet on a motor underneath the aquarium
> bottom. That seems like a lot of hassle for a simple agitation, but
I
> haven't found a better way.
>
>
>
>> I have a drill stand for my Dremel Moto-tool that was made by
Dremel
>> that I use for drilling the boards. I use a #10 Opti-Visor and have
>> no trouble drilling the boards even with my pathetic eyesight. The
>> etched drill guide holes in the center of the pads really helps
>> hitting the holes dead center. With just a little care drills will
>> last until they get dull. As a matter of fact the only time I break
>> one is when I get careless trying to go too fast.
>
> The school I teach for has a half dozen good PCB drills, so I'm not
> yet forced into that corner. I've also got a BIG pcb shop down the
> hill a bit, and they throw away carbide drills by the sackful. I've
> gotten them to throw a few sacks my way.
>
>
> Jim
>
>

For etchant I find that CuCl2 and HCl work very nice -- and it is
especially advantagous to agitate by bubbling air thru the solution
since not only does it agitate but the oxygen in the air helps
regenerate the CuCl2 in situ. You can continue to bubble air thru it
after the etching is done to completely regenerate the etchant.

The reactions:
Etching: CuCl2 + Cu -> 2CuCl
Regenerating: 4(CuCl) + O2 + 4HCl -> 4(CuCl2) + 2(H2O)

Dr. G.

3043. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-01 02:30:12 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <Zisfg.51$%v3.104551@news.sisna.com>
Source record: 11945

I appreciate the information but note that:

a. I cannot send my students/readers down to Home Depot to pick up a pound of copper chloride along with the muriatic (swimming pool grout etch) acid.

b. Now I've got a couple of gallons of etchant to keep around the lab in a proper container for the next go-around.

BTW, what is the color of the CuCl2 and the HCl mixed together?

Jim

"Dr. Grok" <DRGrok@munged.net> wrote in message news:doqfg.11456$ho6.769@trnddc07...
>>
>
> For etchant I find that CuCl2 and HCl work very nice -- and it is
> especially advantagous to agitate by bubbling air thru the solution
> since not only does it agitate but the oxygen in the air helps
> regenerate the CuCl2 in situ. You can continue to bubble air thru it
> after the etching is done to completely regenerate the etchant.
>
> The reactions:
> Etching: CuCl2 + Cu -> 2CuCl
> Regenerating: 4(CuCl) + O2 + 4HCl -> 4(CuCl2) + 2(H2O)
>
> Dr. G.

3044. Re: what's up with eham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-01 02:47:21 UTC
From: Brian Murrey <brian@iquest.net>
Message-ID: <Zysfg.469$jB5.31@newsread3.news.pas.earthlink.net>
Source record: 11944

Paying your electric bill adds money to the BPL bunch.

We must all withhold our electric bill payments until BPL is defeated.

--
==========
Radio Amateurs - Fill your junk box, from my junkbox!
http://www.hamradparts.com
73 de KB9BVN
==========

"Geoffrey S. Mendelson" <gsm@mendelson.com> wrote in message
news:slrne7bqqp.9k4.gsm@cable.mendelson.com...
> Caveat Lector wrote:
> > RE: The BPL ads -- maybe run your own Anti-BPL ad Huh
>
> You miss the point.
>
> ALL Google ads are BPL adds. Google uses the money they get from Adsense
> to finance BPL networks. That's right, Google invested a lot of money in
> BPL. Using Adsense supports BPL, using Google supports BPL, buying Google
> stock supports BPL.
>
> Got it? Google and BPL are connected.
>
> As for supporting those sites, "you pays your money and you makes your
choice".
> A click on a Google Adsense ad helps pay for BPL. There are other online
> "click here" advertising companies. He chose Google. I chose not to
support
> him.
>
> IMHO it's like running a pro-enviornmentweb site and using the proceeds
> from advertising to fund toxic waste dumping.
>
> Geoff.
>
> --
> Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
> IL Voice: (07)-7424-1667 IL Fax: 972-2-648-1443 U.S. Voice:
1-215-821-1838
> Visit my 'blog at http://geoffstechno.livejournal.com/

3045. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-01 08:37:25 UTC
From: Rex <me@hutmail.invalid>
Message-ID: <kk9t729dgud1ne86h4kf3gvbhpgl6901lh@4ax.com>
Source record: 11946

On 29 May 2006 01:54:56 -0700, "Leon" <leon.heller@bulldoghome.com>
wrote:

>
>Dave Platt wrote:
>> In article <1148798061.072427.295730@j73g2000cwa.googlegroups.com>,
>> Leon <leon.heller@bulldoghome.com> wrote:
>>
>> >I just flush it down the toilet. I think that ferric chloride is used
>> >for water treatment and I can't see the small amount of copper doing
>> >any harm by the time it has been diluted millions of times. It's only a
>> >litre ot so every six months - it's negligible.
>>
>> By the time you dump it in this way, you aren't dumping pure ferric
>> chloride by any means! You're dumping a residual amount of ferric
>> chloride, plus a bunch of copper chloride.
>
>Small quantities are acceptable, here in the UK.
>
>Leon

A book I read a long time back recommended mixing spent solution with
concrete powder and sending the resulting brick to the dump. Seems like
one of the best ideas I have heard of if you really care about possible
impacts.

3046. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-01 09:16:48 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1149153407.908733.273380@f6g2000cwb.googlegroups.com>
Source record: 11947

RST Engineering wrote:
> I appreciate the information but note that:
>
> a. I cannot send my students/readers down to Home Depot to pick up a pound
> of copper chloride along with the muriatic (swimming pool grout etch) acid.
>
> b. Now I've got a couple of gallons of etchant to keep around the lab in a
> proper container for the next go-around.
>
> BTW, what is the color of the CuCl2 and the HCl mixed together?

If you start off with HCl and H2O2, you get CuCl2. You don't need to
actually buy the stuff, it gradually becomes more concentrated with
use. Some form of chemical titration is needed with CuCl2 to ensure
that the concentration is correct and that it has the right pH.

Leon

3047. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-01 10:14:20 UTC
From: Rex <me@hutmail.invalid>
Message-ID: <3fft72d94vbu95v5ekqv46n98tvq5t6t7a@4ax.com>
Source record: 11848

On 1 Jun 2006 02:16:48 -0700, "Leon" <leon.heller@bulldoghome.com>
wrote:

>
>RST Engineering wrote:
>> I appreciate the information but note that:
>>
>> a. I cannot send my students/readers down to Home Depot to pick up a pound
>> of copper chloride along with the muriatic (swimming pool grout etch) acid.
>>
>> b. Now I've got a couple of gallons of etchant to keep around the lab in a
>> proper container for the next go-around.
>>
>> BTW, what is the color of the CuCl2 and the HCl mixed together?
>
>If you start off with HCl and H2O2, you get CuCl2. You don't need to
>actually buy the stuff, it gradually becomes more concentrated with
>use. Some form of chemical titration is needed with CuCl2 to ensure
>that the concentration is correct and that it has the right pH.
>

Maybe this will help if you want to try...

http://www.xertech.net/Tech/CuCl_ech.html

3048. Re: what's up with eham?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-01 13:47:09 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <wdCfg.178236$bm6.16284@fed1read04>
Source record: 11849

"Brian Murrey" <brian@iquest.net> wrote in message
news:Zysfg.469$jB5.31@newsread3.news.pas.earthlink.net...
> Paying your electric bill adds money to the BPL bunch.
>
> We must all withhold our electric bill payments until BPL is defeated.
>
Oh thats the perfect squelch - one of those "Why Didn't I think Of That"
Kudos from -- Caveat Lector

If you want to know what Hams really think of e-ham - go to URL:
http://www.eham.net/articles/13951

A dozen pages of "Welcome Back"

> ==
> Radio Amateurs - Fill your junk box, from my junkbox!
> http://www.hamradparts.com
> 73 de KB9BVN
> ==
>
>
> "Geoffrey S. Mendelson" <gsm@mendelson.com> wrote in message
> news:slrne7bqqp.9k4.gsm@cable.mendelson.com...
>> Caveat Lector wrote:
>> > RE: The BPL ads -- maybe run your own Anti-BPL ad Huh
>>
>> You miss the point.
>>
>> ALL Google ads are BPL adds. Google uses the money they get from Adsense
>> to finance BPL networks. That's right, Google invested a lot of money in
>> BPL. Using Adsense supports BPL, using Google supports BPL, buying Google
>> stock supports BPL.
>>
>> Got it? Google and BPL are connected.
>>
>> As for supporting those sites, "you pays your money and you makes your
> choice".
>> A click on a Google Adsense ad helps pay for BPL. There are other online
>> "click here" advertising companies. He chose Google. I chose not to
> support
>> him.
>>
>> IMHO it's like running a pro-enviornmentweb site and using the proceeds
>> from advertising to fund toxic waste dumping.
>>

>> Geoff.
>>
>> --
>> Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
>> IL Voice: (07)-7424-1667 IL Fax: 972-2-648-1443 U.S. Voice:
> 1-215-821-1838
>> Visit my 'blog at http://geoffstechno.livejournal.com/
>
>

3049. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-01 18:11:47 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <G5Gfg.81$Cu3.23576@news.sisna.com>
Source record: 11850

Excellent. I gotta get me a copy of that out of print book.

Jim

>
> Maybe this will help if you want to try...
>
> http://www.xertech.net/Tech/CuCl_ech.html
>
>

3050. Re: Home PCB (Was: Dead Bug)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-02 01:44:45 UTC
From: "Dr. Grok" <DRGrok@munged.net>
Message-ID: <hKMfg.33424$VL2.22265@trnddc06>
Source record: 11851

"RST Engineering" <jim@rstengineering.com> wrote in
news:Zisfg.51$%v3.104551@news.sisna.com:

> I appreciate the information but note that:
>
> a. I cannot send my students/readers down to Home Depot to pick up a
> pound of copper chloride along with the muriatic (swimming pool grout
> etch) acid.

Send them to HD to get some CuSO4.5H2O [Root killer Zep is one brand] and
some CaCl2 [Damp Rid (or in the winter: ice melter)]

Make a solution of each [equal molar amounts for each chemical] and mix.
Let it sit overnite. The white precipitate is CaSO4 [Plaster of Paris] and
the Blue-green solution on top is the CuCl2 solution. Best to filter that
to remove any remaining CaSO4. Now you have your starting supply of CuCl2
and as you can see from the equations you create more of it as you etch.
If you get too much offer it to another ham to get him/her started.

>
> b. Now I've got a couple of gallons of etchant to keep around the lab
> in a proper container for the next go-around.
>
> BTW, what is the color of the CuCl2 and the HCl mixed together?

A very bright green. When it turns a dirty olive green you know it has too
much CuCl so start bubbling air thru until its bright green again.

>
> Jim
>
>
>
> "Dr. Grok" <DRGrok@munged.net> wrote in message
> news:doqfg.11456$ho6.769@trnddc07...
>>>
>>
>> For etchant I find that CuCl2 and HCl work very nice -- and it is
>> especially advantagous to agitate by bubbling air thru the solution
>> since not only does it agitate but the oxygen in the air helps
>> regenerate the CuCl2 in situ. You can continue to bubble air thru it
>> after the etching is done to completely regenerate the etchant.
>>
>> The reactions:
>> Etching: CuCl2 + Cu -> 2CuCl
>> Regenerating: 4(CuCl) + O2 + 4HCl -> 4(CuCl2) + 2(H2O)

>>
>> Dr. G.
>
>

3051. Wireless World & Radio Engineering magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-02 02:44:06 UTC
From: "Bob G. Mahrenholz" <bobm@edge.net>
Message-ID: <447FA5B8.4ED9C96F@edge.net>
Source record: 11852

Hi'
I'm needing a copy of articles on bandpass filtering using negative mutual coupling
(a la J.W. Miller) in the February 18, 1931 issue of Wireless World and in the December, 1936 issue of Radio Engineering magazine. Will pay a reward.

Thanks,
Bob
bobm@edge.net

3052. Re: Wireless World & Radio Engineering magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-02 08:40:09 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1149237609.053605.280570@c74g2000cwc.googlegroups.com>
Source record: 11853

Bob G. Mahrenholz wrote:
> Hi'
> I'm needing a copy of articles on bandpass filtering using negative
> mutual coupling
> (a la J.W. Miller) in the February 18, 1931 issue of Wireless World and
> in the December, 1936 issue of Radio Engineering magazine. Will pay a
> reward.

A good library should have them. The British Library has held a copy of
everything published in the UK for a long time.

Leon

3053. Want To Build a Directional, Amplified Medium Wave Receiving Antenna - Where To Start?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-02 20:29:10 UTC
From: Dan Winker <dwinker@visi.com>
Message-ID: <12817sm5nfc9v3a@corp.supernews.com>
Source record: 11854

Hi all,

I'm not an amateur radio operator, but I do have the 1997 ARRL handbook, I am capable of understanding most of what it says, and this is definitely a question for a ham operator.

I live out in the country where the internet barely reaches and little radio stations are weak. My wife has recently taken to needing to listen to the ghost hunters show at 10 to midnight Sunday nights on KLBP which seems to me to be 5kW. It comes in acceptably during the day, but at night it's extremely weak and seems to be interfered with by another station. Maybe KLBP has to reduce their power at night. I don't know.

Now, instead of listening to the show Sunday night I can download the pod-cast Monday at work and give that to her. But if you're going to listen the the ghost hunting show, it seems much better to do it live, late at night, on an AM radio. Besides, that raises the possibility of calling in sometime.

A huge loop seems like overkill and not directional anyway. I don't think I have room for a dipole (is that 318 ft?). What I'm inventing in my own head is a loop with lots of turns. I think they used them in the old days. They were like a coil of wire mounted on a 2 ft by 3 ft board. Would (1005/1.47 = 684) feet of wire in a 3 ft diameter coil form some kind of ghost show antenna (for KLBP)?

I'm quite capable of reading parts of the ARRL handbook, ordering stuff from Digi-Key, and soldering. Where should I start? What about making it amplified?

BTW, here's my crystal radio that currently doesn't do anything because it doesn't have an antenna. http://www.visi.com/~dwinker/ddd_xtal_radio/ (It is finished now. I gotta get a final picture up now that I've posted this). It'd be cool if I could make that work again. I wouldn't feel to bad if it took an amplified antenna to make it work.

Thanks,
Dan

3054. Re: Want To Build a Directional, Amplified Medium Wave Receiving Antenna - Where To Start?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-02 20:45:47 UTC
From: w2aew <w2aew@yahoo.com>
Message-ID: <1149281147.023176.225210@g10g2000cwb.googlegroups.com>
Source record: 11855

Dan Winker wrote:
> Hi all,
>
> I'm not an amateur radio operator, but I do have the 1997 ARRL handbook, I am capable of understanding most of what it says, and this is definitely a question for a ham operator.
>
> I live out in the country where the internet barely reaches and little radio stations are weak. My wife has recently taken to needing to listen to the ghost hunters show at 10 to midnight Sunday nights on KLBP which seems to me to be 5kW. It comes in acceptably during the day, but at night it's extremely weak and seems to be interfered with by another station. Maybe KLBP has to reduce their power at night. I don't know.
>
> Now, instead of listening to the show Sunday night I can download the pod-cast Monday at work and give that to her. But if you're going to listen the the ghost hunting show, it seems much better to do it live, late at night, on an AM radio. Besides, that raises the possibility of calling in sometime.
>
> A huge loop seems like overkill and not directional anyway. I don't think I have room for a dipole (is that 318 ft?). What I'm inventing in my own head is a loop with lots of turns. I think they used them in the old days. They were like a coil of wire mounted on a 2 ft by 3 ft board. Would (1005/1.47 = 684) feet of wire in a 3 ft diameter coil form some kind of ghost show antenna (for KLBP)?
>
> I'm quite capable of reading parts of the ARRL handbook, ordering stuff from Digi-Key, and soldering. Where should I start? What about making it amplified?
>
> BTW, here's my crystal radio that currently doesn't do anything because it doesn't have an antenna. http://www.visi.com/~dwinker/ddd_xtal_radio/ (It is finished now. I gotta get a final picture up now that I've posted this). It'd be cool if I could make that work again. I wouldn't feel to bad if it took an amplified antenna to make it work.
>
> Thanks,
> Dan

Dan,

There's a ton of great antenna building ideas, thoughts, comments,
articles, etc. to be found on this site. Definitely worth a look...
http://www.cebik.com/radio.html

3055. Patrolman Pro-45 (circa 1977)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-02 23:38:16 UTC
From: maw <mwhitehead4@cogeco.ca>
Message-ID: <PZ3gg.398$Uy1.116@read1.cgocable.net>
Source record: 11856
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

found this old Realistic Pro-45 "beast" of a scanner and it amazingly works.
it's an eight channel scanner that uses crystals.

currently a local 2-meter repeater is the only active frequency in my area.

can somebody help get or sell me some crystals and/or the manual for this
radio?

the crystals i'm looking for are:

148.525mhz
150.100mhz
154.935mhz
154.620mhz
156.800mhz
162.400mhz

please reply by email.

thanks!

3056. Re: Patrolman Pro-45 (circa 1977)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 01:38:13 UTC
From: "g. beat"
Message-ID: <xtqdnRnZeK2UdR3ZnZ2dneKdnZydnZ2d@comcast.com>
Source record: 11857
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

"maw" <mwhitehead4@cogeco.ca> wrote in message
news:PZ3gg.398$Uy1.116@read1.cgocable.net...
> found this old Realistic Pro-45 "beast" of a scanner and it amazingly
> works.
> it's an eight channel scanner that uses crystals.
>
> currently a local 2-meter repeater is the only active frequency in my
> area.
>
> can somebody help get or sell me some crystals and/or the manual for this
> radio?
>
> the crystals i'm looking for are:
>
> 148.525mhz
> 150.100mhz
> 154.935mhz
> 154.620mhz
> 156.800mhz
> 162.400mhz
>
> please reply by email.
>
> thanks!

The Realistic Pro-45 Patrolman Scanning Radio was introduced in 1978.

Strong Signals is a popular SWL / monitoring web site
http://www.strongsignals.net/index.cgi

First, start with the manual.
Anthony W. Haukap of St. Louis, MO has compiled Scanner Owners and Service
manuals:
http://myweb.accessus.net/~090/toc.html#scan

Here is his Radio Shack / Realistic series
http://myweb.accessus.net/~090/bearcatting.html#rsman

Photofacts from Howard Sams Publishing division of Prentice-Hall at
(800)428-7267, http://www.hwsams.com/sams_model_new.html

Repair Tips for Realistic Scanners (Bob Parnass, AJ9S)
http://www.repairfaq.org/REPAIR/F_RS_Repair.html

Crystals - they are not $2 each anymore !

ICM (they have deep library of equipment crystal specs - best in industry)
http://www.icmfg.com/

JAN Crystals
http://www.jancrystals.com/

Bomar Crystals
http://www.bomarcrystal.com/

Ken's Electronics - MAY have some NOS surplus - Inventory reduction sale
http://www.kenselectronics.com/lists/scanxtal.htm

3057. Re: TS520 dismantling....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 04:22:24 UTC
From: clark <clark_speaking@flying_moose.net>
Message-ID: <44810E7E.5EEBE593@flying_moose.net>
Source record: 11858

http://groups.yahoo.com/group/TS-520_820_530_830/

73

3058. Re: Want To Build a Directional, Amplified Medium Wave Receiving Antenna - Where To Start?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 05:58:13 UTC
From: charlesh3@msn.com
Message-ID: <i6udnS5_jM9suRzZnZ2dneKdnZydnZ2d@giganews.com>
Source record: 11859

Dan:

If you want to buy something, take a look at http://www.ccrane.com/antennas/am-antennas/twin-coil-ferrite-am-antenna.aspx . This is a ferrite loop antenna which would seem to fill your bill. If you want something fancier, try Radios Plus at http://dxtools.com/ .

If you want to do it all yourself, my suggestion would be to check out the AM band clubs: the National Radio Club and the International Radio Club of America. Both have articles about constructing loop antennas of various styles.

Chuck

3059. Re: TS520 dismantling....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 06:02:46 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1149314566.825498.9420@u72g2000cwu.googlegroups.com>
Source record: 11860

clark wrote:
> http://groups.yahoo.com/group/TS-520_820_530_830/
>
> 73

Thanks clark, have joined. Misery loves company hi hi...

Andrew VK3BFA.

3060. Re: Want To Build a Directional, Amplified Medium Wave Receiving Antenna - Where To Start?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 09:55:17 UTC
From: w8ji@akorn.net
Message-ID: <1149328517.177604.127060@i40g2000cwc.googlegroups.com>
Source record: 11861

Dan Winker wrote:
>> A huge loop seems like overkill and not directional anyway. I don't think I have room for a dipole (is that 318 ft?). What I'm inventing in my own head is a loop with lots of turns. I think they used them in the old days. They were like a coil of wire mounted on a 2 ft by 3 ft board. Would (1005/1.47 = 684) feet of wire in a 3 ft diameter coil form some kind of ghost show antenna (for KLBP)?
>
> I'm quite capable of reading parts of the ARRL handbook, ordering stuff from Digi-Key, and soldering. Where should I start? What about making it amplified?
>
> BTW, here's my crystal radio that currently doesn't do anything because it doesn't have an antenna. http://www.visi.com/~dwinker/ddd_xtal_radio/ (It is finished now. I gotta get a final picture up now that I've posted this). It'd be cool if I could make that work again. I wouldn't feel to bad if it took an amplified antenna to make it work.

Dan,

You might read this area of my website:

http://www.w8ji.com/receiving.htm

If you have a weak staion with a strong co-channel staion causing problems, you need a directional antenna with a fairly wide and stable null. You won't find that in a single loop. You won't get much useful directivity or gain from any single element antenna, and a loop will be the same with 10 turns or one turn as long as you resonante it. It is the SIZE and balance that mainly affects sensitivity, pattern, or directivity.

Still, we can sometimes find a small antenna that just seems to work better than we might expect so experimenting doesn't hurt. But as a general rule you might have to use two elements phased to get a useful pattern

73 Tom

3061. Re: Want To Build a Directional, Amplified Medium Wave Receiving Antenna - Where To Start?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 10:00:51 UTC
From: w8ji@akorn.net
Message-ID: <1149328851.722460.310120@h76g2000cwa.googlegroups.com>
Source record: 11862

Dan Winker wrote:

<< Would (1005/1.47 = 684) feet of wire in a 3 ft diameter coil form some kind of ghost show antenna (for KLBP)?

Wavelength of the wire is almost meaningless Dan.

684 feet of wire wound in a 3 foot diameter coil is still just a three foot diameter loop antenna.

It will have about the same pattern and same sensitivity as a single turn, assuming you can match and resonate each of them.

So you are really asking if a 3 foot diameter loop will work, and the only reliable answer is "maybe".

73 Tom

3062. 2SC2397 Datasheet ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 11:09:04 UTC
From: Steve Kavanagh <skavanagh72nospam@yahoo.ca>
Message-ID: <1149332944.772826.5820@h76g2000cwa.googlegroups.com>
Source record: 11863
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

I'm looking for a data sheet for the 2SC2397. www.datasheetarchive.com
appears to have just a 1 line description. Does anyone have more ?

Steve

3063. Re: 2SC2397 Datasheet ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 11:20:18 UTC
From: Phil Allison <philallison@tpg.com.au>
Message-ID: <4ed9jjF1dr180U1@individual.net>
Source record: 11864
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"Steve Kavanagh"
>
> I'm looking for a data sheet for the 2SC2397. www.datasheetarchive.com
> appears to have just a 1 line description. Does anyone have more ?
>

** Appears to be an obsolete type.

Several references quote the " MJE3055T " as being a replacement with
similar or better specs.

..... Phil

3064. Re: 2SC2397 Datasheet ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 11:54:06 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <17t282p67fbn48qruumetrmqjhk6h9mtd5@4ax.com>
Source record: 11865
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On 3 Jun 2006 04:09:04 -0700, the renowned "Steve Kavanagh"
<skavanagh72nospam@yahoo.ca> wrote:

>I'm looking for a data sheet for the 2SC2397. www.datasheetarchive.com
>appears to have just a 1 line description. Does anyone have more ?
>
>Steve

You can see from the Kanji in the transistor manual that the original
manufacturer is Hitachi (http://www.trexon.com/hitachi.gif)

..along with quite a few parameters. It's designed to be an RF power
amplifier, especially for CB.

This is supposed to be a similar part:
http://www.cpcares.com/pdf/2SC1817.PDF

with a similar (but less) power output rating (15W vs 18W for the
2SC2397 @27MHz output).

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

3065. Re: 2SC2397 Datasheet ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 11:55:55 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <v2u282p3eig01nd89hf924jmdidlno59bg@4ax.com>
Source record: 11866
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Sat, 3 Jun 2006 21:20:18 +1000, the renowned "Phil Allison"
<philallison@tpg.com.au> wrote:

>
>"Steve Kavanagh"
>>
>> I'm looking for a data sheet for the 2SC2397. www.datasheetarchive.com
>> appears to have just a 1 line description. Does anyone have more ?
>>
>
>
> ** Appears to be an obsolete type.
>
>Several references quote the " MJE3055T " as being a replacement with
>similar or better specs.

Gack! Well, you can bolt it in the same place and the pinout is the
same, but things kinda fall apart from there.. considering the ft of
the 3055 is 2MHz vs 100MHz for the 2SC2397.

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

3066. Re: 2SC2397 Datasheet ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 12:40:39 UTC
From: Phil Allison <philallison@tpg.com.au>
Message-ID: <4edea7F1edbd3U1@individual.net>
Source record: 11867
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"Spehro Pefhany"

>
>> ** Appears to be an obsolete type.
>>
>>Several references quote the " MJE3055T " as being a replacement with
>>similar or better specs.
>
> Gack! Well, you can bolt it in the same place and the pinout is the
> same, but things kinda fall apart from there.. considering the ft of
> the 3055 is 2MHz vs 100MHz for the 2SC2397.

** The Motorola " POWER Data Book" of 1982, lists the devices as "similar replacements" - as does the similar " Bipolar Power Transistor Data " of 1987.

I found at least 7 web sites, including the ST Microelectronics site, with the same info.

Seems some staffer at Motorola made an error in the early 80s and it has gone on and on and on ....

.... Phil

3067. Re: Wireless World & Radio Engineering magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 12:43:43 UTC
From: "Bob G. Mahrenholz" <bobm@edge.net>
Message-ID: <448183C0.7D5A5220@edge.net>
Source record: 11868

Thanks for the idea. Do you know how to contact the British Library? I guess I could search the internet.

I've had problems in the past. I can find a library that has the journal (usually in universities) but they all want you to go thru your local library to order a copy of an article. My local library doesn't want to try and get anything out of state.

Also libraries all want the page numbers and the title of the article and the author and I don't know that on these articles. That's why I was hoping to find someone who actually had the magazine.

Thanks
Bob

Leon wrote:

> Bob G. Mahrenholz wrote:
> > Hi'
> > I'm needing a copy of articles on bandpass filtering using negative
> > mutual coupling
> > (a la J.W. Miller) in the February 18, 1931 issue of Wireless World and
> > in the December, 1936 issue of Radio Engineering magazine. Will pay a
> > reward.
>
> A good library should have them. The British Library has held a copy of
> everything published in the UK for a long time.
>
> Leon

3068. Re: Wireless World & Radio Engineering magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 12:55:16 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1149339316.895488.194660@i39g2000cwa.googlegroups.com>
Source record: 11869

Bob G. Mahrenholz wrote:
> Thanks for the idea. Do you know how to contact the British Library? I guess
> I could search the internet.
>
> I've had problems in the past. I can find a library that has the journal
> (usually in universities) but they all want you to go thru your local library
> to order a copy of an article. My local library doesn't want to try and get
> anything out of state.
>
> Also libraries all want the page numbers and the title of the article and the
> author and I don't know that on these articles. That's why I was hoping to
> find someone who actually had the magazine.

You might be able to find it from their web site:

http://www.bl.uk/

73, Leon

3069. Re: 2SC2397 Datasheet ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 12:59:17 UTC
From: Pooh Bear <rabbitsfriendsandrelations@hotmail.com>
Message-ID: <448187A5.7A9E79F1@hotmail.com>
Source record: 11871
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Steve Kavanagh wrote:

> I'm looking for a data sheet for the 2SC2397. www.datasheetarchive.com
> appears to have just a 1 line description. Does anyone have more ?

Shouldn't be too tricky to sub it. Low voltage (by my standards) npn 25W 50MHz
in TO-220 are a dime a dozen surely ?

Graham

3070. FREE 40 meter QRP transmitters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 13:06:35 UTC
From: hamradio.dxer@yahoo.com
Message-ID: <1149339995.096352.26060@i40g2000cwc.googlegroups.com>
Source record: 11872

Yes, there's a catch. You gotta buy one of their neat antennas.

http://hamradiofun.com/summer-special.htm

73

3071. Re: 2SC2397 Datasheet ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 13:10:44 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <2823829uu6kp759v8jkbsgh6s1f5m3fhq3@4ax.com>
Source record: 11870
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Sat, 3 Jun 2006 22:40:39 +1000, the renowned "Phil Allison"
<philallison@tpg.com.au> wrote:

>
>"Spehro Pefhany"
>
>>
>>> ** Appears to be an obsolete type.
>>>
>>>Several references quote the " MJE3055T " as being a replacement with
>>>similar or better specs.
>>
>> Gack! Well, you can bolt it in the same place and the pinout is the
>> same, but things kinda fall apart from there.. considering the ft of
>> the 3055 is 2MHz vs 100MHz for the 2SC2397.
>
>
>
>** The Motorola " POWER Data Book" of 1982, lists the devices as "similar
>replacements" - as does the similar " Bipolar Power Transistor Data " of
>1987.
>
>I found at least 7 web sites, including the ST Microelectronics site, with
>the same info.
>
>Seems some staffer at Motorola made an error in the early 80s and it has
>gone on and on and on ....

Maybe someone who was sick of the breaker-breaker-one-nine-rubber-duck
CB craze of the day? ;-) Unfortunately lots of references on the
'net may just mean that the stuff was all copied from one source.

BTW, any Japanese speakers here? The Japanese characters for Hitachi
appear to be only two syllables. The characters would be pronounced
"ri4 li4" in Chinese ('sun' or 'day' and 'stand'), maybe "hi ta" in
Japanese? Is the "chi" just tacked on in English?

Mazda is the opposite-- it's three syllables in Chinese (and probably
Japanese as well). And Alps (the component maker)is two syllables in
Japanese.

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"

speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

3072. Re: 2SC2397 Datasheet ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 14:41:19 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2006.06.03.22.41.02.801589@example.net>
Source record: 11873
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Sat, 03 Jun 2006 09:10:44 -0400, Spehro Pefhany wrote:
> On Sat, 3 Jun 2006 22:40:39 +1000, the renowned "Phil Allison"
>>...
>>Seems some staffer at Motorola made an error in the early 80s and it has
>>gone on and on and on ....
>
> Maybe someone who was sick of the breaker-breaker-one-nine-rubber-duck
> CB craze of the day? ;-) Unfortunately lots of references on the
> 'net may just mean that the stuff was all copied from one source.
>
> BTW, any Japanese speakers here? The Japanese characters for Hitachi
> appear to be only two syllables. The characters would be pronounced
> "ri4 li4" in Chinese ('sun' or 'day' and 'stand'), maybe "hi ta" in
> Japanese? Is the "chi" just tacked on in English?

With Japanese Kanji, there's no telling. ;-) Fujiyama, for example,
is two Kanjis.

> Mazda is the opposite-- it's three syllables in Chinese (and probably
> Japanese as well). And Alps (the component maker)is two syllables in
> Japanese.
>

In Katagana or Hiragana, Ma zu da is three, yes, but A ru pu su is _four_! ;-)
(I think they're pronounced more like Ma z' da and A r' p' s'. :-))
To yo ta comes out just right, however. :-)

Cheers!
Rich

3073. SolderSmoke #24: ROCKBOUND HB SSB, Two tone mp3, W1FB amp, SlimGem amp, ELSIE, Book review, Mailbag

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 17:23:05 UTC
From: bill.meara@gmail.com
Message-ID: <1149355385.771876.147540@u72g2000cwu.googlegroups.com>
Source record: 11874
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,sci.electronics.basics

SolderSmoke #24: ROCKBOUND HB SSB, Two tone mp3, W1FB amp, SlimGem amp, ELSIE, Book review, Mailbag

SolderSmoke!
A SHOW FOR ELECTRONICS HOMEBREWERS!

http://www.ourmedia.org/node/231317

Topics discussed in SolderSmoke #24:

-- Mike's rockbound SSB success!
-- Two tone tests via mp3
-- W1FB 40 db amp strip
-- HF Packer SlimGem 5W MOSFET amps
-- ELSIE filter software
-- BOOK REVIEW: "From Crystal Sets to Sideband"
-- HF+6 diplexer
-- MAILBAG: Jerry AA6KI sends in "Lamp Talk" cartoon; Mike WA6ARA on VO-52 as a good QRP satellite.

NEXT EDITION: Bill will be using an Astatic D-104.

Listen at: http://www.ourmedia.org/node/231317

Background:
Tired of listening to Led Zepplin or NPR on your I-Pod? Wouldn't you like to be able to carry with you the kinds of ham radio conversations that you listen to while in your radio shack?
Mike, KL7R, in Juneau, Alaska, and Bill, M0HBR, in London, England meet regularly on the ECHOLINK system to discuss their homebrew radio projects. We are making them available as PODCASTS.

NEW RSS FEED: You can subscribe to the program, have them downloaded to your MP-3 player, and listen to them at your convenience. To subscribe, just cut and paste this URL into your I-poder (or similar) software. We've been having trouble with our Ourmedia RSS feed, so Mike (software wizard that he is) has homebrewed his own RSS feed. In order to subscribe to SolderSmoke, point your podcast software to:

http://kl7r.ham-radio.ch/soldersmoke.rss

If you don't have an MP3 player you can just go to the site below and listen to the latest program (and earlier editions) using the audio software on your computer.

http://www.ourmedia.org/node/231317

Here's the homepage for our show. All our programs are available here. There is also a blog and links to some of the sites and documents we've been discussing: http://www.ourmedia.org/user/36170

We hope you enjoy the program. Please send us feedback.

73 from London
Bill M0HBR N2CQR CU2JL
http://www.gadgeteer.us

3074. Diff between xtal with 3 leads vs. 2 leads?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 17:46:21 UTC
From: C <temp1@tomochka.com>
Message-ID: <1149356781.814929.313650@i40g2000cwc.googlegroups.com>
Source record: 11875

Hi,

Working on converting an old CB to a 10 meter beacon. Obtained some xtals in the correct range I need, but they have 3 leads instead of 2. Are these resonators? Can I use them as direct replacement for xtals in the CB radio? Where does the 3rd lead go?

BTW, if anyone has a schematic for a barebones 10M tx, 1W +/-, please send a copy if you can with parts list.
Tnx!

3075. WTD: Molex .062 Crimp Tool

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 19:33:13 UTC
From: "Richard W. Solomon, W1KSZ" <w1ksz@earthlink.net>
Message-ID: <euo382djiulo2dpfaf6mo16qsf70llet8v@4ax.com>
Source record: 11876

Anyone have one they can part with ?

Tnx, Dick, W1KSZ

3076. Nice HBR 13C

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 20:04:02 UTC
From: Brian Hill <good@it.net>
Message-ID: <TWlgg.64$RH5.62@fe03.lga>
Source record: 11877

Heres some pics of my new HBR13C.
http://webpages.charter.net/brianhill/hbr13c1.jpg
http://webpages.charter.net/brianhill/hbr13c2.jpg
http://webpages.charter.net/brianhill/hbr13c3.jpg
http://webpages.charter.net/brianhill/hbr13c4.jpg
http://webpages.charter.net/brianhill/hbr13c5.jpg

--

Regards
B.H.

Brian's Radio Universe
http://webpages.charter.net/brianhill/500.htm

3077. Re: Want To Build a Directional, Amplified Medium Wave Receiving Antenna - Where To Start?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 22:48:56 UTC
From: Dan Winker <dwinker@visi.com>
Message-ID: <12844eo7f445t4d@corp.supernews.com>
Source record: 11878

Thanks All! Tomorrow I try my luck at making a loop. I found a good website about it at http://www.mindspring.com/~loop_antenna/ . The guy says it has a good null, so I'm hoping that can be used to block the offending station that's interfering. Looks like I have to take one of my variable caps off my crystal radio though. The things I'm willing to do for my wife! (Ha! like I'm not really going to enjoy this).

If that doesn't work I'm workin' her to be able to get this $200 antenna.
http://dxtools.com/QX.htm

Again,
Thanks All!
Dan

3078. Re: Want To Build a Directional, Amplified Medium Wave Receiving Antenna - Where To Start?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-03 23:37:17 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <N2pgg.1123$lp.880@newsread3.news.pas.earthlink.net>
Source record: 11879

"Dan Winker" <dwinker@visi.com> wrote in message
news:12844eo7f445t4d@corp.supernews.com...
> Thanks All! Tomorrow I try my luck at making a loop. I found a good
website about it at http://www.mindspring.com/~loop_antenna/ . The guy says
it has a good null, so I'm hoping that can be used to block the offending
station that's interfering. Looks like I have to take one of my variable
caps off my crystal radio though. The things I'm willing to do for my wife!
(Ha! like I'm not really going to enjoy this).
>
> If that doesn't work I'm workin' her to be able to get this $200 antenna.
http://dxtools.com/QX.htm
>

Make sure to get a money back guarntee if it does not work for your
application. If you are to the east or west of the station you may be
fighting a loosing battle. The station may be shifting the antenna patern
north and south at night.

3079. need: smd transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-04 01:28:10 UTC
From: doug <doug.morsit@virgin.net>
Message-ID: <KGqgg.2779$rC1.1017@newsfe4-gui.ntli.net>
Source record: 11880

Hi all, am looking for source in UK for Sony dual gate n channel surface mount transistors type SGM 2016M to repair yaesu ft8000 radio. have checked online parts lists for the usual firms in uk,with no luck! want three off, or does anyone know of equivalent type? thanks for any help. doug.

3080. Coil stock

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-04 01:57:37 UTC
From: mrhaney <w4pqw@cox.net>
Message-ID: <1149386257.083333.63900@i39g2000cwa.googlegroups.com>
Source record: 11881

I am in need of some B&W coil stock...B&W # 1032T .. It is 24 ga. wire
1 1/4 " dia. 32 turns per inch . also B&W 3020 is about same ..only
need a few inches. Tnx W4PQW

3081. Re: Nice HBR 13C

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-04 03:32:40 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <svsgg.7875$3i3.1368@trnddc08>
Source record: 11882

"Brian Hill" <good@it.net> wrote in message news:TWlgg.64$RH5.62@fe03.lga...
> Heres some pics of my new HBR13C.
> http://webpages.charter.net/brianhill/hbr13c1.jpg
> http://webpages.charter.net/brianhill/hbr13c2.jpg
> http://webpages.charter.net/brianhill/hbr13c3.jpg
> http://webpages.charter.net/brianhill/hbr13c4.jpg
> http://webpages.charter.net/brianhill/hbr13c5.jpg
>
> --
>
> Regards
> B.H.
>
> Brian's Radio Universe
> http://webpages.charter.net/brianhill/500.htm
>Hi Brian,

Gorgeous. I too am a big fan of the Eddystone dial and used it in my W7ZOI
solid state HBR.
Can you tell us what the front panel controls are, and perhaps a short
functional block diagram in words??

Dale W4OP

3082. Re: Diff between xtal with 3 leads vs. 2 leads?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-04 06:35:09 UTC
From: Alan Peake <adpeake@killspam.internode.on.net>
Message-ID: <44827F1D.5020507@killspam.internode.on.net>
Source record: 11883

> Working on converting an old CB to a 10 meter beacon. Obtained some
> xtals in the correct range I need, but they have 3 leads instead of 2.
> Are these resonators? Can I use them as direct replacement for xtals in
> the CB radio? Where does the 3rd lead go?

Do a search for 21.4 MHz filters. They have three leads and are used as
bandpass filters in UHF CB radios and may also turn up in 27MHz radios.
The middle lead probably goes to ground.
Alan

3083. Re: Diff between xtal with 3 leads vs. 2 leads?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-04 10:32:11 UTC
From: Andy <andysharpe@juno.com>
Message-ID: <1149417131.824054.159470@i39g2000cwa.googlegroups.com>
Source record: 11884

C wrote:
> Hi,
>
> Working on converting an old CB to a 10 meter beacon. Obtained some
> xtals in the correct range I need, but they have 3 leads instead of 2.
> Are these resonators? Can I use them as direct replacement for xtals in
> the CB radio? Where does the 3rd lead go?
>
> BTW, if anyone has a schematic for a barebones 10M tx, 1W +/-, please
> send a copy if you can with parts list.
> Tnx!

Andy writes:

Use an ohmeter to see if one of the leads is connected to the case
of the device. If it is, it certainly is a ground lead....
I have seen regular xtals with the third lead used as a case ground,
as well as xtal filters, which normally have a ground lead...

Andy W4OAH

3084. Re: 2SC2397 Datasheet ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-04 14:15:25 UTC
From: Steve Kavanagh <skavanagh72nospam@yahoo.ca>
Message-ID: <1149430525.629202.10730@c74g2000cwc.googlegroups.com>
Source record: 11885
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Pooh Bear wrote:
> Steve Kavanagh wrote:
>
> > I'm looking for a data sheet for the 2SC2397

> Shouldn't be too tricky to sub it. Low voltage (by my standards) npn 25W 50MHz
> in TO-220 are a dime a dozen surely ?

Actually I think such devices characterized for RF PA use are getting a bit thin on the ground with the CB craze over, most other HF applications needing more power and low-VHF most often using integrated modules or at least having the budget for real RF packages. But some comparison with other data sheets might be useful.

I actually have some (and a source for more at a good price, though production is not my intent) but was pondering if they could be stretched to 50 MHz, so the data sheets for similar devices may not be too applicable. Especially the MJE3055T !! I had noticed that curious substitution suggestion !

Steve

3085. Re: 2SC2397 Datasheet ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-04 15:51:27 UTC
From: raul <pcb_dude@pcbdude.org>
Message-ID: <4483017D.F4D63FC9@pcbdude.org>
Source record: 11886
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

While I do not have a datasheet,
NTE quickcross has no equal,

here is some info for you (I'm not the author)

Many Asian-sourced semiconductors are marked per the
EIAJ standard
Electronic Industries Association of Japan,
which uses this code:

2Saxxxxb

2S -- a hint that it's not JEDEC

a -- the type of semiconductor, where
A = PNP bipolar
B = PNP bipolar
C = NPN bipolar
D = NPN bipolar
F = SCR
J = P-channel FET
K = N-channel FET
xxxx= 3- or 4-digit number

b = a suffix sometimes applied to designate updated
versions

Usually but not always,
if xxxx for 2A or 2B is under 500, or 2SC or
2SD is under 100, it's germanium;
else silicon for bipolars.

Provided by
Jim N6OTQ

3086. Re: Wireless World & Radio Engineering magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-04 18:56:24 UTC
From: "Bob G. Mahrenholz" <bobm@edge.net>
Message-ID: <44832C95.D2F1E7BD@edge.net>
Source record: 11889

Leon:
I did find them and it looks real promising . They have the issue of Wireless World that I need. I will probably have to order a copy of the Table of Contents to see what page the article is on. Looks like a good resource. Thanks a lot.
Bob

Leon wrote:

> Bob G. Mahrenholz wrote:
> > Thanks for the idea. Do you know how to contact the British Library? I guess
> > I could search the internet.
> >
> > I've had problems in the past. I can find a library that has the journal
> > (usually in universities) but they all want you to go thru your local library
> > to order a copy of an article. My local library doesn't want to try and get
> > anything out of state.
> >
> > Also libraries all want the page numbers and the title of the article and the
> > author and I don't know that on these articles. That's why I was hoping to
> > find someone who actually had the magazine.
>
> You might be able to find it from their web site:
>
> http://www.bl.uk/
>
> 73, Leon

3087. Re: 2SC2397 Datasheet ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-04 19:02:13 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <8gb68211vu7fq83i81in2kbaksdjqm87a7@4ax.com>
Source record: 11888
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Sat, 03 Jun 2006 14:41:19 GMT, the renowned Rich Grise
<richgrise@example.net> wrote:

>On Sat, 03 Jun 2006 09:10:44 -0400, Spehro Pefhany wrote:
>> On Sat, 3 Jun 2006 22:40:39 +1000, the renowned "Phil Allison"
>>>...
>>>Seems some staffer at Motorola made an error in the early 80s and it has
>>>gone on and on and on ....
>>
>> Maybe someone who was sick of the breaker-breaker-one-nine-rubber-duck
>> CB craze of the day? ;-) Unfortunately lots of references on the
>> 'net may just mean that the stuff was all copied from one source.
>>
>> BTW, any Japanese speakers here? The Japanese characters for Hitachi
>> appear to be only two syllables. The characters would be pronounced
>> "ri4 li4" in Chinese ('sun' or 'day' and 'stand'), maybe "hi ta" in
>> Japanese? Is the "chi" just tacked on in English?
>
>With Japanese Kanji, there's no telling. ;-) Fujiyama, for example,
>is two Kanjis.

So it's not one syllable per character like Chinese? Interesting.

>> Mazda is the opposite-- it's three syllables in Chinese (and probably
>> Japanese as well). And Alps (the component maker)is two syllables in
>> Japanese.
>>
>
>In Katagana or Hiragana, Ma zu da is three, yes, but A ru pu su is _four_! ;-)
>(I think they're pronounced more like Ma z' da and A r' p' s'. :-))
>To yo ta comes out just right, however. :-)
>
>Cheers!
>Rich

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

3088. Re: 2SC2397 Datasheet ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-04 19:22:11 UTC
From: Pooh Bear <rabbitsfriendsandrelations@hotmail.com>
Message-ID: <448332E3.B287B17A@hotmail.com>
Source record: 11890
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Jamie wrote:

> (HIT) NPN 60V 8A TRANSISTOR T0-220
> Vcbo = 60v
> Vbeo = 5 v
> Pc = 25w/
> etc..
> etc..
> looks like a generic 2n3055 type..

You missed ft = 50 MHz.

Not like a 3055 at all.

I notice your 'advice' seems to be regularly flawed. I suggest you take more care.

Graham

3089. Re: 2SC2397 Datasheet ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-04 19:57:32 UTC
From: Bob <nimby1_NEEDSPAM@earthlink.net>
Message-ID: <MWGgg.1402$o4.512@newsread2.news.pas.earthlink.net>
Source record: 11891
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"Steve Kavanagh" <skavanagh72nospam@yahoo.ca> wrote in message
news:1149332944.772826.5820@h76g2000cwa.googlegroups.com...
> I'm looking for a data sheet for the 2SC2397. www.datasheetarchive.com
> appears to have just a 1 line description. Does anyone have more ?
>
> Steve
>

I used to work with a guy named Kavanagh, here in California. Does the name
Dracon ring a bell?

Bob

3090. Re: 2SC2397 Datasheet ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-04 20:27:21 UTC
From: Jamie <jamie_ka1lpa_not_valid_after_ka1lpa_@charter.net>
Message-ID: <bsEgg.9$815.1@fe05.lga>
Source record: 11887
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

raul wrote:

> While I do not have a datasheet,
> NTE quickcross has no equal,
>
> here is some info for you (I'm not the author)
>
> Many Asian-sourced semiconductors are marked per the
> EIAJ standard
> Electronic Industries Association of Japan,
> which uses this code:
>
> 2Saxxxxb
>
> 2S -- a hint that it's not JEDEC
>
> a -- the type of semiconductor, where
> A = PNP bipolar
> B = PNP bipolar
> C = NPN bipolar
> D = NPN bipolar
> F = SCR
> J = P-channel FET
> K = N-channel FET
> xxxx= 3- or 4-digit number
>
> b = a suffix sometimes applied to designate updated
> versions
>
> Usually but not always,
> if xxxx for 2A or 2B is under 500, or 2SC or
> 2SD is under 100, it's germanium;
> else silicon for bipolars.
>
> Provided by
> Jim N6OTQ
>
>

(HIT) NPN 60V 8A TRANSISTOR T0-220
Vcbo = 60v
Vbeo = 5 v
Pc = 25w/
etc..

etc..
looks like a generic 2n3055 type..

--
Real Programmers Do things like this.
http://webpages.charter.net/jamie_5

3091. Re: need: smd transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-04 22:32:52 UTC
From: doug <doug.morsit@virgin.net>
Message-ID: <ocJgg.8256$rC1.522@newsfe4-gui.ntli.net>
Source record: 11892

<nospam@nouce.bellatlantic.net> wrote in message
news:9qj48258c57g4hodup6aavgd79rsvq5mi2@4ax.com...
> On Sun, 04 Jun 2006 01:28:10 GMT, "doug" <doug.morsit@virgin.net>
> wrote:
>
> >Hi all, am looking for source in UK for Sony dual gate n channel surface
> >mount transistors type SGM 2016M to repair yaesu ft8000 radio. have
checked
> >online parts lists for the usual firms in uk,with no luck! want three
off,
> >or does anyone know of equivalent type? thanks for any help. doug.
> >
>
> No but likely that part number is a inhouse designation. One way to
> cheat the whole mess is look up a SMT DG fet sourced from Sony
> as I bet there only a few parts to pick from. Alternate is Phillips
> also does SMT DG fets and likely they would work.
>
> Allison

thanks for reply Allison, will check for Phillips equivalent. doug.

3092. Matching to Crystal Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-05 02:05:00 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <gjMgg.3463$ap3.1904@news-server.bigpond.net.au>
Source record: 11893

Hi,

I am wanting to match the output of a SA602 Mixer to a 45MHz, 4-pole crystal filter and then match the output of the filter to the input of a SA605 IF receiver.

The filter datasheet specifies the termination impedance of 800 Ohms and 3pF.

I have not used crystal filters before and would appreciate some advice for typology of a suitable match.

The SA605 has a input impedance of 4500 Ohms par 3.5pF. Apparently they have a "sweet spot" if matched to 800R.
The SA602 has output impedance of 1500 Ohm (not sure of capacitance).

From what I can see, if I placed a 1k resistor across the SA605 input, this would give me close to 800R//3pF but not max. transfer of signal.

Some of the confusion I have is what to do with the 3pF termination requirement. I am not sure if this means that I could match the resistive components using an "L" or "Tapped C match" and then add another 3pF to each side of the filter ???

Any help much appreciated

Regards

David

3093. Re: 2SC2397 Datasheet ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-05 03:35:49 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4483A66E.17CD2FC5@earthlink.net>
Source record: 11894
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Jamie wrote:
>
> (HIT) NPN 60V 8A TRANSISTOR T0-220
> Vcbo = 60v
> Vbeo = 5 v
> Pc = 25w/
> etc..
> etc..
> looks like a generic 2n3055 type..

Really? What are you going to do with the other 90 watts? The TO-3
version is rated at 115 watts It isn't even close. Even the plastic
version is 90 watts

<http://www.onsemi.com/PowerSolutions/search.do?searchString=2n3055&searchType=others&tabbed=Y&clearFilters=Y>

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

3094. Re: Matching to Crystal Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-05 03:44:24 UTC
From: Andy <andysharpe@juno.com>
Message-ID: <1149479064.193604.313210@g10g2000cwb.googlegroups.com>
Source record: 11895

David wrote:
> Hi,
>
> I am wanting to match the output of a SA602 Mixer to a 45MHz, 4-pole
> crystal filter and then match the output of the filter to the input
> of a SA605 IF receiver.
>
> The filter datasheet specifies the termination impedance of 800 Ohms and
> 3pF.
>
> I have not used crystal filters before and would appreciate some advice
> for typology of a suitable match.
>
> The SA605 has a input impedance of 4500 Ohms par 3.5pF. Apparently they
> have a "sweet spot" if matched to 800R.
> The SA602 has output impedance of 1500 Ohm (not sure of capacitance).
>
> From what I can see, if I placed a 1k resistor across the SA605 input,
> this would give me close to 800R//3pF but not max. transfer of signal.
>
> Some of the confusion I have is what to do with the 3pF termination
> requirement. I am not sure if this means that I could match the
> resistive components using an "L" or "Tapped C match" and then add
> another 3pF to each side of the filter ???
>
>
> Any help much appreciated
>
> Regards
>
> David

Andy writes:

You've generally got it right....
A xtal filter wants to see a particular input SOURCE resistance and
a particular LOAD resistance to develop the passband it was designed
for....

If your source has an output impedance of 4500 ohms, you would
want to transform it down to the 800 ohms specified. This can be
done in a transformer, but I usually do it with a split capacitor tank
circuit..... making the inductor the tuneable part.

If the load wants to "see" a capacitance, I usually use a 2-20pf trimmer , together with whatever else impedance transformation is available. Then I can tune the variable cap for the desired passband characterists... Note that both the input and the output are tuned in my technique....

If you don't have a sweep generator, you can just sweep the gen you have back and forth to see if there are any ripples in the passband.... Optimum is generally with the minimum ripples... So, first tune the input and output for max output... Then rock the generator to check for ripples... Often a very small adjustment in the tuning will minimize the ripples at that point...

It ain't rocket surgery, but if you try to use fixed components it ain't gonna happen, since you don't know your circuit strays....

Andy W4OAH

3095. Re: Want To Build a Directional, Amplified Medium Wave Receiving Antenna - Where To Start?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-05 03:56:18 UTC
From: Rex <me@hutmail.invalid>
Message-ID: <dga78291n1hheolmns69pq5f7ui1mrto7m@4ax.com>
Source record: 11897

On Fri, 02 Jun 2006 20:29:10 -0000, Dan Winker <dwinker@visi.com> wrote:

>I live out in the country where the internet barely reaches and little radio stations are weak. My wife has recently taken to needing to listen to the ghost hunters show at 10 to midnight Sunday nights on KLBP which seems to me to be 5kW. It comes in acceptably during the day, but at night it's extremely weak and seems to be interfered with by another station. Maybe KLBP has to reduce their power at night. I don't know.

Nobody mentioned propagation. It's probably day/night changes in the
atmosphere that are making the main difference in reception. A station
fairly close that you recieve ok in the day can be less strong at night.
Also strong stations far away that you would never hear during the day
can come in really strong at night due to bouncing.

A directional antenna may help some, but there is no guarantee that you
can solve your reception problem.

3096. Re: Matching to Crystal Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-05 04:42:42 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <6DOgg.3511$ap3.1380@news-server.bigpond.net.au>
Source record: 11798

Andy,

Thanks for the information. So my matching circuit may look like....

Mixer Out(1k5) -> Series coupling cap(1n) -> Var L to ground -> C-Tap
across L -> Crystal Filter -> C-Tap -> var L across C-Tap -> Coupling
C(1n) -> SA605 Input (4500//3.5 pF)

C-Tap caps to ground are also tuneable.

I suppose the Q of the match would not need to be particularly high as
the selectivity is provided by the Crystal filter.

Regards

David

Andy wrote:
> David wrote:
>> Hi,
>>
>> I am wanting to match the output of a SA602 Mixer to a 45MHz, 4-pole
>> crystal filter and then match the output of the filter to the input
>> of a SA605 IF receiver.
>>
>> The filter datasheet specifies the termination impedance of 800 Ohms and
>> 3pF.
>>
>> I have not used crystal filters before and would appreciate some advice
>> for typology of a suitable match.
>>
>> The SA605 has a input impedance of 4500 Ohms par 3.5pF. Apparently they
>> have a "sweet spot" if matched to 800R.
>> The SA602 has output impedance of 1500 Ohm (not sure of capacitance).
>>
>> From what I can see, if I placed a 1k resistor across the SA605 input,
>> this would give me close to 800R//3pF but not max. transfer of signal.
>>
>> Some of the confusion I have is what to do with the 3pF termination
>> requirement. I am not sure if this means that I could match the
>> resistive components using an "L" or "Tapped C match" and then add
>> another 3pF to each side of the filter ???
>>
>>
>> Any help much appreciated
>>

>> Regards
>>
>> David
>
>
> Andy writes:
>
> You've generally got it right....
> A xtal filter wants to see a particular input SOURCE resistance and
> a particular LOAD resistance to develop the passband it was designed
> for....
>
> If your source has an output impedance of 4500 ohms, you would
> want to transform it down to the 800 ohms specified. This can be
> done in a transformer, but I usually do it with a split capacitor tank
> circuit..... making the inductor the tuneable part.
>
> If the load wants to "see" a capacitance, I usually use a 2-20pf
> trimmer , together with whatever else impedance transformation
> is available. Then I can tune the variable cap for the desired
> passband characterists... Note that both the input and the output
> are tuned in my technique....
>
> If you don't have a sweep generator, you can just sweep the
> gen you have back and forth to see if there are any ripples in
> the passband.... Optimum is generally with the minimum ripples...
> So, first tune the input and output for max output... Then rock
> the generator to check for ripples... Often a very small adjustment
> in the tuning will minimize the ripples at that point...
>
> It ain't rocket surgery, but if you try to use fixed components
> it ain't gonna happen, since you don't know your circuit strays....
>
> Andy W4OAH
>

3097. Re: 2SC2397 Datasheet ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-05 04:48:44 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4483B784.56787D3D@earthlink.net>
Source record: 11799
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Jamie wrote:
>
> Michael A. Terrell wrote:
>
> > Jamie wrote:
> >
> >>(HIT) NPN 60V 8A TRANSISTOR T0-220
> >>Vcbo = 60v
> >>Vbeo = 5 v
> >>Pc = 25w/
> >>etc..
> >>etc..
> >> looks like a generic 2n3055 type..
> >
> >
> >
> > Really? What are you going to do with the other 90 watts? The TO-3
> > version is rated at 115 watts It isn't even close. Even the plastic
> > version is 90 watts
> >
> what to do with the remaining watts? i don't see your
> point?

That's about what I expected.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

3098. Re: Diff between xtal with 3 leads vs. 2 leads?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-05 04:51:57 UTC
From: C <temp1@tomochka.com>
Message-ID: <1149483117.438265.297750@g10g2000cwb.googlegroups.com>
Source record: 11800

Allison,

You might be misunderstanding. I'm modifying a Midland 13-380 to
transmit in the 10 meter band for use as a CW beacon. The xtal is
9.4MHz to replace the transmit xtal per instructions here:
http://www.4sqrp.com/resource/10m_beacon/10m_beacon.htm

Should put the freq up in the 10M beacon portion of the band if I can
hook up the 3 leads correctly and if it is indeed a proper application
for the part.

Thanks!

- C

nospam@nouce.bellatlantic.net wrote:
> On 3 Jun 2006 10:46:21 -0700, "C" <temp1@tomochka.com> wrote:
>
> >Hi,
> >
> >Working on converting an old CB to a 10 meter beacon. Obtained some
> >xtals in the correct range I need, but they have 3 leads instead of 2.
> >Are these resonators? Can I use them as direct replacement for xtals in
> >the CB radio? Where does the 3rd lead go?
> >
> >BTW, if anyone has a schematic for a barebones 10M tx, 1W +/-, please
> >send a copy if you can with parts list.
> >Tnx!
>
> If you can be more specific on the CB I can give a better answer.
> I will assume US AM/SSB radios.
>
> The likley case is a 10.695 crystal filter.
>
> The second likely case is ground lead on common crystal.
>
> IF foreign (outside usa) FM radio then a 10.7mhz crystal filer is
> packaged that way. Those filters are available in 4.5nhz, 10.7, 10.8
> 21.4 and 45mhz commonly and there are others.
>
> Allison

3099. Re: Identifying Surplus Toroid Material

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-05 06:58:58 UTC
From: Mike Monett <No@email.adr>
Message-ID: <Xns97D91E49F7CB7Noemailadr@208.49.80.251>
Source record: 11801

Alan Peake <adpeake@killspam.internode.on.net> wrote:

> Steve, the usual reason for the apparent low Q is that it is not being
> measured at the frequency that will give highest Q. Try fewer turns and
> higher frequencies as a first attempt. I've measured many cores this
> way. If you like, I can email you an XL spreadsheet with the all the
> cores I've measured so far. Switchmode cores seems to have
> permeabilities quite a bit higher than 600.
> Alan
> VK2ADB

Alan, are the ferrite toroids used to filter the output of pc power
supplies or the ac input of microwave ovens useful for other applications?

Or is the ferrite material lossy like the small ferrite beads used for emi
reduction on wires?

Regards,

Mike Monett

3100. Re: 2SC2397 Datasheet ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-05 07:10:49 UTC
From: Jamie <jamie_ka1lpa_not_valid_after_ka1lpa_@charter.net>
Message-ID: <PSNgg.62$815.17@fe05.lga>
Source record: 11896
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Michael A. Terrell wrote:

> Jamie wrote:
>
>>(HIT) NPN 60V 8A TRANSISTOR T0-220
>>Vcbo = 60v
>>Vbeo = 5 v
>>Pc = 25w/
>>etc..
>>etc..
>> looks like a generic 2n3055 type..
>
>
>
> Really? What are you going to do with the other 90 watts? The TO-3
> version is rated at 115 watts It isn't even close. Even the plastic
> version is 90 watts
>
what to do with the remaining watts? i don't see your
point?

--
Real Programmers Do things like this.
http://webpages.charter.net/jamie_5

3101. Re: 2SC2397 Datasheet ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-05 13:20:32 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1149513632.832880.31820@i40g2000cwc.googlegroups.com>
Source record: 11802
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Bob wrote:

> I used to work with a guy named Kavanagh, here in California. Does the name
> Dracon ring a bell?

Sorry, it doesn't. I've been to California a few times on business
trips but I'm in Ontario (Canada, not California !).

Steve

3102. Re: Coil stock

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-05 16:15:08 UTC
From: Rob Mills <robmills@cox.net>
Message-ID: <dMYgg.85137$IZ2.42804@dukeread07>
Source record: 11803

"mrhaney" <w4pqw@cox.net> wrote in message
news:1149386257.083333.63900@i39g2000cwa.googlegroups.com...

>>I am in need of some B&W coil stock...B&W # 1032T .. It is 24 ga. wire
1 1/4 " dia. 32 turns per inch . also B&W 3020 <<<

www.surplussales.com/Inductors/Ind-B-WCoilStock.html

3103. Re: Matching to Crystal Filter

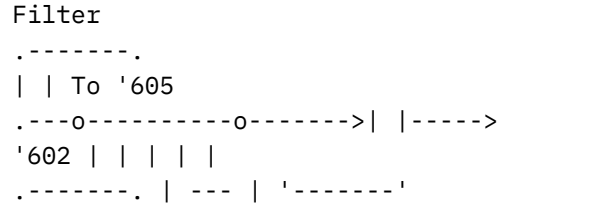
Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-05 16:18:50 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <q9ednbtW3Jr4xBnZnZ2dnUVZ_omdnZ2d@web-ster.com>
Source record: 11804

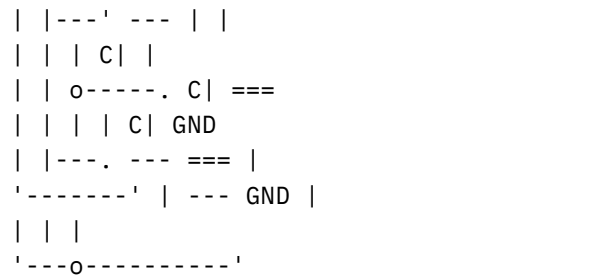
David wrote:

(top posting fixed)

> Andy wrote:
>
>> David wrote:
>>
>>> Hi,
>>>
>>> I am wanting to match the output of a SA602 Mixer to a 45MHz, 4-pole
>>> crystal filter and then match the output of the filter to the input
>>> of a SA605 IF receiver.
>>>
>>> The filter datasheet specifies the termination impedance of 800 Ohms and
>>> 3pF.
>>>
>>> I have not used crystal filters before and would appreciate some advice
>>> for typology of a suitable match.
>>>
>>> The SA605 has a input impedance of 4500 Ohms par 3.5pF. Apparently they
>>> have a "sweet spot" if matched to 800R.
>>> The SA602 has output impedance of 1500 Ohm (not sure of capacitance).
>>>
>>> From what I can see, if I placed a 1k resistor across the SA605 input,
>>> this would give me close to 800R//3pF but not max. transfer of signal.
>>>
>>> Some of the confusion I have is what to do with the 3pF termination
>>> requirement. I am not sure if this means that I could match the
>>> resistive components using an "L" or "Tapped C match" and then add
>>> another 3pF to each side of the filter ???
>>>
>>>
>>> Any help much appreciated
>>>
>>> Regards
>>>
>>> David
>>
>>
>>
>> Andy writes:
>>
>> You've generally got it right....
>> A xtal filter wants to see a particular input SOURCE resistance and

>> a particular LOAD resistance to develop the passband it was designed
>> for....
>>
>> If your source has an output impedance of 4500 ohms, you would
>> want to transform it down to the 800 ohms specified. This can be
>> done in a transformer, but I usually do it with a split capacitor tank
>> circuit..... making the inductor the tuneable part.
>>
>> If the load wants to "see" a capacitance, I usually use a 2-20pf
>> trimmer , together with whatever else impedance transformation
>> is available. Then I can tune the variable cap for the desired
>> passband characterists... Note that both the input and the output
>> are tuned in my technique....
>>
>> If you don't have a sweep generator, you can just sweep the
>> gen you have back and forth to see if there are any ripples in
>> the passband.... Optimum is generally with the minimum ripples...
>> So, first tune the input and output for max output... Then rock
>> the generator to check for ripples... Often a very small adjustment
>> in the tuning will minimize the ripples at that point...
>>
>> It ain't rocket surgery, but if you try to use fixed components
>> it ain't gonna happen, since you don't know your circuit strays....
>>
>> Andy W4OAH
>>
> Andy,
>
> Thanks for the information. So my matching circuit may look like....
>
> Mixer Out(1k5) -> Series coupling cap(1n) -> Var L to ground -> C-Tap
> across L -> Crystal Filter -> C-Tap -> var L across C-Tap -> Coupling
> C(1n) -> SA605 Input (4500//3.5 pF)
>
> C-Tap caps to ground are also tunable.
>
> I suppose the Q of the match would not need to be particularly high as
> the selectivity is provided by the Crystal filter.
>
> Regards
>
> David
>
Something like this:





with an equivalent network going to the '605. You need enough Q to make the circuit appear balanced -- you're depending on the Q of the tank to overwhelm the inherent imbalance of the filter impedance. You _should_ be able to do this just by adjusting the coil, but I haven't tried it with crystal filters, so what do I know?

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

3104. Dissipating High RF Power in Vacuums

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-05 16:23:54 UTC
From: Bobby <originalbobjones@aim.com>
Message-ID: <1149524634.387224.292710@g10g2000cwb.googlegroups.com>
Source record: 11805

All,
What methods are commonly used to dissipate high RF power in vacuum chambers, apart from conduction cooled plates?

Any response is welcomed.

Thanks.

Bobby.

3105. Re: Diff between xtal with 3 leads vs. 2 leads?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-05 17:05:26 UTC
From: C <temp1@tomochka.com>
Message-ID: <1149527126.307414.145370@f6g2000cwb.googlegroups.com>
Source record: 11806

Thanks Allison.

The Midland is of the second variety you described and will require retuing the sections once the TX xtal is replaced. Will take further questions off-line.

73,

C

nospam@nouce.bellatlantic.net wrote:
> On 4 Jun 2006 21:51:57 -0700, "C" <temp1@tomochka.com> wrote:
>
> >Allison,
> >
> >You might be misunderstanding. I'm modifying a Midland 13-380 to
> >transmit in the 10 meter band for use as a CW beacon. The xtal is
> >9.4MHz to replace the transmit xtal per instructions here:
> >http://www.4sqrp.com/resource/10m_beacon/10m_beacon.htm
>
> Seems I do understand but you still didn't answer the question.
>
> OK, that is a CB radio (USA 11M AM flavor). Likely that is a crystal
> of the three legged variety wher one leg is a case ground or anchor.
>
> However I have a RS40ch radio in my parts bin where the 10.695mhz
> three legged thing is a crystal filter!
>
> >Should put the freq up in the 10M beacon portion of the band if I can
> >hook up the 3 leads correctly and if it is indeed a proper application
> >for the part.
>
> The question was is it a crystal or a crystal filter? As both come
> packaged that way. At 9.4mhz it's likely a crystal. If so the
> middle (case ground) is optional.
>
> I don't happen to have the 13-380 schematic but I can make a general
> set of comments:
>
> ANY CB radio with a 10.240 mhz crystal and an IC near it has a PLL for
> frequency control and conversion 10M is not as simple as just changing
> the 10.240 rock. The reasonis the 10.240 is not direcly the TX or RX
> "rock" but the reference for the PLL.
>
> CB radios come on three basic flavors. Cheap and old, used a crystal

> per channel and were often limited to 3 to 12 channels. OLD 23
> channel that used usually combination of 37.x, 10.1xx and 10.5xx
> (or 23 and 14mhz) crystals to get RX and TX by mixing the result.
> Newer (very late 23ch and ALL 40ch) used PLL system with 10.240 as
> reference and PLL chip like 858, 5807, 14506 and maybe a dozen other
> part numbers. Those are the most challenging.
>
> Old and cheap crystal per channel just reqires a rock of the correct
> type and frequency and some retuning.
>
> Old 23ch required picking a pair of rocks or atlest one to get
> the mixed pair to be 10M and then retuning the whole synth and
> TX chain. Often changing the rocks from 37.6 and 10.595 (27.005 CB
> ch 4) to a 37.6 and 9.56 (for 28.040) means the 10.5mhz osc needs to
> be retuned and the tx bandpass filter retuned from 27mhz to 28 before
> the unit will transmit at all. If the 37.x osc crystal is changed
> that will also have the same effect as then that osc needs retuning
> and the band pass filter as well.
>
> The newer PLL based radios are a whole different story and there are
> three different topologies for getting the TX frequency. Some are
> easier than others. Some will not go without a fight. In any case
> schematic for the radio and some understanding of how the PLL
> for that radio works is needed to get a result that works. FYI: the
> PLL based designs have a TX lockout circuit if the PLL is out of lock
> or misprogrammed.
>
> We can discuss off line at kb1gmx at arrl dot net.
>
> Allison

3106. Re: need: smd transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 00:04:19 UTC
From: doug <doug.morsit@virgin.net>
Message-ID: <7E3hg.13186$rC1.3897@newsfe4-gui.ntli.net>
Source record: 11807

<nospam@nouce.bellatlantic.net> wrote in message
news:9du682tk4i5hjb80lrug93ikdruskiqi8f@4ax.com...
> On Sun, 04 Jun 2006 22:32:52 GMT, "doug" <doug.morsit@virgin.net>
> wrote:
>
> >
> ><nospam@nouce.bellatlantic.net> wrote in message
> >news:9qj48258c57g4hodup6aavgd79rsvq5mi2@4ax.com...
> >> On Sun, 04 Jun 2006 01:28:10 GMT, "doug" <doug.morsit@virgin.net>
> >> wrote:
> >>
> >> >Hi all, am looking for source in UK for Sony dual gate n channel
surface
> >> >mount transistors type SGM 2016M to repair yaesu ft8000 radio. have
> >checked
> >> >online parts lists for the usual firms in uk,with no luck! want three
> >off,
> >> >or does anyone know of equivalent type? thanks for any help. doug.
> >> >
> >>
> >> No but likely that part number is a inhouse designation. One way to
> >> cheat the whole mess is look up a SMT DG fet sourced from Sony
> >> as I bet there only a few parts to pick from. Alternate is Phillips
> >> also does SMT DG fets and likely they would work.
> >>
> >> Allison
> >
> >
> >thanks for reply Allison, will check for Phillips equivalent. doug.
> >
> You may have to replace by inference(similar specs or function) rather
> than direct part number match.
>
> Allison

yes,that had occurred to me too. thanks for help Allison doug.

3107. Re: Matching to Crystal Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 00:53:05 UTC
From: Andy <andysharpe@juno.com>
Message-ID: <1149555185.183482.145350@i40g2000cwc.googlegroups.com>
Source record: 11808

David wrote:
> Andy,
>
> Thanks for the information. So my matching circuit may look like....
>
> Mixer Out(1k5) -> Series coupling cap(1n) -> Var L to ground -> C-Tap
> across L -> Crystal Filter -> C-Tap -> var L across C-Tap -> Coupling
> C(1n) -> SA605 Input (4500//3.5 pF)
>
> C-Tap caps to ground are also tuneable.
>
> I suppose the Q of the match would not need to be particularly high as
> the selectivity is provided by the Crystal filter.
>
> Regards
>
> David
>

Andy writes:

There is a formula for the required Q to perform the match.

Qreq'd = Square Root of ((Rhigh/Rlow) - 1)

1500
or Sqrt of (------------ - 1)
800

It's been a while so, if I got this wrong, I am sure some of the
local RF engineers will correct me...

Anyway,,, this is the minimum Q required in the tank to allow the
match
to be accomplished....

This comes from the equvalency formulae for series to parallel
comversion:

2 2
2
Rp = Rs (Q + 1) Xp = Xs (Q + 1) / Q

for coverting parallel resistance or reactance into equivalent
series resistance or reactance.....

Sure you can use Z and Y, but the above are much much easier.....

I can't follow your diagram very well, but I think you have it....
... I am assuming SINGLE ENDED OUTPUT. For balanced
output, it is different...

Andy W4OAH

3108. Re: Matching to Crystal Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 01:34:30 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrne89n7q.22c7.bit-bucket@shell.config.com>
Source record: 11809

On 5 Jun 2006 17:53:05 -0700, Andy wrote:
> <-snip->
> This comes from the equvalency formulae for series to parallel
> comversion:
>
> 2 2
> 2
> Rp = Rs (Q + 1) Xp = Xs (Q + 1) / Q

Before you try posting something like that again, you should make sure you are using a fixed-pitch font.

It probably is indecipherable to anyone except someone using the exact same proportional spaced font _and_ font size as you when you banged so many times on the space bar.

Jonesy

3109. Re: Matching to Crystal Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 02:30:20 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <0N5hg.4093$ap3.1712@news-server.bigpond.net.au>
Source record: 11810

Andy,

Thanks. I am using single-ended output from the SA602 as well as for the
SA605 input. I decouple the unused output/input with 100n Cap in each case.

How do you know the match is working correctly ? My concern is that when
I build the circuit and sweep it with a sig gen and tune it for peak,
how do I know the match to is correct in the first place.

Regards

David

Andy wrote:
> David wrote:
>> Andy,
>>
>> Thanks for the information. So my matching circuit may look like....
>>
>> Mixer Out(1k5) -> Series coupling cap(1n) -> Var L to ground -> C-Tap
>> across L -> Crystal Filter -> C-Tap -> var L across C-Tap -> Coupling
>> C(1n) -> SA605 Input (4500//3.5 pF)
>>
>> C-Tap caps to ground are also tuneable.
>>
>> I suppose the Q of the match would not need to be particularly high as
>> the selectivity is provided by the Crystal filter.
>>
>> Regards
>>
>> David
>>
>
> Andy writes:
>
> There is a formula for the required Q to perform the match.
>
> Qreq'd = Square Root of ((Rhigh/Rlow) - 1)
>
>
> 1500
> or Sqrt of (------------ - 1)
> 800
>
> It's been a while so, if I got this wrong, I am sure some of the
> local RF engineers will correct me...

>
> Anyway,,, this is the minimum Q required in the tank to allow the
> match
> to be accomplished....
>
> This comes from the equvalency formulae for series to parallel
> comversion:
>
>
> 2 2
> 2
> Rp = Rs (Q + 1) Xp = Xs (Q + 1) / Q
>
> for coverting parallel resistance or reactance into equivalent
> series resistance or reactance.....
>
> Sure you can use Z and Y, but the above are much much easier.....
>
>
> I can't follow your diagram very well, but I think you have it....
> ... I am assuming SINGLE ENDED OUTPUT. For balanced
> output, it is different...
>
> Andy W4OAH
>

3110. Re: Dissipating High RF Power in Vacuums

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 03:29:33 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <xE6hg.718$7G2.447@tornado.tampabay.rr.com>
Source record: 11811

Heat pipes? Carbon absorbers? Crash test dummies?

Bobby wrote:

>All,
>What methods are commonly used to dissipate high RF power in vacuum
>chambers, apart from conduction cooled plates?
>
>Any response is welcomed.
>
>Thanks.
>
>Bobby.
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

3111. Re: Identifying Surplus Toroid Material

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 08:14:56 UTC
From: Alan Peake <adpeake@killspam.internode.on.net>
Message-ID: <44853980.1010105@killspam.internode.on.net>
Source record: 11812

> Alan, are the ferrite toroids used to filter the output of pc power
> supplies or the ac input of microwave ovens useful for other applications?
>
The PC PSU filter toroids seem to be optimized for the 25KHz -85KHz
range so any applications you have for this frequency range could use
them. Similarly, the AC input to the oven is probably 50/60HZ so those
toroids would be better at the lower audio frequencies.

> Or is the ferrite material lossy like the small ferrite beads used for emi
> reduction on wires?
>
Not quite sure about beads - ordinary ferrite material has fairly
constant permeability up to a frequency determined by the ferrite mix,
then drops off. Beads tend to have an impedance peak at some desired
frequency range - e.g. 100-200MHz
Alan

3112. Re: Identifying Surplus Toroid Material

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 08:31:26 UTC
From: Mike Monett <No@email.adr>
Message-ID: <Xns97DA2DF30A34ENoemailadr@208.49.80.251>
Source record: 11813

Alan Peake <adpeake@killspam.internode.on.net> wrote:

> The PC PSU filter toroids seem to be optimized for the 25KHz -85KHz
> range so any applications you have for this frequency range could use
> them. Similarly, the AC input to the oven is probably 50/60HZ so those
> toroids would be better at the lower audio frequencies.
>
> Not quite sure about beads - ordinary ferrite material has fairly
> constant permeability up to a frequency determined by the ferrite mix,
> then drops off. Beads tend to have an impedance peak at some desired
> frequency range - e.g. 100-200MHz
> Alan

Thanks very much - that encourages me to try them and see how well
they perform.

Regards,

Mike Monett

3113. Re: Identifying Surplus Toroid Material

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 09:57:58 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <D6ednREIg8mMzxjZRVny1A@bt.com>
Source record: 11814

Ferrites have as many vices as they have virtues.

Ferrite salesmen cleverly make virtues out of vices.

3114. Re: Matching to Crystal Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 10:28:51 UTC
From: Andy <andysharpe@juno.com>
Message-ID: <1149589731.458222.322640@c74g2000cwc.googlegroups.com>
Source record: 11815

David wrote:
> Andy,
>
> Thanks. I am using single-ended output from the SA602 as well as for the
> SA605 input. I decouple the unused output/input with 100n Cap in each case.
>
> How do you know the match is working correctly ? My concern is that when
> I build the circuit and sweep it with a sig gen and tune it for peak,
> how do I know the match to is correct in the first place.
>
> Regards
>
> David
>

Andy replies:
Personally, I would use PSPICE to simulate the circuit to see if it
peaked
at the right point. Then I would measure the voltage at the top of the

tuned tank. Then I would replace the tank and load with a resistor
that
is equal to the source resistor and see that I have the same voltage...

Alternatively, the voltage on the output side of the Thevenin sourse
resistance should be half the voltage of the generator, if the load
is truly transformed up to the Thevenin source......

Little checks like that. Perhaps you can think of others..

I am sorry if your reader gave a problem with the formatting as I
was doing the best I could with what I had..... The "Qs" in the
last formulae are all " Q squared"..

You should look these formulae up in a book , like the ARRL handbook
or some other, to understand how they are used, and practice a little
with them... I wrote a BASIC program to do Series-Parallel conversion
using them, which makes it quicker (don't know where it is, tho).

Also, I would reccommend using PSPICE to verify all these small
circuits
to see how it works and verify that you are doing it right....
It's much easier that building and measuring, and you can try stuff out
and
get a better insight.....

Andy W4OAH

3115. Re: Matching to Crystal Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 10:42:47 UTC
From: Andy <andysharpe@juno.com>
Message-ID: <1149590567.761761.284670@y43g2000cwc.googlegroups.com>
Source record: 11816

Andy write:

I found an App note on the web that will
show you how to use it.

http://www.ece.utah.edu/~cfurse/microwave/LECTURE/L15/L15.html

You can probly find more by doing a google search on :

" Rp Impedance Matching "

3116. Re: Identifying Surplus Toroid Material

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 11:49:32 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <98GdnbXiy_p29hjZnZ2dnUVZ8qqdnZ2d@pipex.net>
Source record: 11817

Reg Edwards wrote:
> Ferrites have as many vices as they have virtues.
>
> Ferrite salesmen cleverly make virtues out of vices.
==========
But an electronics 'homebrewer' can find out characteristics anyway ,
through experimentation.

Frank GM0CSZ / KN6WH

3117. FS: High Quality Coax Connectors & Adapters atvery low prices

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 16:43:59 UTC
From: AAA RF Products <sales@aaarfproducts.com>
Message-ID: <fhihg.6121$rS6.5466@fed1read11>
Source record: 11819
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

Please email sales@aaarfproducts.com or call 949 481 3154 (San Clemente, CA, USA) for a copy of our latest catalog.

3118. Re: High Quality Coax Connectors & Adapters atvery low prices

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 16:50:14 UTC
From: Travis Jordan <no.one@no.net>
Message-ID: <anihg.235646$h54.98444@fe07.news.easynews.com>
Source record: 11820
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

AAA RF Products wrote:
> Please email sales@aaarfproducts.com or call 949 481 3154 (San
> Clemente, CA, USA) for a copy of our latest catalog.

Please stop spamming these newsgroups.

3119. Re: High Quality Coax Connectors & Adapters atvery low prices

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 17:17:14 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1149614234.717200.192860@u72g2000cwu.googlegroups.com>
Source record: 11821
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

Travis Jordan wrote:
> AAA RF Products wrote:
> > Please email sales@aaarfproducts.com or call 949 481 3154 (San
> > Clemente, CA, USA) for a copy of our latest catalog.
>
> Please stop spamming these newsgroups.
why at least it is better reading than most of the crap that get posted

3120. Re: High Quality Coax Connectors & Adapters atvery low prices

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 17:46:17 UTC
From: Jimbo <Jimbo@Jimbo.biz>
Message-ID: <e64er4$7ph$2@nntp.aioe.org>
Source record: 11822
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

"an_old_faggot"
<snip>
then stop your dumb shit,mork!

3121. Re: High Quality Coax Connectors & Adapters atvery low prices

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 17:48:42 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1149616122.862352.120170@h76g2000cwa.googlegroups.com>
Source record: 11823
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

Jimbo wrote:
> "an_old_faggot"
> <snip>
> then stop your dumb shit,mork!
what you ranting about?

3122. Re: Identifying Surplus Toroid Material

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 18:09:03 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <-JqdnTLcL5XQWBjZRVnyjQ@bt.com>
Source record: 11825

> Reg Edwards wrote:
> > Ferrites have as many vices as they have virtues.
> >
> > Ferrite salesmen cleverly make virtues out of vices.
> ==========
> But an electronics 'homebrewer' can find out characteristics anyway
,
> through experimentation.
>
> Frank GM0CSZ / KN6WH
==========

Only if he has first-class laboratory facilities.

And samples vary widely in their characteristics, one from another.

The best way of using one is to wind some wire on it. If it works in
your particular circuit then consider yourself lucky.

Reg.

3123. Re: Dissipating High RF Power in Vacuums

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 18:09:15 UTC
From: fmmck@aol.com
Message-ID: <fmmck-0606061409150001@ac949ecc.ipt.aol.com>
Source record: 11824

> Bobby wrote:
>
> >All,
> >What methods are commonly used to dissipate high RF power in vacuum
> >chambers, apart from conduction cooled plates?

Bobby-

The only remaining option is radiation.

Fred

3124. Re: Identifying Surplus Toroid Material

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 18:31:51 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <128bigq9gr415d4@corp.supernews.com>
Source record: 11826

Reg Edwards wrote:
>> Reg Edwards wrote:
>>> Ferrites have as many vices as they have virtues.
>>>
>>> Ferrite salesmen cleverly make virtues out of vices.
>> ==
>> But an electronics 'homebrewer' can find out characteristics anyway
> ,
>> through experimentation.
>>
>> Frank GM0CSZ / KN6WH
> ====================================
>
> Only if he has first-class laboratory facilities.
>
> And samples vary widely in their characteristics, one from another.
>
> The best way of using one is to wind some wire on it. If it works in
> your particular circuit then consider yourself lucky.

It's not nearly as bad as Reg says, and a surprising response from someone who measures ground conductivity to great depths in a kitchen sink.

An antenna analyzer hardly qualifies as "first-class laboratory facilities", yet it can quickly show you the impedance and Q of an inductor wound on a core at any frequency within its range. If saturation with DC is a problem, the impedance can be measured while DC is passed through another winding from a source having a high impedance at RF. And samples of cores are typically alike in basic characteristics within a few percent.

Ferrites are more commonly used at RF for wideband transformers and EMI suppression than for high-Q inductors. In those applications, minimum impedance magnitude is usually the criterion rather than Q or having a precise value. So even a rough approximation of impedance is usually all that's required. The magnitude of impedance can be measured with a variety of simple means in addition to an antenna analyzer. Only in those applications where a high Q inductor is required, usually at low frequencies, are better measurements required.

Roy Lewallen, W7EL

3125. Re: Dissipating High RF Power in Vacuums

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 18:40:09 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e64i6b$mk7$1@avnika.corp.mot.com>
Source record: 11827

"Fred McKenzie" <fmmck@aol.com> wrote in message
news:fmmck-0606061409150001@ac949ecc.ipt.aol.com...
> > Bobby wrote:
> >
> > >All,
> > > >What methods are commonly used to dissipate high RF power in vacuum
> > > >chambers, apart from conduction cooled plates?
>
> Bobby-
>
> The only remaining option is radiation.
>
> Fred

Don't know what's common. Since it is a *chamber* you could "pipe" it out
of the chamber. Perhaps a water cooled jacket to a radiator on the outside,
or Peltier or heat pipe to a chamber wall.
73, Steve, K9DCi

3126. CB president jackson for 10 m ham band

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 19:41:07 UTC
From: iw3arv <iw3arv@inwind.it>
Message-ID: <1149622867.533922.60990@i40g2000cwc.googlegroups.com>
Source record: 11828

Hello,

I'm searching a modification for the CB President Jackson to bring it
up to 30 Mhz.
I've searched on internet but I've only found simple modification to
add "F" band and reach 271 channels.
I'm a regularly licenced Ham!! and I want to use it on 30 Mhz.

Anyone know other modifications.

Thanks de Iw3arv Paolo Italy

3127. Re: CB president jackson for 10 m ham band

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 20:27:18 UTC
From: JT
Message-ID: <Gylhg.2515$ye5.809@fe13.usenetserver.com>
Source record: 11829

I've done one maybe 20 years ago I changed the 10.240 crystal then
had to re adjust all the tank coils will not work on 11 meters when
your done.
--

Posted with NewsLeecher v3.0 Final
* Binary Usenet Leeching Made Easy
* http://www.newsleecher.com/?usenet

3128. Re: Dissipating High RF Power in Vacuums

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 21:20:01 UTC
From: w8ji@akorn.net
Message-ID: <1149628801.636275.60190@h76g2000cwa.googlegroups.com>
Source record: 11830

Bobby wrote:
> All,
> What methods are commonly used to dissipate high RF power in vacuum
> chambers, apart from conduction cooled plates?
>
> Any response is welcomed.
>
> Thanks.

The only other method is radiation, since you already mentioned conduction.

Many high power glass vacuum tubes are cooled primarily by infrared radiation. Tantalum or moly anode power grid tubes like the 4-400 or 3-500 are cooled primarily by infrared radiation and to a much lesser extent conduction out the metal element supports.

73 Tom

3129. Re: Wireless World & Radio Engineering magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 22:47:11 UTC
From: Chris Jones <lugnut808@nospam.yahoo.com>
Message-ID: <128btt7d0j4joa3@corp.supernews.com>
Source record: 11831

Bob G. Mahrenholz wrote:

> Hi'
> I'm needing a copy of articles on bandpass filtering using negative
> mutual coupling
> (a la J.W. Miller) in the February 18, 1931 issue of Wireless World and
> in the December, 1936 issue of Radio Engineering magazine. Will pay a
> reward.
>
> Thanks,
> Bob
> bobm@edge.net

Perhaps you can buy it from these people:

http://www.kellybooks.co.uk/5-Mag-Tech-WW.htm

I have never dealt with them so I don't know what kind of people they are.

Chris

3130. Re: Identifying Surplus Toroid Material

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 23:18:03 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cKOdnYph6pADkBvZnZ2dnUVZ8qSdnZ2d@bt.com>
Source record: 11833

There is a coil.
It is 1" in diameter.
It is 2" long.
It has 20 turns.

How accurately can coil Q be determined at 30 MHz?

(1) Using an Autec antenna analyser?
(2) Using the best commercially available instrument.

Reg.

3131. Re: CB president jackson for 10 m ham band

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 23:19:41 UTC
From: Yukio YANO <yano@shaw.ca>
Message-ID: <h4ohg.248598$P01.247059@pd7tw3no>
Source record: 11832

iw3arv wrote:
> Hello,
>
> I'm searching a modification for the CB President Jackson to bring it
> up to 30 Mhz.
> I've searched on internet but I've only found simple modification to
> add "F" band and reach 271 channels.
> I'm a regularly licenced Ham!! and I want to use it on 30 Mhz.
>
> Anyone know other modifications.
>
> Thanks de Iw3arv Paolo Italy
>
Google "CB President Jackson" I found some interesting sites The Dumb
thing is Learning to ask the RIGHT Question.
Yukio YANO VE5YS

3132. Re: Matching to Crystal Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 23:39:48 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <8nohg.4561$ap3.1940@news-server.bigpond.net.au>
Source record: 11834

Andy,

Thanks for the link.

Regards

David

Andy wrote:
> Andy write:
>
> I found an App note on the web that will
> show you how to use it.
>
>
> http://www.ece.utah.edu/~cfurse/microwave/LECTURE/L15/L15.html
>
> You can probly find more by doing a google search on :
>
> " Rp Impedance Matching "
>

3133. Re: Identifying Surplus Toroid Material

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-06 23:57:16 UTC
From: Bob Furtaw <bob@N0ZPAMfurtaw.com>
Message-ID: <sd-dnW1noPo5ixvZnZ2dnUVZ_vednZ2d@comcast.com>
Source record: 11835

Hams can not design good Q circuits. I always hear them complaining on the
air. I hear "a lousy Q, a lousy Q" followed by their call signs. :-)
Bob F. W8IL

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cKOdnYph6pADkBvZnZ2dnUVZ8qSdnZ2d@bt.com...
> There is a coil.
> It is 1" in diameter.
> It is 2" long.
> It has 20 turns.
>
> How accurately can coil Q be determined at 30 MHz?
>
> (1) Using an Autec antenna analyser?
> (2) Using the best commercially available instrument.
> ----
> Reg.
>
>

3134. Re: Dissipating High RF Power in Vacuums

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-07 04:35:31 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <wr2dnSaf9o0XMxjZnZ2dnUVZ_rmdnZ2d@comcast.com>
Source record: 11818

Good question to ask NASA

3135. Re: Matching to Crystal Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-07 04:45:42 UTC
From: Jim <kill-spam@no-spam.org>
Message-ID: <EuednVj1x7tqxBvZnZ2dnUVZ_oCdnZ2d@comcast.com>
Source record: 11836

David wrote:
> Andy,
>
> Thanks. I am using single-ended output from the SA602 as well as for the
> SA605 input. I decouple the unused output/input with 100n Cap in each
> case.
>
> How do you know the match is working correctly ? My concern is that when
> I build the circuit and sweep it with a sig gen and tune it for peak,
> how do I know the match to is correct in the first place.
>
> Regards
>
> David
>

For RF matching and filter responses, I like to use RFSIMM99 which is an impedance analysis program using Sparameters.

The Sparameters are generally for active devices, but it also does a nice job with resistors, inductors, and capacitors. One trick it has is a tolerance analysis routine using monte carlo to choose randomg component tolerances. Very useful when testing to see if a particular circuit is likely to be tempermental, or if it will tolerate component variation.....

Just do a websearch for RFSIMM99 and you will find the program, it is freeware.

Jim Pennell
N6BIU

--

21:45 Pacific Time Zone
Jun 6 2006

International Time
04:45 UTC
07.06.2006

3136. Re: Matching to Crystal Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-07 05:03:24 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <w6thg.4789$ap3.141@news-server.bigpond.net.au>
Source record: 11837

Jim,

I have RFsim99.

Do you have an example model for the filter ?

thanks

David

Jim wrote:
> David wrote:
>> Andy,
>>
>> Thanks. I am using single-ended output from the SA602 as well as for the
>> SA605 input. I decouple the unused output/input with 100n Cap in each
>> case.
>>
>> How do you know the match is working correctly ? My concern is that when
>> I build the circuit and sweep it with a sig gen and tune it for peak,
>> how do I know the match to is correct in the first place.
>>
>> Regards
>>
>> David
>>
>
>
>
>
> For RF matching and filter responses, I like to use RFSIMM99 which is an
> impedance analysis program using Sparameters.
>
> The Sparameters are generally for active devices, but it also does a nice
> job with resistors, inductors, and capacitors. One trick it has is a
> tolerance analysis routine using monte carlo to choose randomg component
> tolerances. Very useful when testing to see if a particular circuit is
> likely to be tempermental, or if it will tolerate component variation.....
>
> Just do a websearch for RFSIMM99 and you will find the program, it is
> freeware.
>
>
>
> Jim Pennell
> N6BIU

>
>
>

3137. Re: Matching to Crystal Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-07 05:51:07 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <fPthg.4816$ap3.758@news-server.bigpond.net.au>
Source record: 11838

Andy,

What did you use to measure the voltage on the top of the tank ? I have a 300MHz scope but the probe still seems to load down the circuit being measured.

Thanks

Regards

David

Andy wrote:
> Andy write:
>
> I found an App note on the web that will
> show you how to use it.
>
>
> http://www.ece.utah.edu/~cfurse/microwave/LECTURE/L15/L15.html
>
> You can probly find more by doing a google search on :
>
> " Rp Impedance Matching "
>

3138. Re: CB president jackson for 10 m ham band

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-07 08:08:47 UTC
From: iw3arv <iw3arv@inwind.it>
Message-ID: <1149667726.987455.92790@u72g2000cwu.googlegroups.com>
Source record: 11839

Hello Yano,

I've not the habit to post without having search on Google.
I've only find the same modification over and over and I would to know
if there are some interesting or hidden sites!!! As I know that there
are other mods!!!
I've also seen the old version of some sites with
www.archive.org/web/web.php

73 de iw3arv

Yukio YANO ha scritto:

> Google "CB President Jackson" I found some interesting sites The Dumb
> thing is Learning to ask the RIGHT Question.
> Yukio YANO VE5YS

3139. Re: CB president jackson for 10 m ham band

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-07 08:10:04 UTC
From: iw3arv <iw3arv@inwind.it>
Message-ID: <1149667804.773598.276070@j55g2000cwa.googlegroups.com>
Source record: 11840

This what probably I 'll do.

Thanks

jt@trek.net ha scritto:

> I've done one maybe 20 years ago I changed the 10.240 crystal then
> had to re adjust all the tank coils will not work on 11 meters when
> your done.
> --
> ---
> Posted with NewsLeecher v3.0 Final
> * Binary Usenet Leeching Made Easy
> * http://www.newsleecher.com/?usenet
> ---

3140. Re: Identifying Surplus Toroid Material

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-07 08:29:07 UTC
From: Alan Peake <adpeake@killspam.internode.on.net>
Message-ID: <44868E53.7030408@killspam.internode.on.net>
Source record: 11841

Bob Furtaw wrote:
> Hams can not design good Q circuits. I always hear them complaining on the
> air. I hear "a lousy Q, a lousy Q" followed by their call signs. :-)
Love it!!
Actually, I measure Q by the following Method (for ferrite or iron
powder cores):
First, wind about 10 turns on the toroid. Then put a capacitor across it
- preferrably a 1% mica or similar. Now, connect to a signal generator
via a non-inductive resistor, put an oscilloscope (preferrably with a
X10 probe) across the parallel tuned circuit and find the resonant
frequency Fr. Add a smaller amount of capacitance across the circuit and
re-measure the Fr. Measure the signal generator voltage and the voltage
across the tuned circuit at resonance.
Now you have all the data necessary to calculate the inductance, stray
capacitance and Q. Vary the resistor so that the voltage drop across it
at resonance is about the same as the voltage across the tuned circuit
to maximise the measuement of Q.
If the Q is lower than expected, try a range of Fr by changing the
number of turns and/or the resonating capacitance.
How accurate is this? Good enough for my purposes :)
73 de Alan
VK2ADB

3141. Re: Identifying Surplus Toroid Material

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-07 08:39:57 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <128d470n782a25b@corp.supernews.com>
Source record: 11842

Reg Edwards wrote:
> There is a coil.
> It is 1" in diameter.
> It is 2" long.
> It has 20 turns.
>
> How accurately can coil Q be determined at 30 MHz?
>
> (1) Using an Autec antenna analyser?
> (2) Using the best commercially available instrument.

Those are good questions, although not particularly germane to the current discussion. A toroid is much easier to measure than an air core inductor with fair accuracy, since the field is largely confined. What makes solenoidal coils relatively difficult is the problem of avoiding coupling to the measuring device and nearby objects.

I'll mention again that ferrites are most commonly used at RF for wideband transformers, baluns, and EMI suppression. In those applications, Q is typically very low (1 or less) and generally immaterial.

To answer the question, though, I first note that your program predicts a Q of about 500 for this coil, with a Z of about 960 ohms and an ESR of about 1.4 ohms at 30 MHz. If it's correct, an antenna analyzer would be poor choice for measuring it for several reasons -- poor accuracy at that high an impedance, poor resolution of the ESR, and residual resistance in the measuring device. So probably +/- 50% would be wishful thinking. On the other hand, a good Q meter might make 20% if you could get the coil far enough away from the fixture, and I could probably do around 30% with my GR impedance bridge.

But what's the point you're trying to make?

Roy Lewallen, W7EL

3142. Re: Identifying Surplus Toroid Material

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-07 11:32:02 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1149679922.385360.162210@i40g2000cwc.googlegroups.com>
Source record: 11843

By the way, I found another surplus toroid with somewhat better characteristics....higher permeability and higher Q, as measured around 200 kHz. That has now been incorporated in a small switching power supply operating at about 30 kHz. It works, though not as well as is predicted by a SPICE model. Must be some of those vices that Reg mentions ! My SPICE model does not take into account the variation of the permeability/inductance with DC current, so this may be at least part of the difference. One of these years I'll break down and get an oscilloscope so I can figure out what non-microwave circuits are really doing, and maybe a signal generator that works below 150 kHz.

It is adequate (barely) for what I need, however, so it has now been incorporated as a bias supply in my 3.4 GHz transverter. I'm crossing my fingers that it keeps working over the temperature range it will encounter in portable operation.

The Q-measurement technique I have been using involves connecting a signal generator through a 50 ohm attenuator (to set the output impedance) to a 50-ohm input microwattmeter. The inductor and a capacitor are connected as a series-tuned resonant circuit and inserted either in series between the pad and the meter or shunted across the meter input. The inductance is obtained by finding the resonant frequency and working backward through the formula, given the known capacitance. The tuned circuit is then replaced with a resistor which is adjusted (by substitution) to give the same power on the meter as the tuned circuit at resonance. This resistance is equal to the equivalent series resistance of the tuned circuit, from which the Q can be determined.

As yet the Q results I obtain with the series and shunt connections tend to be somewhat different, so my techniques certainly have room for improvement (there are quite obvious stray-coupling issues, even at LF), but it gives me a rough idea, anyway.

73,
Steve VE3SMA

3143. Re: High Quality Coax Connectors & Adapters atvery low prices

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-07 12:29:17 UTC
From: Oscar <coax_guy@coaxguy.net>
Message-ID: <4486C69D.EEADB75A@coaxguy.net>
Source record: 11844
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

I don't see the original posts, I filter them out

put sales@aaarfproducts.com in sender field

put AAA RF in subject field

and no more of the ads.

coax guy

3144. Re: Identifying Surplus Toroid Material

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-07 13:43:35 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <hr-dnahEeq3mRRvZnZ2dnUVZ8tKdnZ2d@bt.com>
Source record: 11845

"Roy Lewallen" wrote
> But what's the point you're trying to make?
=====================================

No need to be suspicious, Roy.

Nobody can accuse you of suffering from delusions of accuracy.

Actually, I'm waiting for a reply perhaps from somebody who has a
"best commercially available instrument".

Reg.

3145. Good IC-based CW transmitter/reciever?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-07 19:17:53 UTC
From: "dave.harper" <dave.harper@gmail.com>
Message-ID: <1149707873.537462.90360@j55g2000cwa.googlegroups.com>
Source record: 11846
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

I've been doing some browsing on the net, but I'm having trouble finding a schematic for a good IC-based transmitter/reciever for CW (or RTTY, AMTOR, etc). Does anyone know of a good circuit/schematic for this?

Thanks in advance,
Dave

3146. Re: Good IC-based CW transmitter/reciever?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-07 20:43:18 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <e67dp7$cn7$1@news.onet.pl>
Source record: 11847
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

dave.harper wrote:
> I've been doing some browsing on the net, but I'm having trouble
> finding a schematic for a good IC-based transmitter/reciever for CW (or
> RTTY, AMTOR, etc). Does anyone know of a good circuit/schematic for
> this?

Simple or complicated? Mono or multiband?

If you need something simple and monoband just look for "Aquarius" by
sp5ddj (www.qsl.net/sp5ddj/)

Over 100 working.

MAc

3147. Re: Wireless World & Radio Engineering magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-08 04:22:31 UTC
From: "Bob G. Mahrenholz" <bobm@edge.net>
Message-ID: <4487A5C8.3386EB12@edge.net>
Source record: 11748

That sounds great Chris. Thanks. They have a lot of interesting old magazines.

Bob

Chris Jones wrote:

> Bob G. Mahrenholz wrote:
>
> > Hi'
> > I'm needing a copy of articles on bandpass filtering using negative
> > mutual coupling
> > (a la J.W. Miller) in the February 18, 1931 issue of Wireless World and
> > in the December, 1936 issue of Radio Engineering magazine. Will pay a
> > reward.
> >
> > Thanks,
> > Bob
> > bobm@edge.net
>
> Perhaps you can buy it from these people:
>
> http://www.kellybooks.co.uk/5-Mag-Tech-WW.htm
>
> I have never dealt with them so I don't know what kind of people they are.
>
> Chris

3148. Modulated VXO + IF = HF FSK transmitter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-08 06:44:30 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrne8fhqe.23ns.ben@saturn.home.ben.com>
Source record: 11749

I've been brainstorming ways to make a cheap HF APRS beacon. HF APRS
is on 10.151, or more precisely, mark = 10.149.200 and space = 10.149.400.
It occured to me that if I had an appropriate crystal, FSK could be
a simple matter of driving two different voltages into a VXO. Of
course it's not easy to find a suitable crystal. I grabbed the list of
all crystals on Digikey and paired them up and sorted for the best
pairs producing mixer products near 10.149. The most promising combo
is 25MHz - 14.85MHz = 10.150MHz requiring 800Hz worst case pull to MARK
which is .006% of 14.85MHz.

So the idea is to use something like SA602A with the 25MHz LO and a
VXO driven by a microcontroller providing a ~14.85MHz "IF" with the
FSK signal (300 baud packet).

Has anyone tried something similar? I'm not sure if the VXO will
slew fast enough or accurately enough. I'm also wondering if a one-
time calibration of the VXO voltages would keep the output accurate
enough for a normal radio+TNC setup to consistently receive it.

Any ideas appreciated!

--
Ben Jackson
<ben@ben.com>
http://www.ben.com/

3149. Re: Modulated VXO + IF = HF FSK transmitter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-08 15:14:01 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <jPCdnd7G054soxXZnZ2dneKdnZydnZ2d@web-ster.com>
Source record: 11750

Ben Jackson wrote:

> I've been brainstorming ways to make a cheap HF APRS beacon. HF APRS
> is on 10.151, or more precisely, mark = 10.149.200 and space = 10.149.400.
> It occured to me that if I had an appropriate crystal, FSK could be
> a simple matter of driving two different voltages into a VXO. Of
> course it's not easy to find a suitable crystal. I grabbed the list of
> all crystals on Digikey and paired them up and sorted for the best
> pairs producing mixer products near 10.149. The most promising combo
> is 25MHz - 14.85MHz = 10.150MHz requiring 800Hz worst case pull to MARK
> which is .006% of 14.85MHz.
>
> So the idea is to use something like SA602A with the 25MHz LO and a
> VXO driven by a microcontroller providing a ~14.85MHz "IF" with the
> FSK signal (300 baud packet).
>
> Has anyone tried something similar? I'm not sure if the VXO will
> slew fast enough or accurately enough. I'm also wondering if a one-
> time calibration of the VXO voltages would keep the output accurate
> enough for a normal radio+TNC setup to consistently receive it.
>
> Any ideas appreciated!
>
For 300 baud you should be all right -- I'm dinking with frequency-shift pulse position modulation with 1ms pulses, which work fine on a ~16MHz crystal.

I'd build it to adjust the 25MHz LO down a bit with some excessive capacitance in parallel, or with a coil in series. If you arrange for a trimmer in there someplace you won't have to play with adjusting voltages to the XCO -- in fact you could implement the XCO with a switching diode to a cap.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

3150. 8875

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-08 18:29:36 UTC
From: Mitchell <mingram1234@alltel.net>
Message-ID: <aa250$44886c95$471c706c$28099@ALLTEL.NET>
Source record: 11751

Are there any replacement tubes available that are pin compatible with the 8875. I have the Dentron 2500.

Thanks,
Mitchell

3151. The doubly tuned circuit-key to clean hetrodyne or premix transmitters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-08 22:52:19 UTC
From: WSQT <wsqtradio@ziplip.com>
Message-ID: <1149807139.315754.257110@i39g2000cwa.googlegroups.com>
Source record: 11752

One way of building a stable transmitter(in terms of frequency stability) is to mix the signal for a VFO operating at a relatively low frequency like 8MHZ or less with the signal from a crystal oscillator at VHF. This allows setting to any frequency and the use of FM without access to PLL chips.

The problem of course with this apporach is the tendency to radiate unwanted mixer products such as the image or the high oscillator signal. The mixer MUST be fed at least 10 db more high than low oscillator signal or harmonics of the low oscillator will leak out-almost always with one or more harmonics too close to the carrier to stop. Furtunately this is a mixer problem people long learned to minimize by limiting the level of the signal whose harmonics must be stopped.

The use of a balanced mixer can shut up the high oscillator leakage, but no mixer can in itself stop harmonics of the oscillator from beating with harmonics of the high oscillator. In addition, if your crystals won't oscillate on the 7th or 9th overtone and you have to use a multiplier its unwanted harmonics can leak. You can stop even harmonics with a push-pull multiplier, or odd ones witha push push(input in push-pull, output in parallel) multiplier, but some always wants to leak.

How do you solve this? THE SAME WAY OLD TUBE RADIOS GET I.F. SELECTIVITY-the doubly tuned, critically-coupled circuit. This is MUCH simpler to build than you might think.
It consists of two tuned circuits, inductively coupled to each other. Due to a detuning effect when overcoupled, it is necessary to reduce the coupling between them to the amount that just transfers full energy from the primary to the secondary. In my experience with transistor circuits, coils placed side by side and just touching work well.

Coils should have no more than 3 or 4 turns in the VHF range, and you can squeeze or spread the turns to get exact resonance, or change caps to if its really off. You tap the secondary coil at one turn for a match to a bipolar, or couple a FET to the top of the secondary coil. No trimmers or slugs needed, though if you don't mind buying a sack of trimmers they make alignment easier at the price of additional board space. Still, if I used trimmers for every circuit on one of my Gen X exciter boards, there would be more than 10 on the board and it would be much larger.

To align: first resonate the primary with the secondary disconnected. Then connect the secondary cap and resonate teh secondary coil. Now push the secondary further from and closer to the primary until you

find the point that just barely couples full energye into the secondary, checking resonance at each step.

Three or four transister amps including the mixer output stage with this arrangement will cut in-close spurs to such a low level that they will barely move the s-meter on a receiver 15 feet from an antenna energized with 60 watts of transmitter output power onb the carrier frequency.

3152. Re: Dentron MLA-2500 conversion from Eimac 8875

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-09 01:47:45 UTC
From: "g. beat"
Message-ID: <vYWdnfVhmePeThXZnZ2dnUVZ_oSdnZ2d@comcast.com>
Source record: 11753

"Mitchell" <mingram1234@alltel.net> wrote in message
news:aa250$44886c95$471c706c$28099@ALLTEL.NET...
> Are there any replacement tubes available that are pin compatible with the
> 8875. I have the Dentron 2500.
>
> Thanks,
> Mitchell
>

The 3CX400A7 / 8874 is a 400 watt triode in this same Eimac family - but air
cooled.
http://www.cpii.com/eimac/catalog/167923.htm

3CX800A7
http://www.cpii.com/eimac/catalog/16964.htm

Bob Alper, W6KT wrote an article in Communication Quarterly (now part of
ARRL QEX magazine) in Summer 1996
Specifically for Dentron MLA-2500 conversion (Dual 4CX400a)

Of course this is a conversion from a triode to a tetrode tube.
http://www.tomstubes.com/tube_conversions.htm

Adobe Acrobat articles (right mouse click and save to disk - faster)

Dual 4CX400a
http://www.tomstubes.com/images/mla_2500_4cx400a.pdf
Single 4CX800a
http://www.tomstubes.com/images/mla2500_4cx800a.pdf

3153. Re: Identifying Surplus Toroid Material

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-09 09:52:25 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <128ih6tr5d8np4c@corp.supernews.com>
Source record: 11754

A couple of people have mentioned how they do inductor Q measurement. Here's how I do it:

I make a parallel tuned circuit with the inductor and an air variable capacitor. I've found that even mica capacitors often have a low enough Q to affect the measurement of reasonable Q inductors. The variable C also lets me do the measurement at the frequency of interest. I couple into and out of the parallel circuit with 1 pF capacitors, connecting one to a signal generator and the other to a 50 ohm termination and a scope. (If you calculate the parallel equivalent of the coupling cap and terminating resistor, you'll find that you need either a low or very high value of termination to avoid affecting the measurement.)

I've now got a signal generator with a digital frequency readout, but I used to use an old high level generator which I tapped into in order to hook up a frequency counter. I peak the scope signal at the frequency of interest. Then I vary the frequency slightly and find the precise center frequency and the -3 dB frequencies. The Q is simply the center frequency divided by the 3 dB bandwidth. For ease in making measurements, I built a simple 3 dB switchable attenuator and put it in line with the signal generator, terminating the output in 50 ohms at the Q meter so the attenuator would work properly. I measure the center frequency with the attenuator in, then switch it out and find the -3 dB frequencies by adjusting the frequency for the same output level as before. If you use the attenuator, the detector doesn't have to be linear, so you could do away with the scope and use just about any kind of detector like a diode and DVM.

Using this method I get within about 10% of an HP Q meter at HF, at least up to a Q of 300 or so, which is about the best I usually get with a powdered iron toroid core.

Roy Lewallen, W7EL

3154. FCC tutorial on looking up schematic/info using ID number

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-09 15:11:21 UTC
From: n4aeq <tucker@conninc.com>
Message-ID: <1149865881.746342.289440@h76g2000cwa.googlegroups.com>
Source record: 11755

Im trying to lookup schematics/info the FCCs website:

https://gullfoss2.fcc.gov/prod/oet/cf/eas/reports/GenericSearch.cfm

I have the website but havent had much luck looking anything up using
fcc id #, sense this
is my first attempt then maybe theirs something im doing wrong on the
search page. Alot
of people seem to use the site for schematics and other good
information, seems like
it would great for the ham/experimenter. Any help getting started at
looking up information
on the fcc website would be appreciated.

3155. Re: 8875

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-09 15:15:53 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e6c3ba$em5$1@avnika.corp.mot.com>
Source record: 11756

I don't believe there is a direct replacement. There is / was, on the web, a mod to use another less expensive 4CX400A. It was writen by Bob Alper, W6KT in 1996. It replaces the tube sockets

Seems do be dead now:
http://www.svetlana.com/docs/TechBulletins/technoteNo14.html

Goran, SM2YER, lists other mods, but the links were too slow to respond for me to look at them.
http://support2.overkalix.se/~sm2yer/shack/amp_mla2500/

Ahhhh! Here it is from a Google search 6/9/2006: T R U S T G O O G L E ! !

http://dk9ip.ba-karlsruhe.de/pdf/mla2500/technoteNo14.html

Do a search on "Dentron MLA2500 Alper". Maybe it's still somewhere. I have a soft copy. Here's an excerpt:

The major problem for MLA-2500 owners is that there is no economical source for the 8875 tubes used as the active amplifiers. For under $350 including sockets and tubes, the amplifier can be converted to run two Svetlana Electron Devices, Inc. 4CX400A tetrodes. (The price of a Svetlana 4CX400A is $140.) .
In performing the conversion, five specific needs must be addressed. These are:

- Modification of the final amplifier tube area.

- Adding a screen power supply.

- Meter switching board change.

- Adding a bias power supply.

- Installing the passive input grid circuit.

73, Steve, K9DCI

"Mitchell" <mingram1234@alltel.net> wrote in message
news:aa250$44886c95$471c706c$28099@ALLTEL.NET...
> Are there any replacement tubes available that are pin compatible with the
> 8875. I have the Dentron 2500.
>
> Thanks,
> Mitchell
>
>

3156. Re: FCC tutorial on looking up schematic/info using ID number

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-09 17:59:35 UTC
From: John <noaddress@noaddress.invalid>
Message-ID: <rM-dnTtr1L2MKhTZnZ2dnUVZ_tmdnZ2d@comcast.com>
Source record: 11757

"n4aeq" <tucker@conninc.com> wrote in message
news:1149865881.746342.289440@h76g2000cwa.googlegroups.com...
> Im trying to lookup schematics/info the FCCs website:
>
> https://gullfoss2.fcc.gov/prod/oet/cf/eas/reports/GenericSearch.cfm
>
> I have the website but havent had much luck looking anything up using
> fcc id #, sense this
> is my first attempt then maybe theirs something im doing wrong on the
> search page. Alot
> of people seem to use the site for schematics and other good
> information, seems like
> it would great for the ham/experimenter. Any help getting started at
> looking up information
> on the fcc website would be appreciated.
>
https://gullfoss2.fcc.gov/prod/oet/cf/eas/reports/GenericSearch.cfm

3157. Re: FCC tutorial on looking up schematic/info using ID number

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-09 18:09:20 UTC
From: John <noaddress@noaddress.invalid>
Message-ID: <T56dnQqt8LvJJBTZnZ2dnUVZ_oydnZ2d@comcast.com>
Source record: 11758

"John" <noaddress@noaddress.invalid> wrote in message
news:rM-dnTtr1L2MKhTZnZ2dnUVZ_tmdnZ2d@comcast.com...
>
> "n4aeq" <tucker@conninc.com> wrote in message
> news:1149865881.746342.289440@h76g2000cwa.googlegroups.com...
>> Im trying to lookup schematics/info the FCCs website:
>>
>> https://gullfoss2.fcc.gov/prod/oet/cf/eas/reports/GenericSearch.cfm
>>
>> I have the website but havent had much luck looking anything up using
>> fcc id #, sense this
>> is my first attempt then maybe theirs something im doing wrong on the
>> search page. Alot
>> of people seem to use the site for schematics and other good
>> information, seems like
>> it would great for the ham/experimenter. Any help getting started at
>> looking up information
>> on the fcc website would be appreciated.
>>
> https://gullfoss2.fcc.gov/prod/oet/cf/eas/reports/GenericSearch.cfm
>
>
I hit transmit too soon.
Note that the FCC ID is entered in pieces, the first 3 characters in the
first block, and all of the rest in the second block. That is all that you
have to enter. Try PY3WG511-F as an example. There are lots of
documents available.

3158. Re: FCC tutorial on looking up schematic/info using ID number

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-09 20:42:43 UTC
From: n4aeq <tucker@conninc.com>
Message-ID: <1149885762.986782.203720@u72g2000cwu.googlegroups.com>
Source record: 11759

Thanks John, i can get it to display a list of documents that are in
.pdf but i there is no
way to click or open the docs. They just show the list of docs,
pitcures & other, does this mean i need to do something else? Is a
login required before the link will be active?

John wrote:
> "John" <noaddress@noaddress.invalid> wrote in message
> news:rM-dnTtr1L2MKhTZnZ2dnUVZ_tmdnZ2d@comcast.com...
> >
> > "n4aeq" <tucker@conninc.com> wrote in message
> > news:1149865881.746342.289440@h76g2000cwa.googlegroups.com...
> >> Im trying to lookup schematics/info the FCCs website:
> >>
> >> https://gullfoss2.fcc.gov/prod/oet/cf/eas/reports/GenericSearch.cfm
> >>
> >> I have the website but havent had much luck looking anything up using
> >> fcc id #, sense this
> >> is my first attempt then maybe theirs something im doing wrong on the
> >> search page. Alot
> >> of people seem to use the site for schematics and other good
> >> information, seems like
> >> it would great for the ham/experimenter. Any help getting started at
> >> looking up information
> >> on the fcc website would be appreciated.
> >>
> > https://gullfoss2.fcc.gov/prod/oet/cf/eas/reports/GenericSearch.cfm
> >
> >
> I hit transmit too soon.
> Note that the FCC ID is entered in pieces, the first 3 characters in the
> first block, and all of the rest in the second block. That is all that you
> have to enter. Try PY3WG511-F as an example. There are lots of
> documents available.

3159. Trying to locate schematics for spectrum analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-09 20:45:36 UTC
From: "H. P. Friedrichs" <noemail@please.com>
Message-ID: <J9Cdne2qnPBtQBTZnZ2dnUVZ_sOdnZ2d@velocitywest.com>
Source record: 11760

Hello-
I recently acquired an AVCOM PSA 65A spectrum analyzer. I knew it was nonfunctional when I bought it, intending to repair it, but I'm amazed at how difficult it has been to find schematics for it.

An AVCOM rep sent me a PDF of the manual, but was unable to supply schematics. A google search of some of the prominent manual resellers didn't turn anything up. I have posted to a couple of Yahoo groups with no luck.

I thought there might be a homebrewer out there who uses one of these instruments and might be willing to share schematics.

Please reply to hpf (atsign) gainbroadband (dot) com

TIA

Pete
AC7ZL

3160. Re: Identifying Surplus Toroid Material

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-10 07:44:26 UTC
From: Alan Peake <adpeake@killspam.internode.on.net>
Message-ID: <448A785A.2070505@killspam.internode.on.net>
Source record: 11761

Roy Lewallen wrote:
> A couple of people have mentioned how they do inductor Q measurement.
> Here's how I do it:

.....

Good method. I have done that before but my current RF sig gen doesn't
have very good output level regulation, nor is the output adjustable -
it's only a one-transistor sig gen after all:)
They wouldn't let me take my H-P with me when I retired :(]
Alan

3161. Re: Identifying Surplus Toroid Material

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-10 10:11:01 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <128l6lmegnj5a1c@corp.supernews.com>
Source record: 11762

Alan Peake wrote:
>
> Good method. I have done that before but my current RF sig gen doesn't
> have very good output level regulation, nor is the output adjustable -
> it's only a one-transistor sig gen after all:)
> They wouldn't let me take my H-P with me when I retired :(]

Neither of those should be a problem. The absolute level isn't important, and the amount you have to adjust the frequency for a single measurement is small -- for inductors of reasonable Q, anyway -- so the level probably won't change much over that small range unless the level stability is extraordinarily bad.

I've got a one-FET homebrew oscillator I made a long time ago with an extra transistor or two for a crude ALC that keeps it reasonably flat over the whole HF range. But you shouldn't need an ALC for most Q measurements.

Roy Lewallen, W7EL

3162. Weller Tech Sheets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-10 15:11:24 UTC
From: "g. beat"
Message-ID: <Z7GdneQKhZ6AfBfZnZ2dnUVZ_sKdnZ2d@comcast.com>
Source record: 11763

I have been slowly scanning my collection of Weller Tech Sheets and posting these on BAMA.

Some of these instruction, parts and repair sheets go back to Weller Electric in the mid 1960s --
and are no longer available from CooperTools / Weller.
http://bama.edebris.com/manuals/weller/

w9gb

3163. Re: Nice HBR 13C

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-10 16:18:57 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <RhCig.113793$dW3.87762@newssvr21.news.prodigy.com>
Source record: 11764

Very, very nice..
Kudos

--

73
Hank WD5JFR
"Brian Hill" <good@it.net> wrote in message news:TWlgg.64$RH5.62@fe03.lga...
> Heres some pics of my new HBR13C.
> http://webpages.charter.net/brianhill/hbr13c1.jpg
> http://webpages.charter.net/brianhill/hbr13c2.jpg
> http://webpages.charter.net/brianhill/hbr13c3.jpg
> http://webpages.charter.net/brianhill/hbr13c4.jpg
> http://webpages.charter.net/brianhill/hbr13c5.jpg
>
> --
>
> Regards
> B.H.
>
> Brian's Radio Universe
> http://webpages.charter.net/brianhill/500.htm
>
>

3164. Re: Weller Tech Sheets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-10 20:53:53 UTC
From: "g. beat"
Message-ID: <gLedna92eZf-rBbZnZ2dnUVZ_tydnZ2d@comcast.com>
Source record: 11765
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.homebrew

One of the most frequent questions I receive is concerning the deterioration of the white silicon or vinyl cords on the older Weller TCP series soldering irons.

Weller does sell part number TC217, which is a black replacement cord with 3 pin plug already installed.
This is a good solution for the irons that have the Lightweight Nylon handle with black heater insulator/plug-in (after 1977) and mate to the WTCPN and later stations.

However, this is an expensive solution for the earlier TCP irons that had a phenolic handle/finger heat shield, such as the WTCPK (military set with 4-pin Jones plug) or W-TCP and WTCPL stations.

For these units, you have to cut off the 3-pin plug (expensive part of the assembly) from the replacement cord to wire the Jones plug or directly wire to the TCP base unit.

The phenolic handle irons used a metal ground strap that also serves as the cord's clamp and strain relief.
Removal and replacement of the old cord from this metal ground strap is difficult (and can be dangerous without proper tools)

Some restorers have used silicon or fiberglass/silicon sleeving or silicon tubing to build a new cord by removing the old vinyl or broken silicon insulation.

Another option is to use a replacement silicon cord from Rapid electronics (UK), order code 85-0590
which sells for 3.88 British pounds - considerably cheaper. This cable is not appropriate for the lightweight nylon handle, since it is slightly larger in outside diameter and uses the next high wire gauge 20 AWG .. instead of the original 22 AWG used by Weller.

Rapid order code 85-0590 Silicone, heat-resistant cable for soldering irons.

a.. Especially recommended for use with mains powered irons.
b.. Ideal for educational applications.
c.. Survives contact with a heated soldering iron tip.
d.. Convert existing PVC cabled irons to safer silicone cable.
e.. Pre-stripped and tinned.
f.. Overall length 1.5 metres.
g.. Suitable for use with all irons using 3-cored flexible cable.

g. beat

======
"g. beat >" <@<spam protected> wrote in message
news:Z7GdneQKhZ6AfBfZnZ2dnUVZ_sKdnZ2d@comcast.com...
>I have been slowly scanning my collection of Weller Tech Sheets and posting
>these on BAMA.
>
> Some of these instruction, parts and repair sheets go back to Weller
> Electric in the mid 1960s --
> and are no longer available from CooperTools / Weller.
> http://bama.edebris.com/manuals/weller/
>
> w9gb

3165. Canada: Repeaters Up The Alcan (sorta OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 01:59:57 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <zOKig.57$Mt.144526@news.sisna.com>
Source record: 11766

Sorry for posting this OT, but those *&^&*(**& over on rec.radio.
amateur.misc make it impossible to post a serious question on that group.

Leaving Wednesday from Northern California for a trip up the Alcan to
Anchorage. Anybody got a good series of repeaters going up the highway
through Canada?

Jim

3166. Re: Weller Tech Sheets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 02:23:33 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <F8Lig.10221$Ui7.8851@tornado.tampabay.rr.com>
Source record: 11767
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.homebrew

Do you have any tips on fixing a Weller EC-2002-A? It still regulates
and heats, but the temperature display is dead. When first turned on it
flashes "FFF" for a split second. I think maybe bad filter capacitor or
something. Any thoughts on fixing? This is a nice unit I had just bought
spare iron and tips for it. Tried another iron, and also measured proper
resistance on the thermistor.

g. beat <@ wrote:

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>of the white silicon or vinyl cords on the older Weller TCP series soldering
>irons.
>
>Weller does sell part number TC217, which is a black replacement cord with 3
>pin plug already installed.
>This is a good solution for the irons that have the Lightweight Nylon handle
>with black heater insulator/plug-in (after 1977) and mate to the WTCPN and
>later stations.
>
>However, this is an expensive solution for the earlier TCP irons that had a
>phenolic handle/finger heat shield, such as the WTCPK (military set with
>4-pin Jones plug) or W-TCP and WTCPL stations.
>
>For these units, you have to cut off the 3-pin plug (expensive part of the
>assembly) from the replacement cord to wire the Jones plug or directly wire
>to the TCP base unit.
>
>The phenolic handle irons used a metal ground strap that also serves as the
>cord's clamp and strain relief.
>Removal and replacement of the old cord from this metal ground strap is
>difficult (and can be dangerous without proper tools)
>
>Some restorers have used silicon or fiberglass/silicon sleeving or silicon
>tubing to build a new cord by removing the old vinyl or broken silicon
>insulation.
>
>Another option is to use a replacement silicon cord from Rapid electronics
>(UK), order code 85-0590
>which sells for 3.88 British pounds - considerably cheaper. This cable is
>not appropriate for the lightweight nylon handle, since it is slightly
>larger in outside diameter and uses the next high wire gauge 20 AWG ..
>instead of the original 22 AWG used by Weller.
>
> Rapid order code 85-0590 Silicone, heat-resistant cable for soldering

>irons.
>
>
> a.. Especially recommended for use with mains powered irons.
> b.. Ideal for educational applications.
> c.. Survives contact with a heated soldering iron tip.
> d.. Convert existing PVC cabled irons to safer silicone cable.
> e.. Pre-stripped and tinned.
> f.. Overall length 1.5 metres.
> g.. Suitable for use with all irons using 3-cored flexible cable.
>
> g. beat
>
>
>======
>"g. beat >" <@<spam protected> wrote in message
>news:Z7GdneQKhZ6AfBfZnZ2dnUVZ_sKdnZ2d@comcast.com...
>
>
>>I have been slowly scanning my collection of Weller Tech Sheets and posting
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>>Some of these instruction, parts and repair sheets go back to Weller
>>Electric in the mid 1960s --
>>and are no longer available from CooperTools / Weller.
>>http://bama.edebris.com/manuals/weller/
>>
>>w9gb
>>
>>
>
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

3167. Re: Wireless World & Radio Engineering magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 02:25:42 UTC
From: "Bob G. Mahrenholz" <bobm@edge.net>
Message-ID: <448B7EE8.50349B0D@edge.net>
Source record: 11768

Unfortunately when I tried to order the Wireless World issue, it had already been sold.

Bob
"Bob G. Mahrenholz" wrote:

> That sounds great Chris. Thanks. They have a lot of interesting old magazines.
>
> Bob
>
> Chris Jones wrote:
>
> > Bob G. Mahrenholz wrote:
> >
> > > Hi'
> > > I'm needing a copy of articles on bandpass filtering using negative
> > > mutual coupling
> > > (a la J.W. Miller) in the February 18, 1931 issue of Wireless World and
> > > in the December, 1936 issue of Radio Engineering magazine. Will pay a
> > > reward.
> > >
> > > Thanks,
> > > Bob
> > > bobm@edge.net
> >
> > Perhaps you can buy it from these people:
> >
> > http://www.kellybooks.co.uk/5-Mag-Tech-WW.htm
> >
> > I have never dealt with them so I don't know what kind of people they are.
> >
> > Chris

3168. Re: FCC tutorial on looking up schematic/info using ID number

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 02:26:42 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <CbLig.10222$Ui7.8719@tornado.tampabay.rr.com>
Source record: 11769

Make sure you are clicking the correct hyperlink. The FCC pages are
weird. Also it could be that the manufacturer excercised secrecy in what
is allowed to be shown. I also notced a number of products have been
certified and later undergone major changes not reflected on the
database as having a permissable change.

n4aeq wrote:

>Thanks John, i can get it to display a list of documents that are in
>.pdf but i there is no
>way to click or open the docs. They just show the list of docs,
>pitcures & other, does this mean i need to do something else? Is a
>login required before the link will be active?
>
>John wrote:
>
>
>>"John" <noaddress@noaddress.invalid> wrote in message
>>news:rM-dnTtr1L2MKhTZnZ2dnUVZ_tmdnZ2d@comcast.com...
>>
>>
>>>"n4aeq" <tucker@conninc.com> wrote in message
>>>news:1149865881.746342.289440@h76g2000cwa.googlegroups.com...
>>>
>>>
>>>>Im trying to lookup schematics/info the FCCs website:
>>>>
>>>>https://gullfoss2.fcc.gov/prod/oet/cf/eas/reports/GenericSearch.cfm
>>>>
>>>>I have the website but havent had much luck looking anything up using
>>>>fcc id #, sense this
>>>>is my first attempt then maybe theirs something im doing wrong on the
>>>>search page. Alot
>>>>of people seem to use the site for schematics and other good
>>>>information, seems like
>>>>it would great for the ham/experimenter. Any help getting started at
>>>>looking up information
>>>>on the fcc website would be appreciated.
>>>>
>>>>
>>>>
>>>https://gullfoss2.fcc.gov/prod/oet/cf/eas/reports/GenericSearch.cfm
>>>
>>>
>>>

>>>
>>I hit transmit too soon.
>>Note that the FCC ID is entered in pieces, the first 3 characters in the
>>first block, and all of the rest in the second block. That is all that you
>>have to enter. Try PY3WG511-F as an example. There are lots of
>>documents available.
>>
>>
>
>
>

--
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"Follow The Money" ;-P

3169. Re: Weller Tech Sheets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 03:15:24 UTC
From: "g. beat"
Message-ID: <g9ydnXkqZKJRFxbZnZ2dneKdnZydnZ2d@comcast.com>
Source record: 11770
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.homebrew

CooperTools / Weller produced the "EC" (Electronic Control series for about 25 years (~ 1977 - 2002).
The series was discontinued the fall of 2002.

During that time they had a least 3 different revisions (and many more of control boards)

The original control boards were made on a ceramic substrate (yes it can and does crack). From the documents I have - the temperature board actually just serves as a calibrated reading from the sensor.

You may wish to look at eBay auction Item number: 7626510781 by ra2112. This is board 210 .. may be right board for you (not positive). These are (very rare) NOS repair control boards from a distributor close-out in southwest Chicago
(I have an old 1002 series 1 station running with a board from him).

Last resort is to call Dino Chandler, service manager at Weller - in North Carolina and see if they have any spare parts left to repair.

Greg
"**THE-RFI-EMI-GUY**" <rhyolite@nettally.com> wrote in message news:F8Lig.10221$Ui7.8851@tornado.tampabay.rr.com...
Do you have any tips on fixing a Weller EC-2002-A? It still regulates and heats, but the temperature display is dead. When first turned on it flashes "FFF" for a split second. I think maybe bad filter capacitor or something. Any thoughts on fixing? This is a nice unit I had just bought spare iron and tips for it. Tried another iron, and also measured proper resistance on the thermistor.

g. beat <@ wrote:
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This is a good solution for the irons that have the Lightweight Nylon handle with black heater insulator/plug-in (after 1977) and mate to the WTCPN and later stations.

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Removal and replacement of the old cord from this metal ground strap is difficult (and can be dangerous without proper tools)

Some restorers have used silicon or fiberglass/silicon sleeving or silicon tubing to build a new cord by removing the old vinyl or broken silicon insulation.

Another option is to use a replacement silicon cord from Rapid electronics (UK), order code 85-0590
which sells for 3.88 British pounds - considerably cheaper. This cable is not appropriate for the lightweight nylon handle, since it is slightly larger in outside diameter and uses the next high wire gauge 20 AWG .. instead of the original 22 AWG used by Weller.

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g. beat

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3170. Re: Weller Tech Sheets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 03:19:55 UTC
From: "g. beat"
Message-ID: <cLOdnQWeALxGFhbZnZ2dnUVZ_rudnZ2d@comcast.com>
Source record: 11771
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.homebrew

BE VERY CAREFUL ON USING REPLACEMENT IRONS (EC-1201 series) ON THE EARLY "EC" SERIES MODEL BASE UNITS

WELLER CHANGED THE PIN OUTS OF THE 5-pin CONNECTOR FOR THE IRON AND BASES WITH THE EC SERIES !!
THEY ARE DIFFERENT (EC-1201 is different from EC-1201-A and EC1201 P ... etc.) !!!

THIS CAN DAMAGE CONTROL BOARDS OR IRONS !!

Greg
"**THE-RFI-EMI-GUY**" <rhyolite@nettally.com> wrote in message
news:F8Lig.10221$Ui7.8851@tornado.tampabay.rr.com...
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"Follow The Money" ;-P

3171. Re: Weller Tech Sheets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 03:35:44 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <448B90A9.5020605@nettally.com>
Source record: 11774
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.homebrew

Thanks for the tips. The controller died while using the original iron.
I will make sure the new one is compatible. Thanks again

g. beat <@ wrote:

> BE VERY CAREFUL ON USING REPLACEMENT IRONS (EC-1201 series) ON THE
> EARLY "EC" SERIES MODEL BASE UNITS
>
> WELLER CHANGED THE PIN OUTS OF THE 5-pin CONNECTOR FOR THE IRON AND
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> Greg
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>>
>> a.. Especially recommended for use with mains powered irons.
>> b.. Ideal for educational applications.
>> c.. Survives contact with a heated soldering iron tip.
>> d.. Convert existing PVC cabled irons to safer silicone cable.
>> e.. Pre-stripped and tinned.
>> f.. Overall length 1.5 metres.
>> g.. Suitable for use with all irons using 3-cored flexible cable.
>>
>> g. beat
>>
>>
>>======
>>"g. beat >" <@<spam protected> wrote in message
>>news:Z7GdneQKhZ6AfBfZnZ2dnUVZ_sKdnZ2d@comcast.com...
>>
>>
>>>I have been slowly scanning my collection of Weller Tech Sheets and posting
>>>these on BAMA.
>>>
>>>Some of these instruction, parts and repair sheets go back to Weller
>>>Electric in the mid 1960s --
>>>and are no longer available from CooperTools / Weller.
>>>http://bama.edebris.com/manuals/weller/
>>>
>>>w9gb
>>>
>>>

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>
>--
>Joe Leikhim K4SAT
>"The RFI-EMI-GUY"ï¿½
>
>"Treason doth never prosper: what's the reason?
>For if it prosper, none dare call it treason."
>
>"Follow The Money" ;-P
>
>
>

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Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

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"Follow The Money" ;-P

3172. Re: Weller Tech Sheets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 03:35:55 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <vcMig.10226$Ui7.5511@tornado.tampabay.rr.com>
Source record: 11772
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.homebrew

Thanks for the tips. The controller died while using the original iron.
I will make sure the new one is compatible. Thanks again

g. beat <@ wrote:

> BE VERY CAREFUL ON USING REPLACEMENT IRONS (EC-1201 series) ON THE
> EARLY "EC" SERIES MODEL BASE UNITS
>
> WELLER CHANGED THE PIN OUTS OF THE 5-pin CONNECTOR FOR THE IRON AND
> BASES WITH THE EC SERIES !!
> THEY ARE DIFFERENT (EC-1201 is different from EC-1201-A and EC1201 P
> ... etc.) !!!
>
> THIS CAN DAMAGE CONTROL BOARDS OR IRONS !!
>
> Greg
>
> "**THE-RFI-EMI-GUY**" <rhyolite@nettally.com
> <mailto:rhyolite@nettally.com>> wrote in message
> news:F8Lig.10221$Ui7.8851@tornado.tampabay.rr.com...
> Do you have any tips on fixing a Weller EC-2002-A? It still
> regulates and heats, but the temperature display is dead. When
> first turned on it flashes "FFF" for a split second. I think maybe
> bad filter capacitor or something. Any thoughts on fixing? This is
> a nice unit I had just bought spare iron and tips for it. Tried
> another iron, and also measured proper resistance on the thermistor.
>
> g. beat <@ wrote:
>
>>One of the most frequent questions I receive is concerning the deterioration
>>of the white silicon or vinyl cords on the older Weller TCP series soldering
>>irons.
>>
>>Weller does sell part number TC217, which is a black replacement cord with 3
>>pin plug already installed.
>>This is a good solution for the irons that have the Lightweight Nylon handle
>>with black heater insulator/plug-in (after 1977) and mate to the WTCPN and
>>later stations.
>>
>>However, this is an expensive solution for the earlier TCP irons that had a
>>phenolic handle/finger heat shield, such as the WTCPK (military set with
>>4-pin Jones plug) or W-TCP and WTCPL stations.
>>
>>For these units, you have to cut off the 3-pin plug (expensive part of the

>>assembly) from the replacement cord to wire the Jones plug or directly wire
>>to the TCP base unit.
>>
>>The phenolic handle irons used a metal ground strap that also serves as the
>>cord's clamp and strain relief.
>>Removal and replacement of the old cord from this metal ground strap is
>>difficult (and can be dangerous without proper tools)
>>
>>Some restorers have used silicon or fiberglass/silicon sleeving or silicon
>>tubing to build a new cord by removing the old vinyl or broken silicon
>>insulation.
>>
>>Another option is to use a replacement silicon cord from Rapid electronics
>>(UK), order code 85-0590
>>which sells for 3.88 British pounds - considerably cheaper. This cable is
>>not appropriate for the lightweight nylon handle, since it is slightly
>>larger in outside diameter and uses the next high wire gauge 20 AWG ..
>>instead of the original 22 AWG used by Weller.
>>
>> Rapid order code 85-0590 Silicone, heat-resistant cable for soldering
>>irons.
>>
>>
>> a.. Especially recommended for use with mains powered irons.
>> b.. Ideal for educational applications.
>> c.. Survives contact with a heated soldering iron tip.
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>> e.. Pre-stripped and tinned.
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Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
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"Follow The Money" ;-P

3173. Re: Weller Tech Sheets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 03:57:49 UTC
From: "g. beat"
Message-ID: <Ad6dnXbUVIYgCRbZnZ2dnUVZ_oadnZ2d@comcast.com>
Source record: 11773
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.homebrew

I have a sheet that shows the different pin-outs .. will get that on BAMA -- when I have chance to scan.

Greg
"**THE-RFI-EMI-GUY**" <rhyolite@nettally.com> wrote in message
news:vcMig.10226$Ui7.5511@tornado.tampabay.rr.com...
Thanks for the tips. The controller died while using the original iron. I will make sure the new one is compatible. Thanks again

g. beat <@ wrote:

BE VERY CAREFUL ON USING REPLACEMENT IRONS (EC-1201 series) ON THE EARLY "EC" SERIES MODEL BASE UNITS

WELLER CHANGED THE PIN OUTS OF THE 5-pin CONNECTOR FOR THE IRON AND BASES WITH THE EC SERIES !!
THEY ARE DIFFERENT (EC-1201 is different from EC-1201-A and EC1201 P ... etc.) !!!

THIS CAN DAMAGE CONTROL BOARDS OR IRONS !!

Greg
"**THE-RFI-EMI-GUY**" <rhyolite@nettally.com> wrote in message
news:F8Lig.10221$Ui7.8851@tornado.tampabay.rr.com...
Do you have any tips on fixing a Weller EC-2002-A? It still regulates and heats, but the temperature display is dead. When first turned on it flashes "FFF" for a split second. I think maybe bad filter capacitor or something. Any thoughts on fixing? This is a nice unit I had just bought spare iron and tips for it. Tried another iron, and also measured proper resistance on the thermistor.

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This is a good solution for the irons that have the Lightweight Nylon handle with black heater insulator/plug-in (after 1977) and mate to the WTCPN and later stations.

However, this is an expensive solution for the earlier TCP irons that had a phenolic handle/finger heat shield, such as the WTCPK (military set with 4-pin Jones plug) or W-TCP and WTCPL stations.

For these units, you have to cut off the 3-pin plug (expensive part of the assembly) from the replacement cord to wire the Jones plug or directly wire

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The phenolic handle irons used a metal ground strap that also serves as the cord's clamp and strain relief.
Removal and replacement of the old cord from this metal ground strap is difficult (and can be dangerous without proper tools)

Some restorers have used silicon or fiberglass/silicon sleeving or silicon tubing to build a new cord by removing the old vinyl or broken silicon insulation.

Another option is to use a replacement silicon cord from Rapid electronics (UK), order code 85-0590
which sells for 3.88 British pounds - considerably cheaper. This cable is not appropriate for the lightweight nylon handle, since it is slightly larger in outside diameter and uses the next high wire gauge 20 AWG .. instead of the original 22 AWG used by Weller.

Rapid order code 85-0590 Silicone, heat-resistant cable for soldering irons.

a.. Especially recommended for use with mains powered irons.
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g. beat

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"g. beat >" <@<spam protected> wrote in message
news:Z7GdneQKhZ6AfBfZnZ2dnUVZ_sKdnZ2d@comcast.com...
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Some of these instruction, parts and repair sheets go back to Weller Electric in the mid 1960s --
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w9gb

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Joe Leikhim K4SAT
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Joe Leikhim K4SAT
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3174. SolderSmoke#25: D-104 on Echolink, Mike's rig now a transceiver, Rewards of Homebrewing

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 04:08:36 UTC
From: bill.meara@gmail.com
Message-ID: <1149998916.047279.199830@j55g2000cwa.googlegroups.com>
Source record: 11775
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,sci.electronics.basics

SolderSmoke!
A SHOW FOR ELECTRONICS HOMEBREWERS!

http://www.ourmedia.org/node/235576

Topics discussed in SolderSmoke #25:

-- Bill puts Astatic D-104 on ECHOLINK
-- Mike's 80 mtr DSB rig becomes transceiver!
-- Mike's two chip EMRFD NE602-LM386 receiver
-- The rewards of homebrewing

NEXT EDITION: RECORDINGS OF MIKE and BILL's DSB
RECEIVERS!

Listen at: http://www.ourmedia.org/node/235576

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you the kinds of ham radio conversations that you
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London, England meet regularly on the ECHOLINK system
to discuss their homebrew radio projects. We are
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paste this URL into your I-poder (or similar)
software. We've been having trouble with our Ourmedia
RSS feed, so Mike (software wizard that he is) has
homebrewed his own RSS feed. In order to subscribe to
SolderSmoke, point your podcast software to:

http://kl7r.ham-radio.ch/soldersmoke.rss

If you don't have an MP3 player you can just go to the
site below and listen to the latest program (and
earlier editions) using the audio software on your
computer.

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Here's the homepage for our show. All our programs are available here. There is also a blog and links to some of the sites and documents we've been discussing: http://www.ourmedia.org/user/36170

We hope you enjoy the program. Please send us feedback.

73 from London
Bill M0HBR N2CQR CU2JL
http://www.gadgeteer.us

3175. Re: Wireless World & Radio Engineering magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 04:42:09 UTC
From: notbob <notbob@nothome.com>
Message-ID: <oaKdnW9LUJy8AhbZnZ2dnUVZ_tmdnZ2d@comcast.com>
Source record: 11776

uOn 2006-06-11, Bob G. Mahrenholz <bobm@edge.net> wrote:
> Unfortunately when I tried to order the Wireless World issue, it had already been
> sold.

I bet if you had to send all this cw, you'd have trimmed the 300+
lines of useless crap you included.

nb

3176. Re: 44.545MHz LO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 09:39:25 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <hxRig.7352$ap3.2408@news-server.bigpond.net.au>
Source record: 11777

John,

Are you using them in a series resonant circuit or parallel ?

Have you tried an inductor in series with the crystal (say 500nH to 800nH) ?

Regards

David

John Wilkinson wrote:
> Hi,
> I need a good second LO at 44.545MHz.
> I have a few crystals that I bought, that are say they are 44.545MHz, but
> are really 44.548MHz. I tried pulling the frquency somewhat, but to no
> great avail.
> I have read that overtone crystals are hard to pull.
>
> Does anyone know where I can get good quality crystals at this frequency?
>
> Or how I may combine some easily available crystal frequencies to get
> either 44.545MHz or 45.455MHz?
>
> Best regards,
> John.

3177. Re: 44.545MHz LO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 10:16:54 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <sann825sf173qv570jol8t9n1fnh94a7nc@4ax.com>
Source record: 11778

On Mon, 12 Jun 2006 08:23:33 +0100, John Wilkinson
<johnwilkinson@clara.co.uk> wrote:

>I have a few crystals that I bought, that are say they are 44.545MHz, but
>are really 44.548MHz. I tried pulling the frquency somewhat, but to no
>great avail.

Overtone crystals do not oscillate at the _accurate_ integer multiple
of the fundamental frequency due to end effects.

Have you tried to run the crystal in the fundamental mode ? If the
produced frequency is close enough to 14.84833.. MHz, just put a
separate tripler after the oscillator.

>I have read that overtone crystals are hard to pull.

The pulling range is proportional to 1/Nï¿½ and since the needed pulling
range would be 67 ppm and assuming 3rd overtone crystals, the
comparable pulling range for fundamental mode crystals would be 600
ppm, which indeed is quite a lot.

Paul OH3LWR

3178. Re: 44.545MHz LO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 10:47:31 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <7xSig.2129$X02.440@trnddc02>
Source record: 11779

John,

Most overtone crystals are designed for operation on their series resonance. There is also a parallel resonance, usually a few khz higher than the series resonance. The fact that your oscillator is putting out a signal a few khz higher than the frequency marked on the crystal is a good indicator that you might be operating the crystal in the parallel mode.

You shouldn't have to resort to any 'tricks' like operating it in its fundamental mode & multiplying, or putting frequency 'pulling' components in the circuit. It should come very close to the marked frequency if you use the correct circuit.

Can you refer to a circuit that's similar to yours so we can look at it and recommend what might be wrong?

Joe
W3JDR

"John Wilkinson" <johnwilkinson@clara.co.uk> wrote in message
news:f645hxvffzbd$.1vs281zx2v9r1$.dlg@40tude.net...
> Hi,
> I need a good second LO at 44.545MHz.
> I have a few crystals that I bought, that are say they are 44.545MHz, but
> are really 44.548MHz. I tried pulling the frquency somewhat, but to no
> great avail.
> I have read that overtone crystals are hard to pull.
>
> Does anyone know where I can get good quality crystals at this frequency?
>
> Or how I may combine some easily available crystal frequencies to get
> either 44.545MHz or 45.455MHz?
>
> Best regards,
> John.

3179. Schematic for Low Capacitance Fet Buffer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 11:45:53 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <RnTig.7422$ap3.2269@news-server.bigpond.net.au>
Source record: 11780

Hi,

I am looking for a circuit for a low capacitance FET circuit to act as a Buffer/Amp for VHF signals (ie. to probe Oscillators etc). (Homebrew Active Probe).

I have searched quite a bit on www but cannot locate a suitable design.

Thanks in advance

Regards

David

3180. schematicxdiode-capacitance

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 12:04:04 UTC
From: mocio_Vileda <senzaparole@tiscali.it>
Message-ID: <448c06d0$0$972$5fc30a8@news.tiscali.it>
Source record: 11781

I need a capacitance meter scheme to test just varicap and several diodes
,
has anyone link(s)?

3181. Re: Canada: Repeaters Up The Alcan (sorta OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 16:12:04 UTC
From: Larry Gagnon <lggagnon@fakeuniserve.com>
Message-ID: <pan.2006.06.11.16.12.00.350031@fakeuniserve.com>
Source record: 11782

On Sat, 10 Jun 2006 18:59:57 -0700, RST Engineering wrote:

> Leaving Wednesday from Northern California for a trip up the Alcan to
> Anchorage. Anybody got a good series of repeaters going up the highway
> through Canada?

Being as the Alaska HighWay runs through Alberta, British Columbia, the
Yukon and Alaska it is a simple matter to search google for repeaters in
those areas.

Try these to start:

http://www.rac.ca/opsinfo/repeater.htm#Repeater%20Listings%20for%20locations%20in%20Canada
http://www.bcarcc.org/

Larry VE7EA

3182. new

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 17:26:35 UTC
From: alprince <alprince_7000@yahoo.com>
Message-ID: <1150046795.238989.78170@h76g2000cwa.googlegroups.com>
Source record: 11783

تيمر من 5 الى 30 دقيقة اصنعها بنفسك
http://www.ptc2.com/vb/showthread.php?t=226

دائرة انتر كوم اصنعها بنفسك
http://www.ptc2.com/vb/showthread.php?t=205

دائره بسيطه لتتبع الاشاره لطفل ضال
الطريق
http://www.ptc2.com/vb/showthread.php?t=1834

دائرة الكولايزر 3 بند اصنعها بنفسك
http://www.ptc2.com/vb/showthread.php?t=351

سرينة الشرطة اصنعها بنفسك
http://www.ptc2.com/vb/showthread.php?t=372

دائرة اختبار الريموت كنترول
http://www.ptc2.com/vb/showthread.php?t=204

دارة قياس مستوى الماء بعدد ال منتهي من
المستويات
http://www.ptc2.com/vb/showthread.php?t=1610

فليشر بسيط 6 خطوط ويمكن استخدامه لتشغيل
6 اجهزة بشكل متتالى
http://www.ptc2.com/vb/showthread.php?t=354

دائرة فاحص الترنزستور داخل الدائرة
http://www.ptc2.com/vb/showthread.php?t=266

مفتاح ضوئى
http://www.ptc2.com/vb/showthread.php?t=370

دائرة تشغيل cd فى المنزل وخارج
الكومبيوتر
http://www.ptc2.com/vb/showthread.php?t=212

دائرة التحكم فى مساحة السيارة اصنعها
بنفسك
http://www.ptc2.com/vb/showthread.php?t=206

دائرة تشغيل ال cd فى السيارة
http://www.ptc2.com/vb/showthread.php?t=209

فليشر 2 ترنزستور فقط
http://www.ptc2.com/vb/showthread.php?t=386

3183. Re: Schematic for Low Capacitance Fet Buffer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 18:23:56 UTC
From: dplatt@radagast.org
Message-ID: <128ontsrct6et9d@corp.supernews.com>
Source record: 11784

>I am looking for a circuit for a low capacitance FET circuit to act as a
>Buffer/Amp for VHF signals (ie. to probe Oscillators etc). (Homebrew
>Active Probe).
>
>I have searched quite a bit on www but cannot locate a suitable design.

One starting point might be a homebrew active-FET oscilloscope probe design shown by Robert Pease in "Troubleshooting Analog Circuits" (page 16).

As shown, it has a bandwidth of 90 MHz, slew rate of 300 V/usec, input Z of 10^11 ohms in parallel with 0.29 pF. Construction is "ugly" style, with components soldered together in midair to minimize parasitic capacitance to ground.

It uses a cascoded pair of 2N5486 or 2N5485 JFETs, driving a 2N3904/2N3906 buffer, and takes +/-15 VDC supply voltage.

I suspect that its bandwidth might be improved by using faster bipolar-buffer transistors (maybe MPSH-something-or-other) and possibly J310 or U310 JFETs for the front end.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3184. Re: schematicxdiode-capacitance

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 18:31:14 UTC
From: dplatt@radagast.org
Message-ID: <128oobi3pe6n72b@corp.supernews.com>
Source record: 11785

In article <448c06d0$0$972$5fc30a8@news.tiscali.it>,
mocio_Vileda <senzaparole@tiscali.it> wrote:
>I need a capacitance meter scheme to test just varicap and several diodes
>,
>has anyone link(s)?

Check out the AADE meter (www.aade.com) - it's the least expensive decently-accurate meter system I know of. I understand it's a kitted version of a project described in an electronics or radio magazine a few years ago (I don't know where the article appeared). A complete schematic is in the manual, which can be downloaded from AADE's site. The kit is (in my opinion) extremely well thought out; the meter I built went together in about an hour, worked first time, and behaves just as AADE says it should. *Very* nicely done.

The little-or-no-extra-equipment approach would be to wire up your varicap arrangement in an oscillator circuit, resonating against a well-known inductance, and measured with a frequency counter or oscilloscope. Getting good accuracy in the face of all of the unknown parasitic reactances of such a circuit is going to be a huge headache, though.

--
Dave Platt <dplatt@radagast.org> AE6EO
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3185. Re: 44.545MHz LO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 19:53:09 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <-8-dnfBMr5U_6RHZnZ2dnUVZ_sKdnZ2d@web-ster.com>
Source record: 11786

John Wilkinson wrote:

> On Sun, 11 Jun 2006 10:47:31 GMT, W3JDR wrote:
>
>
>>John,
>>
>>Most overtone crystals are designed for operation on their series resonance.
>>There is also a parallel resonance, usually a few khz higher than the series
>>resonance. The fact that your oscillator is putting out a signal a few khz
>>higher than the frequency marked on the crystal is a good indicator that you
>>might be operating the crystal in the parallel mode.
>>
>>You shouldn't have to resort to any 'tricks' like operating it in its
>>fundamental mode & multiplying, or putting frequency 'pulling' components in
>>the circuit. It should come very close to the marked frequency if you use
>>the correct circuit.
>>
>>
>>Can you refer to a circuit that's similar to yours so we can look at it and
>>recommend what might be wrong?
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>>Joe
>>W3JDR
>>
>>
>>"John Wilkinson" <johnwilkinson@clara.co.uk> wrote in message
>>news:f645hxvffzbd$.1vs281zx2v9r1$.dlg@40tude.net...
>>
>>>>Hi,
>>>>I need a good second LO at 44.545MHz.
>>>>I have a few crystals that I bought, that are say they are 44.545MHz, but
>>>>are really 44.548MHz. I tried pulling the frquency somewhat, but to no
>>>>great avail.
>>>>I have read that overtone crystals are hard to pull.
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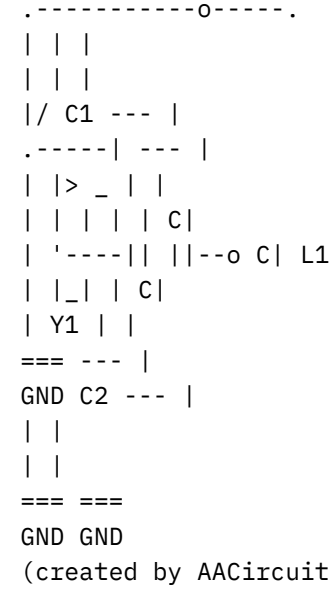
>>>>Does anyone know where I can get good quality crystals at this frequency?
>>>>
>>>>Or how I may combine some easily available crystal frequencies to get
>>>>either 44.545MHz or 45.455MHz?
>>>>
>>>>Best regards,
>>>>John.
>

>
> Hi,
> Thanks,
> The circuit I am using is a simple JFET J310 with a tuned drain circuit.
> The XTAL is connected from the gate to the drain via a 10nF cap.
>
> Another was a colpits oscillator, with a 2N3904 transistor. The XTAL was
> used in palce of the usual L and C.
>
>
> Regards,
> John.

The Pierce circuit is, I believe, only useful for crystals, and not too useful at that.

The Colpitts will definitely want to see you using the thing in parallel mode -- basically you're replacing an inductor with the crystal.

Check out the UHF experimenter's manual from the ARRL. The circuit that they recommend has as it's core a basic grounded-base Colpitts, with the wire from the feedback capacitors to the transistor emitter replaced by the crystal:



(created by AACircuit v1.28.6 beta 04/19/05 www.tech-chat.de)

I don't remember the biasing (obviously this ain't going to work as is) or where you take off your signal, but the idea is that L1, C1 and C2 form a regular old Colpitts at Y1's 3rd-overtone frequency. Y1 just makes sure that the dang thing doesn't drift. What little work I've done with the thing shows it to be very reliable about staying on frequency and starting and all that cool stuff.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

3186. داورل ديدج

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 23:34:14 UTC
From: alprince <alprince_7000@yahoo.com>
Message-ID: <1150068854.498921.23850@y43g2000cwc.googlegroups.com>
Source record: 11787

رلتروكنيملاب عيشام ةعومجم
http://www.ptc2.com/vb/showthread.php?t=1917

ةيفاتهلا تاملاكلما ليجست و ةبقارم
http://www.ptc2.com/vb/showthread.php?t=1698

ةصاخلا كتاعذإ عنصإ
http://www.ptc2.com/vb/showthread.php?t=1147

ةيارسلا يف توبتلاب نحاش
http://www.ptc2.com/vb/showthread.php?t=1275

3في 1دئارة لقياس نبضات القلب
باكمبيوتر +تعلم Serial Interface+أعرف LDR
http://www.ptc2.com/vb/showthread.php?t=672

دائره ارسال Fm
http://www.ptc2.com/vb/showthread.php?t=1463

دائرة ضوء متقطع
http://www.ptc2.com/vb/showthread.php?t=1715

مشاريع و دوائر باستخدام
المايكروكنترولر" Pic"
http://www.ptc2.com/vb/showthread.php?t=663

شاشة مبرمجة بواسطة ميكرو لكتابة ام
تريد (بلغة السي)

http://www.ptc2.com/vb/showthread.php?t=830

مشروع مكبرصوت 100 واط-100W Guitar Amplifier Mk II
http://www.ptc2.com/vb/showthread.php?t=1227

مساعد ركن السيارات
http://www.ptc2.com/vb/showthread.php?t=1372

دائرة مثبت فولت 1.5 لل Mb3 .و.cd Man
http://www.ptc2.com/vb/showthread.php?t=1296

3187. Re: Canada: Repeaters Up The Alcan (sorta OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-11 23:47:45 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <EY1jg.26$vK1.154730@news.sisna.com>
Source record: 11788

Thank you, sir, I appreciate the information, but I've got a list of repeaters from Vancouver up to Anchorage. I've also got a list of repeaters in Northern California, and I know for a fact that I could monitor 90% of them for days on end without hearing anybody. What I wanted most of all was a list of GOOD repeaters, ones with activity on them, between Vancouver and the border of Alaska. I'll worry about Anchorage when I get there.

How about it; any recommendations for "good" repeaters?

Jim

"Larry Gagnon" <lggagnon@fakeuniserve.com> wrote in message news:pan.2006.06.11.16.12.00.350031@fakeuniserve.com...
> On Sat, 10 Jun 2006 18:59:57 -0700, RST Engineering wrote:
>
>> Leaving Wednesday from Northern California for a trip up the Alcan to
>> Anchorage. Anybody got a good series of repeaters going up the highway
>> through Canada?
>
> Being as the Alaska HighWay runs through Alberta, British Columbia, the
> Yukon and Alaska it is a simple matter to search google for repeaters in
> those areas.
>
> Try these to start:
>
>
http://www.rac.ca/opsinfo/repeater.htm#Repeater%20Listings%20for%20locations%20in%20Canada
> http://www.bcarcc.org/
>
>
> Larry VE7EA
>

3188. Re: Schematic for Low Capacitance Fet Buffer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-12 01:09:45 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <t93jg.7647$ap3.5164@news-server.bigpond.net.au>
Source record: 11789

Dave,

Thanks for the tip. I don't want to purchase an entire book for one
circuit though.

I do have some BF998 Dual Gate Mosfets, maybe I can make up a circuit
based on these.

I need around 1pF input capacitance and 1 Meg Ohm, Frequency up to a
couple of hundred MHz.

Regards

David

Dave Platt wrote:
>> I am looking for a circuit for a low capacitance FET circuit to act as a
>> Buffer/Amp for VHF signals (ie. to probe Oscillators etc). (Homebrew
>> Active Probe).
>>
>> I have searched quite a bit on www but cannot locate a suitable design.
>
> One starting point might be a homebrew active-FET oscilloscope probe
> design shown by Robert Pease in "Troubleshooting Analog Circuits"
> (page 16).
>
> As shown, it has a bandwidth of 90 MHz, slew rate of 300 V/usec, input
> Z of 10^11 ohms in parallel with 0.29 pF. Construction is "ugly"
> style, with components soldered together in midair to minimize
> parasitic capacitance to ground.
>
> It uses a cascoded pair of 2N5486 or 2N5485 JFETs, driving a
> 2N3904/2N3906 buffer, and takes +/-15 VDC supply voltage.
>
> I suspect that its bandwidth might be improved by using faster
> bipolar-buffer transistors (maybe MPSH-something-or-other) and
> possibly J310 or U310 JFETs for the front end.
>

3189. Re: FCC tutorial on looking up schematic/info using ID number

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-12 01:16:28 UTC
From: John <noaddress@noaddress.invalid>
Message-ID: <LKGdnQrXgdnIXBHZnZ2dnUVZ_tCdnZ2d@comcast.com>
Source record: 11790

Looks like I picked a poor example.
The schematic is permanently confidential.
Click on the word "Detail" for the second entry.
Click on the "mail slot icon" for any of the
documents to display the document.
If you click on the word "Summary", it will
show which documents are "Permanently Confidential" in the
column of the same name.

"n4aeq" <tucker@conninc.com> wrote in message
news:1149885762.986782.203720@u72g2000cwu.googlegroups.com...
> Thanks John, i can get it to display a list of documents that are in
> .pdf but i there is no
> way to click or open the docs. They just show the list of docs,
> pitcures & other, does this mean i need to do something else? Is a
> login required before the link will be active?
>
> John wrote:
>> "John" <noaddress@noaddress.invalid> wrote in message
>> news:rM-dnTtr1L2MKhTZnZ2dnUVZ_tmdnZ2d@comcast.com...
>> >
>> > "n4aeq" <tucker@conninc.com> wrote in message
>> > news:1149865881.746342.289440@h76g2000cwa.googlegroups.com...
>> >> Im trying to lookup schematics/info the FCCs website:
>> >>
>> >> https://gullfoss2.fcc.gov/prod/oet/cf/eas/reports/GenericSearch.cfm
>> >>
>> >> I have the website but havent had much luck looking anything up using
>> >> fcc id #, sense this
>> >> is my first attempt then maybe theirs something im doing wrong on the
>> >> search page. Alot
>> >> of people seem to use the site for schematics and other good
>> >> information, seems like
>> >> it would great for the ham/experimenter. Any help getting started at
>> >> looking up information
>> >> on the fcc website would be appreciated.
>> >>
>> > https://gullfoss2.fcc.gov/prod/oet/cf/eas/reports/GenericSearch.cfm
>> >
>> >
>> I hit transmit too soon.
>> Note that the FCC ID is entered in pieces, the first 3 characters in the
>> first block, and all of the rest in the second block. That is all that
>> you

>> have to enter. Try PY3WG511-F as an example. There are lots of
>> documents available.
>

3190. Re: Weller Tech Sheets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-12 01:35:47 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <Tx3jg.12151$Ui7.8776@tornado.tampabay.rr.com>
Source record: 11791
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.homebrew

thanks!

g. beat <@ wrote:

> I have a sheet that shows the different pin-outs .. will get that on
> BAMA -- when I have chance to scan.
>
> Greg
>
> "**THE-RFI-EMI-GUY**" <rhyolite@nettally.com
> <mailto:rhyolite@nettally.com>> wrote in message
> news:vcMig.10226$Ui7.5511@tornado.tampabay.rr.com...
> Thanks for the tips. The controller died while using the original
> iron. I will make sure the new one is compatible. Thanks again
>
> g. beat <@ wrote:
>
>> BE VERY CAREFUL ON USING REPLACEMENT IRONS (EC-1201 series) ON
>> THE EARLY "EC" SERIES MODEL BASE UNITS
>>
>> WELLER CHANGED THE PIN OUTS OF THE 5-pin CONNECTOR FOR THE IRON
>> AND BASES WITH THE EC SERIES !!
>> THEY ARE DIFFERENT (EC-1201 is different from EC-1201-A and
>> EC1201 P ... etc.) !!!
>>
>> THIS CAN DAMAGE CONTROL BOARDS OR IRONS !!
>>
>> Greg
>>
>> "**THE-RFI-EMI-GUY**" <rhyolite@nettally.com
>> <mailto:rhyolite@nettally.com>> wrote in message
>> news:F8Lig.10221$Ui7.8851@tornado.tampabay.rr.com...
>> Do you have any tips on fixing a Weller EC-2002-A? It still
>> regulates and heats, but the temperature display is dead.
>> When first turned on it flashes "FFF" for a split second. I
>> think maybe bad filter capacitor or something. Any thoughts
>> on fixing? This is a nice unit I had just bought spare iron
>> and tips for it. Tried another iron, and also measured proper
>> resistance on the thermistor.
>>
>> g. beat <@ wrote:
>>
>>>One of the most frequent questions I receive is concerning the deterioration
>>>of the white silicon or vinyl cords on the older Weller TCP series soldering

>>>irons.
>>>
>>>Weller does sell part number TC217, which is a black replacement cord with 3
>>>pin plug already installed.
>>>This is a good solution for the irons that have the Lightweight Nylon handle
>>>with black heater insulator/plug-in (after 1977) and mate to the WTCPN and
>>>later stations.
>>>
>>>However, this is an expensive solution for the earlier TCP irons that had a
>>>phenolic handle/finger heat shield, such as the WTCPK (military set with
>>>4-pin Jones plug) or W-TCP and WTCPL stations.
>>>
>>>For these units, you have to cut off the 3-pin plug (expensive part of the
>>>assembly) from the replacement cord to wire the Jones plug or directly wire
>>>to the TCP base unit.
>>>
>>>The phenolic handle irons used a metal ground strap that also serves as the
>>>cord's clamp and strain relief.
>>>Removal and replacement of the old cord from this metal ground strap is
>>>difficult (and can be dangerous without proper tools)
>>>
>>>Some restorers have used silicon or fiberglass/silicon sleeving or silicon
>>>tubing to build a new cord by removing the old vinyl or broken silicon
>>>insulation.
>>>
>>>Another option is to use a replacement silicon cord from Rapid electronics
>>>(UK), order code 85-0590
>>>which sells for 3.88 British pounds - considerably cheaper. This cable is
>>>not appropriate for the lightweight nylon handle, since it is slightly
>>>larger in outside diameter and uses the next high wire gauge 20 AWG ..
>>>instead of the original 22 AWG used by Weller.
>>>
>>> Rapid order code 85-0590 Silicone, heat-resistant cable for soldering
>>>irons.
>>>
>>>
>>> a.. Especially recommended for use with mains powered irons.
>>> b.. Ideal for educational applications.
>>> c.. Survives contact with a heated soldering iron tip.
>>> d.. Convert existing PVC cabled irons to safer silicone cable.
>>> e.. Pre-stripped and tinned.
>>> f.. Overall length 1.5 metres.
>>> g.. Suitable for use with all irons using 3-cored flexible cable.
>>>
>>> g. beat
>>>
>>>
>>>======
>>>"g. beat >" <@<spam protected> wrote in message
>>>news:Z7GdneQKhZ6AfBfZnZ2dnUVZ_sKdnZ2d@comcast.com...

>>>
>>>
>>>>I have been slowly scanning my collection of Weller Tech Sheets and posting
>>>>these on BAMA.
>>>>
>>>>Some of these instruction, parts and repair sheets go back to Weller
>>>>Electric in the mid 1960s --
>>>>and are no longer available from CooperTools / Weller.
>>>>http://bama.edebris.com/manuals/weller/
>>>>
>>>>w9gb
>>>>
>>>>
>>>
>>>
>>>
>>>
>>
>>--
>>Joe Leikhim K4SAT
>>"The RFI-EMI-GUY"ï¿½
>>
>>"Treason doth never prosper: what's the reason?
>>For if it prosper, none dare call it treason."
>>
>>"Follow The Money" ;-P
>>
>>
>>
>
>--
>Joe Leikhim K4SAT
>"The RFI-EMI-GUY"ï¿½
>
>"Treason doth never prosper: what's the reason?
>For if it prosper, none dare call it treason."
>
>"Follow The Money" ;-P
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

3191. Re: Canada: Repeaters Up The Alcan (sorta OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-12 04:39:50 UTC
From: Larry Gagnon <lggagnon@fakeuniserve.com>
Message-ID: <pan.2006.06.12.04.39.50.557595@fakeuniserve.com>
Source record: 11792

On Sun, 11 Jun 2006 16:47:45 -0700, RST Engineering wrote:

> What I wanted most of all was
> a list of GOOD repeaters, ones with activity on them, between Vancouver and
> the border of Alaska. I'll worry about Anchorage when I get there.
>
> How about it; any recommendations for "good" repeaters?
>
> Jim

Well Jim, this is way off topic for this newsgroup but I don't think on any 2M repeater, except those in very large cities, will you find too much activity. AFAIAK 2M repeaters are "ham radio telephones". Most of the time folks call only those they know and talk to only those they know. A bit of a "club" thing really.

I have never found 2M to be much good on the road except for the odd occasion - much prefer mobile HF CW and have had MUCH better luck getting QSO's going doing that than I ever did while travelling with my VHF rig alone. For what it's worth - just my opinion.

Also, as you know the population density in Canada, especially northern Canada is significantly less than in the USA so there will always be less activity than you may be used to.

Cheers....Larry VE7EA

3192. Re: 44.545MHz LO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-12 10:15:37 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <d9bjg.24561$X02.16197@trnddc02>
Source record: 11793

John,
It's hard to tell exactly what you have from a verbal description, but I have a suggestion for a test you can make.

Basically, the crystal will look like a small resistance of about 50 ohms or so at its series resonant frequency. Replace the crystal with a 50 ohm resistor (of course, do what you have to do to preserve the DC bias) and see if the circuit oscillates and can be tuned through the crystal frequency. If it doesn't oscillate, chances are that your circuit won't work with a series mode crystal.

Also in general, if you are using a tapped-capacitor colpitts circuit, you can remove the connnection from the junction of the two capacitors to whereever it was connected, and replace that connection with the resistor. If that works, it should oscillate when you replace the resistor with the crystal.

Joe
W3JDR

"John Wilkinson" <johnwilkinson@clara.co.uk> wrote in message
news:1qnq3zucb2g9h$.sz8r3sm5zo8$.dlg@40tude.net...
> On Sun, 11 Jun 2006 10:47:31 GMT, W3JDR wrote:
>
>> John,
>>
>> Most overtone crystals are designed for operation on their series
>> resonance.
>> There is also a parallel resonance, usually a few khz higher than the
>> series
>> resonance. The fact that your oscillator is putting out a signal a few
>> khz
>> higher than the frequency marked on the crystal is a good indicator that
>> you
>> might be operating the crystal in the parallel mode.
>>
>> You shouldn't have to resort to any 'tricks' like operating it in its
>> fundamental mode & multiplying, or putting frequency 'pulling' components
>> in
>> the circuit. It should come very close to the marked frequency if you use
>> the correct circuit.
>>
>>
>> Can you refer to a circuit that's similar to yours so we can look at it
>> and

>> recommend what might be wrong?
>>
>> Joe
>> W3JDR
>>
>>
>> "John Wilkinson" <johnwilkinson@clara.co.uk> wrote in message
>> news:f645hxvffzbd$.1vs281zx2v9r1$.dlg@40tude.net...
>>> Hi,
>>> I need a good second LO at 44.545MHz.
>>> I have a few crystals that I bought, that are say they are 44.545MHz,
>>> but
>>> are really 44.548MHz. I tried pulling the frquency somewhat, but to no
>>> great avail.
>>> I have read that overtone crystals are hard to pull.
>>>
>>> Does anyone know where I can get good quality crystals at this
>>> frequency?
>>>
>>> Or how I may combine some easily available crystal frequencies to get
>>> either 44.545MHz or 45.455MHz?
>>>
>>> Best regards,
>>> John.
>
> Hi,
> Thanks,
> The circuit I am using is a simple JFET J310 with a tuned drain circuit.
> The XTAL is connected from the gate to the drain via a 10nF cap.
>
> Another was a colpits oscillator, with a 2N3904 transistor. The XTAL was
> used in palce of the usual L and C.
>
>
> Regards,
> John.

3193. Re: Canada: Repeaters Up The Alcan (sorta OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-12 10:15:43 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <14WdnfhzxthMoxDZRVnyuQ@pipex.net>
Source record: 11794

R What I wanted most of all was
> a list of GOOD repeaters, ones with activity on them, between Vancouver and
> the border of Alaska. I'll worry about Anchorage when I get there.
>
> How about it; any recommendations for "good" repeaters?
==========
The quality of any repeater is determined by the (content)quality of
YOUR communications. If you make an effort to activate and are willing
to have a sensible communication/discussion ,it will be a GOOD repeater.

In this respect ,sadly, a number of repeaters are not so good ;))

Frank GM0CSZ / KN6WH

3194. Re: Canada: Repeaters Up The Alcan (sorta OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-12 16:18:50 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <Jtgjg.178869$bm6.66854@fed1read04>
Source record: 11795

>>What I wanted most of all was
>> a list of GOOD repeaters, ones with activity on them, between Vancouver
>> and the border of Alaska. I'll worry about Anchorage when I get there.
>>
>> How about it; any recommendations for "good" repeaters?

What I have found for the "farmland" repeaters is they are not amenable to entertaining travelers.
Emergencies - yes. Recommend a restaurant - sometimes. Want to talk about crop disease and prices -- they will talk for hours.

Hint - put a YL on the mic -- that will draw out some responses (;-)
--
CL -- I doubt, therefore I might be !

3195. Re: Schematic for Low Capacitance Fet Buffer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-12 16:21:41 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1150129300.948601.199300@f14g2000cwb.googlegroups.com>
Source record: 11796

David wrote:

> I need around 1pF input capacitance and 1 Meg Ohm, Frequency up to a
> couple of hundred MHz.

These specs are probably rather optimistic, in my opinion. I would probably consider something like a large resistor in series with the input of a cascode amplifier (cascode chosen to reduce effective input capacitance due to feedback). Or perhaps a resistive voltage divider, rather than just a series resistor, in an attempt to get flat response over frequency. But there really is no such thing as a 1 Meg resistor at VHF. The stray capacitance across resistors limits the maximum achievable impedance to perhaps tens of kilohms.

However, I'm not expert on such circuits. You might try posting the question to sci.electronics.design. There are some very clever electronic designers there (along with a number who get their jollies from insulting others).

Steve VE3SMA

3196. Re: 8875

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-12 18:59:55 UTC
From: Skipp says hello <spamsomeotherguyplease@yahoo.com>
Message-ID: <e6kdjbfcr1@skeeter.ucdavis.edu>
Source record: 11797

Hi Mitchell,

The 8875 is its own beast... but you can find them surplus from
guy who mod their original Dentron Amplifiers out. I have a 2500
that I'll some day rebuild with a different tube so who knows... I
may even sell my used tubes on ebay.

You can also post a want over on the yahoo rfamplifiers group,
which is a pretty large group about both rf and audio amplifiers...

http://groups.yahoo.com/group/rfamplifiers/

and the group does both tube and solid state amplifiers...

cheers,
skipp

: Mitchell <mingram1234@alltel.net> wrote:
: Are there any replacement tubes available that are pin compatible with the
: 8875. I have the Dentron 2500.

: Thanks,
: Mitchell

3197. Re: Schematic for Low Capacitance Fet Buffer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-12 20:11:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <128rij2d49tbm98@corp.supernews.com>
Source record: 11648

skavanagh72nospam@yahoo.ca wrote:
> David wrote:
>
>> I need around 1pF input capacitance and 1 Meg Ohm, Frequency up to a
>> couple of hundred MHz.
>
> These specs are probably rather optimistic, in my opinion. I would
> probably consider something like a large resistor in series with the
> input of a cascode amplifier (cascode chosen to reduce effective input
> capacitance due to feedback). Or perhaps a resistive voltage divider,
> rather than just a series resistor, in an attempt to get flat response
> over frequency. But there really is no such thing as a 1 Meg resistor
> at VHF. The stray capacitance across resistors limits the maximum
> achievable impedance to perhaps tens of kilohms.

The "totem pole" follower (a FET source follower with a matched FET as the source "resistor") was widely used by Tektronix. It provides flat, near unity gain over a very wide bandwidth, with high input resistance and low input capacitance. It would be very difficult to make a cascode amplifier with response that flat.

The 1 meg ohm resistor is to establish the DC and low frequency impedance. The unavoidable shunt C from the FETs and other sources makes it immaterial at high frequencies. I agree that 1 pF is optimistic -- it would be very difficult to achieve. You would probably have to do some bootstrapping to reduce the C to that level, if you can do it at all, and bootstrapping becomes more difficult as frequency increases.

> . . .

Roy Lewallen, W7EL

3198. Re: Canada: Repeaters Up The Alcan (sorta OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-13 02:00:34 UTC
From: "veeduber@isp.com" <veeduber@isp.com>
Message-ID: <1150164034.806547.101610@c74g2000cwc.googlegroups.com>
Source record: 11649

RST Engineering wrote:
> Sorry for posting this OT, but those *&^&*(**& over on rec.radio.
> amateur.misc make it impossible to post a serious question on that group.
>
> Leaving Wednesday from Northern California for a trip up the Alcan to
> Anchorage. Anybody got a good series of repeaters going up the highway
> through Canada?
> ----------

During my 1996 trip to Inuvik I had quite a list of repeaters along our route. Up and back, I was in Canada for about 26 days. In that time I think I got TWO responses via 2-meter :-)

-Bob Hoover
-(KA6HZF)

3199. bricks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-13 02:56:35 UTC
From: Allan Butler <ka0ies@hotmail.com>
Message-ID: <1150166962_35@64triton.net>
Source record: 11650

Hi there:

I am looking for resources to obtain schematics, pc layouts and such
for solid state RF amplifiers. I am interested in everything from 6 meters
up to 432 MHz.

I know there is someone that advertises in QST but the May issue of
this year did not have them in the advertising section.

I am looking for amps that work off of 13.8 volts and anywhere from
100 watts up to about 150 watts output. Any information that you might have
would be greatly appreciated.

-----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

3200. ferrite toroids and capacitors for antenna tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-13 09:26:58 UTC
From: John Laczik <John@laczik.org>
Message-ID: <e6m0d2$aq0$1@news.ox.ac.uk>
Source record: 11651

Which types of ferrite toroids and capacitors would be recommended
for an antenna tuner that is to be used 1.5 MHz - 30 MHz (possibly
up to 50 MHz)? Max. transmit power is 100 ~ 150 W.

Ideally I would prefer components that are available from either
RS (rswww.com) or Farnell (uk.farnell.com).

Farnell do toroids from N27, N30, 3C85, 3R1, 4C65, 3E5 and 3E25
materials; which ones are suitable for broadband HF power applications?

For the capacitors, would any of the surface mount types be suitable?

Thanks,

John

3201. Re: ferrite toroids and capacitors for antenna tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-13 09:49:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <128t2hc3mngue17@corp.supernews.com>
Source record: 11652

Exactly what "broadband HF power application" do you have in mind? A single transformer or balun covering the whole band? Capacitors are usually avoided in broadband applications. How will you be using them?

Are you a licensed amateur?

Roy Lewallen, W7EL

John Laczik wrote:
> Which types of ferrite toroids and capacitors would be recommended
> for an antenna tuner that is to be used 1.5 MHz - 30 MHz (possibly
> up to 50 MHz)? Max. transmit power is 100 ~ 150 W.
>
> Ideally I would prefer components that are available from either
> RS (rswww.com) or Farnell (uk.farnell.com).
>
> Farnell do toroids from N27, N30, 3C85, 3R1, 4C65, 3E5 and 3E25
> materials; which ones are suitable for broadband HF power applications?
>
> For the capacitors, would any of the surface mount types be suitable?
>
> Thanks,
>
> John

3202. Re: bricks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-13 13:48:06 UTC
From: "Dr. Jeff" <drjeff@optonline.net>
Message-ID: <1150206486.580523.37780@g10g2000cwb.googlegroups.com>
Source record: 11653

Check out Communication Concepts Inc.(CCI) They have many of the
Motorola Application Notes and Engineering Bulletins, written by Helge
Granberg and his RF engineers at Motorola, on solid state RF amps. CCI
also offers parts, etc.
http://www.communication-concepts.com/

Another good place is RF Electronics Inc:
http://users.aol.com/rfelectron/rfelect.htm

Jeff

Allan Butler wrote:
> Hi there:
>
> I am looking for resources to obtain schematics, pc layouts and such
> for solid state RF amplifiers. I am interested in everything from 6 meters
> up to 432 MHz.
>
> I know there is someone that advertises in QST but the May issue of
> this year did not have them in the advertising section.
>
> I am looking for amps that work off of 13.8 volts and anywhere from
> 100 watts up to about 150 watts output. Any information that you might have
> would be greatly appreciated.
>
> -----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
> ----= East and West-Coast Server Farms - Total Privacy via Encryption =----

3203. Re: ferrite toroids and capacitors for antenna tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-13 14:01:53 UTC
From: John Laczik <John@laczik.org>
Message-ID: <e6mgghgmd1@news.ox.ac.uk>
Source record: 11654

Roy,

> Exactly what "broadband HF power application" do you have in mind?

Sorry, I should have been more precise. What I wrote referred to an antenna tuner that covers the various ham/marine bands in the 1.5 MHz to 50 MHz range, i.e inductors and capacitors that are suitable for use in this 'broad' frequency range. Also, the antenna tuner probably will have a balun in it, which would not be tuned and hence would be broadband.

> Are you a licensed amateur?

Yes.

> How will you be using them?

I am trying to set up a rig on a boat, and one of the options is to make a remote controlled antenna tuner for RX, and up to ~100W TX, instead of using one of the rather expensive commercial units. The antenna/tuner will be used to receive marine weather transmissions, and for CW QSOs on the ham bands.

Thanks,

John, HA5PG/MM

3204. FS: SMA Cable Assemblies, $9.90 each, made in USA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-13 16:31:20 UTC
From: AAA RF Products <sales@aaarfproducts.com>
Message-ID: <eLBjg.7954$rS6.3333@fed1read11>
Source record: 11655
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

Any 10 SMA Male to SMA Male cable assemblies for $99.00

RG-58C/U or RG-223/U

Mix & match any 10

Length available: 12", 18", 24", 30", 36", 48", 60", 72", 84", & 96"

High quality & made in USA

Please email sales@AAARFProducts.com

or call 949 481 3154 (San Clemente, CA, USA)

AAA RF Products
946 Calle Amanecer, suite E
San Clemente, CA 92673

3205. Re: ferrite toroids and capacitors for antenna tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-13 16:45:25 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <o_6dnY4f7M9UdhPZRVnytw@pipex.net>
Source record: 11656

Don't think it is really necessary to use (ferrite) toroids for a
compact 100W capable HF antenna matching unit.
Depending on type of antenna a simple variable capacitor(s) /variable
roller inductor unit will highly likely do the trick, even if remotely
operated.
If the unit needs to have a balun ,you obviously want to use a balanced
feeder, but it is doubtful that an exposed balanced feeder in a 'salt
spraying environment' will be effective.

Frank GM0CSZ / KN6WH

================
> Sorry, I should have been more precise. What I wrote referred to
> an antenna tuner that covers the various ham/marine bands in the
> 1.5 MHz to 50 MHz range, i.e inductors and capacitors that are
> suitable for use in this 'broad' frequency range. Also, the antenna
> tuner probably will have a balun in it, which would not be tuned
> and hence would be broadband.

> I am trying to set up a rig on a boat, and one of the options is to
> make a remote controlled antenna tuner for RX, and up to ~100W TX,
> instead of using one of the rather expensive commercial units. The
> antenna/tuner will be used to receive marine weather transmissions,
> and for CW QSOs on the ham bands.
>
> Thanks,
>
> John, HA5PG/MM
>

3206. Re: FCC tutorial on looking up schematic/info using ID number

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-13 18:36:38 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e6n0jp$p94$1@avnika.corp.mot.com>
Source record: 11657

Manufacturers can pay the FCC to keep various documents from public view.
When they are available, you can see them. If you can't see / download
them, then they are confidental.
73, Steve, K9DCI

"John" <noaddress@noaddress.invalid> wrote in message
news:LKGdnQrXgdnIXBHZnZ2dnUVZ_tCdnZ2d@comcast.com...
> Looks like I picked a poor example.
> The schematic is permanently confidential.
> Click on the word "Detail" for the second entry.
> Click on the "mail slot icon" for any of the
> documents to display the document.
> If you click on the word "Summary", it will
> show which documents are "Permanently Confidential" in the
> column of the same name.
>
> "n4aeq" <tucker@conninc.com> wrote in message
> news:1149885762.986782.203720@u72g2000cwu.googlegroups.com...
> > Thanks John, i can get it to display a list of documents that are in
> > .pdf but i there is no
> > way to click or open the docs. They just show the list of docs,
> > pitcures & other, does this mean i need to do something else? Is a
> > login required before the link will be active?
> >
> > John wrote:
> >> "John" <noaddress@noaddress.invalid> wrote in message
> >> news:rM-dnTtr1L2MKhTZnZ2dnUVZ_tmdnZ2d@comcast.com...
> >> >
> >> > "n4aeq" <tucker@conninc.com> wrote in message
> >> > news:1149865881.746342.289440@h76g2000cwa.googlegroups.com...
> >> >> Im trying to lookup schematics/info the FCCs website:
> >> >>
> >> >> https://gullfoss2.fcc.gov/prod/oet/cf/eas/reports/GenericSearch.cfm
> >> >>
> >> >> I have the website but havent had much luck looking anything up
using
> >> >> fcc id #, sense this
> >> >> is my first attempt then maybe theirs something im doing wrong on
the
> >> >> search page. Alot
> >> >> of people seem to use the site for schematics and other good
> >> >> information, seems like
> >> >> it would great for the ham/experimenter. Any help getting started
at

> >> >> looking up information
> >> >> on the fcc website would be appreciated.
> >> >>
> >> > https://gullfoss2.fcc.gov/prod/oet/cf/eas/reports/GenericSearch.cfm
> >> >
> >> >
> >> I hit transmit too soon.
> >> Note that the FCC ID is entered in pieces, the first 3 characters in
the
> >> first block, and all of the rest in the second block. That is all that
> >> you
> >> have to enter. Try PY3WG511-F as an example. There are lots of
> >> documents available.
> >
>
>

3207. Re: ferrite toroids and capacitors for antenna tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-13 19:55:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <128u626p48l6sde@corp.supernews.com>
Source record: 11658

Thanks for the clarification. The core requirements for a broadband application like a broadband transformer or balun are much different than for a narrowband (high Q) application like an inductor in a matching network.

I wouldn't use ferrites at all for the inductor cores, but powdered iron -- type 6 except perhaps below 3.5 MHz where type 2 might be slightly better. For fixed capacitors I'd stick to NPO (C0G) ceramic for Q and stability.

Roy Lewallen, W7EL

John Laczik wrote:
> Roy,
>
>> Exactly what "broadband HF power application" do you have in mind?
>
> Sorry, I should have been more precise. What I wrote referred to
> an antenna tuner that covers the various ham/marine bands in the
> 1.5 MHz to 50 MHz range, i.e inductors and capacitors that are
> suitable for use in this 'broad' frequency range. Also, the antenna
> tuner probably will have a balun in it, which would not be tuned
> and hence would be broadband.
>
>> Are you a licensed amateur?
>
> Yes.
>
>> How will you be using them?
>
> I am trying to set up a rig on a boat, and one of the options is to
> make a remote controlled antenna tuner for RX, and up to ~100W TX,
> instead of using one of the rather expensive commercial units. The
> antenna/tuner will be used to receive marine weather transmissions,
> and for CW QSOs on the ham bands.
>
> Thanks,
>
> John, HA5PG/MM
>

3208. Tektronix FG501A drift question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-14 03:01:22 UTC
From: hexter@blazenet.net
Message-ID: <YuednVBq6_uf4RLZnZ2dnUVZ_tKdnZ2d@suscom.com>
Source record: 11659

Hi folks,

I have a Tek function generator model FG501A and the D.C. offset in the 'fixed' or 'non-variable' position seems real drifty with temperature changes. I thought my unit was bad when I noticed it was offset nearly .5 volts at startup then drifting toward 0 offset after extended warmup, that was until I discovered the unit where I work was even worse than mine at about 1.5 volts of offset. The offset can be adjusted to zero for some exact given temperature, but geez guys, change the temperature about 10 degrees and the offset changes about .25 volts.

Anyone ever run into this? Seems kinda crappy compared to most Tek stuff. Do the two units I can lay my hands on have a shot compensating component? Other than d.c. offset drift the unit works perfect.

Thanks.

3209. Re: Tektronix FG501A drift question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-14 16:17:22 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrne90dlk.1noa.bit-bucket@shell.config.com>
Source record: 11660

On Tue, 13 Jun 2006 22:01:22 -0500, Gudmundur wrote:
> Hi folks,
>
> I have a Tek function generator model FG501A and the D.C. offset in
> the 'fixed' or 'non-variable' position seems real drifty with
> temperature changes.

Probably a wider audience for this:

sci.electronics.repair

Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
38.24N 104.55W | @ config.com | Jonesy | OS/2
*** Killfiling google posts: <http//jonz.net/ng.htm>

3210. Re: Tektronix FG501A drift question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-14 16:18:26 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <449036A6.DE5356F7@earthlink.net>
Source record: 11661

Gudmundur wrote:
>
> Hi folks,
>
> I have a Tek function generator model FG501A and the D.C. offset in
> the 'fixed' or 'non-variable' position seems real drifty with
> temperature changes. I thought my unit was bad when I noticed it was
> offset nearly .5 volts at startup then drifting toward 0 offset after
> extended warmup, that was until I discovered the unit where I work
> was even worse than mine at about 1.5 volts of offset. The offset
> can be adjusted to zero for some exact given temperature, but geez
> guys, change the temperature about 10 degrees and the offset changes
> about .25 volts.
>
> Anyone ever run into this? Seems kinda crappy compared to most Tek stuff.
> Do the two units I can lay my hands on have a shot compensating
> component? Other than d.c. offset drift the unit works perfect.
>
> Thanks.

news:sci.electronics.equipment might be of more help.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

3211. On measuring small coils

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-14 18:09:25 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1150308565.001491.278920@h76g2000cwa.googlegroups.com>
Source record: 11662

Hi all,

I'm in the midst of winding a bunch of little coils on ferrite toroids, and was pondering how to measure their inductance and adjust it (by changing turns spacing around the toroid) to the desired values. I have an HP4274A LCR meter, but its test frequency only goes up to 100kHz, and I wanted to measure the coils closer to their ~10MHz operating frequency. It occured to me that I could make the measurement with a one-port network analyzer measurement. If I resonate the coil with a capacitor of known value (C1) with one end of that tank grounded, and put another capacitor (C2) in series from the top of the tank to the VNA port, and a third capacitor (C3) shunt across the VNA port, by adjusting C2 I can get "perfect" return loss at some frequency. When I do that, the values of C1, C2 and C3, and the frequency at which the return loss is infinite, will tell me not only the inductance but also the Q at that frequency.

I guess I can write a general expression for the impedance the VNA sees, in terms of C1, C2, C3, L and Rseries, and the frequency, and set that equal to 50 ohms, plug in the capacitor values, and calculate L and R. But for now I'm just using an easy RFSim99 model, with the inductor "physical model" selected so I can set Q and frequency at which Q is applied. I just set the capacitances as they are in my measurement circuit (with C2 estimated from the rotation angle of the little air trimmer I'm using there), and adjust the coil inductance and Q in the simulation till the return loss null is deep and the frequency matches the observed VNA frequency for that null.

My coils are on T-25-6 cores, around 1uH, and I'm using 180pF for C1, 150pF for C3, and can vary C2 from about 12 to 30pF. Even with my crude reading of C2, I can determine the Q within 10% tolerance, which is plenty accurate enough for my work. This same method should work well for coils over a pretty wide range of Q, inductance and operating frequency, so long as you have capacitors with Q much higher than the coil (or known capacitor Qs), and the parasitic reactances around the circuit are not out of control.

Lest you think a VNA is out of your reach, check out ebay auctions and the very nice homebrew VNA described at http://users.adelphia.net/~n2pk/. It can be a very useful piece of equipment for an RF homebrewer.

Cheers,
Tom

3212. Re: Weller Tech Sheets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-14 18:59:59 UTC
From: fmmck@aol.com
Message-ID: <fmmck-1406061459590001@ac931cd2.ipt.aol.com>
Source record: 11663

In article <Z7GdneQKhZ6AfBfZnZ2dnUVZ_sKdnZ2d@comcast.com>, "g. beat"
<@<spam protected>> wrote:

> I have been slowly scanning my collection of Weller Tech Sheets and posting
> these on BAMA.

w9gb-

Do you by any chance have a Fluke collection as well?

I'm looking for an instruction sheet for installing the 1300 MHz
prescaler, Option 72XXA-331K, into the Fluke 7260A or 7261A counters. It
is Fluke Stock Number 546087. Fluke no longer had any record of it when I
checked.

BAMA has the 7261A manual, but not this instruction sheet.

Thanks.

Fred, K4DII

3213. 800W output filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-14 20:58:23 UTC
From: paulsandland@peoplepc.com
Message-ID: <1150318703.539417.171210@f6g2000cwb.googlegroups.com>
Source record: 11665

I am trying to build a set of filters for the ham bands for use with the 600W motorola designed fet amplifier described in last months qsl.I have sucessfully modelled suitable filters using pspice using 3 series inductors with 2 parallel caps for each band but I notice the current in the caps can be several amps peak. Values range from 150 to 3000pf. Can Ceramics be used? Or do I need several parallel silver mica caps? How much power can one dissipate in these caps? Near the corner frequency there is as much as 6db gain under low load conditions and this exacerbates the problem. I could move the corner further up so that the filter is not excited at the peak current, but then I will probably have to increase the number of poles to 7 from 5 to get enough attenuation at the third harmonic. Is there a better filter architecture that minimizes cap current?

3214. 800W output filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-14 20:58:24 UTC
From: paulsandland@peoplepc.com
Message-ID: <1150318704.182159.267840@u72g2000cwu.googlegroups.com>
Source record: 11664

I am trying to build a set of filters for the ham bands for use with the 600W motorola designed fet amplifier described in last months qsl.I have sucessfully modelled suitable filters using pspice using 3 series inductors with 2 parallel caps for each band but I notice the current in the caps can be several amps peak. Values range from 150 to 3000pf. Can Ceramics be used? Or do I need several parallel silver mica caps? How much power can one dissipate in these caps? Near the corner frequency there is as much as 6db gain under low load conditions and this exacerbates the problem. I could move the corner further up so that the filter is not excited at the peak current, but then I will probably have to increase the number of poles to 7 from 5 to get enough attenuation at the third harmonic. Is there a better filter architecture that minimizes cap current?

3215. Re: ferrite toroids and capacitors for antenna tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-14 22:12:18 UTC
From: w8ji@akorn.net
Message-ID: <1150323138.486625.199110@c74g2000cwc.googlegroups.com>
Source record: 11666

John,

I designed some automatic tuners on the market. It was a very lengthy process in selecting components and laying out circuit boards. It really is a much better value to just buy one, unless you want to learn how to design a tuner.

You probably want powdered iron mixes for low frequencies (larger inductor values) and air core coils for small values.

The capacitors would have to be silver mica types although you might find some high current high Q multi-layer ceramics that will work. There is no reason to go much over the contact voltage breakdown of the relays when picking capacitor voltage, since the relay would fail first. Current is another issue. You must obtain capacitors that handle high current, meaning the capacitor must have low ESR. As a general rule that would mean a snubber mica capacitor or a multi-layer HV chip capacitor.

Relay selection is critical. I cut dozens of relays open looking for good candidates, and then HV tested and RF tested the relays for breakdown voltage. A DC test will not work.

It's pretty tough to build an automatic tuner that will handle 100 watts or more into a wide range of load impedances. Most of the problem is parts selection and board layout.

73 Tom

3216. ** FLEA at MIT ** Sunday June 18th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-15 01:00:27 UTC
From: w1gsl@mit.edu
Message-ID: <4490b12b$0$570$b45e6eb0@senator-bedfellow.mit.edu>
Source record: 11667
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

This comming Sunday...

+++ Now even more Buyers Parking !!!
Thanks to TKT we have use of their new parking lot
across Albany St from the SWAPFEST !!!

!! ** More Buyers PARKING is available ** for details see
http://web.mit.edu/w1gsl/Public/flyer

*** !!!! In our Traditional GARAGE and the adjacent lot !!!! ****
so come rain or shine or super heat the Flea is on !!!

********* $1 buyers discount with hardcopy of this notice ********

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS - HAM RADIO

FLEA all SUMMER at MIT
Sunday June 18yh 2006
9AM-2PM

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MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
free, off-street parking for >2000 cars!

Buyers admission is $5 (you get $1 off if
you're lucky enough to have a copy of our ad)
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$15 for each additional at the gate.

The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
time starting at 7AM.

SEASON PASS + Advance Seller Discount

A sellers discount season pass is available which
offers a 30% discount. By prepaying you get a
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*** Attention Sellers ***
Prepaid vendors.. Season Pass or monthly,

will be admitted FIRST.
Separate lines will form prior to gate opening
for prepaid and nonprepaid vendors

!! RAIN or SHINE !! Have no fear of rain, a covered
well illuminated tailgate area is available for all
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MIT UHF Repeater Association (W1XM)
MIT Radio Society (W1MX)
Harvard Wireless Club (W1AF)

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Rates include one admission per space.

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$70 each additional Space
Must be received by April 16th

Advance $17 First space
$12 Additional Spaces
Must be received by the 5th of the month.

Gate Admission $20 First Space
$15 Additional Spaces
Admission is after the prepaid vendors

Early Bird Buyer -Admission after the prepaid vendor line is admitted. ~ 7:15AM
** You may not sell. **
$15 per person at the gate.

****************************** cut here ******************************

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City _____ State _____ Zip _____ PO Box 397082
Cambridge MA 02139
E-mail _____

****
Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754
****

3217. Re: 800W output filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-15 01:02:23 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1150333343.152115.72390@f6g2000cwb.googlegroups.com>
Source record: 11668

Have a look at http://www.avxcorp.com/docs/catalogs/hi-q.pdf -- there
are likely other manufacturers who have lines of high current RF caps,
too. The caps in the referenced PDF are rated for max current about
15A at 150pF, 13MHz; 11A at 150pF, 64MHz; over 20A at 3000pF at 13MHz.
High enough for you? Parallel a couple if not! These are SMT-style
ceramics--a 3300pF 1000WVDC will be 9.4mm long, 9.9mm wide, 3.3mm max
thick. A 150pF 3000WVDC will be 5.8mmx6.4mm, max 3.3mm thick. (Those
are the only two len * width in that series.)

Cheers,
Tom

paulsandland@peoplepc.com wrote:
> I am trying to build a set of filters for the ham bands for use with
> the 600W motorola designed fet amplifier described in last months qsl.I
> have sucessfully modelled suitable filters using pspice using 3 series
> inductors with 2 parallel caps for each band but I notice the current
> in the caps can be several amps peak. Values range from 150 to 3000pf.
> Can Ceramics be used? Or do I need several parallel silver mica caps?
> How much power can one dissipate in these caps? Near the corner
> frequency there is as much as 6db gain under low load conditions and
> this exacerbates the problem. I could move the corner further up so
> that the filter is not excited at the peak current, but then I will
> probably have to increase the number of poles to 7 from 5 to get enough
> attenuation at the third harmonic. Is there a better filter
> architecture that minimizes cap current?

3218. Re: Weller Tech Sheets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-15 04:45:27 UTC
From: "g. beat"
Message-ID: <Vc2dnZTK3NR1eA3ZnZ2dnUVZ_qOdnZ2d@comcast.com>
Source record: 11669

"Fred McKenzie" <fmmck@aol.com> wrote in message
news:fmmck-1406061459590001@ac931cd2.ipt.aol.com...
>
> w9gb-
>
> Do you by any chance have a Fluke collection as well?
>
> I'm looking for an instruction sheet for installing the 1300 MHz
> prescaler, Option 72XXA-331K, into the Fluke 7260A or 7261A counters. It
> is Fluke Stock Number 546087. Fluke no longer had any record of it when I
> checked.
>
> BAMA has the 7261A manual, but not this instruction sheet.
>
> Thanks.
>

Fred -

Call Fluke Service at:
Within US: 888.993.5853
Outside US: 1-425-446-5480

I talked to their Service manager last autumn.
If they don't have the specific document -- their experience should be able
to guide you.

g. beat
w9gb

3219. FT-817 FT-857 FT-897 KEYPAD

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-15 05:09:50 UTC
From: Dexxsterlab <dexxster_a@t_email.com>
Message-ID: <4490eb98$0$16940$4fafbaef@reader4.news.tin.it>
Source record: 11670
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,pl.rec.radio.amatorskie,japan.ham-radio,hr.rec.radio,aus.radio.amateur.misc,alt.ham-radio.marketplace

http://cgi.ebay.it/ws/eBayISAPI.dll?ViewItem&item=9740259721

Info

http://www.dexxsterlab.com/kp8x7/kp8x7e.pdf

http://www.qsl.net/it9xxs

3220. Re: FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-15 09:24:38 UTC
From: Daniel <dxmm@nospam.albury.net.au>
Message-ID: <44911a16$0$3650$88260bb3@free.teranews.com>
Source record: 11671
Cross-posted to: alt.electronics.manufacture.circuitboard,alt.engineering.electrical,aus.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.equipment,uk.radio.amateur

Ross Mac wrote:
> "Roy L. Fuchs" <roylfuchs@urfargingicehole.org> wrote in message
> news:gtg172letiechtlciahvlssjq2nal7lbqj@4ax.com...
>> On Sun, 21 May 2006 11:24:16 -0400, "Ross Mac"
>> <this.is.a.mung@example.invalid> Gave us:
>>
>>> "Roy L. Fuchs" <roylfuchs@urfargingicehole.org> wrote in message
>>> news:0rhl629t40if5hih8t7hm85gn5s5h44qei@4ax.com...
>>>> On Mon, 15 May 2006 19:42:38 -0400, "Ross Mac"
>>>> <this.is.a.mung@example.invalid> Gave us:
>>>>
>>>>> "Roy L. Fuchs" <roylfuchs@urfargingicehole.org> wrote in message
>>>>> news:gvof629spp34fho2k68kvv340b0memcg0r@4ax.com...
>>>>>> On Sun, 14 May 2006 17:44:51 -0400, "Ross Mac"
>>>>>> <this.is.a.mung@example.invalid> Gave us:
>>>>>>
>>>>>>> "Roy L. Fuchs" <roylfuchs@urfargingicehole.org> wrote in message
>>>>>>> news:l70f62pu6h880c700hb0lghjn9moindili@4ax.com...
>>>>>>>> On Fri, 12 May 2006 19:12:04 GMT, <glenron@ntlworld.com> Gave us:
>>>>>>>>
>>>>>>>>> FA KEITHLEY
>>>>>>>> You posted to only ONE correct group. The posts in the rest of the
>>>>>>>> groups are all SPAM, asshole.
>>>>>>> Wrong again Dimbulb...do your homework.....
>>>>>>>
>>>>>> Not in school, you stupid fucktard.
>>>>> Oh...you must be...you use schoolyard lingo!
>>>> You wouldn't know. You're just an old alzheimeristic twit.
>>>>
>>> That's the best you can do Hey Dimbulb?
>>>> My worst is two orders of magnitude better than your best.
>>>>
>>> Wrong and wrong again....what else is new....
>>>> You should stop talking about yourself.
>>>>
>>> Big on mouth and small on brains.....
>>>
>>>> You're an idiot. That is quite succinct.
>>>>
>>>> This is a text forum, you retarded bastard. There are no mouths
>>>> here, dumbfuck.

>>> The typical moronic response expected from the likes of you
>>> Darkmatter.....
>>>
>> You're an idiot.
>
> You resemble that remark....
>

Friends at play.....eh!

Daniel

--
Posted via a free Usenet account from http://www.teranews.com

3221. Re: 800W output filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-15 12:42:19 UTC
From: "Dr. Jeff" <drjeff@optonline.net>
Message-ID: <1150375339.271112.198340@i40g2000cwc.googlegroups.com>
Source record: 11672

If you can, get a copy of the book " Radio Frequency Transistors" by
Norm Dye & Helge Granberg. There is a chapter specifically about
designing and building Filters to handle the output of Motorola based
transistor RF amplifiers. To quote from the book:
"Paralleling of multiple capacitors provides a means to increase
current carrying capabilities and allows the use of inexpensive disc
types.
.....Typically the RF voltage ratings of such capacitors are
approximately 30-35% of their D.C. voltage ratings."
High voltage ceramic disc caps are widely available (1,000 to 3,000
volts).
The book also has formulas for calculating various types of filters,
estimating RF currents and voltages, and choosing components, etc.
Highly recommended!

Jeff

paulsandland@peoplepc.com wrote:
> I am trying to build a set of filters for the ham bands for use with
> the 600W motorola designed fet amplifier described in last months qsl.I
> have sucessfully modelled suitable filters using pspice using 3 series
> inductors with 2 parallel caps for each band but I notice the current
> in the caps can be several amps peak. Values range from 150 to 3000pf.
> Can Ceramics be used? Or do I need several parallel silver mica caps?
> How much power can one dissipate in these caps? Near the corner
> frequency there is as much as 6db gain under low load conditions and
> this exacerbates the problem. I could move the corner further up so
> that the filter is not excited at the peak current, but then I will
> probably have to increase the number of poles to 7 from 5 to get enough
> attenuation at the third harmonic. Is there a better filter
> architecture that minimizes cap current?

3222. FT-817 FT-857 FT-897 KEYPAD

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-15 17:09:08 UTC
From: Dexxsterlab <dexxster@email.com>
Message-ID: <4491942e$0$5102$4fafbaef@reader2.news.tin.it>
Source record: 11673
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,pl.rec.radio.amatorskie,japan.ham-radio,hr.rec.radio,aus.radio.amateur.misc,alt.ham-radio.marketplace

http://cgi.ebay.it/ws/eBayISAPI.dll?ViewItem&item=9740259721

Info

http://www.dexxsterlab.com/kp8x7/kp8x7e.pdf

http://www.qsl.net/it9xxs

3223. FT-817 FT-857 FT-897 KEYPAD

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-15 17:13:29 UTC
From: Dexxsterlab <dexxster@email.com>
Message-ID: <44919532$0$10064$4fafbaef@reader3.news.tin.it>
Source record: 11674
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,pl.rec.radio.amatorskie,hr.rec.radio,aus.radio.amateur.misc

http://cgi.ebay.it/ws/eBayISAPI.dll?ViewItem&item=9740259721

Info

http://www.dexxsterlab.com/kp8x7/kp8x7e.pdf

http://www.qsl.net/it9xxs

3224. Re: 800W output filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-15 17:36:18 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <JuudnS2zPeWIBgzZRVny2Q@bt.com>
Source record: 11675

```
>> Is there a better filter
> > architecture that minimizes cap current?
>
=====================================

There is no alternative to analysing the circuit and working it out.

Use your slide rules and pocket calculators. You ARE educated
engineers, or are you just typical, unreliable Google and newsgroup
addicts?
```

3225. Re: 800W output filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-15 19:15:25 UTC
From: paulsandland@peoplepc.com
Message-ID: <1150398925.547872.241190@c74g2000cwc.googlegroups.com>
Source record: 11676

Thanks, Tom for the input. I looked up the AVX caps and they would do
the job, but I find them difficult to get. They seem not to be in stock
anywhere at retail, and are quoted at 11 weeks leadtime. Somewhere
there must be a supplier who caters to small quantity orders I would
think. I just haven't found them!
Paul
K7ITM wrote:
> Have a look at http://www.avxcorp.com/docs/catalogs/hi-q.pdf -- there
> are likely other manufacturers who have lines of high current RF caps,
> too. The caps in the referenced PDF are rated for max current about
> 15A at 150pF, 13MHz; 11A at 150pF, 64MHz; over 20A at 3000pF at 13MHz.
> High enough for you? Parallel a couple if not! These are SMT-style
> ceramics--a 3300pF 1000WVDC will be 9.4mm long, 9.9mm wide, 3.3mm max
> thick. A 150pF 3000WVDC will be 5.8mmx6.4mm, max 3.3mm thick. (Those
> are the only two len * width in that series.)
>
> Cheers,
> Tom
>
> paulsandland@peoplepc.com wrote:
> > I am trying to build a set of filters for the ham bands for use with
> > the 600W motorola designed fet amplifier described in last months qsl.I
> > have sucessfully modelled suitable filters using pspice using 3 series
> > inductors with 2 parallel caps for each band but I notice the current
> > in the caps can be several amps peak. Values range from 150 to 3000pf.
> > Can Ceramics be used? Or do I need several parallel silver mica caps?
> > How much power can one dissipate in these caps? Near the corner
> > frequency there is as much as 6db gain under low load conditions and
> > this exacerbates the problem. I could move the corner further up so
> > that the filter is not excited at the peak current, but then I will
> > probably have to increase the number of poles to 7 from 5 to get enough
> > attenuation at the third harmonic. Is there a better filter
> > architecture that minimizes cap current?

3226. Re: 800W output filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-15 19:22:47 UTC
From: paulsandland@peoplepc.com
Message-ID: <1150399367.816664.222490@h76g2000cwa.googlegroups.com>
Source record: 11677

Thanks Jeff for the information. However I think it is dielectric loss
and not working voltage that may give me trouble here. Even with 3kV
disc ceramics the loss is quoted at 2% so these will get hot at a few
amps. The low loss AVX hi-q ceramics do appear to be better but are not
east to find. I am new to amateur radio so just learning these things.
I did order the book you suggested. Thanks,
Paul.
Dr. Jeff wrote:
> If you can, get a copy of the book " Radio Frequency Transistors" by
> Norm Dye & Helge Granberg. There is a chapter specifically about
> designing and building Filters to handle the output of Motorola based
> transistor RF amplifiers. To quote from the book:
> "Paralleling of multiple capacitors provides a means to increase
> current carrying capabilities and allows the use of inexpensive disc
> types.
> .....Typically the RF voltage ratings of such capacitors are
> approximately 30-35% of their D.C. voltage ratings."
> High voltage ceramic disc caps are widely available (1,000 to 3,000
> volts).
> The book also has formulas for calculating various types of filters,
> estimating RF currents and voltages, and choosing components, etc.
> Highly recommended!
>
> Jeff
>
>
>
>
>
> paulsandland@peoplepc.com wrote:
> > I am trying to build a set of filters for the ham bands for use with
> > the 600W motorola designed fet amplifier described in last months qsl.I
> > have sucessfully modelled suitable filters using pspice using 3 series
> > inductors with 2 parallel caps for each band but I notice the current
> > in the caps can be several amps peak. Values range from 150 to 3000pf.
> > Can Ceramics be used? Or do I need several parallel silver mica caps?
> > How much power can one dissipate in these caps? Near the corner
> > frequency there is as much as 6db gain under low load conditions and
> > this exacerbates the problem. I could move the corner further up so
> > that the filter is not excited at the peak current, but then I will
> > probably have to increase the number of poles to 7 from 5 to get enough
> > attenuation at the third harmonic. Is there a better filter
> > architecture that minimizes cap current?

3227. Re: 800W output filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-15 19:42:54 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1293e242pv6po6c@corp.supernews.com>
Source record: 11678

American Technical Ceramics (ATC) makes capacitors specifically for high power, low loss RF applications. You might see if you can get some of their products.

My guess is that you'll find ordinary NPO ceramics to be good enough if you use multilayer ones, rather than disks, of decent physical size. The critical spec is the ESR if you can get it for candidate ceramics. I don't, however, have personal experience at running them at this power level.

Roy Lewallen, W7EL

3228. Re: FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-15 21:40:16 UTC
From: Robert Baer <robertbaer@earthlink.net>
Message-ID: <4tkkg.6269$lf4.1851@newsread1.news.pas.earthlink.net>
Source record: 11679
Cross-posted to: alt.electronics.manufacture.circuitboard,alt.engineering.electrical,aus.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.equipment,uk.radio.amateur

Meanwhile, what is happening with that poor neglected Kiethley 610C?

3229. FT-817 FT-857 FT-897 KEYPAD

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-16 04:47:03 UTC
From: Dexxsterlab <dexxster@email.com>
Message-ID: <449237bf$0$16926$4fafbaef@reader4.news.tin.it>
Source record: 11680
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

http://www.dexxsterlab.com/kp8x7/kp8x7e.pdf

http://www.qsl.net/it9xxs

3230. Looking for DC over coax injector design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-16 09:40:58 UTC
From: zorton <zorton@jtan.com>
Message-ID: <1150450858.458876.257340@i40g2000cwc.googlegroups.com>
Source record: 11681

One of my local projects here is going to be installing a ground rod and service box for the shack. I scrounged an old outdoor weatherproof box that will work great with one exception; it has a large meter shaped hole in the front that i'll have to cover up with some steel or plastic.

While poking at it with my brother in law the idea of using plexiglass to see inside was brought up. Of course all this box will do is provide a junction for the RF and ground and house my lighting arrestor. However, it wouldn't be like me to not install some blinky lights!

Here's the idea. Since the lightning arrestor will pass DC except when it's shorted to ground I was thinking of putting 12 volts up past the arrestor and lighting up a green led or something. That way all I have to do is look at the box to know that the arrestor isn't shorted to ground.

Is there a nice DC coax injector design floating around? I'm starting to think that once I get 12 volts out to the box i'll end up adding more and more stuff as well. How about a nice red light that lights up when i'm transmitting... :)

Thanks and 73,
Justin KL1RL

3231. Re: Looking for DC over coax injector design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-16 11:55:09 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <154592da0jfq3uc10br2p1l61ct4dfb8dt@4ax.com>
Source record: 11682

On 16 Jun 2006 02:40:58 -0700, "zorton" <zorton@jtan.com> wrote:

>While poking at it with my brother in law the idea of using plexiglass
>to see inside was brought up. Of course all this box will do is
>provide a junction for the RF and ground and house my lighting
>arrestor. However, it wouldn't be like me to not install some blinky
>lights!
>
>Here's the idea. Since the lightning arrestor will pass DC except when
>it's shorted to ground I was thinking of putting 12 volts up past the
>arrestor and lighting up a green led or something. That way all I have
>to do is look at the box to know that the arrestor isn't shorted to
>ground.

If you put DC injection somewhere between the arrestor and your rig
and feed power to the DC injector from any convenient mains outlet,
this may cause a lot of harm.

Assume that the lightning will cause some high voltage peaks in the
mains that will propagate through the DC injector and destroy the
input stages of your rig. If the overvoltage is really large, the
lightning arrestor will limit the amplitude _at_the_arrestor_, but if
the injector is close your rig, your rig will receive a higher voltage
than the arrestor turn on voltage, due to the cable voltage loss
between the injector and arrestor.

You will also need a separator in the arrestor box to separate RF and
the LED DC current from each other, otherwise, the LED will rectify
your transmitted RF current and cause a lot of harmonics, which will
radiate through the antenna.

Note also that the separator filter inductances in the arrestor box
might interact with the lightning pulse and might even generate larger
voltages than otherwise.

But to your actual question, for HF+6m any LC filter circuit should be
doable, as long as you keep an eye on stray inductances and
capacitances.

On VHF/UHF a single band injector/separator could be done from
open/closed quarter/half wave stubs.

Paul OH3LWR

3232. Re: 800W output filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-16 13:20:39 UTC
From: "Dr. Jeff" <drjeff@optonline.net>
Message-ID: <1150464039.135490.34400@c74g2000cwc.googlegroups.com>
Source record: 11683

BTW, in the "RF Transistors" book, on page 103 there is a photo of a large RF Power Amplifier that has 6 filters built using large Ceramic Capacitors & Toroid forms.
Quote: ".... a 2KW prototype RF amplifier for a period of ten years with over 5000 hours of operation without failure."

paulsandland@peoplepc.com wrote:
> Thanks Jeff for the information. However I think it is dielectric loss
> and not working voltage that may give me trouble here. Even with 3kV
> disc ceramics the loss is quoted at 2% so these will get hot at a few
> amps. The low loss AVX hi-q ceramics do appear to be better but are not
> east to find. I am new to amateur radio so just learning these things.
> I did order the book you suggested. Thanks,
> Paul.
> Dr. Jeff wrote:
> > If you can, get a copy of the book " Radio Frequency Transistors" by
> > Norm Dye & Helge Granberg. There is a chapter specifically about
> > designing and building Filters to handle the output of Motorola based
> > transistor RF amplifiers.

3233. Re: Looking for DC over coax injector design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-16 17:52:14 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1150480334.892330.166510@h76g2000cwa.googlegroups.com>
Source record: 11684

zorton wrote:

> Is there a nice DC coax injector design floating around? I'm starting
> to think that once I get 12 volts out to the box i'll end up adding
> more and more stuff as well. How about a nice red light that lights up
> when i'm transmitting... :)
>
> Thanks and 73,
> Justin KL1RL

Andy writes:

The conventional way is to use a DC blocking cap, an RFC as
an injector, and a resistor as a current limiter (in series with the
RFC in case the line becomes shorted at the output)

If you think of a "worst case", there are possible problems, like,
if lightening strikes your antenna, or whatever..... You cannot
protect everything from every possible occurrence however, and
should realize your risk and weigh what can "possiblY" happen
aainst simplicity of design..... as every manufactured radio does...

A couple hints ; make the RFC just large enought wire size to act
as a fuse and put a big-ass (and I mean enough big-ass to sink
enough current for long enough to burn out the RFC in case of a
strike) capacitor on the DC supply side.....1000uf, for instance

Stick a neon bulb across the coax (if it is receive only). A big
transient will make a really good short, instantly, and help a lot....

Make your own spark gap on the coax with maybe .010 separation
by epoxying a couple of #22 wire together. This will be a cheap and
easy "spark gap".....

But you CAN'T protect against everything..... It is purely a
risk
assessment, and a direct stike will ALWAYS wipe you out..... A nearby
strike, however, can be shunted or opened.....

And, you can unplug your receiver, (or whatever) from the coax
when not in use by using a series coaxial protection relay.,...It
connects your shack to the antenna whenever you power up.....

Just a couple of ideas..... Don't get carried away with this, cause
there
is never anything more than a bunch of tradeoffs....

Andy in Eureka, Texas W4OAH

3234. Re: Looking for DC over coax injector design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-16 18:48:03 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e6uud4$hl8$1@avnika.corp.mot.com>
Source record: 11685

"Paul Keinanen" <keinanen@sci.fi> wrote in message
news:154592da0jfq3uc10br2p1l61ct4dfb8dt@4ax.com...
> On 16 Jun 2006 02:40:58 -0700, "zorton" <zorton@jtan.com> wrote:
>
> >While poking at it with my brother in law the idea of using plexiglass
> >to see inside was brought up. Of course all this box will do is
> >provide a junction for the RF and ground and house my lighting
> >arrestor. However, it wouldn't be like me to not install some blinky
> >lights!
> >
> >Here's the idea. Since the lightning arrestor will pass DC except when
> >it's shorted to ground I was thinking of putting 12 volts up past the
> >arrestor and lighting up a green led or something. That way all I have
> >to do is look at the box to know that the arrestor isn't shorted to
> >ground.
>
> If you put DC injection somewhere between the arrestor and your rig
> and feed power to the DC injector from any convenient mains outlet,
> this may cause a lot of harm.
>
> Assume that the lightning will cause some high voltage peaks in the
> mains that will propagate through the DC injector and destroy the
> input stages of your rig. If the overvoltage is really large, the
> lightning arrestor will limit the amplitude _at_the_arrestor_, but if
> the injector is close your rig, your rig will receive a higher voltage
> than the arrestor turn on voltage, due to the cable voltage loss
> between the injector and arrestor.
>
> You will also need a separator in the arrestor box to separate RF and
> the LED DC current from each other, otherwise, the LED will rectify
> your transmitted RF current and cause a lot of harmonics, which will
> radiate through the antenna.
>
> Note also that the separator filter inductances in the arrestor box
> might interact with the lightning pulse and might even generate larger
> voltages than otherwise.
>
> But to your actual question, for HF+6m any LC filter circuit should be
> doable, as long as you keep an eye on stray inductances and
> capacitances.
>
> On VHF/UHF a single band injector/separator could be done from
> open/closed quarter/half wave stubs.
>

> Paul OH3LWR

Justin,
Wow! Paul really has concerns. Some I don't quite understand. The rig is connected to the antenna anyway, so if lightning zaps it, a well done DC injector shouldn't make things any worse that it already is. My opinion is that if you get a hit bad enough to go from the mains, into the injector and into the rig, you'll have lots of damage from other pathec as well, so this probably won't be the worst, ot even the only thing to zap the rig. Where you inject the DC into the line, you have an RF choke. Appropriate attention to both RF and arc-over considerations should minimize this as a "damage-to-the-rig". The capacitor used to block the DC from the rig, must be minimum size needed (for the lowest band you'll use) so it passes the least amount of lightning-induced spike.

I don't see any serious Gotchas, but then, I don't know your capability / technical level, but two RF choke and and two caps is all it takes, while you observe all the "normal" RF care required for a box through-which you are routing RF...short leads, proper connections to the arrestor and all that. The lightning arrestor, obviously can't be a DC short to ground or you need the cap on the rig side and take the DC off on the rig side of the arrestor. If the arrestor passes DC, you can pick off the DC on the antenna side.

On the "DC" side of the choke, you should also have another bypass cap to keep RF off the LED and out of the 12 V power source.

I think the most important thing in this whole situation, is to do the arrestor correctly. A good installation is fairly complex and the closet to the ideal the more protection you'll get.

THE DC part should be pretty standars practice. Short leads where ther need to be. Big gaps where any high voltage can be. Super-duper ground for the arrestor. Proper RF practices.

73, Steve, K9DCI

Drive he neighbors nuts with these blinking lights in the back yard!

You could even rectify the RF and then the little blinkey lights'll blink with your SSB or CW...

Later Dude.

3235. Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-16 19:22:26 UTC
From: Brian's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1150485745.993044.253690@f6g2000cwb.googlegroups.com>
Source record: 11686
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

A necessary preface.....

(It is becoming increasingly difficult to fly the flag for
decency and for civilised behaviour in Radio Hammery. Even
the Usenet newsgroups dedicated to the cause have degenerated
into a hotbed of abusive onslaughts by those who ought to know
better; the Nugatory Numpties who boast of an interest
exceeding 10, 20, 30, 40 or even 50 years and yet who have
proved themselves incapable of even meeting the trivial exam
standards set for 6-year-olds. However, there still exists
the fundamental basis on which Ham Radio is based, and
that will never die. This FAQ ("What Is Ham Radio?") will
be regularly published and will not be shouted or bullied
down. It is important that those of a technical bent, who
are the natural seed-corn of Radio Hammery and who
gravitate towards us to be the real novitiate, can
still find us, (and know that we are still here), their fellows.)

-----ooooo-----

So,.....What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then

operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line

telephone, whilst continuing to regard Ham Radio as a separate technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between a Ham Radio licence and a CB Radio licence. To him, they are sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then tries to classify himself as the equal of the Radio Ham when, in fact, he is nothing of the kind.

Ham Radio is not CB Radio and has no common ground with it! Ham Radio is _THE_ technical pursuit for gentlemen; CB Radio is the operating hobby for those who buy their rigs and equipment off the shelf.

-----ooooo-----

If you are the sort of person who is motivated by a technical interest in how things work; if you took apart malfunctioning clocks, toasters and the like and put them right despite never having seen them working, then a Ham Radio licence is your traditional route! There has never been a shortage of such people, and those who gravitate towards such an interest have always been welcomed into our shacks and their interests fostered. There is not today, nor has there ever been, a need to go out and encourage and press children, children who have never expressed an interest in Ham Radio, to come into our shacks. Such an activity should cause eyebrows to be raised - what normal well-adjusted adults seek the social acquaintance of children?!

-----ooooo-----

Please remember that this FAQ is a _POSITIVE EXHORTATION_ to you to exert yourselves to join our fraternity! (If you find otherwise, then perhaps you are already classing yourself in the mediocre groups of those who are criticised in the FAQ and from whom we _MUST_ dissociate? If so - it's never too late for a re-taxonomisation on your part - there's nothing elitist about us, and we welcome all those who are prepared to put themselves out in order to join our ranks!)

3236. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-16 19:51:50 UTC
From: M0WWS <gareth.paley@gmail.com>
Message-ID: <1150487510.815049.85960@g10g2000cwb.googlegroups.com>
Source record: 11687
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Oh FFS !!!

I thought Bean had gone for good.

Glad I'm off for a few weeks, you lot are welcome to him.

BYE.

3237. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-16 19:53:30 UTC
From: huLLy <villageidiot@sheepandmeths.co.uk>
Message-ID: <XKydnQhE48KrkQ7ZRVny2A@giganews.com>
Source record: 11688
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

M0WWS wrote:
> Oh FFS !!!
>
> I thought Bean had gone for good.
>
> Glad I'm off for a few weeks, you lot are welcome to him.
>
>
> BYE.

Lifers only get 5 years...
--
huLLy
Big K and now the (Sergeant) Fuller Effect - ain't life grand!
Tel: 07976 123278
villageidiot(at)sheepandmeths.co.uk
ICQ 136-987-925

3238. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-16 19:54:41 UTC
From: Chaney <chaney@i12.com>
Message-ID: <1150487681.183895.82230@c74g2000cwc.googlegroups.com>
Source record: 11689
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Welcome back...I for one have missed your humour...

Brian's Conscience wrote:
> A necessary preface.....
>
> (It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery. Even
> the Usenet newsgroups dedicated to the cause have degenerated
> into a hotbed of abusive onslaughts by those who ought to know
> better; the Nugatory Numpties who boast of an interest
> exceeding 10, 20, 30, 40 or even 50 years and yet who have
> proved themselves incapable of even meeting the trivial exam
> standards set for 6-year-olds. However, there still exists
> the fundamental basis on which Ham Radio is based, and
> that will never die. This FAQ ("What Is Ham Radio?") will
> be regularly published and will not be shouted or bullied
> down. It is important that those of a technical bent, who
> are the natural seed-corn of Radio Hammery and who
> gravitate towards us to be the real novitiate, can
> still find us, (and know that we are still here), their fellows.)
>
> -----ooooo-----
>
> So,.....What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>
> Ham Radio awakens in its aficionados a whole-life
> fascination with all things technical and gives
> an all-abiding curiosity to improve one's scientific
> knowledge. It's a great swimming pool, please dive in!
>
> This excitement causes a wish to share the experience
> with ones fellow man, and shows itself in the
> gentlemanly traditions of Ham Radio.
>
> Radio Hams are in a unique privileged position in that
> they can construct and operate their own equipment! No-one

> else has this privilege. Users, such as broadcasters,
> the po lice and armed farces, CBers and mobile phone
> users have to purchase ready-made gear. Manufacturers
> are not licensed to operate their gear. Radio Hams
> are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment. This is a privilege well worth the effort
> to gain, and one to be jealously guarded.
>
> The excitement that drives a Radio Ham starts with
> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to
> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.
>
> -----OOOOO----
>
> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;
> they are free with rather silly personal insults.
>
> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.
>
> No _REAL_ Radio Hams are deceived by such people!
>
> -----ooooo-----
>
> One infallible way to disambiguate the CB Radio Hobbyist

> from the _REAL_ Radio Ham is to solicit their view of the
> difference between CB Radio and Ham Radio. A Radio Ham will
> perceive Ham Radio to be a technical pursuit and will
> perceive CB Radio to be a social communications facility
> no different in essence to a land-line telephone or a
> GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
> could also hold a CB licence safe in the knowledge that
> such a licence says no more about him than having a land-line
> telephone, whilst continuing to regard Ham Radio as a separate
> technical pursuit.
>
> A CB Radio hobbyist, on the other hand, sees no difference between
> a Ham Radio licence and a CB Radio licence. To him, they are
> sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
> tries to classify himself as the equal of the Radio
> Ham when, in fact, he is nothing of the kind.
>
> Ham Radio is not CB Radio and has no common ground with it!
> Ham Radio is _THE_ technical pursuit for gentlemen; CB Radio
> is the operating hobby for those who buy their rigs and
> equipment off the shelf.
>
> -----ooooo-----
>
> If you are the sort of person who is motivated by
> a technical interest in how things work; if you took apart
> malfunctioning clocks, toasters and the like and put them
> right despite never having seen them working, then
> a Ham Radio licence is your traditional route! There has
> never been a shortage of such people, and those who gravitate
> towards such an interest have always been welcomed into
> our shacks and their interests fostered. There is not today,
> nor has there ever been, a need to go out and encourage
> and press children, children who have never expressed an
> interest in Ham Radio, to come into our shacks. Such an
> activity should cause eyebrows to be raised - what
> normal well-adjusted adults seek the social acquaintance
> of children?!
>
> -----ooooo-----
>
> Please remember that this FAQ is a _POSITIVE EXHORTATION_
> to you to exert yourselves to join our fraternity! (If you find
> otherwise, then perhaps you are already classing yourself in the
> mediocre groups of those who are criticised in the FAQ and from
> whom we _MUST_ dissociate? If so - it's never too late for
> a re-taxonomisation on your part - there's nothing elitist about
> us, and we welcome all those who are prepared to put themselves
> out in order to join our ranks!)

3239. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-16 20:18:51 UTC
From: Jim GM4DHJ <jim.gm4dhj@ntlworld.com>
Message-ID: <LmEkg.20678$qD.5097@newsfe1-gui.ntli.net>
Source record: 11690
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Me too...I also......

3240. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-16 20:50:06 UTC
From: Mr_J&#65533; <someone@somewhere.com>
Message-ID: <2QEkg.87180$wl.13166@text.news.blueyonder.co.uk>
Source record: 11691
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Chaney" <chaney@i12.com> wrote in message
news:1150487681.183895.82230@c74g2000cwc.googlegroups.com...
> Welcome back...I for one have missed your humour...
>
Oh theres a shock.

3241. Re: Looking for DC over coax injector design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-16 21:56:15 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1296a7vdtshs4cb@corp.supernews.com>
Source record: 11692

Steve N. wrote:
> . . .
> Drive he neighbors nuts with these blinking lights in the back yard!
>
> You could even rectify the RF and then the little blinkey lights'll blink
> with your SSB or CW...

Long ago my Elmer told me a story of a local ham who got the bright (pun intended) idea of putting a large neon bulb at the top of his vertical antenna. Not long afterward, his neighbor knocked on the door complaining of TVI. "How do you know it's me that's causing the interference?" the ham asked. "Because," said the neighbor, "every time that light on the top of the antenna blinks, my TV goes crazy."

The next night the ham was seen in the back yard with a BB gun shooting out the neon bulb.

Roy Lewallen, W7EL

3242. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-16 22:05:11 UTC
From: Theo <theodore.twyler@ntlworld.com>
Message-ID: <rWFkg.43970$rC1.17116@newsfe4-gui.ntli.net>
Source record: 11693
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Oh not again!
Is it his turn again to use the family brain cell??!

3243. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 00:42:04 UTC
From: jawod <jawod@fuse.net>
Message-ID: <44934FDC.8060204@fuse.net>
Source record: 11694
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Brian's Conscience wrote:
> A necessary preface.....
>
> (It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery. Even
> the Usenet newsgroups dedicated to the cause have degenerated
> into a hotbed of abusive onslaughts by those who ought to know
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> exceeding 10, 20, 30, 40 or even 50 years and yet who have
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> users have to purchase ready-made gear. Manufacturers
> are not licensed to operate their gear. Radio Hams
> are qualified to design, build and then
> operate their own pieces of equipment. They do this
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> equipment. This is a privilege well worth the effort
> to gain, and one to be jealously guarded.
>
> The excitement that drives a Radio Ham starts with
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> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to
> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.
>
> -----OOOOO----
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> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
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> perceive CB Radio to be a social communications facility
> no different in essence to a land-line telephone or a
> GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
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> such a licence says no more about him than having a land-line
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> tries to classify himself as the equal of the Radio
> Ham when, in fact, he is nothing of the kind.
>
> Ham Radio is not CB Radio and has no common ground with it!
> Ham Radio is _THE_ technical pursuit for gentlemen; CB Radio
> is the operating hobby for those who buy their rigs and
> equipment off the shelf.
>
Your definition of ham radio describes probably less than 20% of
currently operating hams. Social communication is the heart of ham
radio. Maybe technical saavy is the soul. (Newsgroups would
necessarily be the colon... and I don't mean ":")

> -----ooooo-----
>
> If you are the sort of person who is motivated by
> a technical interest in how things work; if you took apart
> malfunctioning clocks, toasters and the like and put them
> right despite never having seen them working, then
> a Ham Radio licence is your traditional route! There has
> never been a shortage of such people, and those who gravitate
> towards such an interest have always been welcomed into
> our shacks and their interests fostered. There is not today,
> nor has there ever been, a need to go out and encourage
> and press children, children who have never expressed an
> interest in Ham Radio, to come into our shacks. Such an
> activity should cause eyebrows to be raised - what
> normal well-adjusted adults seek the social acquaintance
> of children?!
>

> -----ooooo-----
>
> Please remember that this FAQ is a _POSITIVE EXHORTATION_
> to you to exert yourselves to join our fraternity! (If you find
> otherwise, then perhaps you are already classing yourself in the
> mediocre groups of those who are criticised in the FAQ and from
> whom we _MUST_ dissociate? If so - it's never too late for
> a re-taxonomisation on your part - there's nothing elitist about

> us, and we welcome all those who are prepared to put themselves
> out in order to join our ranks!)
>

NO, it's not elitist AT ALL to "disambiguate" (is that a word?) between
REAL hams and the rest of the freaks and losers that "pose" as hams.

What bullshit.

It's a very big tent and there's room for all.

3244. Re: Looking for DC over coax injector design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 00:51:25 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1150505485.135181.209020@g10g2000cwb.googlegroups.com>
Source record: 11695

Roy Lewallen wrote:
> Long ago my Elmer told me a story of a local ham who got the bright (pun
> intended) idea of putting a large neon bulb at the top of his vertical
> antenna. Not long afterward, his neighbor knocked on the door
> complaining of TVI. "How do you know it's me that's causing the
> interference?" the ham asked. "Because," said the neighbor, "every time
> that light on the top of the antenna blinks, my TV goes crazy."
>
> The next night the ham was seen in the back yard with a BB gun shooting
> out the neon bulb.
>
> Roy Lewallen, W7EL

Andy writes:
Reminds me of the time in college when I worked at WRAL in Raleigh,.
They had four big towers spread out over a quarter mile, and I had
to record the base currents at the towers every nite. Pain in the ass.
The chief engr put up a fluorescent bulb at each tower base and I had
to touch each one when I went there. The field would sustain the light,

and the CE could see the four lights each morning when he came in
before power changed , and he KNEW I had been there...
Well, I put about 3 feet of #32 on each lamp, and when power changed
at nite the lamps would glow by themselves... I didn't have to make the

walk and could "estimate" the currents by the line currents in the
station....... It worked fine until one night it snowed. The CE saw
the
lights glowing the next morning, but didn't see any footprints across
the field...... You'd think a bright young college student would
have better sense.... :>))))))

Andy W40AH in Eureka, Texas

3245. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 02:07:43 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <PtJkg.40427$uP.39620@newsfe2-gui.ntli.net>
Source record: 11696
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

on 16/06/2006 20:22 The Chippenham village idiot said the following:
> A necessary preface.....
>
YAWN! I knew it was too good to be true.

3246. Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 02:55:10 UTC
From: shoppa@trailing-edge.com
Message-ID: <1150512910.810581.47510@c74g2000cwc.googlegroups.com>
Source record: 11697
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew

OK, I'm trying to understand the failure of a 807 beam tetrode in a homebrew push-pull audio amp.

Tubes are GE, about 45 years old, bought as new old stock several weeks ago.

Being run with 400V on the plate and 255V on the screens.

Both behaved very nicely for a few weeks in my amp, and plate current at idle followed the curves in the books just fine. They were well-balanced.

But tonight under some listening stress the B+ fuse blew.

Turning the bias (supplied from a bias supply through a 100K resistor) down to -40V, the good tube is drawing a small amount of plate current while the other draws 40mA after warmup and current goes up and up and up until it hits 100mA or so and I turn the amp off before blowing another fuse. Check the grid current and as the bad tube warms up grid current is increasing and increasing as well, to the point where the -40V is being entirely dropped in the 100K resistor (I guess that means about half a mA of grid current).

The tube with high current always had some violet-blue spots that danced on the top but they were on the glass and mica so I figured that was normal but now I don't know. There was also this strange orange spot that was on a mica insulator there too.

Is this classic "gassy" tube failure? Towards the end it seemed to be slightly more blueish on the top.

I've burnt up/blown up a lot of 6146 and other variant beam tetrodes over the years but now I'm trying to get some understanding of what's happening :-).

Will a certain chunk of NOS 807's simply be this way from age?

Tim.

3247. Re: Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 03:11:53 UTC
From: Pooh Bear <rabbitsfriendsandrelations@hotmail.com>
Message-ID: <449372F9.FCD4EC92@hotmail.com>
Source record: 11698
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew

shoppa@trailing-edge.com wrote:

> Is this classic "gassy" tube failure? Towards the end it seemed to be
> slightly more blueish on the top.

What condition was the getter in ?

Graham

3248. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 08:52:28 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1150534348.185339.271090@p79g2000cwp.googlegroups.com>
Source record: 11699
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

G4SDW wrote:
> It is important that those of a technical bent, who
> are the natural seed-corn of Radio Hammery and who
> gravitate towards us to be the real novitiate, can
> still find us, (and know that we are still here), their fellows.)

So how many of these naturally-bent novitiate corncobs of Radio Hammery
have gravitated their way towards you, in all the time you've been
posting this deranged drivel then Gareth?

73
Mike G4KFK

3249. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 10:33:08 UTC
From: Brian's Conscience <radio.ham@lycos.co.uk>
Message-ID: <1150540388.497835.138790@f6g2000cwb.googlegroups.com>
Source record: 11700
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

You are very kind. However, I shan't stay long
(Cue chorus from the very Childish Broadcasters (CBers)
criticised in the article) becaue I never intended to call
in yesterday.

I'd not even read this group since 17th? March? April?
let alone contributed to it and have been engaged on
other projects, primarily preparing my first anthology
of poetry for publication. I had some time on my hands yesterday,
had a quick look, and there on the front page of Google was a
gratuitous unpleasant remark directed at me from the same
nasty, sick-minded pervert who has caused me and my
family (and, indeed his w*nkmason buddies in the ploddery)
so much trauma over the last 4 years. Why that should be the case
after an absence by me of many months by me, I do not know, but
it shows conclusively that the campaign of harassment
originated with him, and him alone, and continues to be
motivated by his infantile attention-seeking bile.

As before, I have responded only to defend myself, and have done
so by quoting his own nasty remarks back to him.

Anyway having been provoked by his gratuitous and infantile outburst,
I presumed that no-one else had published the FAQ recently and that
it would be overdue for republication. We must all remember that
Ham Radio is a technical pursuit, and one for which sufficiently
interested and motivated 14-year-olds trained themselves. There never
has been any need to lower the standards, firstly by the Novice
Licence, and latterly by the Fools' Licence. If otherwise-unqualified
14-year-olds can do it, then so can anybody.

Grown-ups who are either too lazy or too stupid, or both, to be able
to tackle and then pass the exams that a 6-year old can pass
after only two days' tuition are a joke. Grown-ups who beam
and preen themselves once having passed the 6-year-olds'
are the absolute laughing stock and we should not
associate with them in any way. They are not Radio
Hams by any stretch of the imagination.

Chaney wrote:
> Welcome back...I for one have missed your humour...
>
> Brian's Conscience wrote:
> > A necessary preface.....
> >

> > (It is becoming increasingly difficult to fly the flag for
> > decency and for civilised behaviour in Radio Hammery. Even
> > the Usenet newsgroups dedicated to the cause have degenerated
> > into a hotbed of abusive onslaughts by those who ought to know
> > better; the Nugatory Numpties who boast of an interest
> > exceeding 10, 20, 30, 40 or even 50 years and yet who have
> > proved themselves incapable of even meeting the trivial exam
> > standards set for 6-year-olds. However, there still exists
> > the fundamental basis on which Ham Radio is based, and
> > that will never die. This FAQ ("What Is Ham Radio?") will
> > be regularly published and will not be shouted or bullied
> > down. It is important that those of a technical bent, who
> > are the natural seed-corn of Radio Hammery and who
> > gravitate towards us to be the real novitiate, can
> > still find us, (and know that we are still here), their fellows.)
> >
> > -----ooooo-----
> >
> > So,.....What is Ham Radio?
> >
> > Ham Radio is a technical pursuit for those who
> > are interested in the science of radio wave
> > propagation and who are also interested in the
> > way that their radios function. It has a long-standing
> > tradition of providing a source of engineers who
> > are born naturals.
> >
> > Ham Radio awakens in its aficionados a whole-life
> > fascination with all things technical and gives
> > an all-abiding curiosity to improve one's scientific
> > knowledge. It's a great swimming pool, please dive in!
> >
> > This excitement causes a wish to share the experience
> > with ones fellow man, and shows itself in the
> > gentlemanly traditions of Ham Radio.
> >
> > Radio Hams are in a unique privileged position in that
> > they can construct and operate their own equipment! No-one
> > else has this privilege. Users, such as broadcasters,
> > the po lice and armed farces, CBers and mobile phone
> > users have to purchase ready-made gear. Manufacturers
> > are not licensed to operate their gear. Radio Hams
> > are qualified to design, build and then
> > operate their own pieces of equipment. They do this
> > with gusto, and also repair and modify their own
> > equipment. This is a privilege well worth the effort
> > to gain, and one to be jealously guarded.
> >
> > The excitement that drives a Radio Ham starts with
> > relatively simple technologies at first, perhaps making

> > his own Wimshurst machine and primary cells. Small pieces
> > of test equipment follow, possibly multimeters and signal
> > generators. Then comes receivers and transmitters. It is with
> > the latter that communication with like-minded technically
> > motivated people takes off. The scope for technical
> > development grows with the years
> > and now encompasses DSP and DDS. There is also a great deal
> > of excitement in the areas of computer programming to
> > be learnt and applied.
> >
> > The technical excitement motivates Radio Hams to compete
> > with each other to determine who has designed and manufactured
> > the best-quality station. This competitiveness is found in DXing,
> > competitions and fox-hunts.
> >
> > -----OOOOO----
> >
> > However, beware! A Ham Radio licence is such a
> > desirable thing to have that there are large
> > numbers of people who wish to be thought of
> > as Radio Hams when, in fact, they are nothing
> > of the kind! Usually such people are a
> > variation of the CB Radio hobbyist; they buy their
> > radios off the shelf and send them back to be
> > repaired; they are not interested in technical discussion
> > and sneer at those who are; they have no idea how
> > their radios work inside and have no wish to find out;
> > they are free with rather silly personal insults.
> >
> > These CB types engage in the competitive activities
> > with their Cheque-Book-purchased off-the-shelf radios
> > in a forlorn effort to prove that they are Radio Hams.
> >
> > No _REAL_ Radio Hams are deceived by such people!
> >
> > -----ooooo-----
> >
> > One infallible way to disambiguate the CB Radio Hobbyist
> > from the _REAL_ Radio Ham is to solicit their view of the
> > difference between CB Radio and Ham Radio. A Radio Ham will
> > perceive Ham Radio to be a technical pursuit and will
> > perceive CB Radio to be a social communications facility
> > no different in essence to a land-line telephone or a
> > GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
> > could also hold a CB licence safe in the knowledge that
> > such a licence says no more about him than having a land-line
> > telephone, whilst continuing to regard Ham Radio as a separate
> > technical pursuit.
> >
> > A CB Radio hobbyist, on the other hand, sees no difference between

> > a Ham Radio licence and a CB Radio licence. To him, they are
> > sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
> > tries to classify himself as the equal of the Radio
> > Ham when, in fact, he is nothing of the kind.
> >
> > Ham Radio is not CB Radio and has no common ground with it!
> > Ham Radio is _THE_ technical pursuit for gentlemen; CB Radio
> > is the operating hobby for those who buy their rigs and
> > equipment off the shelf.
> >
> > -----ooooo-----
> >
> > If you are the sort of person who is motivated by
> > a technical interest in how things work; if you took apart
> > malfunctioning clocks, toasters and the like and put them
> > right despite never having seen them working, then
> > a Ham Radio licence is your traditional route! There has
> > never been a shortage of such people, and those who gravitate
> > towards such an interest have always been welcomed into
> > our shacks and their interests fostered. There is not today,
> > nor has there ever been, a need to go out and encourage
> > and press children, children who have never expressed an
> > interest in Ham Radio, to come into our shacks. Such an
> > activity should cause eyebrows to be raised - what
> > normal well-adjusted adults seek the social acquaintance
> > of children?!
> >
> > -----ooooo-----
> >
> > Please remember that this FAQ is a _POSITIVE EXHORTATION_
> > to you to exert yourselves to join our fraternity! (If you find
> > otherwise, then perhaps you are already classing yourself in the
> > mediocre groups of those who are criticised in the FAQ and from
> > whom we _MUST_ dissociate? If so - it's never too late for
> > a re-taxonomisation on your part - there's nothing elitist about
> > us, and we welcome all those who are prepared to put themselves
> > out in order to join our ranks!)

3250. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 10:47:30 UTC
From: mc.puttd@hammer.down.bro
Message-ID: <a8n792dk1aptuh2o9m63nbitgfu759il7k@4ax.com>
Source record: 11701
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On 17 Jun 2006 03:33:08 -0700, "Brian's Conscience"
<radio.ham@lycos.co.uk> wrote:

>I'd not even read this group since 17th? March? April?
>let alone contributed to it and have been engaged on
>other projects, primarily preparing my first anthology
>of poetry for publication.

Coming soon to a remaindered book-stall near you.

The Ballad of Reading Jail - Pt 2.

3251. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 11:11:08 UTC
From: huLLy <villageidiot@sheepandmeths.co.uk>
Message-ID: <y9-dnQyVNLPafg7ZRVny1w@giganews.com>
Source record: 11702
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Brian's Conscience wrote:
> You are very kind. However, I shan't stay long
> (Cue chorus from the very Childish Broadcasters (CBers)
> criticised in the article) becaue I never intended to call
> in yesterday.
>

Runaway quickly then, remember to take a blanket...
--
huLLy
Big K and now the (Sergeant) Fuller Effect - ain't life grand!
Tel: 07976 123278
villageidiot(at)sheepandmeths.co.uk
ICQ 136-987-925

3252. Re: Noise in first IF

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 11:32:36 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <oLRkg.158$1G2.36@trnddc06>
Source record: 11703

John,

My comments are below your text snippets:

> I have for the time being disonnected the first mixer, and am able to feed
> in a 45MHz signal straight into the firts IF amp if I wish.>
> Now if I look at the output of the second IF with a spectrum analyser,
> with
> the power off to the first IF, but with the 2nd LO running, I can wind up
> the second IF's gain, and the noise floor goes up, which I guess is
> expected, but there are no peaks at 455KHz.

This would be expected, as there is nothing to bandlimit the output of the high-gain 455 KHz IF, so you're seeing its broadband input noise amplified by its gain.
>
> If I connect the power to the first IF, and then wind the gain of the
> second IF up, I get a noisy peak at 455KHz, that varies in aplitude with
> the gain. The input to the first IF has a dummy load.

This is also to be expected, as the input noise of the first IF is amplified by its gain, then bandlimited before amplifying in the second IF.

>
> The second LO is a crystal oscillator, see my previous questions regarding
> this.
>
> The question is, should I expect to see a peak, I dont think so.
> What could be causing this? The first IF is in a double sided PCB
> enclosure.
>
> I hope someone can help as this is driving me nuts....

Don't go nuts - it sounds normal. It would be a lot easier to say if everything truly is normal if you could supply some numeric data - fortunately you have a signal generator and a spectrum analyzer. I suggest that you put a signal into the first mixer and observe the output of the last IF on your spectrum analyzer. What input signal level does it take to get 10 dB output signal-to-noise ratio. What level does it take to get the same result feeding a signal into the first IF chain, then the second IF chain, etc ??. Don't worry so much about gain during these tests, just the signal-to-noise ratios. BTW, make sure the analyzer's resolution bandwidth is approximately the same as the receiver's IF bandwidth for these tests, otherwise you'll have to apply a noise bandwidth correction).

Good luck

Joe
W3JDR

3253. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 11:56:06 UTC
From: Tool of the Walrus <roboobers3@nospyahoonosp.com>
Message-ID: <3447$4493edbf$d1cc41f6$31491@snip.allthenewsgroups.com>
Source record: 11704
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

And if you think that was easy folks, then it's
easier to pull a fig from the anus of a donkey.... :)

- - - - - - -

"The people who are regarded as moral luminaries
are those who forego ordinary pleasures themselves
and find compensation in interfering with the pleasures of others."

- Bertrand Russell

3254. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 12:13:30 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1150546410.418072.258630@c74g2000cwc.googlegroups.com>
Source record: 11705
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Tool of the Walrus wrote:
> And if you think that was easy folks, then it's
> easier to pull a fig from the anus of a donkey.... :)

You mean "a FAQ from the anus of a donkey", Shirley?

3255. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 12:16:40 UTC
From: Ken Ward <ken.g1itv@MTLworld.com>
Message-ID: <loSkg.13248$s4.7562@newsfe3-win.ntli.net>
Source record: 11706
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Tool of the Walrus" <roboobers3@nospyahoonosp.com> wrote in message
news:3447$4493edbf$d1cc41f6$31491@snip.allthenewsgroups.com...

Eh?

3256. Re: Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 12:42:10 UTC
From: shoppa@trailing-edge.com
Message-ID: <1150548130.837876.81650@f6g2000cwb.googlegroups.com>
Source record: 11707
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew

Pooh Bear wrote:
> shoppa@trailing-edge.com wrote:
>
> > Is this classic "gassy" tube failure? Towards the end it seemed to be
> > slightly more blueish on the top.
>
> What condition was the getter in ?

Dark metallic. Not whitish, not even on the edges.

Just warmed it up again, and looked for interelement shorts. No shorts, just lots of grid and plate current when negative grid bias and B+ is applied, it seems to "run away" in fact (after 5-10 seconds of bias/B+ the currents start taking off steeply). No oscillations/parasitics on the scope.

I actually have another GE 807 that's been in my junk box for many years (presumed "junk"), and it has a similar getter and similar excess currents (actually worse).

One thing I want to eliminate as a possibility is that something in my homebrew amp did this tube in after just a few dozen hours of service: 390V on the plate, 255V regulated on the screen, about -23V on the grid to give 38mA idle current, all following the classical AB1 parameters in the 40's vintage tube manuals. This is MUCH relaxed compared to typical ham transmitter usage I've done with 807/6L6GC/6146's in the past (which is 700 to 750V B+, 80 or 90mA plate, class C so substantial grid current, etc.) but that was ICAS.

Tim.

3257. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 13:05:45 UTC
From: Chaney <chaney@i12.com>
Message-ID: <J6Tkg.417840$tc.264936@fe2.news.blueyonder.co.uk>
Source record: 11708
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

That I'm not an *rs* licker...that I have a mind of my own and don't have to follow the status quo to feel a part of something...

Run along...your "friends" are waiting...

--

Chaney

Chaney's World
www.chaney.i12.com

"Mr_J" <someone@somewhere.com> wrote in message
news:2QEkg.87180$wl.13166@text.news.blueyonder.co.uk...
>
>
>>
> Oh theres a shock.
>
>

3258. Re: Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 13:31:57 UTC
From: Pooh Bear <rabbitsfriendsandrelations@hotmail.com>
Message-ID: <4494044D.581B51D4@hotmail.com>
Source record: 11709
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew

shoppa@trailing-edge.com wrote:

> Pooh Bear wrote:
> > shoppa@trailing-edge.com wrote:
> >
> > > Is this classic "gassy" tube failure? Towards the end it seemed to be
> > > slightly more blueish on the top.
> >
> > What condition was the getter in ?
>
> Dark metallic. Not whitish, not even on the edges.
>
> Just warmed it up again, and looked for interelement shorts. No shorts,
> just lots of grid and plate current when negative grid bias and B+ is
> applied, it seems to "run away" in fact (after 5-10 seconds of bias/B+
> the currents start taking off steeply). No oscillations/parasitics on
> the scope.
>
> I actually have another GE 807 that's been in my junk box for many
> years (presumed "junk"), and it has a similar getter and similar excess
> currents (actually worse).
>
> One thing I want to eliminate as a possibility is that something in my
> homebrew amp did this tube in after just a few dozen hours of service:
> 390V on the plate, 255V regulated on the screen, about -23V on the grid
> to give 38mA idle current, all following the classical AB1 parameters
> in the 40's vintage tube manuals. This is MUCH relaxed compared to
> typical ham transmitter usage I've done with 807/6L6GC/6146's in the
> past (which is 700 to 750V B+, 80 or 90mA plate, class C so substantial
> grid current, etc.) but that was ICAS.

If it's 'friend' hasn't expired I can't really see how your amp can be at fault.

Graham

3259. Re: Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 14:35:58 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <arUkg.25784$EX2.17835@bignews5.bellsouth.net>
Source record: 11710
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew

shoppa@trailing-edge.com wrote:
> Pooh Bear wrote:
>
>>shoppa@trailing-edge.com wrote:
>>
>>
>>>Is this classic "gassy" tube failure? Towards the end it seemed to be
>>>slightly more blueish on the top.
>>
>>What condition was the getter in ?
>
>
> Dark metallic. Not whitish, not even on the edges.
>
> Just warmed it up again, and looked for interelement shorts. No shorts,
> just lots of grid and plate current when negative grid bias and B+ is
> applied, it seems to "run away" in fact (after 5-10 seconds of bias/B+
> the currents start taking off steeply). No oscillations/parasitics on
> the scope.
>
> I actually have another GE 807 that's been in my junk box for many
> years (presumed "junk"), and it has a similar getter and similar excess
> currents (actually worse).
>
> One thing I want to eliminate as a possibility is that something in my
> homebrew amp did this tube in after just a few dozen hours of service:
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> to give 38mA idle current, all following the classical AB1 parameters
> in the 40's vintage tube manuals. This is MUCH relaxed compared to
> typical ham transmitter usage I've done with 807/6L6GC/6146's in the
> past (which is 700 to 750V B+, 80 or 90mA plate, class C so substantial
> grid current, etc.) but that was ICAS.
>
> Tim.
>
swap the tubes around and see if the problem moves with the tube or
stays in the socket. But I bet it's the tube. The getter only
absorbs oxygen. However other gasses can be outgassed from the
metals in the tube and cause problems perhaps.

3260. Re: Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 15:13:04 UTC
From: Mike Silva <snarflemike@yahoo.com>
Message-ID: <1150557184.151487.222160@r2g2000cwb.googlegroups.com>
Source record: 11711
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew

You should also check to see if the coupling cap from the driving stage
is leaky.

3261. Re: Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 15:30:35 UTC
From: Pooh Bear <rabbitsfriendsandrelations@hotmail.com>
Message-ID: <4494201B.397E26EF@hotmail.com>
Source record: 11712
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew

flipper wrote:

> On 17 Jun 2006 05:42:10 -0700, shoppa@trailing-edge.com wrote:
>
> >One thing I want to eliminate as a possibility is that something in my
> >homebrew amp did this tube in after just a few dozen hours of service:
> >390V on the plate, 255V regulated on the screen, about -23V on the grid
> >to give 38mA idle current, all following the classical AB1 parameters
> >in the 40's vintage tube manuals. This is MUCH relaxed compared to
> >typical ham transmitter usage I've done with 807/6L6GC/6146's in the
> >past (which is 700 to 750V B+, 80 or 90mA plate, class C so substantial
> >grid current, etc.) but that was ICAS.
>
> I've got a 6EM7 that does the same thing and it's visual appearance is
> perfect as well so I doubt it's your circuit.
>
> Ironically, it turned out to be fortuitous in my case because I was
> testing a circuit design intended to force PP current balance and that
> tube was a great test subject. Dern thing works even though it would
> run away on it's own.

A servo presumably ?

Graham

3262. Re: Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 16:46:56 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <449431FF.1080703@invalid.invalid>
Source record: 11713
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew

shoppa@trailing-edge.com wrote:
> Pooh Bear wrote:
>
>>shoppa@trailing-edge.com wrote:
>>
>>
>>>Is this classic "gassy" tube failure? Towards the end it seemed to be
>>>slightly more blueish on the top.
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>>What condition was the getter in ?
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> Just warmed it up again, and looked for interelement shorts. No shorts,
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> applied, it seems to "run away" in fact (after 5-10 seconds of bias/B+
> the currents start taking off steeply). No oscillations/parasitics on
> the scope.
>
> I actually have another GE 807 that's been in my junk box for many
> years (presumed "junk"), and it has a similar getter and similar excess
> currents (actually worse).

semi-dumb question: where are you measuring the bias voltage? (directly
at the tube, or on the other side of the grid resistor?)

I'm wondering if a bad coupling cap is causing the bias at the tube to
drift towards 0v or even positive.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

3263. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 17:04:59 UTC
From: roy <g4vct@gb7mbc.net>
Message-ID: <1150563899.455085.101560@i40g2000cwc.googlegroups.com>
Source record: 11714
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Brian's Conscience wrote:

> A necessary preface.....
>
> (It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery. Even
> the Usenet newsgroups dedicated to the cause have degenerated
> into a hotbed of abusive onslaughts by those who ought to know
> better; the Nugatory Numpties who boast of an interest
> exceeding 10, 20, 30, 40 or even 50 years and yet who have
> proved themselves incapable of even meeting the trivial exam
> standards set for 6-year-olds. However, there still exists
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> that will never die. This FAQ ("What Is Ham Radio?") will
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> down. It is important that those of a technical bent, who
> are the natural seed-corn of Radio Hammery and who
> gravitate towards us to be the real novitiate, can
> still find us, (and know that we are still here), their fellows.)
>
> -----ooooo-----
>
> So,.....What is Ham Radio?
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> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>
> Ham Radio awakens in its aficionados a whole-life
> fascination with all things technical and gives
> an all-abiding curiosity to improve one's scientific
> knowledge. It's a great swimming pool, please dive in!
>
> This excitement causes a wish to share the experience
> with ones fellow man, and shows itself in the
> gentlemanly traditions of Ham Radio.
>
> Radio Hams are in a unique privileged position in that
> they can construct and operate their own equipment! No-one
> else has this privilege. Users, such as broadcasters,

> the po lice and armed farces, CBers and mobile phone
> users have to purchase ready-made gear. Manufacturers
> are not licensed to operate their gear. Radio Hams
> are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment. This is a privilege well worth the effort
> to gain, and one to be jealously guarded.
>
> The excitement that drives a Radio Ham starts with
> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to
> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.
>
> -----OOOOO----
>
> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;
> they are free with rather silly personal insults.
>
> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.
>
> No _REAL_ Radio Hams are deceived by such people!
>
> -----ooooo-----
>
> One infallible way to disambiguate the CB Radio Hobbyist
> from the _REAL_ Radio Ham is to solicit their view of the

> difference between CB Radio and Ham Radio. A Radio Ham will
> perceive Ham Radio to be a technical pursuit and will
> perceive CB Radio to be a social communications facility
> no different in essence to a land-line telephone or a
> GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
> could also hold a CB licence safe in the knowledge that
> such a licence says no more about him than having a land-line
> telephone, whilst continuing to regard Ham Radio as a separate
> technical pursuit.
>
> A CB Radio hobbyist, on the other hand, sees no difference between
> a Ham Radio licence and a CB Radio licence. To him, they are
> sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
> tries to classify himself as the equal of the Radio
> Ham when, in fact, he is nothing of the kind.
>
> Ham Radio is not CB Radio and has no common ground with it!
> Ham Radio is _THE_ technical pursuit for gentlemen; CB Radio
> is the operating hobby for those who buy their rigs and
> equipment off the shelf.
>
> -----ooooo-----
>
> If you are the sort of person who is motivated by
> a technical interest in how things work; if you took apart
> malfunctioning clocks, toasters and the like and put them
> right despite never having seen them working, then
> a Ham Radio licence is your traditional route! There has
> never been a shortage of such people, and those who gravitate
> towards such an interest have always been welcomed into
> our shacks and their interests fostered. There is not today,
> nor has there ever been, a need to go out and encourage
> and press children, children who have never expressed an
> interest in Ham Radio, to come into our shacks. Such an
> activity should cause eyebrows to be raised - what
> normal well-adjusted adults seek the social acquaintance
> of children?!
>
> -----ooooo-----
>
> Please remember that this FAQ is a _POSITIVE EXHORTATION_
> to you to exert yourselves to join our fraternity! (If you find
> otherwise, then perhaps you are already classing yourself in the
> mediocre groups of those who are criticised in the FAQ and from
> whom we _MUST_ dissociate? If so - it's never too late for
> a re-taxonomisation on your part - there's nothing elitist about
> us, and we welcome all those who are prepared to put themselves
> out in order to join our ranks!)

Jesus is he here again !

3264. Re: Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 17:20:03 UTC
From: shoppa@trailing-edge.com
Message-ID: <1150564803.188626.193430@g10g2000cwb.googlegroups.com>
Source record: 11715
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew

Doug Smith W9WI wrote:
> semi-dumb question: where are you measuring the bias voltage? (directly
> at the tube, or on the other side of the grid resistor?)
>
> I'm wondering if a bad coupling cap is causing the bias at the tube to
> drift towards 0v or even positive.

Well, I WANT the bias to be circa -20V or -25V. There's a negative supply and some pots which form a stiff voltage divider and supplies grid bias through a 100K resistor.

On the "bad" tube grid current is so high that it does indeed drift up to 0V in a minute or so. Yeah, I know, there's not supposed to be grid current until the grid goes positive. I suspect this is the root of the problem.

The coupling capacitors are indeed good and moving the tube around it follows the tube.

Tim.

3265. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 17:20:14 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1150564814.729832.175350@f6g2000cwb.googlegroups.com>
Source record: 11716
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

roy wrote:
> Jesus is he here again !

Jesus, did you have to quote everything the twat wrote? :-)

3266. get ehelp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 17:51:44 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1150566704.630755.47330@r2g2000cwb.googlegroups.com>
Source record: 11717
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Brian's Conscience wrote:
> A necessary preface.....
>
> (It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery.
well it is ery hard for an uncivilized barbariarn to fly such a flag
that is why you fail mostly

3267. Re: Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 18:34:59 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <ZoWdna9cAcnO1gnZnZ2dnUVZ_tGdnZ2d@web-ster.com>
Source record: 11718
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew

shoppa@trailing-edge.com wrote:

> OK, I'm trying to understand the failure of a 807 beam tetrode in a
> homebrew push-pull audio amp.
>
> Tubes are GE, about 45 years old, bought as new old stock several weeks
> ago.
>
> Being run with 400V on the plate and 255V on the screens.
>
> Both behaved very nicely for a few weeks in my amp, and plate current
> at idle followed the curves in the books just fine. They were
> well-balanced.
>
> But tonight under some listening stress the B+ fuse blew.
>
> Turning the bias (supplied from a bias supply through a 100K resistor)
> down to -40V, the good tube is drawing a small amount of plate current
> while the other draws 40mA after warmup and current goes up and up and
> up until it hits 100mA or so and I turn the amp off before blowing
> another fuse. Check the grid current and as the bad tube warms up grid
> current is increasing and increasing as well, to the point where the
> -40V is being entirely dropped in the 100K resistor (I guess that means
> about half a mA of grid current).
>
> The tube with high current always had some violet-blue spots that
> danced on the top but they were on the glass and mica so I figured that
> was normal but now I don't know. There was also this strange orange
> spot that was on a mica insulator there too.
>
> Is this classic "gassy" tube failure? Towards the end it seemed to be
> slightly more blueish on the top.
>
> I've burnt up/blown up a lot of 6146 and other variant beam tetrodes
> over the years but now I'm trying to get some understanding of what's
> happening :-).
>
> Will a certain chunk of NOS 807's simply be this way from age?
>
> Tim.
>

I have very little direct tube experience, but from what I've read it
sounds like the grid is emitting. Apparently this happens when some of

the oxide coating from the cathode gets onto the grid, which gets hot and emits electrons, which tends to pull the grid more positive. The current flow on the grid heats it up more, which makes things worse, and it runs away.

In all the old tube books this is a result of mistreating the tube -- running so much cathode current that the oxide vaporizes a bit and condenses on the grid (although it may also happen from positive ion bombardment -- hmm). But who knows what 50 years of sitting in a drawer (or getting carted around) will do?

'Regular' grid current happens when the grid goes positive and collects electrons, tending to pull the grid more negative -- this is why you can self-bias a class C amplifier or oscillator with a resistor to ground.

I have no idea of how to actually test this theory, or what other mechanisms would cause this problem. The best I can do is mention that while 807's are normally $18 at Antique Radio Supply they're on sale right now at $10, and 1625's are still a better buy at $5.50.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

3268. Get a clue!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 19:46:30 UTC
From: markie_morgan_rapesboys@yahoo.com
Message-ID: <1150573590.441942.179660@c74g2000cwc.googlegroups.com>
Source record: 11719
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

an_old_friend wrote:
> Brian's Conscience wrote:
> > A necessary preface.....
> >
> > (It is becoming increasingly difficult to fly the flag for
> > decency and for civilised behaviour in Radio Hammery.
> well it is ery hard for an uncivilized barbariarn to fly such a flag
> that is why you fail mostly

STFU, idiot!

3269. get help

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 22:06:40 UTC
From: an old freind <kb9rqz-ars@hotmail.com>
Message-ID: <1150582000.340923.262500@r2g2000cwb.googlegroups.com>
Source record: 11720
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

markie_morgan_rapesboys@yahoo.com wrote:

> STFU, idiot!
typing to yourself some more?

3270. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 23:31:23 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <fh0lg.467$Z61.393@newsfe4-win.ntli.net>
Source record: 11721
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

on 17/06/2006 11:33 The Chippenham Village Idiot said the following:
> You are very kind. However, I shan't stay long
> (Cue chorus from the very Childish Broadcasters (CBers)
> criticised in the article) becaue I never intended to call
> in yesterday.
So you admit to being unable to control your own actions.

> I'd not even read this group since 17th? March? April?
Now you're trying to kid us you can read?

> let alone contributed to it
CONTRIBUTED? BWWWAHAHAHAHAHAHAHAHAHAHAHA!

and have been engaged on
> other projects, primarily preparing my first anthology
> of poetry for publication.
We've seen examples of your 'poetry', Beanie. Don't give up the day job
(if you have one).

I had some time on my hands yesterday,
and that probably led to something else all over your hands.

> had a quick look,
with a microscope?

< remaining crap snipped >
FOAD, TWAT.
...(_!_)...

3271. Re: Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-17 23:33:29 UTC
From: JC <jcandela@prodigy.net>
Message-ID: <dj0lg.118882$dW3.28925@newssvr21.news.prodigy.com>
Source record: 11722
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew

"Tim Wescott" <tim@seemywebsite.com> wrote in message
news:ZoWdna9cAcnO1gnZnZ2dnUVZ_tGdnZ2d@web-ster.com...
> shoppa@trailing-edge.com wrote:
>

> I have very little direct tube experience, but from what I've read it
> sounds like the grid is emitting. Apparently this happens when some of
> the oxide coating from the cathode gets onto the grid, which gets hot and
> emits electrons, which tends to pull the grid more positive. The current
> flow on the grid heats it up more, which makes things worse, and it runs
> away.
>
> In all the old tube books this is a result of mistreating the tube --
> running so much cathode current that the oxide vaporizes a bit and
> condenses on the grid (although it may also happen from positive ion
> bombardment -- hmm). But who knows what 50 years of sitting in a drawer
> (or getting carted around) will do?
>
> 'Regular' grid current happens when the grid goes positive and collects
> electrons, tending to pull the grid more negative -- this is why you can
> self-bias a class C amplifier or oscillator with a resistor to ground.
>
> I have no idea of how to actually test this theory, or what other
> mechanisms would cause this problem. The best I can do is mention that
> while 807's are normally $18 at Antique Radio Supply they're on sale right
> now at $10, and 1625's are still a better buy at $5.50.
>
> --
>
> Tim Wescott
> Wescott Design Services
> http://www.wescottdesign.com

Tim,

I think you are on to something here. I ran across this effect with an
old WWII pulse tetrode, the 4D32. The ones showing this effect also had
little white spec's on the inside of the glass that could be "disturbed" by
tapping on the glass envelope. This was in a ham transmitter, and was worse
with rising frequency. At first the runaway occurred on 10 meters (29 Mhz),
and over time it would occur on 80 meters (3.9 Mhz). One thing that always
helped was to reduce the filament voltage from say 6.8 volts down to about
5.5 volts. Many old amplifiers / transmitters run the filaments pretty hot
with today's line voltages.

Might consider late manufactured 6BG6's for $6.00 each:
http://www.vacuumtubes.com/6BG6.html

These are very similar to the 807, and if the claims are true, then these are better.

Jim

3272. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 07:23:58 UTC
From: "Jimbo's old machine....." <jim.gm4dhj@ntlworld.com>
Message-ID: <ic7lg.24813$lQ.12984@newsfe3-gui.ntli.net>
Source record: 11723
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> let alone contributed to it and have been engaged on
> other projects, primarily preparing my first anthology
> of poetry for publication. I had some time on my hands yesterday,

Ah ha!.....no doubt about Ladies from various parts of the Country........

3273. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 07:25:10 UTC
From: "Jimbo's old machine....." <jim.gm4dhj@ntlworld.com>
Message-ID: <qd7lg.24814$lQ.9961@newsfe3-gui.ntli.net>
Source record: 11724
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Straw in the wind.....straw in the wind.....fly fly fly

3274. Re: Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 10:27:36 UTC
From: shoppa@trailing-edge.com
Message-ID: <1150626456.307581.121390@y41g2000cwy.googlegroups.com>
Source record: 11725
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew

Tim Wescott wrote:
> I have very little direct tube experience, but from what I've read it
> sounds like the grid is emitting.

This is certainly consistent with what I'm thinking.

> In all the old tube books this is a result of mistreating the tube --
> running so much cathode current that the oxide vaporizes a bit and
> condenses on the grid (although it may also happen from positive ion
> bombardment -- hmm). But who knows what 50 years of sitting in a drawer
> (or getting carted around) will do?

At the same time Allison says that this is what gassy tubes do, too
:-).

The explanation from Allison that there was a small crack at a pin seal
is a bit more easy to use in terms of timing of my particular problem.

> I have no idea of how to actually test this theory, or what other
> mechanisms would cause this problem. The best I can do is mention that
> while 807's are normally $18 at Antique Radio Supply they're on sale
> right now at $10

That's where mine came from, and what inspired my question "are a
certain chunk of 45-year old 807's this way?".

> and 1625's are still a better buy at $5.50.

In fact I have plenty of 1625's too :-).

Tim.

3275. mc3362 and xtal filter termination

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 12:29:20 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <e73gv0$d7u$1@news.onet.pl>
Source record: 11726

Hi All
I'm trying to use TQF9-02 (similar to xf9b)(impedance 500ohm) filter in
receiver on MC3362.
In original project there was homebrew filter connected to pins 17,19
MC3362 via capacitors 220pf.

Have you any ideas for proper termination of Xfilter?

MAc

3276. A Complex Metaphysical Conundrum...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 14:38:15 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1150641495.634423.169620@h76g2000cwa.googlegroups.com>
Source record: 11727
Cross-posted to: sci.electronics.design,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Hi all,
I once believed that UHF(and beyond) RF electronics was the most
technically challenging hobby there is. Period.
However, I've since read about some chap who claims his principal
'hobby' is Quantum Mechanics! This fellow is in prison somewhere in the
UK and all his 'work' is *entirely* theoretical (obviously - given the
confined circumstances) and consists of the academic pursuit of the
subject alone including heaps of serious number-crunching and
formidably cryptic calculus.
The complex, metaphysical conundrum that arises from this is: can QM
(highly theoretical even if you actually work hands-on with particle
accelerators) ever be accurately described as a 'hobby?'
What does the Panel think?
p.

3277. Re: mc3362 and xtal filter termination

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 14:43:02 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1150641782.494039.108680@g10g2000cwb.googlegroups.com>
Source record: 11728

MAc wrote:
> Hi All
> I'm trying to use TQF9-02 (similar to xf9b)(impedance 500ohm) filter in
> receiver on MC3362.
> In original project there was homebrew filter connected to pins 17,19
> MC3362 via capacitors 220pf.
>
> Have you any ideas for proper termination of Xfilter?
>
> MAc

Andy writes:

If the specified filter termination impedance is 500 ohms, you have
to take the 3362 input impedance and transform it to 500 ohms.
I don't know the 3362 input Z, and am too lazy to look it up, but most
likely it is higher than 500 ohms and has a capacitive component...
So, use math to find out what the parallel R and C is, and things
will start to make sense...

Lots of ways to do this, but ALWAYS use a tuned circuit. Otherwise
you will have a reactive component that will mess you up...

Personally, I like to use an inductor and two capacitors, since it
provides DC blocking. Some people like transformers......

Andy in Eureka, Texas

PS Rp = Rs (1 + Qsquared)\

Xp = Xs (1 + Qsquared) / (Qsquared)

Q = Rp / Xp or Q = Xs / Rs

If you put these in a Basic program, and learn to use them, it
makes things a lot quicker....

3278. Re: A Complex Metaphysical Conundrum...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 14:46:50 UTC
From: Professor <briangriffey@sbcglobal.net>
Message-ID: <1150642010.587782.127110@g10g2000cwb.googlegroups.com>
Source record: 11729
Cross-posted to: sci.electronics.design,rec.radio.amateur.misc,rec.radio.amateur.homebrew

I guess a guy in his circumstances... could consider that a hobby.

www.telstar-electronics.com

3279. Re: A Complex Metaphysical Conundrum...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 14:47:48 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1150642068.135448.47400@y41g2000cwy.googlegroups.com>
Source record: 11730
Cross-posted to: sci.electronics.design,rec.radio.amateur.misc,rec.radio.amateur.homebrew

paul@burridge8333.fsbusiness.co.uk wrote:
> Hi all,
> I once believed that UHF(and beyond) RF electronics was the most
> technically challenging hobby there is. Period.
> However, I've since read about some chap who claims his principal
> 'hobby' is Quantum Mechanics! This fellow is in prison somewhere in the
> UK and all his 'work' is *entirely* theoretical (obviously - given the
> confined circumstances) and consists of the academic pursuit of the
> subject alone including heaps of serious number-crunching and
> formidably cryptic calculus.
> The complex, metaphysical conundrum that arises from this is: can QM
> (highly theoretical even if you actually work hands-on with particle
> accelerators) ever be accurately described as a 'hobby?'
> What does the Panel think?
> p.

Andy writes:

I think that talking incessantly about a subject that one can't
prove by demonstration shows an inferiority complex. The dude is
afraid to argue a subject whose results can be proven....

Just like arguing Catholicism versus Buddha --- an interesting
way , for some, to waste their time. But no way to be proven
wrong.......

If the fellow's mind was as good as the fellow seems to think
it is , himself, he wouldn't be afraid to approach subjects where
he could be shown in error.....

I bet the SOB has never changed the oil in his own truck.....I bet
if he tried, he would mess it up.....

Andy in Eureka, Texas

3280. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 14:59:12 UTC
From: The Conscience <radio.ham@lycos.co.uk>
Message-ID: <1150642752.277529.179330@g10g2000cwb.googlegroups.com>
Source record: 11731
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

3 have been published in The Petersfield Post, 1
in The Wiltshire Gazette And Herald, 1 on the
www.adoptabeach web site (But was removed, presumably
because Charmouth beach was scavenged clean), 1
was on display in the church porch at St.Enodoc's,
trebetheric. A number have been published on Usenet.

Some are, indeed, about ladies - 2 of those in The Petersfield
Post, for example. In response to one of them, the daughter
(now in her 90's) of the lady I wrote about contacted me
to say that her family were very pleased with the publicity.

Jimbo's old machine..... wrote:
> > let alone contributed to it and have been engaged on
> > other projects, primarily preparing my first anthology
> > of poetry for publication. I had some time on my hands yesterday,
>
> Ah ha!.....no doubt about Ladies from various parts of the Country.....

3281. Re: A Complex Metaphysical Conundrum...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 15:08:59 UTC
From: David <david@nospam.no>
Message-ID: <44956c8b@news.wineasy.se>
Source record: 11732
Cross-posted to: sci.electronics.design,rec.radio.amateur.misc,rec.radio.amateur.homebrew

AndyS wrote:
> paul@burridge8333.fsbusiness.co.uk wrote:
>> Hi all,
>> I once believed that UHF(and beyond) RF electronics was the most
>> technically challenging hobby there is. Period.
>> However, I've since read about some chap who claims his principal
>> 'hobby' is Quantum Mechanics! This fellow is in prison somewhere in the
>> UK and all his 'work' is *entirely* theoretical (obviously - given the
>> confined circumstances) and consists of the academic pursuit of the
>> subject alone including heaps of serious number-crunching and
>> formidably cryptic calculus.
>> The complex, metaphysical conundrum that arises from this is: can QM
>> (highly theoretical even if you actually work hands-on with particle
>> accelerators) ever be accurately described as a 'hobby?'
>> What does the Panel think?
>> p.
>
> Andy writes:
>
> I think that talking incessantly about a subject that one can't
> prove by demonstration shows an inferiority complex. The dude is
> afraid to argue a subject whose results can be proven....
>

Quantum mechanics is a science - you don't *prove* anything. You make theories to explain data obtained by experiment, and verify the predictions of these theories with more experiments. Anyone looking for a subject whose results can be proven should stick to maths (another good choice for people stuck in prison!). But as a science, QM is solid (if somewhat difficult) - just because the guy in prison can't personally verify any predictions he comes up with, doesn't mean they can't be verified by others. After all, much of the theory is developed by people at universities, not just the more "practical" scientists working with particle accelerators and the like.

> Just like arguing Catholicism versus Buddha --- an interesting
> way , for some, to waste their time. But no way to be proven
> wrong.......
>
> If the fellow's mind was as good as the fellow seems to think
> it is , himself, he wouldn't be afraid to approach subjects where
> he could be shown in error.....
>

Given that you apparently know nothing about quantum mechanics, what subjects were you thinking of?

> I bet the SOB has never changed the oil in his own truck.....I bet
> if he tried, he would mess it up.....
>

So what? Is that some sort of red-neck test of manhood?

>
> Andy in Eureka, Texas
>

3282. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 15:15:46 UTC
From: Jim GM4DHJ <jim.gm4dhj@ntlworld.com>
Message-ID: <C6elg.21002$n13.1314@newsfe2-win.ntli.net>
Source record: 11733
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"The Conscience" <radio.ham@lycos.co.uk> wrote in message
news:1150642752.277529.179330@g10g2000cwb.googlegroups.com...
>3 have been published in The Petersfield Post, 1
> in The Wiltshire Gazette And Herald, 1 on the
> www.adoptabeach web site (But was removed, presumably
> because Charmouth beach was scavenged clean), 1
> was on display in the church porch at St.Enodoc's,
> trebetheric. A number have been published on Usenet.
>
> Some are, indeed, about ladies - 2 of those in The Petersfield
> Post, for example. In response to one of them, the daughter
> (now in her 90's) of the lady I wrote about contacted me
> to say that her family were very pleased with the publicity.

very... good sounds like more fun than Amateur radio these days........I'll
stick to..."There was a young lady from......."

3283. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 15:23:16 UTC
From: The Conscience <radio.ham@lycos.co.uk>
Message-ID: <1150644195.945506.14010@u72g2000cwu.googlegroups.com>
Source record: 11734
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

The ones that appeal to me are those where you'd
think that a rhyme would be impossible, such as...

There was a young lady from Exeter,
So pretty, that men craned their necks at her.
Indeed, one was so brave
As to take out, and wave,
The distinguishing mark of his sex at her.

Jim GM4DHJ wrote:
> very... good sounds like more fun than Amateur radio these days........I'll
> stick to..."There was a young lady from......."

3284. Re: Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 15:29:24 UTC
From: Bill Janssen <billj@ieee.org>
Message-ID: <ojelg.3692$oa1.2353@news02.roc.ny>
Source record: 11735

nospam@nouce.bellatlantic.net wrote:

>On 17 Jun 2006 10:20:03 -0700, shoppa@trailing-edge.com wrote:
>
>
>
>>Doug Smith W9WI wrote:
>>
>>
>>>semi-dumb question: where are you measuring the bias voltage? (directly
>>>at the tube, or on the other side of the grid resistor?)
>>>
>>>I'm wondering if a bad coupling cap is causing the bias at the tube to
>>>drift towards 0v or even positive.
>>>
>>>
>>Well, I WANT the bias to be circa -20V or -25V. There's a negative
>>supply and some pots which form a stiff voltage divider and supplies
>>grid bias through a 100K resistor.
>>
>>On the "bad" tube grid current is so high that it does indeed drift up
>>to 0V in a minute or so. Yeah, I know, there's not supposed to be grid
>>current until the grid goes positive. I suspect this is the root of the
>>problem.
>>
>>The coupling capacitors are indeed good and moving the tube around it
>>follows the tube.
>>
>>Tim.
>>
>>
>
>Tim,
>
>Thats a classic gassy tube. One possible source is small cracks
>around the tube pins as it gets hot there and often there is limited
>air circulation.
>
>I've been 30 years since I've seen a 807 modulator (acutally 4 in
>parallel push pull) and I've had the honor of watching them do
>interesting things back when they were easily found at $2.50 each.
>
>Allison
>

>
>
I have used tubes with the "gassy problem. I got the tubes free because
of the problem.
I used the tubes in my transmitter by biasing the tube with a very
stiff bias supply. I used
a choke coil to get the bias to the grid. They were 829 tubes and were
used on two meters.

Bill K7NOM

3285. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 16:01:06 UTC
From: Jim GM4DHJ <jim.gm4dhj@ntlworld.com>
Message-ID: <6Nelg.21024$n13.12238@newsfe2-win.ntli.net>
Source record: 11736
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"The Conscience" <radio.ham@lycos.co.uk> wrote in message
news:1150644195.945506.14010@u72g2000cwu.googlegroups.com...
> The ones that appeal to me are those where you'd
> think that a rhyme would be impossible, such as...
>
> There was a young lady from Exeter,
> So pretty, that men craned their necks at her.
> Indeed, one was so brave
> As to take out, and wave,
> The distinguishing mark of his sex at her.

Tee hee! ......I like that........

3286. Re: mc3362 and xtal filter termination

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 16:15:32 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <e73u75$m28$1@news.onet.pl>
Source record: 11737

I only found (app note), that filter should be 330ohm

3287. Re: A Complex Metaphysical Conundrum...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 16:59:20 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <qbydnYknio7FGwjZRVnysA@pipex.net>
Source record: 11738
Cross-posted to: sci.electronics.design,rec.radio.amateur.misc,rec.radio.amateur.homebrew

> The complex, metaphysical conundrum that arises from this is: can QM
> (highly theoretical even if you actually work hands-on with particle
> accelerators) ever be accurately described as a 'hobby?'
> What does the Panel think?
> p.
==========
Paul , Is there not a more appropriate NG for this topic ?

Frank GM0CSZ / KN6WH

3288. Re: Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 17:12:01 UTC
From: Patrick Turner <info@turneraudio.com.au>
Message-ID: <44958929.72F04037@turneraudio.com.au>
Source record: 11739
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew

shoppa@trailing-edge.com wrote:

> OK, I'm trying to understand the failure of a 807 beam tetrode in a
> homebrew push-pull audio amp.
>
> Tubes are GE, about 45 years old, bought as new old stock several weeks
> ago.
>
> Being run with 400V on the plate and 255V on the screens.
>
> Both behaved very nicely for a few weeks in my amp, and plate current
> at idle followed the curves in the books just fine. They were
> well-balanced.
>
> But tonight under some listening stress the B+ fuse blew.
>
> Turning the bias (supplied from a bias supply through a 100K resistor)
> down to -40V, the good tube is drawing a small amount of plate current
> while the other draws 40mA after warmup and current goes up and up and
> up until it hits 100mA or so and I turn the amp off before blowing
> another fuse. Check the grid current and as the bad tube warms up grid
> current is increasing and increasing as well, to the point where the
> -40V is being entirely dropped in the 100K resistor (I guess that means
> about half a mA of grid current).
>
> The tube with high current always had some violet-blue spots that
> danced on the top but they were on the glass and mica so I figured that
> was normal but now I don't know. There was also this strange orange
> spot that was on a mica insulator there too.
>
> Is this classic "gassy" tube failure? Towards the end it seemed to be
> slightly more blueish on the top.

The violet - orange colouring only ever occurs as a tube dies from gas
intake. Normally
the tubes should have a slight "royal blue" low level flurescence usually
visible in darkness.
the bright blue flickering is the end for the tube; its only good for the
bin unless you
salvage the tube base plug for a multi wire plug.

After turn on with the output tubes in you should measure the voltage
across each bias resistor
from supply to grid pin. Usually the gassy tube draws grid current at idle

with the grid becoming
positive with respect to the bias supply.

Just what has caused the gasiness in anyone's guess but to test the
coupling caps remove the
output tubes and measure dc voltage across the biasing resistors to the
output tubes.
There should be less than a mV after leaving the amp on for an hour.
Using 807 from WW2 NOS could be dodgy since gas leaks could occur; not
enough to turn the getters white
or even slightly brown edged but enough to cause rapid failure well before
the usual 5,000 hrs you should get from a hi-fi output tube.
But then I have just repaired an ARC VT100 and out of 8 brand new Ei 6DJ8
there were two
which were quite faulty because one of the twin triodes in each tube became
gradually saturated
and fully turned on for no reason other than they had been poorly
manufactured in Yugoslavia.
Nice gold lettering on the outside, crummy work inside.

>
> I've burnt up/blown up a lot of 6146 and other variant beam tetrodes
> over the years but now I'm trying to get some understanding of what's
> happening :-).
>
> Will a certain chunk of NOS 807's simply be this way from age?

Youse takes your chances with ancient 807.
They usually were renowned for their ruggedness but heck, anything ancient
must surely be less reliable than had it been made yesterday to the same
spec.

Would you fly in a NOS Mustang P51 that was NOS?

Not me, that's fo sure.

Maybe I got 20 x 807, I dunno their history, and I ain't got around to
using any; maybe I never will....

Patrick Turner.

>
>
> Tim.

3289. Re: A Complex Metaphysical Conundrum...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 17:23:45 UTC
From: Ian Bell <ruffrecords@yahoo.com>
Message-ID: <e7429dvmq2@slavica.ukpost.com>
Source record: 11740
Cross-posted to: sci.electronics.design,rec.radio.amateur.misc,rec.radio.amateur.homebrew

paul@burridge8333.fsbusiness.co.uk wrote:

> Hi all,
> I once believed that UHF(and beyond) RF electronics was the most
> technically challenging hobby there is. Period.
> However, I've since read about some chap who claims his principal
> 'hobby' is Quantum Mechanics! This fellow is in prison somewhere in the
> UK and all his 'work' is *entirely* theoretical (obviously - given the
> confined circumstances) and consists of the academic pursuit of the
> subject alone including heaps of serious number-crunching and
> formidably cryptic calculus.
> The complex, metaphysical conundrum that arises from this is: can QM
> (highly theoretical even if you actually work hands-on with particle
> accelerators) ever be accurately described as a 'hobby?'
> What does the Panel think?
> p.

If you define a hobby as some pursuit you do in your spare time then I guess
the answer has to be yes.

Ian

3290. Re: A Complex Metaphysical Conundrum...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 17:38:18 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1150652298.540021.49930@p79g2000cwp.googlegroups.com>
Source record: 11741
Cross-posted to: sci.electronics.design,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Highland Ham wrote:
> > The complex, metaphysical conundrum that arises from this is: can QM
> > (highly theoretical even if you actually work hands-on with particle
> > accelerators) ever be accurately described as a 'hobby?'
> > What does the Panel think?
> > p.
> ==========
> Paul , Is there not a more appropriate NG for this topic ?

One on the topic sure it is a hooy

to Hihgland Ham

yes I am sure this but it is better than the swill posting though at
least one the gruops it gt droped in
>
>
> Frank GM0CSZ / KN6WH

3291. is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 17:41:25 UTC
From: eternalsquire@comcast.net
Message-ID: <1150652485.685726.246160@c74g2000cwc.googlegroups.com>
Source record: 11742

All,

I've got a brother who works for a consulting firm whose main customer is Homeland Secrity.

What the feds want to do is to be able to communicate mil-spec digital packets over low power links in the middle of a disaster-hit area between squads of Guards deployed across a destroyed city.

They cannot assume that hams and ham equipment will be available, and they do not want to carry heavy equipment into a city. They want to be able to use equipment that they can readily commandeer from stores such as Radio Shack.

That pretty much means CB radios. I have heard of hams working DX using 5 watts of PSK on 10 meters using poor antennas, so that gives me the idea that Guard units could form medium range mobile networks using 5 watts of PSK on 11 meters using wires dropped off bridges.

Eventually the hams that do get on the scene could set up a CB to HF gateway so that the packets could make it out from the Guards to the NGOs.

While I am more than willing to test this setup out for my brother on a pair of CB radios, I told him I might need an STA from the FCC to communicate data on CB channel 40. He tells me that in an emergency, anyone can use any frequencies they want, any power, any mode. I told him true, but that does not help me as an OEM getting fined for testing out an emergency scenario in a nonemergency situation.

Suggestions?

The Eternal Squire

3292. Re: A Complex Metaphysical Conundrum...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 17:48:01 UTC
From: Andy <andysharpe@juno.com>
Message-ID: <1150652881.002561.30340@r2g2000cwb.googlegroups.com>
Source record: 11744
Cross-posted to: sci.electronics.design,rec.radio.amateur.misc,rec.radio.amateur.homebrew

David wrote:>
> Given that you apparently know nothing about quantum mechanics, what
> subjects were you thinking of?
>

***** I was thinking of ways of improving the flakiness of biscuits.
Also
a more efficient way of skinning rabbits....

> > I bet the SOB has never changed the oil in his own truck.....I bet
> > if he tried, he would mess it up.....
> >
>
> So what? Is that some sort of red-neck test of manhood?
>
****** Yes. If you can't do the basic essentials of life, you
shouldn't be
screwing around with theory of the universe.........

Andy in Eureka, Texas

(If the home ed teacher in your local high school wears a pink
hooter hoister, you might live in Eureka, Texas)
> >

3293. Re: A Complex Metaphysical Conundrum...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 17:57:55 UTC
From: Rich Webb <bbew.ar@mapson.nozirev.ten>
Message-ID: <ve4b92t5asfn28eqenbnds46k61n7ib6qf@4ax.com>
Source record: 11745
Cross-posted to: sci.electronics.design,rec.radio.amateur.misc,rec.radio.amateur.homebrew

On 18 Jun 2006 17:08:59 +0200, David <david@nospam.no> wrote:

[snip...snip...]
>So what? Is that some sort of red-neck test of manhood?

No, the red-neck test of manhood is to fish the oil drain plug out of
the bucket of hot oil, bare-handed. It doesn't count unless the oil is
elbow deep and from a hot engine. ;-)

--
Rich Webb Norfolk, VA

3294. Re: A Complex Metaphysical Conundrum...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 17:58:28 UTC
From: mc <look@www.ai.uga.edu.for.address>
Message-ID: <0vglg.61362$qd2.60640@bignews6.bellsouth.net>
Source record: 11746
Cross-posted to: sci.electronics.design,rec.radio.amateur.misc,rec.radio.amateur.homebrew

<paul@burridge8333.fsbusiness.co.uk> wrote in message
news:1150641495.634423.169620@h76g2000cwa.googlegroups.com...
> Hi all,
> I once believed that UHF(and beyond) RF electronics was the most
> technically challenging hobby there is. Period.
> However, I've since read about some chap who claims his principal
> 'hobby' is Quantum Mechanics! This fellow is in prison somewhere in the
> UK and all his 'work' is *entirely* theoretical (obviously - given the
> confined circumstances) and consists of the academic pursuit of the
> subject alone including heaps of serious number-crunching and
> formidably cryptic calculus.
> The complex, metaphysical conundrum that arises from this is: can QM
> (highly theoretical even if you actually work hands-on with particle
> accelerators) ever be accurately described as a 'hobby?'
> What does the Panel think?
> p.

It is a hobby if you're a physics Ph.D. who can't get an academic job :)

There are people who do astronomical computing (calculation of orbits, etc.)
as a hobby. I suppose this is similar.

3295. Re: Looking for DC over coax injector design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 18:22:56 UTC
From: zorton <zorton@jtan.com>
Message-ID: <1150654976.533717.117520@y41g2000cwy.googlegroups.com>
Source record: 11747

> Andy writes:
> Reminds me of the time in college when I worked at WRAL in Raleigh,.
> They had four big towers spread out over a quarter mile, and I had
> to record the base currents at the towers every nite. Pain in the ass.
> The chief engr put up a fluorescent bulb at each tower base and I had
> to touch each one when I went there. The field would sustain the light,
>
> and the CE could see the four lights each morning when he came in
> before power changed , and he KNEW I had been there...
> Well, I put about 3 feet of #32 on each lamp, and when power changed
> at nite the lamps would glow by themselves... I didn't have to make the
>
> walk and could "estimate" the currents by the line currents in the
> station..... It worked fine until one night it snowed. The CE saw
> the
> lights glowing the next morning, but didn't see any footprints across
> the field..... You'd think a bright young college student would
> have better sense.... :>)))))))
>
> Andy W40AH in Eureka, Texas

As a not so bright college student, I can safely say that even the smartest people can fail to have common sense.

Case and point. I worked for a small tribe in Cordova Alaska installing communications for a sonar fish counter camp about 27 miles outside of town. While this location was on the road it was in the middle of the cooper river delta and should be considered quite remote for the purposes of this story. One of the smartest people i've ever met was responsible for specifying the sonar and doing most of the hard science behind the counter. He was happily standing on the bridge overlooking the river probably pondering some complex function of acoustics and leaned over and watched his keys tumble into the river.

Animals tend to have a bit more common sense than highly educated people; while people who live outside the norm know to keep the keys in the ignition in a situation like that.

Funny how life works out,
KL1RL

3296. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 18:35:41 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <moOdnUfw0dpsAQjZRVnygA@pipex.net>
Source record: 11598

The CB band is close enough to the 10m amateur band ,such that when the test
is done within the amateur band it would also be valid for the CB band .
Although you might have to do the test in the 10m amateur band with 300 baud ,whereas in the CB band you could use 1200 Baud.
Unless the 300 Baud limit in amateur allocated HF bands has been / can be lifted.

Frank GM0CSZ / KN6WH

==========

> While I am more than willing to test this setup out for my brother on a
> pair of CB radios, I told him I might need an STA from the FCC to
> communicate data on CB channel 40. He tells me that in an emergency,
> anyone can use any frequencies they want, any power, any mode. I told
> him true, but that does not help me as an OEM getting fined for testing
> out an emergency scenario in a nonemergency situation.
>
> Suggestions?
>
> The Eternal Squire
>

3297. Re: A Complex Metaphysical Conundrum...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 18:42:44 UTC
From: Lloyd <anon@anon.com>
Message-ID: <30orm.jr9.17.1@news.alt.net>
Source record: 11743
Cross-posted to: sci.electronics.design,rec.radio.amateur.misc,rec.radio.amateur.homebrew

"an old friend" <kb9rqz@yahoo.com> wrote in message
news:1150652298.540021.49930@p79g2000cwp.googlegroups.com...

Highland Ham wrote:
> > The complex, metaphysical conundrum that arises from this is: can QM
> > (highly theoretical even if you actually work hands-on with particle
> > accelerators) ever be accurately described as a 'hobby?'
> > What does the Panel think?
> > p.
> ==========
> Paul , Is there not a more appropriate NG for this topic ?

One on the topic sure it is a hooy

to Hihgland Ham

yes I am sure this but it is better than the swill posting though at
least one the gruops it gt droped in
>
>
> Frank GM0CSZ / KN6WH

/././.

Speak English, you ill-educated retard.

3298. Re: A Complex Metaphysical Conundrum...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 19:14:36 UTC
From: Tim Williams <tmoranwms@charter.net>
Message-ID: <kChlg.122$aw4.107@fe04.lga>
Source record: 11600
Cross-posted to: sci.electronics.design,rec.radio.amateur.misc,rec.radio.amateur.homebrew

<paul@burridge8333.fsbusiness.co.uk> wrote in message
news:1150641495.634423.169620@h76g2000cwa.googlegroups.com...
> The complex, metaphysical conundrum that arises from this is: can QM
> (highly theoretical even if you actually work hands-on with particle
> accelerators) ever be accurately described as a 'hobby?'

Well, I know that some people persue mathematics as a "hobby". Nothing
could be less hands-on, but it's a hobby nonetheless.

Tim

--
Deep Fryer: a very philosophical monk.
Website: http://webpages.charter.net/dawill/tmoranwms

3299. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 19:34:02 UTC
From: Rob <rob2@nospam.co.uk>
Message-ID: <KUhlg.60760$rC1.31389@newsfe4-gui.ntli.net>
Source record: 11601

<eternalsquire@comcast.net> wrote in message
news:1150652485.685726.246160@c74g2000cwc.googlegroups.com...
> All,
>
> I've got a brother who works for a consulting firm whose main customer
> is Homeland Secrity.
>
> What the feds want to do is to be able to communicate mil-spec digital
> packets over low power links in the middle of a disaster-hit area
> between squads of Guards deployed across a destroyed city.
>
I can't believe they would be asking a company with such a lack of knowledge
that you have to post a message to a newsgroup!
I think you're telling a bit of a fairy tale. They wouldn't be using CB as
there is a vast array of communications equipment already in use - or did
your brother forget to tell you that.
What's the name of his company so we can all avoid what appears to be bunch
of amateurs.

3300. Re: A Complex Metaphysical Conundrum...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 19:47:39 UTC
From: an old friend <kb9queer@stoopid.up>
Message-ID: <30sld.3pm.17.1@news.alt.net>
Source record: 11599
Cross-posted to: sci.electronics.design,rec.radio.amateur.misc,rec.radio.amateur.homebrew

"Rich Webb" <bbew.ar@mapson.nozirev.ten> wrote in message
news:ve4b92t5asfn28eqenbnds46k61n7ib6qf@4ax.com...
On 18 Jun 2006 17:08:59 +0200, David <david@nospam.no> wrote:

[snip...snip...]
>So what? Is that some sort of red-neck test of manhood?

No, the red-neck test of manhood is to fish the oil drain plug out of
the bucket of hot oil, bare-handed. It doesn't count unless the oil is
elbow deep and from a hot engine. ;-)

--
Rich Webb Norfolk, VA

an then you rub the oil in your hair to keep it shiny

3301. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 20:10:44 UTC
From: fmmck@aol.com
Message-ID: <fmmck-1806061610440001@ac918f5c.ipt.aol.com>
Source record: 11602

In article <1150652485.685726.246160@c74g2000cwc.googlegroups.com>,
eternalsquire@comcast.net wrote:

> What the feds want to do is to be able to communicate mil-spec digital
> packets over low power links in the middle of a disaster-hit area
> between squads of Guards deployed across a destroyed city.
>
> They cannot assume that hams and ham equipment will be available, and
> they do not want to carry heavy equipment into a city. They want to be
> able to use equipment that they can readily commandeer from stores such
> as Radio Shack.

E.S.-

With all due respect to your brother, this is an extremely unlikely
scenario. While a common AM CB radio might be modified to perform the
task, you aren't going to commandeer one from Radio Shack that a Guardsman
can adapt for such data transmission.

Just how heavy do you think a data radio would be? A unit as small as the
smallest CB could be designed to perform the function (and may be
off-the-shelf). In other words, such a data system MUST be carried in to
ensure it is going to work, and it won't be so "heavy" that each unit
can't have spares handy.

Fred

3302. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 20:17:14 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <e74cca$p5h$1@news.hawaii.edu>
Source record: 11603
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

jawod <jawod@fuse.net> wrote:
>It's a very big tent and there's room for all.

Actually, it's a very small tent and there is NOT room for all:

Let's crunch some numbers: Our total MF/HF spectrum consists of just 3.75 MHz, with only about half of it, 1875 kHz, useful for communications at any one particular time of the day.

With that in mind, let's look at some worst-case scenarios: If suddenly, as if by magic, all licensees were granted MF/HF privileges, we could possibly have 670,000 hams attempting to fill that 1.875 MHz. Okay, I'll grant you that folks have to work and sleep, so let's say at any one time, we have one-fourth of all 670 kilohams on the air, with two per QSO. That would mean each QSO would be separated by just 22 Hz.

I'll be more generous. Let's pretend that all 3.75 MHz is available all the time, with say, one-tenth of all operators on at any one time; now each two-person QSO is separated by 112 Hz. Getting better.

Worried that I didn't take into account frequency re-use? Alright, suppose we could manage three simultaneous QSOs spread across the country on a single frequency; each such grouping would now be separated by 336 Hz. That could be done if we ban phone.

I'll never understand this liberal mentality of wanting to grant everyone MF/HF privileges; it's no longer a privilege if it's something that everyone can get practically for free. We recevied our current spectrum total at a time (WARC 1979) when we had less than half the present number of hams. That shows that this movement of wanting to "fill up the bands or we'll lose them" is pure nonsense.

As Michael Savage says, "Liberalism is a mental disorder."

No 73 for you,
Jeff KH6O

--
Chief Petty Officer, U.S. Coast Guard, Dept. of Homeland Security
and Mathematics Lecturer, University of Hawaii System

3303. Re: A Complex Metaphysical Conundrum...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 20:26:06 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4495B6BA.4CF1F579@earthlink.net>
Source record: 11604
Cross-posted to: sci.electronics.design,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Andy wrote:
>
> David wrote:>
> > Given that you apparently know nothing about quantum mechanics, what
> > subjects were you thinking of?
> >
>
> ***** I was thinking of ways of improving the flakiness of biscuits.
> Also
> a more efficient way of skinning rabbits....
>
> > > I bet the SOB has never changed the oil in his own truck.....I bet
> > > if he tried, he would mess it up.....
> > >
> >
> > So what? Is that some sort of red-neck test of manhood?
> >
> ****** Yes. If you can't do the basic essentials of life, you
> shouldn't be
> screwing around with theory of the universe.........

And just how often do you need to change the universe's oil, anyway?
;-)

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

3304. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 20:26:26 UTC
From: "g. beat"
Message-ID: <8Nidnc_f2aNqKwjZnZ2dnUVZ_s-dnZ2d@comcast.com>
Source record: 11605

<eternalsquire@comcast.net> wrote in message
news:1150652485.685726.246160@c74g2000cwc.googlegroups.com...
> All,
>
> I've got a brother who works for a consulting firm whose main customer
> is Homeland Security.

Please supply me this consulting firm name.

Is this former FEMA director Mike Brown's consulting firm by chance?

3305. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 20:29:11 UTC
From: an old friend <kb9rqz-MCM@hotmail.com>
Message-ID: <1150662550.945158.47140@y41g2000cwy.googlegroups.com>
Source record: 11606
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Jeffrey Herman wrote:
> jawod <jawod@fuse.net> wrote:
> >It's a very big tent and there's room for all.
>
> Actually, it's a very small tent and there is NOT room for all:
>
> Let's crunch some numbers: Our total MF/HF spectrum consists of just
> 3.75 MHz, with only about half of it, 1875 kHz, useful for
> communications at any one particular time of the day.
>
why can't you tell the truth cpo

there is plenty of room RIGHT now and given the tech lcass folks
affected are roughly half the number of ARS lienses

thsince there is easily room for ttwice that many tranmissions there
fore there is plety of room for all

> --
> Chief Petty Officer, U.S. Coast Guard, Dept. of Homeland Security
> and Mathematics Lecturer, University of Hawaii System

3306. Re: Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 20:37:40 UTC
From: shoppa@trailing-edge.com
Message-ID: <1150663060.793413.183750@r2g2000cwb.googlegroups.com>
Source record: 11607
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew

flipper wrote:
> I've got a 6EM7 that does the same thing and it's visual appearance is
> perfect as well so I doubt it's your circuit.

Come to think of it I had some nearly-new (back when I was a kid!)
6146B's go into grid-and-plate-current-runaway-at-idle like this 807
too.

Tim.

3307. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 21:46:58 UTC
From: dplatt@radagast.org
Message-ID: <129bieidij87a17@corp.supernews.com>
Source record: 11608

In article <1150652485.685726.246160@c74g2000cwc.googlegroups.com>,
<eternalsquire@comcast.net> wrote:

>While I am more than willing to test this setup out for my brother on a
>pair of CB radios, I told him I might need an STA from the FCC to
>communicate data on CB channel 40. He tells me that in an emergency,
>anyone can use any frequencies they want, any power, any mode. I told
>him true, but that does not help me as an OEM getting fined for testing
>out an emergency scenario in a nonemergency situation.

I think you're correct. Part 95, section 631 (c) and (e) and (f)
make it quite clear that data transmission over CB is a no-no.

In addition, the simple act of hooking up a data transmission circuit
to a CB radio's modulator might be considered to be enough of a
modification to void the transmitter's certification.

Applying for an STA certainly seems to be the safe thing to do. And,
if you get one yourself, the end-user agency should probably also get
one, so they can run periodic tests and drills without breaking the
rules.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3308. Re: A Complex Metaphysical Conundrum...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 21:58:22 UTC
From: Roger <irwin@iol.it>
Message-ID: <1150667902.884976.164450@c74g2000cwc.googlegroups.com>
Source record: 11609
Cross-posted to: sci.electronics.design,rec.radio.amateur.misc,rec.radio.amateur.homebrew

paul@burridge8333.fsbusiness.co.uk wrote:
> Hi all,
> I once believed that UHF(and beyond) RF electronics was the most
> technically challenging hobby there is. Period.
> However, I've since read about some chap who claims his principal
> 'hobby' is Quantum Mechanics! This fellow is in prison somewhere in the
> UK

Aha, quantum tunneling eh?

3309. Re: A Complex Metaphysical Conundrum...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 22:37:49 UTC
From: Andy <andysharpe@juno.com>
Message-ID: <1150670269.289554.21500@y41g2000cwy.googlegroups.com>
Source record: 11610
Cross-posted to: sci.electronics.design,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Rich Webb wrote:
> No, the red-neck test of manhood is to fish the oil drain plug out of
> the bucket of hot oil, bare-handed. It doesn't count unless the oil is
> elbow deep and from a hot engine. ;-)

Andy comments:
Yes.... but a true redneck doesn't use a bucket..... (grin)

Andy in Eureka, Texas

(If you've ever bet your buddy that you could shoot a beer
can off his head, you might live in Eureka, Texas)

3310. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-18 23:58:05 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <ebpb9217hs5ic303jvc2urvb8650c80r6i@4ax.com>
Source record: 11611

On 18 Jun 2006 10:41:25 -0700, eternalsquire@comcast.net wrote:

>All,
>
>I've got a brother who works for a consulting firm whose main customer
>is Homeland Secrity.
>
>What the feds want to do is to be able to communicate mil-spec digital
>packets over low power links in the middle of a disaster-hit area
>between squads of Guards deployed across a destroyed city.
>
>They cannot assume that hams and ham equipment will be available, and
>they do not want to carry heavy equipment into a city. They want to be
>able to use equipment that they can readily commandeer from stores such
>as Radio Shack.
>
>That pretty much means CB radios. I have heard of hams working DX
>using 5 watts of PSK on 10 meters using poor antennas, so that gives me
>the idea that Guard units could form medium range mobile networks using
>5 watts of PSK on 11 meters using wires dropped off bridges.
>
>Eventually the hams that do get on the scene could set up a CB to HF
>gateway so that the packets could make it out from the Guards to the
>NGOs.
>
>While I am more than willing to test this setup out for my brother on a
>pair of CB radios, I told him I might need an STA from the FCC to
>communicate data on CB channel 40. He tells me that in an emergency,
>anyone can use any frequencies they want, any power, any mode. I told
>him true, but that does not help me as an OEM getting fined for testing
>out an emergency scenario in a nonemergency situation.
>
>Suggestions?
>
>The Eternal Squire

I for one think this is a bit hairbrained. But here goes...

Actually you can break the task down two several larger problems.

Is AM modulation suitable?

What connectors? The average CB uses one of ten different mic
connectors and of those the same type none are wired the same!

Forget internal mods, they are very different from unit and
some are surface mount construction. Also type acceptance
and operating rules) prohibit most data, image and modifications.

How will they power the CB radio? A 5W radio under full TX
modulation want about 15-20W of power (1.5-2A) SSB versions are
far more power hungry (2-4A on TX for legal radios and the import
illegals can run far higher.).

Radios vary widely from real junk to near decent so you need to find
examples of the worst to be sure your not encouraging an interference
generator.

At this time RS is closing stores and I think at most they carry only
a few (if any instock) different CB sets. You'd have better luck at a
truck stop!

What do thy expect to use for an antenna? The average CB set will
fry the finals if the antenna isn't tuned reasonably well.

You can test the basics using dummy loads before you get into
the STA.

FYI: GMRS radios present a better choice and are more widely sold.
GMRS being higher power thn FRS and often better radios for short
range (UHF FM) ops.

Allison

3311. Re: Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-19 01:26:44 UTC
From: Bret Ludwig <bretldwig@yahoo.com>
Message-ID: <1150680404.073192.105030@y41g2000cwy.googlegroups.com>
Source record: 11612
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew

shoppa@trailing-edge.com wrote:
> flipper wrote:
> > I've got a 6EM7 that does the same thing and it's visual appearance is
> > perfect as well so I doubt it's your circuit.
>
> Come to think of it I had some nearly-new (back when I was a kid!)
> 6146B's go into grid-and-plate-current-runaway-at-idle like this 807

I have seen it with many NOS power tubes in this power class. Doesn't
seem to be a problem with bright filament types but maybe it can be.
Fix is to throw out the offending tube.

If you can't get NOS tubes at Surplus hut prices, my advice is to buy
NEW tubes. From someone you can get a refund from.

3312. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-19 07:01:59 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <e75i57$l7s$1@theodyn.ncf.ca>
Source record: 11613

(eternalsquire@comcast.net) writes:

> While I am more than willing to test this setup out for my brother on a
> pair of CB radios, I told him I might need an STA from the FCC to
> communicate data on CB channel 40. He tells me that in an emergency,
> anyone can use any frequencies they want, any power, any mode.

I think this is a misreading of the rules.

Yes, if someone's ship is sinking, or someone is lost in the mountains,
it is far better to use what's available than die. But, I seem to
recall some cases in the US where someone just blasted away, and it
was deemed later that the emergency was not serious enough.

But, the scenario you are talking about is not the same thing. You
aren't talking about someone trying anything to save themselves, you
are talking about organized emergency work. And once that starts happening,
you can't have anything goes, for the same reasons that there are
rules to regulate radio under non-emergency conditions.

If you blast away at any frequency or any power, then you could
so easily interfere with some other legitimate emergency communication.
Your communication may not be more important than someone else's, and
hence frequency coordination is just as important.

It has been long argued that one reason to keep amateur radio around
is that in the case of a big emergency, it's relatively easy to put
amateur radio to rest, and then you get some big chunks of spectrum
that won't be used for necessary or emergency communication. IN other
words, using amateur radio frequencies is one scenario that is already
planned if the emergency is important enough (aside from it being
used as auxiliary communication with hams using their existing
equipment.

But, life goes on, and you can't superimpose a lot of communication
onto frequencies that are needed for existing communication needs
which won't go away when an emergency comes along.

And on a completely other note, as others have pointed out, even
if an existing communication band is the only choice, there are far
better choices than the 27MHz band. A big problem of that band
is that when the skip is in, it's made fairly useless because
distant stations come in nice and strong. And likewise, you
want a band that's good for local communication, and the fact
that you can get great range under good conditions on 10meters
is not the same as getting good reliable local communication.

Michael VE2BVW

3313. Re: Think you might be interested? Then here's your FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-19 07:53:18 UTC
From: The Conscience <radio.ham@lycos.co.uk>
Message-ID: <1150703597.926998.283850@f6g2000cwb.googlegroups.com>
Source record: 11614
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Very well said.

The mantra that we must "attract new blood" has been shown, in
Britland at least, as a piece of propaganda to help fill the coffers
of our national CB society - the RSCB.

There has never been a shortage of _REAL_ Radio Hams.

Jeffrey Herman wrote:

> I'll never understand this liberal mentality of wanting to grant
> everyone MF/HF privileges; it's no longer a privilege if it's something
> that everyone can get practically for free. We recevied our current
> spectrum total at a time (WARC 1979) when we had less than half the
> present number of hams. That shows that this movement of wanting to "fill
> up the bands or we'll lose them" is pure nonsense.

3314. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-19 13:55:31 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1150725331.900431.93600@y41g2000cwy.googlegroups.com>
Source record: 11615

eternalsquire@comcast.net wrote:
> All,
>
> I've got a brother who works for a consulting firm whose main customer
> is Homeland Secrity.
>
> What the feds want to do is to be able to communicate mil-spec digital
> packets over low power links in the middle of a disaster-hit area
> between squads of Guards deployed across a destroyed city.
>

Wow, looks like consultants are the same the world over - come up with lunatic schemes, and get paid lots of money for them.

Tell him to get a real job - it will pay less, but he wont be held responsible after the next major stuff up.

And tell him to buy a text book on - well, just about anything except self-promotion - he doesnt seem to know very much. Probably why hes a consultant. Is he an accountant?

And dont the National Guard units already have radios - they have been issued to military units since, lets say, 1918 or therabouts.....

What a wonderful scenario - due to basic functional stupidity, the disaster plan is contingent on being able to commandeer radios from stores, and , with a swiss army knife, modify them for data communications. There is, of course, a team of trained technicians with the advancing relief workers who can do this.The data comms gear is already with the people trying to get it to work on the commandeered radios.......

Get real people - this is either a post from someone taking the mickey out of you guys, or, if it is a real, serous idea - make sure you dont need any external help if a disaster does happen in your area..... sounds like organising a frozen chicken raffle would be straining their ability..

Andrew VK3BFA.

3315. Re: A Complex Metaphysical Conundrum...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-19 14:59:41 UTC
From: Dan Andersson <dan@andersson.co.uk>
Message-ID: <-cmcnT2s5ptDJgvZSa8jmw@karoo.co.uk>
Source record: 11616
Cross-posted to: sci.electronics.design,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Michael A. Terrell wrote:

> Andy wrote:
>>
>> David wrote:>
>> > Given that you apparently know nothing about quantum mechanics, what
>> > subjects were you thinking of?
>> >
>>
>> ***** I was thinking of ways of improving the flakiness of biscuits.
>> Also
>> a more efficient way of skinning rabbits....
>>
>> > > I bet the SOB has never changed the oil in his own truck.....I
>> > > bet
>> > > if he tried, he would mess it up.....
>> > >
>> >
>> > So what? Is that some sort of red-neck test of manhood?
>> >
>> ****** Yes. If you can't do the basic essentials of life, you
>> shouldn't be
>> screwing around with theory of the universe.........
>
>
> And just how often do you need to change the universe's oil, anyway?
> ;-)
>
>

Errmm! Some scientists claims the Universe is slowing down - The Oil Maintenance is obviously overdue as the friction is to high!

Dan / M0DFI

3316. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-19 15:02:43 UTC
From: davis@space.mit.edu
Message-ID: <slrne9df4h.bh6.davis@aluche.mit.edu>
Source record: 11617

On 18 Jun 2006 10:41:25 -0700, eternalsquire@comcast.net <eternalsquire@comcast.net>
wrote:
>What the feds want to do is to be able to communicate mil-spec digital
>packets over low power links in the middle of a disaster-hit area
>between squads of Guards deployed across a destroyed city.
[...]
>Suggestions?

I suggest that you consider using the unlicensed MURS band for this.
Unfortunately you cannot just walk in to a walmart or radioshack and
grab a MURS radio. Rather visit rkleef.com and look at the MURS22
units, or google for the "dakota alert" MURS radios.

Good luck,
--John

3317. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-19 16:15:43 UTC
From: Brian 2W0BDW <notsaying@here.com>
Message-ID: <P4Alg.21840$n13.20793@newsfe2-win.ntli.net>
Source record: 11618

<eternalsquire@comcast.net> wrote in message
news:1150652485.685726.246160@c74g2000cwc.googlegroups.com...
> All,
>
> I've got a brother who works for a consulting firm whose main customer
> is Homeland Secrity.
>
> What the feds want to do is to be able to communicate mil-spec digital
> packets over low power links in the middle of a disaster-hit area
> between squads of Guards deployed across a destroyed city.
>
> They cannot assume that hams and ham equipment will be available, and
> they do not want to carry heavy equipment into a city. They want to be
> able to use equipment that they can readily commandeer from stores such
> as Radio Shack.
>
> That pretty much means CB radios. I have heard of hams working DX
> using 5 watts of PSK on 10 meters using poor antennas, so that gives me
> the idea that Guard units could form medium range mobile networks using
> 5 watts of PSK on 11 meters using wires dropped off bridges.
>
> Eventually the hams that do get on the scene could set up a CB to HF
> gateway so that the packets could make it out from the Guards to the
> NGOs.
>
> While I am more than willing to test this setup out for my brother on a
> pair of CB radios, I told him I might need an STA from the FCC to
> communicate data on CB channel 40. He tells me that in an emergency,
> anyone can use any frequencies they want, any power, any mode. I told
> him true, but that does not help me as an OEM getting fined for testing
> out an emergency scenario in a nonemergency situation.
>
> Suggestions?
>
> The Eternal Squire
>
IMHO The feds have plenty of radio equipment with comms operators that could
be shipped to disaster hit area faster than your average guards unit could
adapt/setup a purloined unit.

3318. Re: Looking for DC over coax injector design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-19 18:21:33 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e76pve$io4$1@avnika.corp.mot.com>
Source record: 11619

Great Stories!

Ahhh. There's always those unintended consequences...

73, Steve, K9DCI

"AndyS" <andysharpe@juno.com> wrote in message
news:1150505485.135181.209020@g10g2000cwb.googlegroups.com...
>
> Roy Lewallen wrote:
> > Long ago my Elmer told me a story of a local ham who got the bright (pun
> > intended) idea of putting a large neon bulb at the top of his vertical
> > antenna. Not long afterward, his neighbor knocked on the door
> > complaining of TVI. "How do you know it's me that's causing the
> > interference?" the ham asked. "Because," said the neighbor, "every time
> > that light on the top of the antenna blinks, my TV goes crazy."
> >
> > The next night the ham was seen in the back yard with a BB gun shooting
> > out the neon bulb.
> >
> > Roy Lewallen, W7EL
>
> Andy writes:
> Reminds me of the time in college when I worked at WRAL in Raleigh,.
> They had four big towers spread out over a quarter mile, and I had
> to record the base currents at the towers every nite. Pain in the ass.
> The chief engr put up a fluorescent bulb at each tower base and I had
> to touch each one when I went there. The field would sustain the light,
>
> and the CE could see the four lights each morning when he came in
> before power changed , and he KNEW I had been there...
> Well, I put about 3 feet of #32 on each lamp, and when power changed
> at nite the lamps would glow by themselves... I didn't have to make the
>
> walk and could "estimate" the currents by the line currents in the
> station..... It worked fine until one night it snowed. The CE saw
> the
> lights glowing the next morning, but didn't see any footprints across
> the field..... You'd think a bright young college student would
> have better sense.... :>)))))))
>
> Andy W40AH in Eureka, Texas
>

3319. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-19 18:49:02 UTC
From: eternalsquire@comcast.net
Message-ID: <1150742942.564318.271840@p79g2000cwp.googlegroups.com>
Source record: 11620

Brian 2W0BDW wrote:
> <eternalsquire@comcast.net> wrote in message
> news:1150652485.685726.246160@c74g2000cwc.googlegroups.com...
> > All,
> >
> > I've got a brother who works for a consulting firm whose main customer
> > is Homeland Secrity.
> >
> > What the feds want to do is to be able to communicate mil-spec digital
> > packets over low power links in the middle of a disaster-hit area
> > between squads of Guards deployed across a destroyed city.
> >
> > They cannot assume that hams and ham equipment will be available, and
> > they do not want to carry heavy equipment into a city. They want to be
> > able to use equipment that they can readily commandeer from stores such
> > as Radio Shack.
> >
> > That pretty much means CB radios. I have heard of hams working DX
> > using 5 watts of PSK on 10 meters using poor antennas, so that gives me
> > the idea that Guard units could form medium range mobile networks using
> > 5 watts of PSK on 11 meters using wires dropped off bridges.
> >
> > Eventually the hams that do get on the scene could set up a CB to HF
> > gateway so that the packets could make it out from the Guards to the
> > NGOs.
> >
> > While I am more than willing to test this setup out for my brother on a
> > pair of CB radios, I told him I might need an STA from the FCC to
> > communicate data on CB channel 40. He tells me that in an emergency,
> > anyone can use any frequencies they want, any power, any mode. I told
> > him true, but that does not help me as an OEM getting fined for testing
> > out an emergency scenario in a nonemergency situation.
> >
> > Suggestions?
> >
> > The Eternal Squire
> >
> IMHO The feds have plenty of radio equipment with comms operators that could
> be shipped to disaster hit area faster than your average guards unit could
> adapt/setup a purloined unit.

Thank you all for your suggestions.

This is not a hoax. But I too find the need sufficiently implausible
that I feel a little bit queasy taking R&D fees for a cause like this

at $50 per hour. The only reason that I'm not mentioning the consulting firm is that I could stand to get paid... and any money is better than no money. And if I'm the king's coin then I ought to make it work.

I agree, Truck stops are a very good idea for commandeering CB's, but you only find those in the exurbs.. Yes, other commercial radio services could and maybe even should be drafted into this. The squad lead could then determine the tradeoffs based on the availability of foraged equipment.

Allison, your idea of using the dummy loads to simulate fading over distance is OUTSTANDING. I'll do it!

Using dummy loads as a demo, I could then get the consulting firm to ask the FCC for an STA for field tests.

For my test rigs, I'm intending to plug in a laptop sound card I/O into the SSB mic and headphone jacks. Therefore no type acceptance needed because no mods.

My brother says ideally in the scenario, each squad leader should only need to carry a mini-CDROM in his or her pocket. The squad lead could then commandeer a laptop, an SSB CB radio, and then use an abandoned automobile as an electric generator for the laptop and radio. Antenna would be flung over a 3 story office building.

One of the reasons for this scenario is to lighten the overall squad load and thereby increase the speed of response. That way each squad could break into an abandoned store and then set up a first responder posts.

3320. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-19 19:45:02 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <gvajm3-v49.ln1@mail.specsol.com>
Source record: 11621

eternalsquire@comcast.net wrote:

<snip>

> My brother says ideally in the scenario, each squad leader should only
> need to carry a mini-CDROM in his or her pocket. The squad lead could
> then commandeer a laptop, an SSB CB radio, and then use an abandoned
> automobile as an electric generator for the laptop and radio. Antenna
> would be flung over a 3 story office building.

Let's see, all you have to do is find a bunch of laptops with 12V
adapters, a bunch of CB radios with documentation on the mic input,
a soldering iron to make up a mic/laptop interface cable (assuming
you can use the existing mic cable connector).

The only problem left is how to get the abandoned automobile to the
top of the 3 story office building (if any are left standing in this
disaster).

You know, sometimes as a consultant you just have to find a way to
tell the customer he is crazy but you have an altenate idea that
they might like in acceptable language.

> One of the reasons for this scenario is to lighten the overall squad
> load and thereby increase the speed of response. That way each squad
> could break into an abandoned store and then set up a first responder
> posts.

Seems to me it would be easier to come up with a plan to stockpile
and distribute standard squad radios the troops already know how to use.

But I'm just a retired Army signal guy, so what would I know?

--
Jim Pennino

Remove .spam.sux to reply.

3321. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-19 20:19:15 UTC
From: mzenier@eskimo.com
Message-ID: <e794ku$js5$1@eskinews.eskimo.com>
Source record: 11646

In article <1150652485.685726.246160@c74g2000cwc.googlegroups.com>,
<eternalsquire@comcast.net> wrote:
>All,
>
>I've got a brother who works for a consulting firm whose main customer
>is Homeland Secrity.
>
>What the feds want to do is to be able to communicate mil-spec digital
>packets over low power links in the middle of a disaster-hit area
>between squads of Guards deployed across a destroyed city.
>
>They cannot assume that hams and ham equipment will be available, and
>they do not want to carry heavy equipment into a city. They want to be
>able to use equipment that they can readily commandeer from stores such
>as Radio Shack.
>
>That pretty much means CB radios. I have heard of hams working DX
>using 5 watts of PSK on 10 meters using poor antennas, so that gives me
>the idea that Guard units could form medium range mobile networks using
>5 watts of PSK on 11 meters using wires dropped off bridges.
>
>Eventually the hams that do get on the scene could set up a CB to HF
>gateway so that the packets could make it out from the Guards to the
>NGOs.
>
>While I am more than willing to test this setup out for my brother on a
>pair of CB radios, I told him I might need an STA from the FCC to
>communicate data on CB channel 40. He tells me that in an emergency,
>anyone can use any frequencies they want, any power, any mode. I told
>him true, but that does not help me as an OEM getting fined for testing
>out an emergency scenario in a nonemergency situation.
>
>Suggestions?

The CB band is also listed under the license free regulations, Part 15
so if you run low enough power, you don't need a license, and there are
no particular restrictions on mode.

> 15.227 Operation within the band 26.96-27.28 MHz.

>(a) The field strength of any emission within this band shall not
>exceed 10,000 microvolts/meter at 3 meters. The emission limit in this
>paragraph is based on measurement instrumenta-tion employing an average
>detector. The provisions in 15.35 for limiting peak emissions apply.

>(b) The field strength of any emissions which appear outside of this
>band shall not exceed the general radiated emission limits in § 15.209.

Channel 40 is above 27.28 MHz, about channel 27 as near as I can tell
(channels are not sequential frequencies).

Contrary to popular opinion, I think that a packet radio relay made with
a portable computer with a sound card, a CB transceiver, and a patch cable
all made from stuff that you could "liberate" from the local Radio Shack
is possible. Some sort of PTT control (VOX?) would be the hardest part.

Given my opinion of the average CBer's conception of "The Public Good",
I don't expect that a system could run without getting the hell jammed
out of it, even if the military is exempt from FCC regs.

Mark Zenier mzenier@eskimo.com
Googleproofaddress(account:mzenier provider:eskimo domain:com)

3322. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-19 21:09:10 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-173A91.13101419062006@netnews.worldnet.att.net>
Source record: 11622

In article <129bieidij87a17@corp.supernews.com>,
dplatt@radagast.org (Dave Platt) wrote:

> In article <1150652485.685726.246160@c74g2000cwc.googlegroups.com>,
> <eternalsquire@comcast.net> wrote:
>
> >While I am more than willing to test this setup out for my brother on a
> >pair of CB radios, I told him I might need an STA from the FCC to
> >communicate data on CB channel 40. He tells me that in an emergency,
> >anyone can use any frequencies they want, any power, any mode. I told
> >him true, but that does not help me as an OEM getting fined for testing
> >out an emergency scenario in a nonemergency situation.
>
> I think you're correct. Part 95, section 631 (c) and (e) and (f)
> make it quite clear that data transmission over CB is a no-no.
>
> In addition, the simple act of hooking up a data transmission circuit
> to a CB radio's modulator might be considered to be enough of a
> modification to void the transmitter's certification.
>
> Applying for an STA certainly seems to be the safe thing to do. And,
> if you get one yourself, the end-user agency should probably also get
> one, so they can run periodic tests and drills without breaking the
> rules.

First of all: The Federal Government (ie Homeland Security, USCG, US
Army, ectg) doesn't need, or require anything from the FCC, as the FCC
has no jurasdiction over US Federal Government Radio Operatrions. It only
regulates, non-Federal Government Communications. The Office of
Telecommunications Policy, or whatever they changed the name to recently,
is the Clearing House for ALL Federal Communications Operations.

Second of all: Even if you did apply for an STA, the FCC wouldn't grant
it for 27Mhz, as that would specifically go against a Standing FCC
Regulation, and set a very bad policy statement for the future.

Last of all: AM Modulation is the worst type for trying to get error
free communications, and not likely to succeed without spending a pile
of money in the R & D Phase of the modem part of the project.

Me an ex-FCC Field Resident Agent who knows better than
to go down this kind of path.....

3323. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-19 21:43:58 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <44971A7A.56525EC@earthlink.net>
Source record: 11623

Me wrote:
>
> First of all: The Federal Government (ie Homeland Security, USCG, US
> Army, ectg) doesn't need, or require anything from the FCC, as the FCC
> has no jurasdiction over US Federal Government Radio Operatrions. It only
> regulates, non-Federal Government Communications. The Office of
> Telecommunications Policy, or whatever they changed the name to recently,
> is the Clearing House for ALL Federal Communications Operations.
>
> Second of all: Even if you did apply for an STA, the FCC wouldn't grant
> it for 27Mhz, as that would specifically go against a Standing FCC
> Regulation, and set a very bad policy statement for the future.
>
> Last of all: AM Modulation is the worst type for trying to get error
> free communications, and not likely to succeed without spending a pile
> of money in the R & D Phase of the modem part of the project.
>
> Me an ex-FCC Field Resident Agent who knows better than
> to go down this kind of path.........

The US ARMY radio & TV station I worked at had FCC licenses hanging
on the walls at Ft. Greely, back in the early '70s but they were
considered "Courtesy Licenses" so the FCC knew to keep track of them
when other stations were built. They had no expiration dates, now power
limits, and no operating hours. They were marked "Until no longer
needed", and "As deemed necessary" and at that time were issued to any
long term US Government RF installation.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

3324. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-19 23:10:14 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <44973004.2010806@nettally.com>
Source record: 11629

SSB CB radios are pretty rare items in most circles, in fact the troops trying to commandeer CB's might not be aware of the difference and will try to use standard CB's and they won't work in the "net". Secondly, SSB CB's have a clarifier control that has to be adjusted. This is easy enough with voice, but with data, it is not as easy to do by "ear". You will have to incorporate some sort of tuning scheme in your software. You are better off with AM because of these limitations. Are you going to have a field expedient handbook so that the troops can figure out which mike wires are which? It is not that easy to figure out if you are unfamiliar with radio. Your idea of a software solution reminds me of the BAYCOM TNC modems of the 80's. You might want to research those. You should be able to get 3 to 5 times that rate in the consulting world by the way.

eternalsquire@comcast.net wrote:

>Brian 2W0BDW wrote:
>
>
>><eternalsquire@comcast.net> wrote in message
>>news:1150652485.685726.246160@c74g2000cwc.googlegroups.com...
>>
>>
>>>All,
>>>
>>>I've got a brother who works for a consulting firm whose main customer
>>>is Homeland Secrity.
>>>
>>>What the feds want to do is to be able to communicate mil-spec digital
>>>packets over low power links in the middle of a disaster-hit area
>>>between squads of Guards deployed across a destroyed city.
>>>
>>>They cannot assume that hams and ham equipment will be available, and
>>>they do not want to carry heavy equipment into a city. They want to be
>>>able to use equipment that they can readily commandeer from stores such
>>>as Radio Shack.
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>>>using 5 watts of PSK on 10 meters using poor antennas, so that gives me
>>>the idea that Guard units could form medium range mobile networks using
>>>5 watts of PSK on 11 meters using wires dropped off bridges.
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>>>Eventually the hams that do get on the scene could set up a CB to HF
>>>gateway so that the packets could make it out from the Guards to the
>>>NGOs.

>>>
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>>>pair of CB radios, I told him I might need an STA from the FCC to
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>>>anyone can use any frequencies they want, any power, any mode. I told
>>>him true, but that does not help me as an OEM getting fined for testing
>>>out an emergency scenario in a nonemergency situation.
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>>>Suggestions?
>>>
>>>The Eternal Squire
>>>
>>>
>>>
>>IMHO The feds have plenty of radio equipment with comms operators that could
>>be shipped to disaster hit area faster than your average guards unit could
>>adapt/setup a purloined unit.
>>
>>
>
>
>Thank you all for your suggestions.
>
>This is not a hoax. But I too find the need sufficiently implausible
>that I feel a little bit queasy taking R&D fees for a cause like this
>at $50 per hour. The only reason that I'm not mentioning the
>consulting firm is that I could stand to get paid... and any money is
>better than no money. And if I'm the king's coin then I ought to make
>it work.
>
>I agree, Truck stops are a very good idea for commandeering CB's, but
>you only find those in the exurbs.. Yes, other commercial radio
>services could and maybe even should be drafted into this. The squad
>lead could then determine the tradeoffs based on the availability of
>foraged equipment.
>
>Allison, your idea of using the dummy loads to simulate fading over
>distance is OUTSTANDING. I'll do it!
>
>Using dummy loads as a demo, I could then get the consulting firm to
>ask the FCC for an STA for field tests.
>
>For my test rigs, I'm intending to plug in a laptop sound card I/O into
>the SSB mic and headphone jacks. Therefore no type acceptance needed
>because no mods.
>
>My brother says ideally in the scenario, each squad leader should only
>need to carry a mini-CDROM in his or her pocket. The squad lead could
>then commandeer a laptop, an SSB CB radio, and then use an abandoned
>automobile as an electric generator for the laptop and radio. Antenna

>would be flung over a 3 story office building.
>
>One of the reasons for this scenario is to lighten the overall squad
>load and thereby increase the speed of response. That way each squad
>could break into an abandoned store and then set up a first responder
>posts.
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

3325. how?Re: A Complex Metaphysical Conundrum...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-19 23:28:09 UTC
From: an old freind <kb9rqz-ars@hotmail.com>
Message-ID: <1150759689.883447.139000@i40g2000cwc.googlegroups.com>
Source record: 11624
Cross-posted to: sci.electronics.design,rec.radio.amateur.misc,rec.radio.amateur.homebrew

how was wether or not quantum mechcanics is hobby a "A Complex Metaphysical Conundrum..."

3326. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-19 23:53:32 UTC
From: eternalsquire@comcast.net
Message-ID: <1150761212.462138.299280@y41g2000cwy.googlegroups.com>
Source record: 11625

jimp@specsol.spam.sux.com wrote:
> eternalsquire@comcast.net wrote:

> Let's see, all you have to do is find a bunch of laptops with 12V
> adapters,

12V power is standard power jack for laptops

a bunch of CB radios with documentation on the mic input,

The docs could be on the CD-ROM. Squad leader or designate
could read that using the laptop.

> a soldering iron to make up a mic/laptop interface cable (assuming
> you can use the existing mic cable connector).
Shouldn't be too hard.

>
> The only problem left is how to get the abandoned automobile to the
> top of the 3 story office building (if any are left standing in this
> disaster).
The feed could start at street level and connect to a dipole on the
rooftop.

3327. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 00:00:45 UTC
From: eternalsquire@comcast.net
Message-ID: <1150761645.673394.43370@h76g2000cwa.googlegroups.com>
Source record: 11626

Me wrote:
> In article <129bieidij87a17@corp.supernews.com>,
> dplatt@radagast.org (Dave Platt) wrote:
>
> > In article <1150652485.685726.246160@c74g2000cwc.googlegroups.com>,
> > <eternalsquire@comcast.net> wrote:
> >
> > >While I am more than willing to test this setup out for my brother on a
> > >pair of CB radios, I told him I might need an STA from the FCC to
> > >communicate data on CB channel 40. He tells me that in an emergency,
> > >anyone can use any frequencies they want, any power, any mode. I told
> > >him true, but that does not help me as an OEM getting fined for testing
> > >out an emergency scenario in a nonemergency situation.
> >
> > I think you're correct. Part 95, section 631 (c) and (e) and (f)
> > make it quite clear that data transmission over CB is a no-no.
> >
> > In addition, the simple act of hooking up a data transmission circuit
> > to a CB radio's modulator might be considered to be enough of a
> > modification to void the transmitter's certification.
> >
> > Applying for an STA certainly seems to be the safe thing to do. And,
> > if you get one yourself, the end-user agency should probably also get
> > one, so they can run periodic tests and drills without breaking the
> > rules.
>
>
> First of all: The Federal Government (ie Homeland Security, USCG, US
> Army, ectg) doesn't need, or require anything from the FCC, as the FCC
> has no jurasdiction over US Federal Government Radio Operatrions. It only
> regulates, non-Federal Government Communications. The Office of
> Telecommunications Policy, or whatever they changed the name to recently,
> is the Clearing House for ALL Federal Communications Operations.

Then I guess if the consulting firm can get the necessary authority to
waive the need for an STA, I won't complain.

> Second of all: Even if you did apply for an STA, the FCC wouldn't grant
> it for 27Mhz,

If the FCC was trying to prove itself modern for digital commo by
trying to kill amateur HF using BPL, then with this they have a chance
to let CB'ers enter the digital age. Maybe the FCC will go for it..

>as that would specifically go against a Standing FCC
> Regulation, and set a very bad policy statement for the future.

In other words, an Act of Congress would be necessary?

>
> Last of all: AM Modulation is the worst type for trying to get error
> free communications, and not likely to succeed without spending a pile
> of money in the R & D Phase of the modem part of the project.

Using SSB CB radios.
>
> Me an ex-FCC Field Resident Agent who knows better than
> to go down this kind of path.........

3328. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 00:02:56 UTC
From: eternalsquire@comcast.net
Message-ID: <1150761776.412346.56640@h76g2000cwa.googlegroups.com>
Source record: 11627

> And tell him to buy a text book on - well, just about anything except
> self-promotion - he doesnt seem to know very much. Probably why hes a
> consultant. Is he an accountant?

Nope, a geoscientist.

3329. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 00:04:38 UTC
From: eternalsquire@comcast.net
Message-ID: <1150761878.744417.64620@h76g2000cwa.googlegroups.com>
Source record: 11628

Andrew VK3BFA wrote:

> And tell him to buy a text book on - well, just about anything except
> self-promotion - he doesnt seem to know very much. Probably why hes a
> consultant. Is he an accountant?

Nope, my brother is a geophysicist. I'm the electronics person.

The Eternal Squire

3330. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 01:15:02 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <unujm3-ho3.ln1@mail.specsol.com>
Source record: 11630

eternalsquire@comcast.net wrote:

> jimp@specsol.spam.sux.com wrote:
> > eternalsquire@comcast.net wrote:

> > Let's see, all you have to do is find a bunch of laptops with 12V
> > adapters,

> 12V power is standard power jack for laptops

Funny, the last laptop I bought doesn't include a 12V cable. As a
matter of fact, neither did the one before it. You had to ask for
it as an add-on.

> a bunch of CB radios with documentation on the mic input,

> The docs could be on the CD-ROM. Squad leader or designate
> could read that using the laptop.

And just where do you get this CD-ROM in a deserted, destroyed building
after the catastrophe?

Oh yeah, you've got the schematics of every CB radio ever made on
CD-ROM already and you are taking it with you.

Right,

> > a soldering iron to make up a mic/laptop interface cable (assuming
> > you can use the existing mic cable connector).
> Shouldn't be too hard.

Of course every squad made up of random troops from the motor pool and
the rifle squad has a portable soldering iron, knows how to solder
and has solder.

Or or all these troops going to come from the Signal School?

Oh, wait, they are going to commandeer the soldering irons and solder
from the destroyed businesses and plug the irons into the none-functioning
AC grid, and learn how to solder from a CD-ROM.

How could I have been so stupid with only 30 years in the Army?

Maybe from teaching soldering classes?

> >
> > The only problem left is how to get the abandoned automobile to the
> > top of the 3 story office building (if any are left standing in this
> > disaster).

> The feed could start at street level and connect to a dipole on the
> rooftop.

So where do you get the custom power cable or antenna cable to go
up three stories?

Three stories worth of cable is going to weigh a lot more than most
radios these days.

Might as well bring the radios with built in antennas and battry packs.

--
Jim Pennino

Remove .spam.sux to reply.

3331. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 01:32:38 UTC
From: eternalsquire@comcast.net
Message-ID: <1150767158.428059.60640@p79g2000cwp.googlegroups.com>
Source record: 11631

jimp@specsol.spam.sux.com wrote:

> And just where do you get this CD-ROM in a deserted, destroyed building
> after the catastrophe?

Clearly you are only skimming my posts rather than reading them.

Starting at the beginning:

1) Squad leader carries a mini-CDROM in his/her pocket. That's the
nucleus
for everything else. With luck, nothing else need be carried into
the field.

2) The CDROM would contain schematics and part numbers of everything
necessary
to forage to create a datalink.

3) SSB CB Radios (funny, my RS always carries the SSB CB radio as the
high end
model) would be one of several pieces of RF equipment
that could be foraged off the street (i.e. Radio Shack stores,
truck stops, etc).

4) Most new laptops carry 12V power input. Older ones don't. There
are plenty
of sources to forage a laptop from: Target, Walmart, and K-mart
come to mind
as well as Radio Shack.

5) The laptop, radio, and car are all at street level. People can
take plain old copper
wire and make a dipole or inverted Vee with it, hanging it from the
roof top. The only actual ground to antenna connnection comes
between the radio and the center of the dipole or inverted Vee.

Caught up now?

The Eternal Squire

3332. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 01:39:58 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <k5ke925avvu5vt2kvvhr71tb0mng0vlfn5@4ax.com>
Source record: 11632

On Mon, 19 Jun 2006 23:10:14 GMT, **THE-RFI-EMI-GUY**
<rhyolite@nettally.com> wrote:

>SSB CB radios are pretty rare items in most circles, in fact the troops
>trying to commandeer CB's might not be aware of the difference and will
>try to use standard CB's and they won't work in the "net". Secondly, SSB
>CB's have a clarifier control that has to be adjusted. This is easy
>enough with voice, but with data, it is not as easy to do by "ear". You
>will have to incorporate some sort of tuning scheme in your software.
>You are better off with AM because of these limitations. Are you going
>to have a field expedient handbook so that the troops can figure out
>which mike wires are which? It is not that easy to figure out if you are

Thats funny! Actually CB radios are very diverse with their mic
wiring and switching schemes as in if not done correctly they will
not transmit _or_ recieve.

It's a bad idea and deserves to die an expedient death.

It would be far easier to mass produce a UHF FM radio based on
GMRS chipsets with a digital interface. Then give everyone
a box of them and a box of batteries.

Allison

>unfamiliar with radio. Your idea of a software solution reminds me of
>the BAYCOM TNC modems of the 80's. You might want to research those. You
>should be able to get 3 to 5 times that rate in the consulting world by
>the way.
>
>eternalsquire@comcast.net wrote:
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>>Brian 2W0BDW wrote:
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>>
>>><eternalsquire@comcast.net> wrote in message
>>>news:1150652485.685726.246160@c74g2000cwc.googlegroups.com...
>>>
>>>
>>>>All,
>>>>
>>>>I've got a brother who works for a consulting firm whose main customer
>>>>is Homeland Secrity.
>>>>
>>>>What the feds want to do is to be able to communicate mil-spec digital
>>>>packets over low power links in the middle of a disaster-hit area

>>>>between squads of Guards deployed across a destroyed city.
>>>>
>>>>They cannot assume that hams and ham equipment will be available, and
>>>>they do not want to carry heavy equipment into a city. They want to be
>>>>able to use equipment that they can readily commandeer from stores such
>>>>as Radio Shack.
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>>>>That pretty much means CB radios. I have heard of hams working DX
>>>>using 5 watts of PSK on 10 meters using poor antennas, so that gives me
>>>>the idea that Guard units could form medium range mobile networks using
>>>>5 watts of PSK on 11 meters using wires dropped off bridges.
>>>>
>>>>Eventually the hams that do get on the scene could set up a CB to HF
>>>>gateway so that the packets could make it out from the Guards to the
>>>>NGOs.
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>>>>While I am more than willing to test this setup out for my brother on a
>>>>pair of CB radios, I told him I might need an STA from the FCC to
>>>>communicate data on CB channel 40. He tells me that in an emergency,
>>>>anyone can use any frequencies they want, any power, any mode. I told
>>>>him true, but that does not help me as an OEM getting fined for testing
>>>>out an emergency scenario in a nonemergency situation.
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>>>>Suggestions?
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>>>>The Eternal Squire
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>>>>
>>>IMHO The feds have plenty of radio equipment with comms operators that could
>>>be shipped to disaster hit area faster than your average guards unit could
>>>adapt/setup a purloined unit.
>>>
>>>
>>
>>
>>Thank you all for your suggestions.
>>
>>This is not a hoax. But I too find the need sufficiently implausible
>>that I feel a little bit queasy taking R&D fees for a cause like this
>>at $50 per hour. The only reason that I'm not mentioning the
>>consulting firm is that I could stand to get paid... and any money is
>>better than no money. And if I'm the king's coin then I ought to make
>>it work.
>>
>>I agree, Truck stops are a very good idea for commandeering CB's, but
>>you only find those in the exurbs.. Yes, other commercial radio
>>services could and maybe even should be drafted into this. The squad
>>lead could then determine the tradeoffs based on the availability of
>>foraged equipment.

>>
>>Allison, your idea of using the dummy loads to simulate fading over
>>distance is OUTSTANDING. I'll do it!
>>
>>Using dummy loads as a demo, I could then get the consulting firm to
>>ask the FCC for an STA for field tests.
>>
>>For my test rigs, I'm intending to plug in a laptop sound card I/O into
>>the SSB mic and headphone jacks. Therefore no type acceptance needed
>>because no mods.
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>>My brother says ideally in the scenario, each squad leader should only
>>need to carry a mini-CDROM in his or her pocket. The squad lead could
>>then commandeer a laptop, an SSB CB radio, and then use an abandoned
>>automobile as an electric generator for the laptop and radio. Antenna
>>would be flung over a 3 story office building.
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>>One of the reasons for this scenario is to lighten the overall squad
>>load and thereby increase the speed of response. That way each squad
>>could break into an abandoned store and then set up a first responder
>>posts.
>>
>>
>>

3333. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 02:29:39 UTC
From: kh <nospam@nospam.com>
Message-ID: <0QMXZWh9EdSr-pn2-e3dSCHOZcsRd@localhost>
Source record: 11633

On Sun, 18 Jun 2006 20:24:04 UTC, Jim Higgins
<invalid@invalid.invalid> wrote:
>
> About all you're going to commander from Radio Shack is cell phones.
> I smell a hoax...

That's close...

> though it wouldn't surprise me to find an absolutely
> clueless consulting firm sucking up Homeland Security money and
> Homeland Security tossing money around to every clueless Tom, Dick and
> Harry like it was water.
>

I bet that's it. I'm in WAAA-shington and it is incredible how
absolutely clueless the folks who staff the consulting firms are.

They'll seize upon a buzzword or a weird concept and, bing, the word
processors and powerpoint presentations are running full time,
filling the air with blather.

Handwaving, spewing the jive.

Let's be clear. The concept makes no sense at all. Others have
detailed the technical and practical issues.

What does work is standard military comm gear, ruggedized, charged
up and ready to use.

This is America. The guard or whoever already has comm gear, likely
as good as stuff used by 14 year old mall-kids.

If they don't, then it's a simple matter to deliver it to them from
a depot.

In the absense of a problem, a consulting firm will imagineer one
and, let the spew-games begin.

This is WAAA-shington. Blather and cluelessness abound.
They might be filing for a proof-of-concept, stage one,
small-business-innovative-research contract, twenty-five or fifty
grand of your money pays for a lot of USENET trollin' and wacky
verbage.

Even scarier, if they make the first cut, the next level is a
quarter million to a half million dollars of YOUR money.

-c

- -

3334. Re: is an STA ..more like a rules change

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 03:36:34 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1150774594.276361.33360@r2g2000cwb.googlegroups.com>
Source record: 11634

eternalsquire@comcast.net wrote:
> All,

> While I am more than willing to test this setup out for my brother on a
> pair of CB radios, I told him I might need an STA from the FCC to
> communicate data on CB channel 40. He tells me that in an emergency,
> anyone can use any frequencies they want, any power, any mode. I told
> him true, but that does not help me as an OEM getting fined for testing
> out an emergency scenario in a nonemergency situation.
STA are temproary and not supposed to be granted for perment possible
ops the people ask in this case would the FCC iself but I an STA would
allow protype testing and such but deployment authoity would need some
mondo rulling to be legal

3335. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 03:45:02 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <fe7km3-mdq.ln1@mail.specsol.com>
Source record: 11635

eternalsquire@comcast.net wrote:

> jimp@specsol.spam.sux.com wrote:

> > And just where do you get this CD-ROM in a deserted, destroyed building
> > after the catastrophe?

> Clearly you are only skimming my posts rather than reading them.A

Actually, I was reading them and comparing them against my real world
experiences with combat boots in the dirt.

> Starting at the beginning:

> 1) Squad leader carries a mini-CDROM in his/her pocket. That's the
> nucleus
> for everything else. With luck, nothing else need be carried into
> the field.A

A military force that goes into the field depending on luck is doomed
to failure.

It doesn't matter if it is a combat situation in foreign land or a
simple training exercise within sight of a major US city.

If you don't have everything you need going in, or at least a supply
chain that can get it to you quickly, someone is going to be hurt.

This comes from bitter experience.

> 2) The CDROM would contain schematics and part numbers of everything
> necessary
> to forage to create a datalink.

You are going to supply an up to date CDROM containing all the info for
all the CB radios in the US?

Yeah, that's going to happen

> 3) SSB CB Radios (funny, my RS always carries the SSB CB radio as the
> high end
> model) would be one of several pieces of RF equipment
> that could be foraged off the street (i.e. Radio Shack stores,
> truck stops, etc).

Assuming there were such stores in the first place and they aren't
flattened/flooded by whatever the catastrophe was.

> 4) Most new laptops carry 12V power input. Older ones don't. There
> are plenty
> of sources to forage a laptop from: Target, Walmart, and K-mart
> come to mind
> as well as Radio Shack.

Getting a laptop is a minor problem. Getting a 12V DC connector and
someone that knows how to wire to a field expediate power source
correctly is a major problem.

> 5) The laptop, radio, and car are all at street level. People can
> take plain old copper
> wire and make a dipole or inverted Vee with it, hanging it from the
> roof top. The only actual ground to antenna connnection comes
> between the radio and the center of the dipole or inverted Vee.

Where does the antenna feed cable come from? The collapsed/flooded
store?

Where do you get the person that knows how to wire up an antenna
and feed cable?

Where do you get the person that knows how to cut a dipole or
inverted-vee, or even what those terms mean?

Most troops are really good at what they are trained for. Few troops
have been trained in anything to do with electronics or even electricty.

Special Forces troops are probably the most veratile of troops (and
the smallest in number), but without the training they would be
useless.

You want them to parachute in during the dark of night, take and
hold a tactical position, no problem.

You want them to cut and connect a diplole, big problem

Upon what do I base these statements?

Years spent teaching such subjects to troops.

> Caught up now?

I never was behind.

You, however, have no concept of what it is like to have boots in
the dirt.

--
Jim Pennino

Remove .spam.sux to reply.

3336. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 04:19:21 UTC
From: john graesser <graesser@tca.net>
Message-ID: <129eth1jvfei420@corp.supernews.com>
Source record: 11636

<jimp@specsol.spam.sux.com> wrote in message
news:unujm3-ho3.ln1@mail.specsol.com...
> eternalsquire@comcast.net wrote:
>
> > jimp@specsol.spam.sux.com wrote:
> > > eternalsquire@comcast.net wrote:
>
> > > Let's see, all you have to do is find a bunch of laptops with 12V
> > > adapters,
>
> > 12V power is standard power jack for laptops
>
> Funny, the last laptop I bought doesn't include a 12V cable. As a
> matter of fact, neither did the one before it. You had to ask for
> it as an add-on.

I guess it is the new laptops that use 12v, the only laptops I have here have an 18v adaptor for the Zenith or 120v input for the Toshibas. I guess noone will be borrowing mine to use in an emergency. What sort of emergency responders are going to be sent in with no equipment?

With the right soundcard software a laptop could emulate a bell 202 or 103 modem over AM radio, even with packet error checking to reduce transmission errors. What no one has mentioned yet is channel usage, one simplex data channel for an entire disaster area with no provision for collision detection between users other than just listening for someone else transmitting? With the central data collection point high enough to cover the entire area, you will be in the position that each transmitter may not hear another but the reciever can hear both while transmitting at the same time. The data collector would spend quite a bit of time acting as net control determining which remote site was allowed to transmit at any particular time. Just my $.02 on this poorly thought out idea.
thanks, John.
KC5DWD

3337. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 05:19:17 UTC
From: yea right <spam@spam.spam>
Message-ID: <pan.2006.06.20.05.19.17.693594@spam.spam>
Source record: 11637

On Sun, 18 Jun 2006 10:41:25 -0700, eternalsquire wrote:

> All,
>
> I've got a brother who works for a consulting firm whose main customer is
> Homeland Secrity.
>
<snip>

It's against the law for feds to use freqs not assigned to them. At least
by design.

3338. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 07:07:51 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1150787271.040683.18960@y41g2000cwy.googlegroups.com>
Source record: 11638

eternalsquire@comcast.net wrote:
> Andrew VK3BFA wrote:
>
>
> > And tell him to buy a text book on - well, just about anything except
> > self-promotion - he doesnt seem to know very much. Probably why hes a
> > consultant. Is he an accountant?
>
> Nope, my brother is a geophysicist. I'm the electronics person.
>
> The Eternal Squire

Then what is he doing consulting? - has his academic discipline got
ANYTHING to do with the subject?

And you, sir, have been told, repeatedly, by ex military comms people
(amongst others) thats its just a plain downright, stupid, time
wasting, idiotic, non feasible "idea".

Does it need to be spelt out any clearer than that?

What dont you understand?

Andrew VK3BFA.

3339. Re: AN OPEN LETTER TO THE MENTAL HEALTH INSPECTORS

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 09:03:39 UTC
From: mc.puttd@hammer.down.bro
Message-ID: <v7df92505vvv5v1g5kmh6jt33jdrk85ru1@4ax.com>
Source record: 11639
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On 19 Jun 2006 23:55:25 -0700, "The Conscience"
<radio.ham@lycos.co.uk> wrote:
>
>I draw your attention to a myself, an evasive man and a liar,
>everywhere I go, I lie, I practice deceit and I flaunt my
>incredible stupidity.
>
>I am underemployed and largely unemployable. If it were
>not for the generosity of the benefits system, I might be
>forced onto the streets.
>
>I regularly disrupt Internet news groups, with my unwanted
>presence and my ridiculous postings regarding just about every
>subject under the sun, none of which I know anything about,
>using aliases such as "Radio Ham", "Airy R Bean", and "Brian
>Reays Conscience" amongst many others, all equally stupid,
>as am I
>
>Ham Radio is a technical pursuit for decent, law-abiding citizens,
>and as somebody with a criminal record I cannot understand
>how I'm allowed to bring it into disrepute.

Congratulations. That's the most honest posting you have made.

3340. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 09:17:27 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1150795047.114766.273680@b68g2000cwa.googlegroups.com>
Source record: 11640

Andrew VK3BFA wrote:
> And you, sir, have been told, repeatedly, by ex military comms people
> (amongst others) thats its just a plain downright, stupid, time
> wasting, idiotic, non feasible "idea".
>
> Does it need to be spelt out any clearer than that?
>
> What dont you understand?

Seriously, hams have long been responsible for taking time wasting idiotic non feasible "ideas" and VERY occasionally turning them into serious modes of communications.

I agree that in this particular case the original idea has several enormous flaws. But with some of the modifications suggested here I think there may be something of some value in some emergency circumstances.

Certainly the professionals who set up digitally trunked comm systems have a less than stellar track record at actual success (do NOT confuse with "contractual success") and I have a large chip on my shoulder regarding ALL the billions of dollars that they've wasted at taxpayer expense. Not to mention the distortions they've caused to frequency allocations that actually WERE previously useful.

And you would be SERIOUSLY surprised at some of the far stupider flawed ideas that are being funded by government agencies.

Tim.

3341. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 09:55:48 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1150797348.371810.74180@c74g2000cwc.googlegroups.com>
Source record: 11641

Tim Shoppa wrote:
> Andrew VK3BFA wrote:
> > And you, sir, have been told, repeatedly, by ex military comms people
> > (amongst others) thats its just a plain downright, stupid, time
> > wasting, idiotic, non feasible "idea".
> >
> > Does it need to be spelt out any clearer than that?
> >
> > What dont you understand?
>
> Seriously, hams have long been responsible for taking time wasting
> idiotic non feasible "ideas" and VERY occasionally turning them into
> serious modes of communications.
>
> I agree that in this particular case the original idea has several
> enormous flaws. But with some of the modifications suggested here I
> think there may be something of some value in some emergency
> circumstances.
>
> Certainly the professionals who set up digitally trunked comm systems
> have a less than stellar track record at actual success (do NOT
> confuse with "contractual success") and I have a large chip on my
> shoulder regarding ALL the billions of dollars that they've wasted at
> taxpayer expense. Not to mention the distortions they've caused to
> frequency allocations that actually WERE previously useful.
>
> And you would be SERIOUSLY surprised at some of the far stupider flawed
> ideas that are being funded by government agencies.
>
> Tim.

Hi Tim,
not disagreing with you in some aspects - amateurs have had a long record of innovation in the comms field - this scheme, however, is seriously flawed on a basic, technical level. Is there ANYBODY in the emergency management chain who has enough BASIC KNOWLEDGE of communications theory and practice to know that its a stupid idea to start with? - that, to me, is the really worrying part.

There would be FAR more easy and efficient means of getting field comms going - most of them were raised following Hurrican Katrina. Vis

- having common liason frequencies between the various emergency services - they had lots of sophisticated equipment, but couldnt talk to each other beyond sending "runners"

- having backup generators and power available (preferably auto start) on the cell phone and landline systems. And the simple technical ability to lock out non-essential users. This USED to be a basic engineering specification - what happend?
- having someone in charge who could CO-ORDINATE resources - lost in paranoid state/federal/local turf wars.

These are the most basic physical infrastructure issues, , let alone the politics of blame - have they been addressed post Katrina? - the whole world watched in stunned amazement as the Americans couldnt even organise a relief effort for their own people, on their own soil, with no one shooting at them.

And sorry, but when lunatic fringe ideas like "lets commandeer CB's" are even remotely taken seriously out side of a bar room, you have good reason to be worried.

Andrew VK3BFA.

3342. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 12:23:35 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <10pf925c8f5oo90kaie7bqgfa376d5d8ff@4ax.com>
Source record: 11642

On 19 Jun 2006 18:32:38 -0700, eternalsquire@comcast.net wrote:

>
>jimp@specsol.spam.sux.com wrote:
>
>> And just where do you get this CD-ROM in a deserted, destroyed building
>> after the catastrophe?
>
>Clearly you are only skimming my posts rather than reading them.
>
>Starting at the beginning:
>
>1) Squad leader carries a mini-CDROM in his/her pocket. That's the
>nucleus
> for everything else. With luck, nothing else need be carried into
>the field.
>
>2) The CDROM would contain schematics and part numbers of everything
>necessary
> to forage to create a datalink.
>
>3) SSB CB Radios (funny, my RS always carries the SSB CB radio as the
>high end
> model) would be one of several pieces of RF equipment
> that could be foraged off the street (i.e. Radio Shack stores,
>truck stops, etc).
>
>4) Most new laptops carry 12V power input. Older ones don't. There
>are plenty
> of sources to forage a laptop from: Target, Walmart, and K-mart
>come to mind
> as well as Radio Shack.
>
>5) The laptop, radio, and car are all at street level. People can
>take plain old copper
> wire and make a dipole or inverted Vee with it, hanging it from the
>roof top. The only actual ground to antenna connnection comes
>between the radio and the center of the dipole or inverted Vee.
>
>Caught up now?
>
>The Eternal Squire

You know, then again the idea doesn't want to know.
If they (the first responders) find a working (unwet and

undamaged) CB radio, battery and antenna they could
just pick up the mic and TALK. That would would be
both cost effective and requires far less effort/training to
implement. It would also conform to the CB norm and other
<gasp> operators might be part of the assistance. There
may still be people working the REACT system.

For those that remember before CB became littered with
carriers and other flotsum and jetsum CB was considered
a very good tactical radio due to it's channelized character.
Since then portable amatuer HTs, FRS and GMRS radios
became available and reliable and share in that tactical
capability without the need for a 9ft whip.

Allison

3343. New England Wireless and Steam Museum

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 12:55:01 UTC
From: Only <Only@work.home>
Message-ID: <129fs158j6fhb81@corp.supernews.com>
Source record: 11643
Cross-posted to: sci.electronics.design,rec.radio.amateur.misc,rec.radio.amateur.homebrew

The New England Wireless and Steam Museum, Inc.
http://users.ids.net/%7enewsm/mission.html

A Marconi distress transmitter, the same as Titanic's.
A Marconi 1900 coherer and jigger.
The oldest equipped radio station in the world.
An Edison 1882 diode - the first of all radio tubes.
An 1881 Professor Dolbear radio receiver. It still works.
The first commercial transistor.

3344. Info on PT4370C RF Power Transistor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 13:53:44 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1150811624.001208.65850@y41g2000cwy.googlegroups.com>
Source record: 11644
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Does anyone have a datasheet, or any technical information at all (frequency, power and nominal supply voltage would be adequate for my needs I think), on this obsolete TRW transistor ?

Steve

3345. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 14:03:19 UTC
From: "R. Scott" <rickw7psk@gmail.com>
Message-ID: <J15wDH.5En@news.boeing.com>
Source record: 11645

> I never was behind.
>
> You, however, have no concept of what it is like to have boots in
> the dirt.

Your prolly talking to one of those Pencil Pushing pentagon admin types we
had to deal with :D. They
have no concept what its like to be in the field.

3346. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 16:05:02 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <rbilm3-8nj.ln1@mail.specsol.com>
Source record: 11647

Mark Zenier <mzenier@eskimo.com> wrote:

<snip>

> Contrary to popular opinion, I think that a packet radio relay made with
> a portable computer with a sound card, a CB transceiver, and a patch cable
> all made from stuff that you could "liberate" from the local Radio Shack
> is possible. Some sort of PTT control (VOX?) would be the hardest part.

It is not a matter of being possible to do by someone who knows what
they are doing.

It is a matter of being practical to do by random, untrained people,
and doing it many times.

<snip remaining>

--
Jim Pennino

Remove .spam.sux to reply.

3347. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 17:14:10 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <nrSdnZt7Iv7osAXZRVnyrA@bt.com>
Source record: 11548

> >What the feds want to do is to be able to communicate mil-spec
digital
> >packets over low power links in the middle of a disaster-hit area
> >between squads of Guards deployed across a destroyed city.
> >
==========
Americans are always planning for war. It's an inbuilt disposition.

That's the best way of guaranteeing they will get it sooner or later.

Witness Vietnam, Iraq, Afganistan, Palestine and many other places.

But keep the Chinese, Russians and Indians in mind. No danger from
them. But they are in a position to retaliate in kind.

Why not plan for Peace! It's safer!

3348. Re: Info on PT4370C RF Power Transistor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 17:52:36 UTC
From: johan aeq <pe1aeq@amsat.og>
Message-ID: <a3148$449837a4$52ad139c$9857@news.versatel.net>
Source record: 11549
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

they still have them..
http://www.1sourcecomponents.com/partinfo/pt4370.htm

<skavanagh72nospam@yahoo.ca> schreef in bericht
news:1150811624.001208.65850@y41g2000cwy.googlegroups.com...
> Does anyone have a datasheet, or any technical information at all
> (frequency, power and nominal supply voltage would be adequate for my
> needs I think), on this obsolete TRW transistor ?
>
> Steve
>

3349. Tradeoffs of filtering exciter vs after PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 18:58:31 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrne9ghan.2vka.ben@saturn.home.ben.com>
Source record: 11550

I'm still working on my HF APRS beacon idea (25MHz-14.85MHz = 10.151)
and I've done some experiments using a 74HC86 quad XOR with one gate for
each oscillator and one as a mixer. In spice simulations, the '86 as a
mixer produces lots of products resulting from the odd harmonics of the
inputs, some of which are close to or below the 10.151MHz I want. If I
run that output through a 2nd order Butterworth 30m bandpass filter I
get a clean result.

My question is about the tradeoffs between filtering the exciter output
to the PA vs filtering after the PA. Obviously a post-amp filter has
to handle more power, but has the opportunity to eliminate amplifier
distortion. But eliminating unwanted inputs to the amp also reduces
unwanted outputs.

Are there rules of thumb for suppression of unwanted signals at each
stage of an amplification chain?

--
Ben Jackson
<ben@ben.com>
http://www.ben.com/

3350. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 18:59:00 UTC
From: fmmck@aol.com
Message-ID: <fmmck-2006061459000001@ac845e3a.ipt.aol.com>
Source record: 11551

In article <1150767158.428059.60640@p79g2000cwp.googlegroups.com>,
eternalsquire@comcast.net wrote:

> Clearly you are only skimming my posts rather than reading them.

E.S.-

You are not easily discouraged!

Consider that many who have posted negative comments here, have years of experience in the military. Others have experience in providing communications systems for field deployment. Their comments may not have addressed all the points you posted in order to maintain brevity. I detect a consensus that your brother's proposal is not practical, even though it is theoretically possible.

Reading your postings, I can't help but recall two experiences from my youth:

1. A snipe hunt.

2. Trying to catch a bird by putting salt on its tail.

Fred

3351. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 21:01:23 UTC
From: eternalsquire@comcast.net
Message-ID: <1150837283.725045.270490@r2g2000cwb.googlegroups.com>
Source record: 11552

Wars may be disasters, but disasters are not wars.

Reg Edwards wrote:
> > >What the feds want to do is to be able to communicate mil-spec
> digital
> > >packets over low power links in the middle of a disaster-hit area
> > >between squads of Guards deployed across a destroyed city.
> > >
> ==========
> Americans are always planning for war. It's an inbuilt disposition.
>
> That's the best way of guaranteeing they will get it sooner or later.
>
> Witness Vietnam, Iraq, Afganistan, Palestine and many other places.
>
> But keep the Chinese, Russians and Indians in mind. No danger from
> them. But they are in a position to retaliate in kind.
>
> Why not plan for Peace! It's safer!

3352. Re: how?Re: A Complex Metaphysical Conundrum...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-20 23:10:35 UTC
From: "Rich Grise, Plainclothes Hippie" <eatmyshorts@doubleclick.net>
Message-ID: <pan.2006.06.21.07.10.06.609298@doubleclick.net>
Source record: 11553
Cross-posted to: sci.electronics.design,rec.radio.amateur.misc,rec.radio.amateur.homebrew

On Mon, 19 Jun 2006 16:28:09 -0700, an old freind wrote:

> how was wether or not quantum mechcanics is hobby a "A Complex
> Metaphysical Conundrum..."

When all else fails, read the instructions:
http://www.google.com/search?q=define%3Ametaphysical
http://www.google.com/search?&q=define%3Aconundrum

Good Luck!
Rich

3353. Re: Info on PT4370C RF Power Transistor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-21 01:54:58 UTC
From: "g. beat"
Message-ID: <ap6dnQzl8o9nOwXZnZ2dnUVZ_qSdnZ2d@comcast.com>
Source record: 11554
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

<skavanagh72nospam@yahoo.ca> wrote in message
news:1150811624.001208.65850@y41g2000cwy.googlegroups.com...
> Does anyone have a datasheet, or any technical information at all
> (frequency, power and nominal supply voltage would be adequate for my
> needs I think), on this obsolete TRW transistor ?
>
> Steve
>

Steve,

I am almost positive that this transistor (PT4370C) was used in the
Transworld RF amplifiers.
There is a Motorola MRF equivalent.
RF Parts will either have the parts or a Motorola cross reference.
http://www.rfparts.com/mototran.html

Look here:
http://www.rfparts.com/pt.html

If you post this question on QRZ Q&A, one of the regulars use to work at TRW
during that era - likely has the old spec sheets and any history you may
want.

gb

3354. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-21 01:57:28 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4498A74D.BB203518@earthlink.net>
Source record: 11555

Reg Edwards wrote:
>
> > >What the feds want to do is to be able to communicate mil-spec
> digital
> > >packets over low power links in the middle of a disaster-hit area
> > >between squads of Guards deployed across a destroyed city.
> > >
> ==========
> Americans are always planning for war. It's an inbuilt disposition.
>
> That's the best way of guaranteeing they will get it sooner or later.
>
> Witness Vietnam, Iraq, Afganistan, Palestine and many other places.
>
> But keep the Chinese, Russians and Indians in mind. No danger from
> them. But they are in a position to retaliate in kind.
>
> Why not plan for Peace! It's safer!

Sure, do like you and spend your whole life with your head between
your legs as you kiss your life good-bye. What a pathetic loser. If
the rest of england had had your view you would have let Hitler have the
keys to Buckingham Palace as his troops shot the men and raped the
women. How wide is that yellow stripe?

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

3355. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-21 03:34:26 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <4498BF71.7020501@nettally.com>
Source record: 11558

Its just not good business. Peace works against Fear, Uncertainty and
Doubt, the prime movers of the business world. Why would you suggest
such an irrational thing?

Reg Edwards wrote:

>
>Why not plan for Peace! It's safer!
>
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

3356. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-21 03:34:43 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <4498BF82.9020103@nettally.com>
Source record: 11556

Its just not good business. Peace works against Fear, Uncertainty and
Doubt, the prime movers of the business world. Why would you suggest
such an irrational thing?

Reg Edwards wrote:

>
>Why not plan for Peace! It's safer!
>
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

3357. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-21 03:35:42 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <i83mg.23277$Ui7.2028@tornado.tampabay.rr.com>
Source record: 11557

Its just not good business. Peace works against Fear, Uncertainty and
Doubt, the prime movers of the business world. Why would you suggest
such an irrational thing?

Reg Edwards wrote:

>
>Why not plan for Peace! It's safer!
>
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

3358. Re: Tradeoffs of filtering exciter vs after PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-21 05:12:54 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <4498D555.8070404@invalid.invalid>
Source record: 11559

Ben Jackson wrote:
> I'm still working on my HF APRS beacon idea (25MHz-14.85MHz = 10.151)

I realize this doesn't really answer your question, but isn't 10.15 the
band edge - and out of the band once you apply modulation?
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

3359. Why hide the most beautiful parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-21 05:51:20 UTC
From: Paul Hinman <paul.hinman@shaw.ca>
Message-ID: <s75mg.68895$Mn5.10135@pd7tw3no>
Source record: 11560

Over the years I have read many articles on how to build a linear amplifier. Many of the plans called for glass fire bottles (811, 572, 3-500, etc.). The tubes are always hidden in the back of the amp. Wouldn't it be nice to move them up front behind a piece of high temperature glass and a fine brass screen for shielding purposes. Then we could enjoy the true glow of the tubes.

I am sure that there are a myriad of reasons for not doing this and I am too inexperienced to understand why. Is such a thing possible and if so I might just upgrade my ticket so that I can build such a beauty. I will upgrade anyway just for my own satisfaction.

Think how impressive an amplifier with a tube or two or more glowing behind a picture window would be.

I would appreciate any thoughts on the subject.

Paul - VE6LDS
Grid Square DO33gk

3360. Re: Tradeoffs of filtering exciter vs after PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-21 06:35:47 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <a8oh92l0f9bau0dsoopvo0jeuvueruv56e@4ax.com>
Source record: 11561

On Tue, 20 Jun 2006 13:58:31 -0500, Ben Jackson <ben@ben.com> wrote:

>I'm still working on my HF APRS beacon idea (25MHz-14.85MHz = 10.151)
>and I've done some experiments using a 74HC86 quad XOR with one gate for
>each oscillator and one as a mixer. In spice simulations, the '86 as a
>mixer produces lots of products resulting from the odd harmonics of the
>inputs, some of which are close to or below the 10.151MHz I want. If I
>run that output through a 2nd order Butterworth 30m bandpass filter I
>get a clean result.

Since the filter loss depends on the ratio between the loaded-Q and
the unloaded-Q and in order to get a steep bandpass filter, the losses
are going to be large with ordinary LC components.

If you put the steep bandpass filter after the power amplifier, a
large amount of expensive RF fundamental power is lost in the filter.
However, if you put the steep filter before the power amplifier, the
loss of signal level is easily compensated for by an extra low level
amplification stage, with minimal extra cost.

Depending of the linearity of the power amplifier, some low pass
filtering may be needed after it, but now you have to worry only on
the harmonics of the 10 MHz signal, not the various mixing products.
If you use a push-pull power amplifier, the first significant harmonic
would be the 3rd, which is above 30 MHz and since this is a single
band design, it might even make sense to use an elliptic low pass
filter, with a resonant notch at the 3rd harmonic.

Paul OH3LWR

3361. Re: Info on PT4370C RF Power Transistor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-21 06:39:20 UTC
From: Rex <me@hutmail.invalid>
Message-ID: <mjph92l12t322d4n0tbeas1s5uav95p1ic@4ax.com>
Source record: 11562
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On 20 Jun 2006 06:53:44 -0700, skavanagh72nospam@yahoo.ca wrote:

>Does anyone have a datasheet, or any technical information at all
>(frequency, power and nominal supply voltage would be adequate for my
>needs I think), on this obsolete TRW transistor ?
>
>Steve

No idea if this is any help at all, but...

I have a TRW data book from 1979. Doesn't list PT4370. Closest number is PT4570. PT4570 was a wierd TO-117 case; stud mount with 4 radial leads out of the transistor capsule. Two E leads opposite each other; C is the one with the pointy end.

This was NPN, 40 V, fT 2GHz, dissipation 5 W.

I have no idea if this is anything similar to the one you want, but though I'd pass the closest I found, just in case it might help.

3362. Re: Why hide the most beautiful parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-21 10:02:05 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1150884125.772863.7560@u72g2000cwu.googlegroups.com>
Source record: 11563

Paul Hinman wrote:
> Over the years I have read many articles on how to build a linear
> amplifier. Many of the plans called for glass fire bottles (811, 572,
> 3-500, etc.). The tubes are always hidden in the back of the amp.
> Wouldn't it be nice to move them up front behind a piece of high
> temperature glass and a fine brass screen for shielding purposes. Then
> we could enjoy the true glow of the tubes.
>
> I am sure that there are a myriad of reasons for not doing this and I am
> too inexperienced to understand why. Is such a thing possible and if so
> I might just upgrade my ticket so that I can build such a beauty. I
> will upgrade anyway just for my own satisfaction.
>
> Think how impressive an amplifier with a tube or two or more glowing
> behind a picture window would be.
>
> I would appreciate any thoughts on the subject.
>
> Paul - VE6LDS
> Grid Square DO33gk
>

Andy comments:
I agree with you completely. I suppose that is is a lot more trouble
to put
a glass or plastic window on the front panel, and that the majority of
builders
are looking more to the goal of putting the amp on the air than using
is as
a piece of art.....
Back in high school I built an amp using four 811As and had two 866
mercury vapor rectifiers in the power supply. Beautiful violet glow
would
light up the room and pulse along with my code..... Since I was on a
budget, and had little access to metalworking equip, all of my stuff
was
open chassis with a front panel. I could see the plates of the 811A s
swell
and glow cherry red when I kept the key down for too long.....
Personally, I have no talent for the artistic, so I'm sure any
attempt
I made at "pretty" would be second rate at best.... But I have always
liked to build my own, and take a great deal of pride in my stuff, even
if

it isn't always really "nice" to look at...
I am retired now, but developed dozens of communications products
over
my career. I always tried to work with the best mech engineer I could
so he
could be responsible for the appearance, and the products always seemed
to
end up looking good -- no thanks to me......
I appreciate your attitude, and wish more people would build their
own and
take pride in the appearance. Personally, I think the old rigs --
Viking Valiant,
Hammarlund HQ180, Collins S line --- would be great examples of tech
art,
and should have a place in the Smithsonian.... This new stuff with all
the
lights and readouts and switches and microprocessors just doesn't
convey
the same sense of the hobby to me..... I know how to design and buld
it,
but it just doesn't "feel" the same...

Andy in Eureka, Texas W4OAH

3363. Re: Tradeoffs of filtering exciter vs after PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-21 18:27:29 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrne9j3sh.17i5.ben@saturn.home.ben.com>
Source record: 11564

On 2006-06-20, Ben Jackson <ben@ben.com> wrote:
> I'm still working on my HF APRS beacon idea (25MHz-14.85MHz = 10.151)

The replies to this aren't showing up on my news server, but from google groups I see that

Doug Smith asked:
> I realize this doesn't really answer your question, but isn't 10.15 the
> band edge - and out of the band once you apply modulation?

With LSB and ~2kHz tones it's actually back *in* the band with modulation. HF packet is FSK, and the mark/space for APRS are at 10.149.200 and .400. When implemented as AFSK + LSB + modem you have to take into account the modem tones, which vary considerably. In fact, you can use USB and tune below the band as well. If you google "hf aprs" you'll find a bunch of tables for various radios and TNCs.

--
Ben Jackson
<ben@ben.com>
http://www.ben.com/

3364. Re: Tradeoffs of filtering exciter vs after PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-21 20:56:18 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <mdcj929i71839b63v0l5cr1tf8fbo647bg@4ax.com>
Source record: 11565

On Tue, 20 Jun 2006 13:58:31 -0500, Ben Jackson <ben@ben.com> wrote:

>I'm still working on my HF APRS beacon idea (25MHz-14.85MHz = 10.151)
>and I've done some experiments using a 74HC86 quad XOR with one gate for
>each oscillator and one as a mixer. In spice simulations, the '86 as a
>mixer produces lots of products resulting from the odd harmonics of the
>inputs, some of which are close to or below the 10.151MHz I want. If I
>run that output through a 2nd order Butterworth 30m bandpass filter I
>get a clean result.

You ant to do that.

>
>My question is about the tradeoffs between filtering the exciter output
>to the PA vs filtering after the PA. Obviously a post-amp filter has
>to handle more power, but has the opportunity to eliminate amplifier
>distortion. But eliminating unwanted inputs to the amp also reduces
>unwanted outputs.

if you do it agter the PA you get those products plus IMD to create
more products and it will be very hard to secure a clean signal
without high losses.

>Are there rules of thumb for suppression of unwanted signals at each
>stage of an amplification chain?

Start clean, then clean up anything that results from the stage(s).
Usually if you have a clean source and run that through multiple
linear stages you should get the same only bigger with only a
small number of artifacts that are easy to clean up.

Allison

3365. Re: Why hide the most beautiful parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-21 22:06:33 UTC
From: Wes Stewart <*n7ws*@yahoo.com>
Message-ID: <fqej92tkkdkj261lvg4qpkadti9dgtucgv@4ax.com>
Source record: 11566

On Wed, 21 Jun 2006 05:51:20 GMT, Paul Hinman <paul.hinman@shaw.ca>
wrote:

|Over the years I have read many articles on how to build a linear
|amplifier. Many of the plans called for glass fire bottles (811, 572,
|3-500, etc.). The tubes are always hidden in the back of the amp.
|Wouldn't it be nice to move them up front behind a piece of high
|temperature glass and a fine brass screen for shielding purposes. Then
|we could enjoy the true glow of the tubes.
|
|I am sure that there are a myriad of reasons for not doing this and I am
|too inexperienced to understand why. Is such a thing possible and if so
|I might just upgrade my ticket so that I can build such a beauty. I
|will upgrade anyway just for my own satisfaction.
|
|Think how impressive an amplifier with a tube or two or more glowing
|behind a picture window would be.
|
|I would appreciate any thoughts on the subject.

It's been done.

The ARRL Handbook "One Band Amplifiers" (in my 1962 edition) didn't
use glass, but perf aluminum, but the tubes were still somewhat
visible.

Of course, the Collins KW-1 is a commercial example.

3366. Re: Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-22 01:25:00 UTC
From: hexter@blazenet.net
Message-ID: <BradnRbxYKbxbATZnZ2dnUVZ_oSdnZ2d@suscom.com>
Source record: 11567
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew

In article <1150512910.810581.47510@c74g2000cwc.googlegroups.com>,
shoppa@trailing-edge.com says...
>
>OK, I'm trying to understand the failure of a 807 beam tetrode in a
>homebrew push-pull audio amp.
>
>Tubes are GE, about 45 years old, bought as new old stock several weeks
>ago.
>
>Being run with 400V on the plate and 255V on the screens.
>
>Both behaved very nicely for a few weeks in my amp, and plate current
>at idle followed the curves in the books just fine. They were
>well-balanced.
>
>But tonight under some listening stress the B+ fuse blew.
>
>Turning the bias (supplied from a bias supply through a 100K resistor)
>down to -40V, the good tube is drawing a small amount of plate current
>while the other draws 40mA after warmup and current goes up and up and
>up until it hits 100mA or so and I turn the amp off before blowing
>another fuse. Check the grid current and as the bad tube warms up grid
>current is increasing and increasing as well, to the point where the
>-40V is being entirely dropped in the 100K resistor (I guess that means
>about half a mA of grid current).
>
>The tube with high current always had some violet-blue spots that
>danced on the top but they were on the glass and mica so I figured that
>was normal but now I don't know. There was also this strange orange
>spot that was on a mica insulator there too.
>
>Is this classic "gassy" tube failure? Towards the end it seemed to be
>slightly more blueish on the top.
>
>I've burnt up/blown up a lot of 6146 and other variant beam tetrodes
>over the years but now I'm trying to get some understanding of what's
>happening :-).
>
>Will a certain chunk of NOS 807's simply be this way from age?
>
>Tim.
>

Hey my man, what you may have is a classic case of the grid coupling capacitor breaking down and killing your bias on the grid. It is not uncommon for the grid to go positive and cause the tube to melt!!

3367. Re: Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-22 01:28:57 UTC
From: Arthur Dent <rabbitsfriendsandrelations@hotmail.com>
Message-ID: <4499F259.4DA432F2@hotmail.com>
Source record: 11568
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew

Gudmundur wrote:

> Hey my man, what you may have is a classic case of the grid coupling
> capacitor breaking down and killing your bias on the grid. It is
> not uncommon for the grid to go positive and cause the tube to melt!!

You haven't read the thread fully have you ?

Graham

3368. Re: Why hide the most beautiful parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-22 03:04:11 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <N_KdnXR5dcM8lQfZnZ2dnUVZ_qqdnZ2d@web-ster.com>
Source record: 11569

Wes Stewart wrote:

> On Wed, 21 Jun 2006 05:51:20 GMT, Paul Hinman <paul.hinman@shaw.ca>
> wrote:
>
> |Over the years I have read many articles on how to build a linear
> |amplifier. Many of the plans called for glass fire bottles (811, 572,
> |3-500, etc.). The tubes are always hidden in the back of the amp.
> |Wouldn't it be nice to move them up front behind a piece of high
> |temperature glass and a fine brass screen for shielding purposes. Then
> |we could enjoy the true glow of the tubes.
> |
> |I am sure that there are a myriad of reasons for not doing this and I am
> |too inexperienced to understand why. Is such a thing possible and if so
> |I might just upgrade my ticket so that I can build such a beauty. I
> |will upgrade anyway just for my own satisfaction.
> |
> |Think how impressive an amplifier with a tube or two or more glowing
> |behind a picture window would be.
> |
> |I would appreciate any thoughts on the subject.
>
> It's been done.
>
> The ARRL Handbook "One Band Amplifiers" (in my 1962 edition) didn't
> use glass, but perf aluminum, but the tubes were still somewhat
> visible.
>
> Of course, the Collins KW-1 is a commercial example.
>
And it looks good. If you want to have an excuse, use tubes that are
expected to show some color on the plate when loaded up properly.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

3369. Re: Why hide the most beautiful parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-22 12:03:08 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1150977788.491845.214500@i40g2000cwc.googlegroups.com>
Source record: 11570

Paul Hinman wrote:
> Over the years I have read many articles on how to build a linear
> amplifier. Many of the plans called for glass fire bottles (811, 572,
> 3-500, etc.). The tubes are always hidden in the back of the amp.
> Wouldn't it be nice to move them up front behind a piece of high
> temperature glass and a fine brass screen for shielding purposes. Then
> we could enjoy the true glow of the tubes.
>
> I am sure that there are a myriad of reasons for not doing this and I am
> too inexperienced to understand why.

I think that for many years the handbook and QST editors strongly encouraged any high voltage parts be hidden away under multiple layers of metal, probably out of concern for safety reasons.

In the 50's and 60's there were multiple articles where the low-power tubes were put on top of the chassis but any tube that had the anode on the top went either under the chassis (often mounted at a very odd angle!) or in its own metal box. It couldn't have been generally good for those tubes to put them horizontally (in fact power tube books often tell you to expect reduced life when tubes are operated in non-vertical orientations) and away from airflow.

For the really big power amps with forced air cooling, noise from the blower is a concern to many hams (hey, we don't spend ALL our time talking!) and sometimes this relegates the tube, air chimney, and blower to the rear as much as possible. I think we've learned a little bit about air cooling and also today have much quieter blowers available off-the-shelf.

For a bandswitching amp, relation of front panel controls/shafts and the tank components/switching often determines the layout of the entire amp. The constraints can be quite compelling if you are trying to cover a decade or more of RF spectrum (say 160M to 10M).

A lot of professional BCB transmitters from the 20's through the 50's put the power tubes (sometimes just the modulator, other times including the RF tubes) up front behind a glass window, just like you want.

Tim.

3370. Re: Tradeoffs of filtering exciter vs after PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-22 13:47:39 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <449A9F7A.2060602@invalid.invalid>
Source record: 11571

Ben Jackson wrote:
> With LSB and ~2kHz tones it's actually back *in* the band with modulation.
> HF packet is FSK, and the mark/space for APRS are at 10.149.200 and .400.
> When implemented as AFSK + LSB + modem you have to take into account the
> modem tones, which vary considerably. In fact, you can use USB and tune
> below the band as well. If you google "hf aprs" you'll find a bunch of
> tables for various radios and TNCs.

Ah. Makes sense.

I do direct FSK so have been taking carrier frequencies literally. (and
haven't done datamodes, except CW, on 30 meters so I'm not familiar with
APRS practice on that band)
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

3371. Re: Why hide the most beautiful parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-22 15:38:11 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1150990691.154585.61140@b68g2000cwa.googlegroups.com>
Source record: 11572

Tim Shoppa wrote:>
> A lot of professional BCB transmitters from the 20's through the 50's
> put the power tubes (sometimes just the modulator, other times
> including the RF tubes) up front behind a glass window, just like you
> want.
>
> Tim.

Andy comments:

I remember the old BC-1T ... Gates, I think .... a 1 KW am broadcast transmitter used by smaller stations.... Damn, that was a fine looking piece of equipment.... Big Tubes plainly visible...

I thought I had walked into Dr Frank's lab and he throwing "the third switch" !!!!!

Anyway, I was impressed......

Andy in
Eureka, Texas W4OAH

3372. Re: Why hide the most beautiful parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-22 17:08:16 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1150996096.565767.188490@p79g2000cwp.googlegroups.com>
Source record: 11573

Tim Shoppa wrote:
> Paul Hinman wrote:
> > Over the years I have read many articles on how to build a linear
> > amplifier. Many of the plans called for glass fire bottles (811, 572,
> > 3-500, etc.). The tubes are always hidden in the back of the amp.
> > Wouldn't it be nice to move them up front behind a piece of high
> > temperature glass and a fine brass screen for shielding purposes. Then
> > we could enjoy the true glow of the tubes.
>
> A lot of professional BCB transmitters from the 20's through the 50's
> put the power tubes (sometimes just the modulator, other times
> including the RF tubes) up front behind a glass window, just like you
> want.

Tim, good message, but I would disagree a bit with your last paragraph, having spent 1953 to 1956 at Army station ADA in Tokyo. Three-dozen-plus HF beasties there, RF power out from 1 KW to 40 KW, except for one model they were all old ones from pre-WW2 to post-WW2. For more, see:

http://sujan.hallikainen.org/BroadcastHistory

Scroll down the page and click on "Military." My photo essay description is there as My3Years.pdf and is 20 pages, about 10 MB worth.

Of all of them, the old Press Wireless PW-15 had large glass windows for the final amplifier (15 KW CW) compartment and the blue-glowing gas rectifier tubes in the power supply section. When a storm came up the "extra" electricity might cause the final to arc over. That would scare the <something> out of you if you were close to it at the time. :-)

In my opinion, the cosmetics of the front panel would be the most appealing to all. Everyone will see that and not all would be interested in lots of metal working or glowing containers of vacuum. :-)

Len Anderson

3373. Re: Why hide the most beautiful parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-22 18:52:55 UTC
From: Bruce in Alaska <bruceg@btpost.net>
Message-ID: <bruceg-E47CD5.10542022062006@netnews.worldnet.att.net>
Source record: 11574

In article <N_KdnXR5dcM8lQfZnZ2dnUVZ_qqdnZ2d@web-ster.com>,
Tim Wescott <tim@seemywebsite.com> wrote:

> Wes Stewart wrote:
>
> > On Wed, 21 Jun 2006 05:51:20 GMT, Paul Hinman <paul.hinman@shaw.ca>
> > wrote:
> >
> > |Over the years I have read many articles on how to build a linear
> > |amplifier. Many of the plans called for glass fire bottles (811, 572,
> > |3-500, etc.). The tubes are always hidden in the back of the amp.
> > |Wouldn't it be nice to move them up front behind a piece of high
> > |temperature glass and a fine brass screen for shielding purposes. Then
> > |we could enjoy the true glow of the tubes.
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> > |too inexperienced to understand why. Is such a thing possible and if so
> > |I might just upgrade my ticket so that I can build such a beauty. I
> > |will upgrade anyway just for my own satisfaction.
> > |
> > |Think how impressive an amplifier with a tube or two or more glowing
> > |behind a picture window would be.
> > |
> > |I would appreciate any thoughts on the subject.
> >
> > It's been done.
> >
> > The ARRL Handbook "One Band Amplifiers" (in my 1962 edition) didn't
> > use glass, but perf aluminum, but the tubes were still somewhat
> > visible.
> >
> > Of course, the Collins KW-1 is a commercial example.
> >
> And it looks good. If you want to have an excuse, use tubes that are
> expected to show some color on the plate when loaded up properly.

When I first started traveling Alaska as Traveling Radioman for Northern
Radio Company, I serviced all the old N-529E 2-12 Meg AM Sets that all
the Salmon Canneries used to communicate with the ACS Stations. They
all had 807's, 6146's, and 866A's, that glowed behind perferated screens
in the front panels. Most of the Cannery Radiomen had Ne-2's taped to
the HV Antenna feeds that would glow when the transmitter was online.
Those Radio Shacks were an errie place in the evenings when the last
Radio Scheudal of the day was happening. Orange Neon, Blue Mercury Vapor,
and Dull Red on the Tx Tubes. some of those puppies would crank out 200

Watts Full Carrier Power.

Bruce in alaska the last of the Cannery RadioMen, in alaska.....
--
add a <2> before @

3374. Re: mc3362 and xtal filter termination

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-23 01:38:54 UTC
From: Pete KE9OA <p.gianako@comcast.net>
Message-ID: <quadnXjLqMKw2wbZnZ2dnUVZ_v2dnZ2d@comcast.com>
Source record: 11575

Depending on the bandwidth of the filter, typically, the natural impedance
of the filter will be anywhere in the range from 1.5k to 7k. Using ECS
10.7MHz crystal filters as an example, the 50kHz filter has an impedance of
around 6.5k, while the 25kHz filter has an impedance of around 3k.
Most crystal filter don't have a low impedance, but there are exceptions.
The 330 ohm impedance that you describe is typical of the Murata 10.7MHz
ceramic filters. An example would be the SFE10.7V, with a 13kHz bandwidth.
The skirt selectivity on these types of filters is very poor, so about the
only use that they really have is as a roofing filter at the 1st I.F. of a
dual-conversion receiver.

Pete

"MAc" <mac_dx@tosiewytnie.poczta.onet.pl> wrote in message
news:e73u75$m28$1@news.onet.pl...
>I only found (app note), that filter should be 330ohm

3375. Re: 800W output filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-23 12:07:46 UTC
From: steve.balstone@hotmail.co.uk
Message-ID: <1151064466.500146.116230@c74g2000cwc.googlegroups.com>
Source record: 11576

paulsandland@peoplepc.com wrote:
> I am trying to build a set of filters for the ham bands for use with
> the 600W motorola designed fet amplifier described in last months qsl.I
> have sucessfully modelled suitable filters using pspice using 3 series
> inductors with 2 parallel caps for each band but I notice the current
> in the caps can be several amps peak. Values range from 150 to 3000pf.
> Can Ceramics be used? Or do I need several parallel silver mica caps?
> How much power can one dissipate in these caps? Near the corner
> frequency there is as much as 6db gain under low load conditions and
> this exacerbates the problem. I could move the corner further up so
> that the filter is not excited at the peak current, but then I will
> probably have to increase the number of poles to 7 from 5 to get enough
> attenuation at the third harmonic. Is there a better filter
> architecture that minimizes cap current?

I used ceramics in a high power filter and they just fried.
Definately us silver mica, and values up to 3nF shouldn't be a problem.
It's not the power dissipation that needs to be concidered, but the
working voltage.
A 'perfect' capacitor doesn't disipate power anyhow because the voltage
and current are always 90deg apart. ie peak-voltage/no-current,
peak-current/no-voltage
As nothing is perfect, they will dissipate some power.
Also try Porcelain capacitors from 'Dielectric labs'.
They do a 'C40 power' range designed for high power very low loss RF
applications.
1pF to 5nF, 500V to 3.6KV, ... nice

Steve balstone
stephen balstone

3376. FS: Various stuff....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-23 13:27:31 UTC
From: Straydog <asd@panix.com>
Message-ID: <Pine.NEB.4.63.0606230833390.7798@panix3.panix.com>
Source record: 11577
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.homebrew

Pure sale, no bidding wars.

Summer cleaning out the shack: several items
(terms at end)

1. (dead on transmit) RF Concepts, RFC 2-317 (2 meter brick amplifier), 30 watts drive, 170 watts output. The transmit side of the amp is dead (looked like power transistors gave out over a few minutes of transmit way back and I never tried to locate someone to fix it; the receive GasFET preamp still works). The manual goes with the brick amp. The schematic says the power transistors (assuming that is the problem) are SRF3897 and there are two of them. Schematic looks like two in parallel (many other transistors, too). RF Concepts went out of business some years ago but maybe one of you guys who knows this stuff would like to have a crack at this repair job. $10 for this unit.

2. Two Hamtronics receiving converters, CA-28 and CA-144. One takes input at 144 - 148 and converts down to 28-32 mHz (and I put a 9 volt battery case inside, and small toggle switch), the other one takes 28-30 mHz and upconverts to 144-148 mHz (I was meaning to listen to 10 meters FM repeaters with my 2 m HT but never tried it). These units do not have as low of a noise figure as the best scanners and newer ham transceivers. Both units to the same address, $35 for both. Otherwise $20 each. With manuals and documentation.

3. Yaesu YS-500 in line wattmeter and SWR bridge for 140-525 mHz. Looks fine, works fine. Max power: 200 w. With one sheet "manual" $30.

4. 440 FM Yagi, 10 elements. I think it might be a Hygain but can't remember for sure. No manual or documentation. It was never outside of an attic. At old OTH it was aimed at one 440 repeater (at present QTH, I have way too many trees and barely can get into one 440 repeater that almost no one uses, so it goes 'on the block'). $25.

---non ham electronics------

5. OPTIMUS (Radio shack) AM/FM STA-795 solid state receiver, with manual and documentation. Works fine. $20.00

6. Night vision device: NV-100/NV-100-1 by Moonlight Products, bought through Edmund Scientifi when it was in business. I need to test it at night before releasing it. I think its a first generation device. Has a large telephoto lens with low f/stop, includes manual and documentation. Runs on two AA batteries, and has its own IR diode light souce if one wants to try that. Has not been used for maybe 7-8 years, but worked fine at the time, and was always stored in a stable non-moist room at RT. Was

not used much when it was used (maybe 1-2 hours, total). I seem to recall reading that these units undergo some deterioration in performance with time, but I don't know if that is independent of whether the units are used or not used. $40

7. Panasonic AG-1830, Video Cassette Recorder, Pro-Line, commercial grade. With manual. Used a lot back 10 years ago, not much since then. It has an on-board frame-grabber, but I have lost the remote control which is how the frame-grabber was activated. Complex controls and relatively thick manual. 17 lbs. Some dust here and there. I have not extensively tested all functionalities, but besides the missing remote control, it was recording and playing back last time I used it. But if you want to receive TV signals and record them, you may need a preamp because the input is normally not very sensitive. I was in a fringe area and got noisy images unless I used a TV receiver preamp. New price over $1000. My price $55

8. Hitachi VHS video camera (portable), VM-2500A, with dead lead-acid gel-cell battery (will not hold charge, won't accept charge). Camera (color) still works fine and records audio, too. It runs fine with an external DC power supply of about 9.6 volts 2.3 amps. This is an old style, over the shoulder unit. With manual and documentation, and some cables (can take output from camera, in playback mode, and feed into a video imput device). I think its never had more than about 20-25 hours of running time. My price $30.

Terms:

If you are interested, send email. I prefer to sell in the continental USA. I prefer to ship USPS, but UPS may be less risky in terms of damage. I prefer USPS money order for sum. Sum needs to include shipping charges which I will estimate, and I'll refund any excess if there is excess. If you want insurance, I'll include that in price. No charge for packaging, handling, which will depend on what item we're talking about and I'll do my best to locate packing materials, especially on biger & heavier items. If we go with USPS, I will spring for delivery confirmation and email you the DC number. You'll need to send the money order first.

I am located in southern Delaware. Please wait a few days before expecting a response. In the event more than one person wants the same item, I will work with the first one and tell the others that they are "backup" buyers in case the first one backs out or something. You need to specify how fast you want the shipping to be; UPS and USPS have several grades of service speed (faster is more expensive). If you have a counter-proposal, I'll consider it. Please give you "ship to" address in your first email to me. On the non-ham gear, I will probably "check" the unit to make sure it is at least minimally functional before shipping.

Art, W4PON

3377. Are you interested in Ham Radio? Don't be fooled by the Lizards! Here's the FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-23 17:12:12 UTC
From: Confused <radio.ham@lycos.co.uk>
Message-ID: <1151082732.090134.164780@m73g2000cwd.googlegroups.com>
Source record: 11578
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

A necessary preface.....

(It is becoming increasingly difficult to fly the flag for
decency and for civilised behaviour in Radio Hammery. Even
the Usenet newsgroups dedicated to the cause have degenerated
into a hotbed of abusive onslaughts by those who ought to know
better; the Nugatory Numpties who boast of an interest
exceeding 10, 20, 30, 40 or even 50 years and yet who have
proved themselves incapable of even meeting the trivial exam
standards set for 6-year-olds. However, there still exists
the fundamental basis on which Ham Radio is based, and
that will never die. This FAQ ("What Is Ham Radio?") will
be regularly published and will not be shouted or bullied
down. It is important that those of a technical bent, who
are the natural seed-corn of Radio Hammery and who
gravitate towards us to be the real novitiate, can
still find us, (and know that we are still here), their fellows.)

-----ooooo-----

So,.....What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams

are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that

such a licence says no more about him than having a land-line telephone, whilst continuing to regard Ham Radio as a separate technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between a Ham Radio licence and a CB Radio licence. To him, they are sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then tries to classify himself as the equal of the Radio Ham when, in fact, he is nothing of the kind.

Ham Radio is not CB Radio and has no common ground with it! Ham Radio is _THE_ technical pursuit for gentlemen; CB Radio is the operating hobby for those who buy their rigs and equipment off the shelf.

-----ooooo-----

If you are the sort of person who is motivated by a technical interest in how things work; if you took apart malfunctioning clocks, toasters and the like and put them right despite never having seen them working, then a Ham Radio licence is your traditional route! There has never been a shortage of such people, and those who gravitate towards such an interest have always been welcomed into our shacks and their interests fostered. There is not today, nor has there ever been, a need to go out and encourage and press children, children who have never expressed an interest in Ham Radio, to come into our shacks. Such an activity should cause eyebrows to be raised - what normal well-adjusted adults seek the social acquaintance of children?!

-----ooooo-----

Please remember that this FAQ is a _POSITIVE EXHORTATION_ to you to exert yourselves to join our fraternity! (If you find otherwise, then perhaps you are already classing yourself in the mediocre groups of those who are criticised in the FAQ and from whom we _MUST_ dissociate? If so - it's never too late for a re-taxonomisation on your part - there's nothing elitist about us, and we welcome all those who are prepared to put themselves out in order to join our ranks!)

3378. Re: Are you interested in Ham Radio? Don't be fooled by the Lizards! Here's the FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-23 18:40:46 UTC
From: Confused <radio.ham@lycos.co.uk>
Message-ID: <1151088046.471163.83650@c74g2000cwc.googlegroups.com>
Source record: 11579
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

Oops! Spelling now correct!

Confused wrote:
> A necessary preface.....
>
> (It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery. Even
> the Usenet newsgroups dedicated to the cause have degenerated
> into a hotbed of abusive onslaughts by those who ought to know
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> exceeding 10, 20, 30, 40 or even 50 years and yet who have
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> the fundamental basis on which Ham Radio is based, and
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> way that their radios function. It has a long-standing
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> are born naturals.
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> an all-abiding curiosity to improve one's scientific
> knowledge. It's a great swimming pool, please dive in!
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> with ones fellow man, and shows itself in the
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> they can construct and operate their own equipment! No-one
> else has this privilege. Users, such as broadcasters,
> the po lice and armed farces, CBers and mobile phone
> users have to purchase ready-made gear. Manufacturers
> are not licensed to operate their gear. Radio Hams
> are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment. This is a privilege well worth the effort
> to gain, and one to be jealously guarded.
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> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to
> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.
>
> -----OOOOO----
>
> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;
> they are free with rather silly personal insults.
>
> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.
>
> No _REAL_ Radio Hams are deceived by such people!
>
> -----ooooo-----
>

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> perceive Ham Radio to be a technical pursuit and will
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> no different in essence to a land-line telephone or a
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> could also hold a CB licence safe in the knowledge that
> such a licence says no more about him than having a land-line
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> is the operating hobby for those who buy their rigs and
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> a technical interest in how things work; if you took apart
> malfunctioning clocks, toasters and the like and put them
> right despite never having seen them working, then
> a Ham Radio licence is your traditional route! There has
> never been a shortage of such people, and those who gravitate
> towards such an interest have always been welcomed into
> our shacks and their interests fostered. There is not today,
> nor has there ever been, a need to go out and encourage
> and press children, children who have never expressed an
> interest in Ham Radio, to come into our shacks. Such an
> activity should cause eyebrows to be raised - what
> normal well-adjusted adults seek the social acquaintance
> of children?!
>
> -----ooooo-----
>
> Please remember that this FAQ is a _POSITIVE EXHORTATION_
> to you to exert yourselves to join our fraternity! (If you find
> otherwise, then perhaps you are already classing yourself in the
> mediocre groups of those who are criticised in the FAQ and from
> whom we _MUST_ dissociate? If so - it's never too late for
> a re-taxonomisation on your part - there's nothing elitist about
> us, and we welcome all those who are prepared to put themselves
> out in order to join our ranks!)

3379. Re: Are you interested in Ham Radio? Don't be fooled by the Lizards! Here's the FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-23 19:14:01 UTC
From: DrDeath <drdeath555usb@yahoo.com>
Message-ID: <129ofbqfdc9en1a@corp.supernews.com>
Source record: 11580
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

"Confused" <radio.ham@lycos.co.uk> wrote in message
news:1151082732.090134.164780@m73g2000cwd.googlegroups.com...
(major snippage)
That's absolute bullshit. I build and modify my own CB equipment. I know of hams that don't even know ohms law much less how to build equipment. I see lots of off the shelf ham gear for sale proving that your post is nothing more that propaganda. You perpetuate the myth that CBers are too stupid to obtain a license, you are wrong.
You post this to continue the rift between hams and CBers, fine by me, many CBers become hams, others like myself avoid it due to closed minded thinking like yours. Maybe if hams openly welcomed CBers into the fold instead of constantly insulting us, the ham radio hobby will survive. Instead the CBers will sit back and laugh as the FCC sells off your bandwidth to the highest bidder. We DO have a common ground, you just refuse to see it.

3380. Re: Are you interested in Ham Radio? Don't be fooled by the Lizards! Here's the FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-23 19:27:26 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <449c40be$0$92017$dbd4d001@news.wanadoo.nl>
Source record: 11581
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

DrDeath wrote:

> I know of
> hams that don't even know ohms law much less how to build equipment.

In the UK they have an M3 callsign....

> You perpetuate the myth that CBers are too stupid to
> obtain a license,

In the UK, he's not far wrong most of the time....

> You post this to continue the rift between hams and CBers, fine by me,

Fine by me too!

> Maybe if hams openly welcomed CBers into the fold instead of
> constantly insulting us,

Don't hold your breath on that happening any time soon!

> Instead the CBers
> will sit back and laugh as the FCC sells off your bandwidth to the highest
> bidder.

Well, considering the original poster posted with a .co.uk e-mail address (where he lives as he constantly pollutes the uk.r.a group), I would like to see the FCC trying to sell off the spectrum in the UK!!!!!

3381. Re: Are you interested in Ham Radio? Don't be fooled by the Lizards! Here's the FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-23 19:41:39 UTC
From: Mike G4KFK <mike@g4kfk.co.uk>
Message-ID: <1151091698.988853.6240@m73g2000cwd.googlegroups.com>
Source record: 11582
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

know code wrote:
> Well, considering the original poster posted with a .co.uk e-mail
> address (where he lives as he constantly pollutes the uk.r.a group), I
> would like to see the FCC trying to sell off the spectrum in the UK!!!!!

The FCC no longer control the radio spectrum in the United States
either. See http://www.watleyreview.com/2004/102604-2.html

3382. Re: Are you interested in Ham Radio? Don't be fooled by the Lizards! Here's the FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-23 20:07:56 UTC
From: "Jim S." <jtx71@dfg.net>
Message-ID: <449c3cc5$0$9934$88260bb3@free.teranews.com>
Source record: 11583
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

"Mike G4KFK" <mike@g4kfk.co.uk> wrote in message
news:1151091698.988853.6240@m73g2000cwd.googlegroups.com...
>
> know code wrote:
>> Well, considering
Well considering that the U.K.is the U.S.A.'s lap dog, when the spectrum is
sold here it will also be sold there.

Besides, it will be a great day when the code is dropped......the rush of
the dumb CB'er onto the bands will be funny as hell to watch.Couldn't happen
to a finer bunch of assholes.

--
Posted via a free Usenet account from http://www.teranews.com

3383. Re: Are you interested in Ham Radio? Don't be fooled by the Lizards! Here's the FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-23 20:57:40 UTC
From: The Magnum <magnum@mag2781.freeserve.co.uk>
Message-ID: <449c5601$0$8850$834e42db@reader.greatnowhere.com>
Source record: 11584
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

"Walt Davidson" <g3nyy@despammed.com> wrote in message
news:gqko92l1e363nv72almtusdg4gde9gelor@4ax.com...
> On Fri, 23 Jun 2006 14:14:01 -0500, "DrDeath"
> <drdeath555usb@yahoo.com> wrote:
>
> >That's absolute bullshit. I build and modify my own CB equipment.
>
> Then you are unashamedly breaking the law.
>
> 73 de G3NYY

Shirley only if he hooks it up and attempts to use it? He never said
anything about using it.

Graham
--
-.-. -... / .-. .- -.. .. ---

Radio is only a Hobby. Don't let it rule your life...

73/51 - Graham, 26-Golf Charlie-19 (www.open-channel.co.uk)

3384. Re: Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-23 22:43:40 UTC
From: hexter@blazenet.net
Message-ID: <9rydnSPnBckB8wHZnZ2dnUVZ_oWdnZ2d@suscom.com>
Source record: 11585
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew

In article <4499F259.4DA432F2@hotmail.com>,
rabbitsfriendsandrelations@hotmail.com says...
>
>
>
>Gudmundur wrote:
>
>> Hey my man, what you may have is a classic case of the grid coupling
>> capacitor breaking down and killing your bias on the grid. It is
>> not uncommon for the grid to go positive and cause the tube to melt!!
>
>You haven't read the thread fully have you ?
>
>Graham
>

Well let's see, the original poster said the voltage across the grid
resistor seemed wrong, (leaky cap is possible there) and he said the
current kept going up and up (leaky cap getting worse with ambient
heat from the tube) and a blue glow which I find to be typical with
many tubes of the 807 style when there is excess plate current such
as may be caused by A LEAKY CAP between the control grid of the 807
and the previous stage plate voltage. Gassey tube causing runaway,
yes in circuits with high ohmic value grid resistors which is why the
d.c. impedance of power output stage grid circuits is usually low
and and includes an rf choke to keep the rf impedance high. Then, even
with a gassey final power output tube the output stage will be less
likely to run away even with a crappy tube. The original poster
added that after his experience with the runaway tube it seemed to
glow even bluer, no doubt!!!! Guess he liberated even more gass from
the internal overheated elements such as may be caused by 'a leaky
grid coupling cap' in a high resistance grid circuit connected
to a power output tube that is a bit gassey and may be experiencing
such positive grid voltage excursions during peaks causing the
grid to heat and become an even better emitter of electrons causing
a chicken and egg roundabout until the death of a slightly gassey
tube which will find it's final resting place in a landfill beside
some misfit unwanted LEAKY CAPS that I have personally cut out of
some older Seeburg jukeboxes with a problem exactly like the one
the original poster was describing.

3385. Re: FS: Various stuff....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-23 23:56:13 UTC
From: Straydog <asd@panix.com>
Message-ID: <Pine.NEB.4.63.0606231943550.26780@panix2.panix.com>
Source record: 11586
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.homebrew

(see original post farther down)

Update (as of 7:40 pm): I have a pending deal for the night vision scope
and the RFC brick amplifier. If the deal with those interested parties
falls through, I will make an re-announcement.

I forgot one more item: a single pan, digital balance (transistorized),
Its an "Ohaus" model C305, and reads in grams or ounces. It has a
calibration weight (300 g), a wall plug transformer supply, and can run
off an internal 9 volt standard transistor battery. And, yes, the manual
comes with it. It also has a button for "tare" weight (eg. put an empty
container on, press "tare" and it re-zeros the digital readout. The pan
comes off the unit for shipping, and just drops on. I was using it to
weigh letters and small packages. Now I have some new scales for
that. My price: $20.

Art, W4PON

===== no change to below, included for reference and context =====

On Fri, 23 Jun 2006, Straydog wrote:

>
> Pure sale, no bidding wars.
>
> Summer cleaning out the shack: several items
> (terms at end)
>
>
> 1. (dead on transmit) RF Concepts, RFC 2-317 (2 meter brick amplifier), 30
> watts drive, 170 watts output. The transmit side of the amp is dead (looked
> like power transistors gave out over a few minutes of transmit way back and I
> never tried to locate someone to fix it; the receive GasFET preamp still
> works). The manual goes with the brick amp. The schematic says the power
> transistors (assuming that is the problem) are SRF3897 and there are two of
> them. Schematic looks like two in parallel (many other transistors, too). RF
> Concepts went out of business some years ago but maybe one of you guys who
> knows this stuff would like to have a crack at this repair job. $10 for this
> unit.
>
>
> 2. Two Hamtronics receiving converters, CA-28 and CA-144. One takes input at
> 144 - 148 and converts down to 28-32 mHz (and I put a 9 volt battery case
> inside, and small toggle switch), the other one takes 28-30 mHz and
> upconverts to 144-148 mHz (I was meaning to listen to 10 meters FM repeaters

> with my 2 m HT but never tried it). These units do not have as low of a noise
> figure as the best scanners and newer ham transceivers. Both units to the
> same address, $35 for both. Otherwise $20 each. With manuals and
> documentation.
>
> 3. Yaesu YS-500 in line wattmeter and SWR bridge for 140-525 mHz. Looks fine,
> works fine. Max power: 200 w. With one sheet "manual" $30.
>
> 4. 440 FM Yagi, 10 elements. I think it might be a Hygain but can't remember
> for sure. No manual or documentation. It was never outside of an attic. At
> old OTH it was aimed at one 440 repeater (at present QTH, I have way too many
> trees and barely can get into one 440 repeater that almost no one uses, so it
> goes 'on the block'). $25.
>
> ---non ham electronics------
>
> 5. OPTIMUS (Radio shack) AM/FM STA-795 solid state receiver, with manual and
> documentation. Works fine. $20.00
>
> 6. Night vision device: NV-100/NV-100-1 by Moonlight Products, bought through
> Edmund Scientifi when it was in business. I need to test it at night before
> releasing it. I think its a first generation device. Has a large telephoto
> lens with low f/stop, includes manual and documentation. Runs on two AA
> batteries, and has its own IR diode light souce if one wants to try that. Has
> not been used for maybe 7-8 years, but worked fine at the time, and was
> always stored in a stable non-moist room at RT. Was not used much when it was
> used (maybe 1-2 hours, total). I seem to recall reading that these units
> undergo some deterioration in performance with time, but I don't know if that
> is independent of whether the units are used or not used. $40
>
> 7. Panasonic AG-1830, Video Cassette Recorder, Pro-Line, commercial grade.
> With manual. Used a lot back 10 years ago, not much since then. It has an
> on-board frame-grabber, but I have lost the remote control which is how the
> frame-grabber was activated. Complex controls and relatively thick manual. 17
> lbs. Some dust here and there. I have not extensively tested all
> functionalities, but besides the missing remote control, it was recording and
> playing back last time I used it. But if you want to receive TV signals and
> record them, you may need a preamp because the input is normally not very
> sensitive. I was in a fringe area and got noisy images unless I used a TV
> receiver preamp. New price over $1000. My price $55
>
> 8. Hitachi VHS video camera (portable), VM-2500A, with dead lead-acid
> gel-cell battery (will not hold charge, won't accept charge). Camera (color)
> still works fine and records audio, too. It runs fine with an external DC
> power supply of about 9.6 volts 2.3 amps. This is an old style, over the
> shoulder unit. With manual and documentation, and some
> cables (can take output from camera, in playback mode, and feed into
> a video imput device). I think its never had more than about 20-25 hours of
> running time. My price $30.
>

> ------
> Terms:
>
> If you are interested, send email. I prefer to sell in the continental USA. I
> prefer to ship USPS, but UPS may be less risky in terms of damage. I prefer
> USPS money order for sum. Sum needs to include shipping charges which I will
> estimate, and I'll refund any excess if there is
> excess. If you want insurance, I'll include that in price. No charge for
> packaging, handling, which will depend on what item we're talking about and
> I'll do my best to locate packing materials, especially on biger & heavier
> items. If we go with USPS, I will spring for delivery confirmation
> and email you the DC number. You'll need to send the money order first.
>
>
> I am located in southern Delaware. Please wait a few days before expecting
> a response. In the event more than one person wants the same item, I will
> work with the first one and tell the others that they are "backup" buyers
> in case the first one backs out or something. You need to specify how fast
> you want the shipping to be; UPS and USPS have several grades of service
> speed (faster is more expensive). If you have a counter-proposal, I'll
> consider it. Please give you "ship to" address in your first email to me.
> On the non-ham gear, I will probably "check" the unit to make sure it is
> at least minimally functional before shipping.
>
> Art, W4PON
>

3386. Re: Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-24 00:40:59 UTC
From: Eeyore <rabbitsfriendsandrelations@REMOVETHIS.hotmail.com>
Message-ID: <449C8A1B.C31A47F0@REMOVETHIS.hotmail.com>
Source record: 11587
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew

Gudmundur wrote:

> In article <4499F259.4DA432F2@hotmail.com>,
> rabbitsfriendsandrelations@hotmail.com says...
>
> >Gudmundur wrote:
> >
> >> Hey my man, what you may have is a classic case of the grid coupling
> >> capacitor breaking down and killing your bias on the grid. It is
> >> not uncommon for the grid to go positive and cause the tube to melt!!
> >
> >You haven't read the thread fully have you ?
> >
> >Graham
> >
>
> Well let's see, the original poster said the voltage across the grid
> resistor seemed wrong, (leaky cap is possible there) and he said the
> current kept going up and up (leaky cap getting worse with ambient
> heat from the tube) and a blue glow which I find to be typical with
> many tubes of the 807 style when there is excess plate current such
> as may be caused by A LEAKY CAP between the control grid of the 807
> and the previous stage plate voltage.

Fine but he already said he'd checked it and it's not that.

No matter.

Graham

3387. Re: Are you interested in Ham Radio? Don't be fooled by the Lizards! Here's the FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-24 01:46:04 UTC
From: DrDeath <drdeath555usb@yahoo.com>
Message-ID: <129p6au5j4jnk51@corp.supernews.com>
Source record: 11588
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

"Jim S." <jtx71@dfg.net> wrote in message
news:449c3cc5$0$9934$88260bb3@free.teranews.com...
>
> "Mike G4KFK" <mike@g4kfk.co.uk> wrote in message
> news:1151091698.988853.6240@m73g2000cwd.googlegroups.com...
>>
>> know code wrote:
>>> Well, considering
> Well considering that the U.K.is the U.S.A.'s lap dog, when the spectrum
> is sold here it will also be sold there.

Agreed.

>
> Besides, it will be a great day when the code is dropped......the rush of
> the dumb CB'er onto the bands will be funny as hell to watch.Couldn't
> happen to a finer bunch of assholes.

I don't think your going to see that big of a rush. What attracts a lot of
people to CB is price. I don't want to spend a ton of money on ham gear and
I don't have the time to build it. I think all that will happen is that the
lower portion of 10 meters will get the traffic with all of the "export"
radios in circulation.

3388. Re: Are you interested in Ham Radio? Don't be fooled by the Lizards! Here's the FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-24 01:52:16 UTC
From: DrDeath <drdeath555usb@yahoo.com>
Message-ID: <129p6mi2pc7hs01@corp.supernews.com>
Source record: 11589
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

"Walt Davidson" <g3nyy@despammed.com> wrote in message
news:gqko92l1e363nv72almtusdg4gde9gelor@4ax.com...
> On Fri, 23 Jun 2006 14:14:01 -0500, "DrDeath"
> <drdeath555usb@yahoo.com> wrote:
>
>>That's absolute bullshit. I build and modify my own CB equipment.
>
> Then you are unashamedly breaking the law.
>

Yep.

3389. Update on this-->Re: FS: Various stuff....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-24 02:06:25 UTC
From: Straydog <asd@panix.com>
Message-ID: <Pine.NEB.4.63.0606232205400.25660@panix1.panix.com>
Source record: 11590
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.homebrew

(~10 pm, local time)

The 440 beam is sold.

On Fri, 23 Jun 2006, Straydog wrote:

> (see original post farther down)
>
> Update (as of 7:40 pm): I have a pending deal for the night vision scope and
> the RFC brick amplifier. If the deal with those interested parties falls
> through, I will make an re-announcement.
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> I forgot one more item: a single pan, digital balance (transistorized), Its
> an "Ohaus" model C305, and reads in grams or ounces. It has a calibration
> weight (300 g), a wall plug transformer supply, and can run off an internal 9
> volt standard transistor battery. And, yes, the manual
> comes with it. It also has a button for "tare" weight (eg. put an empty
> container on, press "tare" and it re-zeros the digital readout. The pan comes
> off the unit for shipping, and just drops on. I was using it to weigh letters
> and small packages. Now I have some new scales for that. My price: $20.
>
> Art, W4PON
>
> ===== no change to below, included for reference and context =====
>
> On Fri, 23 Jun 2006, Straydog wrote:
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>> Pure sale, no bidding wars.
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>> Summer cleaning out the shack: several items
>> (terms at end)
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>> 1. (dead on transmit) RF Concepts, RFC 2-317 (2 meter brick amplifier), 30
>> watts drive, 170 watts output. The transmit side of the amp is dead (looked
>> like power transistors gave out over a few minutes of transmit way back and
>> I never tried to locate someone to fix it; the receive GasFET preamp still
>> works). The manual goes with the brick amp. The schematic says the power
>> transistors (assuming that is the problem) are SRF3897 and there are two of
>> them. Schematic looks like two in parallel (many other transistors, too).
>> RF Concepts went out of business some years ago but maybe one of you guys
>> who knows this stuff would like to have a crack at this repair job. $10 for
>> this unit.

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>> 2. Two Hamtronics receiving converters, CA-28 and CA-144. One takes input
>> at 144 - 148 and converts down to 28-32 mHz (and I put a 9 volt battery
>> case inside, and small toggle switch), the other one takes 28-30 mHz and
>> upconverts to 144-148 mHz (I was meaning to listen to 10 meters FM
>> repeaters with my 2 m HT but never tried it). These units do not have as
>> low of a noise figure as the best scanners and newer ham transceivers. Both
>> units to the same address, $35 for both. Otherwise $20 each. With manuals
>> and documentation.
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>> 3. Yaesu YS-500 in line wattmeter and SWR bridge for 140-525 mHz. Looks
>> fine, works fine. Max power: 200 w. With one sheet "manual" $30.
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>> 4. 440 FM Yagi, 10 elements. I think it might be a Hygain but can't
>> remember for sure. No manual or documentation. It was never outside of an
>> attic. At old OTH it was aimed at one 440 repeater (at present QTH, I have
>> way too many trees and barely can get into one 440 repeater that almost no
>> one uses, so it goes 'on the block'). $25.
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>> ---non ham electronics------
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>> 5. OPTIMUS (Radio shack) AM/FM STA-795 solid state receiver, with manual
>> and documentation. Works fine. $20.00
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>> 6. Night vision device: NV-100/NV-100-1 by Moonlight Products, bought
>> through Edmund Scientifi when it was in business. I need to test it at
>> night before releasing it. I think its a first generation device. Has a
>> large telephoto lens with low f/stop, includes manual and documentation.
>> Runs on two AA batteries, and has its own IR diode light souce if one wants
>> to try that. Has not been used for maybe 7-8 years, but worked fine at the
>> time, and was always stored in a stable non-moist room at RT. Was not used
>> much when it was used (maybe 1-2 hours, total). I seem to recall reading
>> that these units undergo some deterioration in performance with time, but I
>> don't know if that is independent of whether the units are used or not
>> used. $40
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>> 7. Panasonic AG-1830, Video Cassette Recorder, Pro-Line, commercial grade.
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>> on-board frame-grabber, but I have lost the remote control which is how the
>> frame-grabber was activated. Complex controls and relatively thick manual.
>> 17 lbs. Some dust here and there. I have not extensively tested all
>> functionalities, but besides the missing remote control, it was recording
>> and playing back last time I used it. But if you want to receive TV signals
>> and record them, you may need a preamp because the input is normally not
>> very sensitive. I was in a fringe area and got noisy images unless I used a
>> TV receiver preamp. New price over $1000. My price $55
>>
>> 8. Hitachi VHS video camera (portable), VM-2500A, with dead lead-acid
>> gel-cell battery (will not hold charge, won't accept charge). Camera

>> (color) still works fine and records audio, too. It runs fine with an
>> external DC power supply of about 9.6 volts 2.3 amps. This is an old style,
>> over the shoulder unit. With manual and documentation, and some
>> cables (can take output from camera, in playback mode, and feed into
>> a video imput device). I think its never had more than about 20-25 hours of
>> running time. My price $30.
>>
>> ------
>> Terms:
>>
>> If you are interested, send email. I prefer to sell in the continental USA.
>> I prefer to ship USPS, but UPS may be less risky in terms of damage. I
>> prefer USPS money order for sum. Sum needs to include shipping charges
>> which I will estimate, and I'll refund any excess if there is
>> excess. If you want insurance, I'll include that in price. No charge for
>> packaging, handling, which will depend on what item we're talking about and
>> I'll do my best to locate packing materials, especially on biger & heavier
>> items. If we go with USPS, I will spring for delivery confirmation
>> and email you the DC number. You'll need to send the money order first.
>>
>>
>> I am located in southern Delaware. Please wait a few days before expecting
>> a response. In the event more than one person wants the same item, I will
>> work with the first one and tell the others that they are "backup" buyers
>> in case the first one backs out or something. You need to specify how fast
>> you want the shipping to be; UPS and USPS have several grades of service
>> speed (faster is more expensive). If you have a counter-proposal, I'll
>> consider it. Please give you "ship to" address in your first email to me.
>> On the non-ham gear, I will probably "check" the unit to make sure it is
>> at least minimally functional before shipping.
>>
>> Art, W4PON
>>
>

3390. Re: Why hide the most beautiful parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-24 05:39:09 UTC
From: Lynn Coffelt <coffelt2@comcast.net>
Message-ID: <e7ijbg$f96$1@paola.aioe.org>
Source record: 11591

"Bruce in Alaska" <bruceg@btpost.net> wrote in message
news:bruceg-E47CD5.10542022062006@netnews.worldnet.att.net...
> In article <N_KdnXR5dcM8lQfZnZ2dnUVZ_qqdnZ2d@web-ster.com>,
> Tim Wescott <tim@seemywebsite.com> wrote:
>
> > Wes Stewart wrote:
> >
> > > On Wed, 21 Jun 2006 05:51:20 GMT, Paul Hinman <paul.hinman@shaw.ca>
> > > wrote:
> > >
> > > |Over the years I have read many articles on how to build a linear
> > > |amplifier. Many of the plans called for glass fire bottles (811,
572,
> > > |3-500, etc.). The tubes are always hidden in the back of the amp.
> > > |Wouldn't it be nice to move them up front behind a piece of high
> > > |temperature glass and a fine brass screen for shielding purposes.
Then
> > > |we could enjoy the true glow of the tubes.
> > > |
> > > |I am sure that there are a myriad of reasons for not doing this and I
am
> > > |too inexperienced to understand why. Is such a thing possible and if
so
> > > |I might just upgrade my ticket so that I can build such a beauty. I
> > > |will upgrade anyway just for my own satisfaction.
> > > |
> > > |Think how impressive an amplifier with a tube or two or more glowing
> > > |behind a picture window would be.
> > > |
> > > |I would appreciate any thoughts on the subject.
> > >
> > > It's been done.
> > >
> > > The ARRL Handbook "One Band Amplifiers" (in my 1962 edition) didn't
> > > use glass, but perf aluminum, but the tubes were still somewhat
> > > visible.
> > >
> > > Of course, the Collins KW-1 is a commercial example.
> > >
> > And it looks good. If you want to have an excuse, use tubes that are
> > expected to show some color on the plate when loaded up properly.
>
> When I first started traveling Alaska as Traveling Radioman for Northern
> Radio Company, I serviced all the old N-529E 2-12 Meg AM Sets that all

> the Salmon Canneries used to communicate with the ACS Stations. They
> all had 807's, 6146's, and 866A's, that glowed behind perferated screens
> in the front panels. Most of the Cannery Radiomen had Ne-2's taped to
> the HV Antenna feeds that would glow when the transmitter was online.
> Those Radio Shacks were an errie place in the evenings when the last
> Radio Scheudal of the day was happening. Orange Neon, Blue Mercury Vapor,
> and Dull Red on the Tx Tubes. some of those puppies would crank out 200
> Watts Full Carrier Power.
>
> Bruce in alaska the last of the Cannery RadioMen, in alaska........

Bruce,
Wish I could remember the name of the cannery tender for
Whitney-Fidalgo that used to pass through Anacortes for provisioning and
last minute work each spring. You probably met her at times. She was some
sort of WWII conversion with a whole processing crew aboard. In the radio
room was some sort of Northern Linear that stood about 6 feet tall as I
recall. Had a pair of 4-125's in the final that would run pretty red on a
long "fooooooooooouuuuuuurrrrrrr, fooooooouuuuuurrrrr". Was driven by an
upgrade transceiver, one of my favorites, N550. (they glowed a little too,
if you tuned it for maximum smoke!)
Filament was out on one 4-125 one spring, and so in replacing with a
matched pair, I ended up with a slightly used 4-125 which I though would
someday be on 40 cw. Still in box, sob.
I used to try to keep FCC happy with responses to off frequency
operation with N-550's from three local canneries and the Texaco marine
station on March Point. Wasn't it "Northwest Crystal" that used to try to
make oven xtals that would last for almost a year on the higher bands?
The glow I remember was from a home-brew linear using push-pull
parallel 304TL's driven by the infamous BC-610. Don Knutzen here in
Anacortes would melt the snow and ice off his antenna and 600 ohm open line
feed with such a rig. Garage door openers were really new in those days, and
he was known for running them up and down all over the neighborhood Sunday
mornings.
But I digress.
Old Chief Lynn

3391. Re: Are you interested in Ham Radio? Don't be fooled by the Lizards! Here's the FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-24 07:49:29 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <449ceeaa$0$12884$dbd41001@news.wanadoo.nl>
Source record: 11592
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

DrDeath wrote:
> "Jim S." <jtx71@dfg.net> wrote in message
> news:449c3cc5$0$9934$88260bb3@free.teranews.com...
>> "Mike G4KFK" <mike@g4kfk.co.uk> wrote in message
>> news:1151091698.988853.6240@m73g2000cwd.googlegroups.com...
>>> know code wrote:
>>>> Well, considering
>> Well considering that the U.K.is the U.S.A.'s lap dog, when the spectrum
>> is sold here it will also be sold there.
>
> Agreed.

Do you not think the ITU might have something to say about that? Oh
sorry, I forgot, the US ignores international organisations!

3392. Re: Are you interested in Ham Radio? Don't be fooled by the Lizards! Here's the FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-24 07:52:39 UTC
From: know code <know_code@wanadoo.nl>
Message-ID: <449cef68$0$12884$dbd41001@news.wanadoo.nl>
Source record: 11593
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

DrDeath wrote:
> "Walt Davidson" <g3nyy@despammed.com> wrote in message
> news:gqko92l1e363nv72almtusdg4gde9gelor@4ax.com...
>> On Fri, 23 Jun 2006 14:14:01 -0500, "DrDeath"
>> <drdeath555usb@yahoo.com> wrote:
>>
>>> That's absolute bullshit. I build and modify my own CB equipment.
>> Then you are unashamedly breaking the law.
>>
>
> Yep.

Don't you just love a democracy.... the citizens even have the right to
break whatever laws they want....

3393. Re: Are you interested in Ham Radio? Don't be fooled by the Lizards! Here's the FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-24 10:01:24 UTC
From: DrDeath <drdeath555usb@yahoo.com>
Message-ID: <129q3blpjqncd40@corp.supernews.com>
Source record: 11595
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

"know code" <know_code@wanadoo.nl> wrote in message
news:449ceeaa$0$12884$dbd41001@news.wanadoo.nl...
> DrDeath wrote:
>> "Jim S." <jtx71@dfg.net> wrote in message
>> news:449c3cc5$0$9934$88260bb3@free.teranews.com...
>>> "Mike G4KFK" <mike@g4kfk.co.uk> wrote in message
>>> news:1151091698.988853.6240@m73g2000cwd.googlegroups.com...
>>>> know code wrote:
>>>>> Well, considering
>>> Well considering that the U.K.is the U.S.A.'s lap dog, when the spectrum
>>> is sold here it will also be sold there.
>>
>> Agreed.
>
> Do you not think the ITU might have something to say about that? Oh
> sorry, I forgot, the US ignores international organisations!

You'll get no argument from me. The US tends to do as they please regardless
of what the rest of the world thinks.
I remember a time when most countries liked the US and it's citizens, but
those days are long gone.

3394. Re: Are you interested in Ham Radio? Don't be fooled by the Lizards! Here's the FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-24 10:01:27 UTC
From: DrDeath <drdeath555usb@yahoo.com>
Message-ID: <129q3bp8tkc642@corp.supernews.com>
Source record: 11594
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

"know code" <know_code@wanadoo.nl> wrote in message
news:449cef68$0$12884$dbd41001@news.wanadoo.nl...
> DrDeath wrote:
>> "Walt Davidson" <g3nyy@despammed.com> wrote in message
>> news:gqko92l1e363nv72almtusdg4gde9gelor@4ax.com...
>>> On Fri, 23 Jun 2006 14:14:01 -0500, "DrDeath"
>>> <drdeath555usb@yahoo.com> wrote:
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>>>> That's absolute bullshit. I build and modify my own CB equipment.
>>> Then you are unashamedly breaking the law.
>>>
>>
>> Yep.
>
> Don't you just love a democracy.... the citizens even have the right to
> break whatever laws they want....

I wouldn't go that far, but the FCC all but quit policing 11 meters back in the late 70s. A couple of years ago the FCC gave local law enforcement the power to enforce the laws governing 11 meters, but most of the police in my area have no interest or knowledge to do anything about it. I have a better chance of getting in trouble spitting on the sidewalk, and I don't have a sidewalk as I live in the sticks.

3395. Re: Are you interested in Ham Radio? Don't be fooled by the Lizards! Here's the FAQ!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-24 14:15:47 UTC
From: The Magnum <magnum@mag2781.freeserve.co.uk>
Message-ID: <449d4946$0$8843$834e42db@reader.greatnowhere.com>
Source record: 11596
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

"DrDeath" <drdeath555usb@yahoo.com> wrote in message
news:129p6mi2pc7hs01@corp.supernews.com...
> "Walt Davidson" <g3nyy@despammed.com> wrote in message
> news:gqko92l1e363nv72almtusdg4gde9gelor@4ax.com...
> > On Fri, 23 Jun 2006 14:14:01 -0500, "DrDeath"
> > <drdeath555usb@yahoo.com> wrote:
> >
> >>That's absolute bullshit. I build and modify my own CB equipment.
> >
> > Then you are unashamedly breaking the law.
> >
>
> Yep.

A bit like those Amateurs who open out their Transceivers to transmit where
they aren't supposed to? (waits for Jim and MM3 banter ;o)

Graham
--
-.-. -... / .-. .- -.. .. ---

Radio is only a Hobby. Don't let it rule your life...

73/51 - Graham, 26-Golf Charlie-19 (www.open-channel.co.uk)

3396. NEW (MOTOROLA) MX300 WEB SITE / SUPPORT FORUM

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-24 17:40:38 UTC
From: Dave Hildebrand <dave@cahuenga.com>
Message-ID: <Pine.LNX.4.58.0606240218270.15990@torquay.cahuenga.com>
Source record: 11498
Cross-posted to: alt.ham-radio.vhf-uhf,alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,alt.ham-radio.packet,alt.ham-radio.mods

Some of us have just started a support new group and web site (including a forum/BBS) for the Motorola MX300 radio:

http://www.mx300.org And:

http://forum.mx300.org

Check it out!

...Dave, N6BHU

3397. Re: Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-24 18:00:05 UTC
From: hexter@blazenet.net
Message-ID: <F_udndnHWuo44ADZnZ2dnUVZ_rWdnZ2d@suscom.com>
Source record: 11597
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew

In article <bi5p9257qomblq7l3ne57r8uqia6gg4qf0@4ax.com>, flipper@fish.net
says...
>
>On Fri, 23 Jun 2006 17:43:40 -0500, hexter@blazenet.net (Gudmundur)
>wrote:
>
>>In article <4499F259.4DA432F2@hotmail.com>,
>>rabbitsfriendsandrelations@hotmail.com says...
>>>
>>>
>>>
>>>Gudmundur wrote:
>>>
>>>> Hey my man, what you may have is a classic case of the grid coupling
>>>> capacitor breaking down and killing your bias on the grid. It is
>>>> not uncommon for the grid to go positive and cause the tube to melt!!
>>>
>>>You haven't read the thread fully have you ?
>>>
>>>Graham
>>>
>>
>> Well let's see, the original poster said the voltage across the grid
>>resistor seemed wrong, (leaky cap is possible there) and he said the
>>current kept going up and up (leaky cap getting worse with ambient
>>heat from the tube) and a blue glow which I find to be typical with
>>many tubes of the 807 style when there is excess plate current such
>>as may be caused by A LEAKY CAP between the control grid of the 807
>>and the previous stage plate voltage. Gassey tube causing runaway,
>>yes in circuits with high ohmic value grid resistors which is why the
>>d.c. impedance of power output stage grid circuits is usually low
>>and and includes an rf choke to keep the rf impedance high. Then, even
>>with a gassey final power output tube the output stage will be less
>>likely to run away even with a crappy tube. The original poster
>>added that after his experience with the runaway tube it seemed to
>>glow even bluer, no doubt!!!! Guess he liberated even more gass from
>>the internal overheated elements such as may be caused by 'a leaky
>>grid coupling cap' in a high resistance grid circuit connected
>>to a power output tube that is a bit gassey and may be experiencing
>>such positive grid voltage excursions during peaks causing the
>>grid to heat and become an even better emitter of electrons causing
>>a chicken and egg roundabout until the death of a slightly gassey
>>tube which will find it's final resting place in a landfill beside

>>some misfit unwanted LEAKY CAPS that I have personally cut out of
>>some older Seeburg jukeboxes with a problem exactly like the one
>>the original poster was describing.
>
>
>I suspect that when he says "read the thread fully" he may be
>referring to where the OP said "The coupling capacitors are indeed
>good and moving the tube around it
>follows the tube."
>

Yes, that post was missing on my newsreader, as were several of
the replies. WinVN newsreader gets kind of weird like that sometimes.
When I posted the first response I had only seen about half of the
total replies that were actually posted. The op's statement that
the problem follows the tube shows two things, the tube is gassey
and the grid circuit resistance is probably to high. Some of my
old books show 47k as the maximum recommended control grid
resistance. Low d.c. grid circuit resistance helps stabilize
the runaway tendancy in power output tube circuits.

3398. Re: Tube failure mode: gassy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-25 13:23:01 UTC
From: shoppa@trailing-edge.com
Message-ID: <1151241781.583974.177990@u72g2000cwu.googlegroups.com>
Source record: 11499
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew

Gudmundur wrote:
> The op's statement that
> the problem follows the tube shows two things, the tube is gassey
> and the grid circuit resistance is probably to high. Some of my
> old books show 47k as the maximum recommended control grid
> resistance.

Just as a compare/contrast:

With 100K grid resistors to the bias supply, the current through the resistor to a "GOOD" tube is zero. Less than a millivolt drop across the grid resistor.

And with the "BAD" tube, the current through a 47K resistor to -25V bias is so high that the drop across the resistor goes from 0 at poweron to 5V after 10 seconds, and steadily increases over the next 30 or 40 seconds to the point of 300-400mA plate current (at about 0V on the grid, and 25V drop across the resistor) when the B+ fuse blows.

So, as I see it: with a good tube it doesn't matter much what the exact value of the grid resistor is. With a bad tube it doesn't matter much what the exact value of the grid resistor is.

Tim.

3399. Re: FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-25 16:31:38 UTC
From: ctyguy <ctyguy@webtv.net>
Message-ID: <KTyng.2180$ii.1779@newsread3.news.pas.earthlink.net>
Source record: 11500
Cross-posted to: alt.electronics.manufacture.circuitboard,alt.engineering.electrical,aus.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.equipment,uk.radio.amateur

Who pray tell, would have the need to measure coulombs? A "coulomb" is an
abstract number of electrons assigned to current 'flow'."

<glenron@ntlworld.com> wrote in message
news:8659g.23076$mX1.20976@newsfe2-gui.ntli.net...
> FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus
>
> The shipping with online verification is expensive from the uk .N But this
> equipmenst may be worth it if you bid right !!
>
> http://cgi.ebay.co.uk/ws/eBayISAPI.dll?ViewItem&rd=1&item=7618143523
>
> emial me on glenron@ntlworld.com
>

3400. Re: FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-26 01:46:42 UTC
From: Robert Baer <robertbaer@earthlink.net>
Message-ID: <60Hng.12235$o4.400@newsread2.news.pas.earthlink.net>
Source record: 11501
Cross-posted to: alt.electronics.manufacture.circuitboard,alt.engineering.electrical,aus.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.equipment,uk.radio.amateur

ctyguy wrote:

> Who pray tell, would have the need to measure coulombs? A "coulomb" is an
> abstract number of electrons assigned to current 'flow'."
>
>
>
> <glenron@ntlworld.com> wrote in message
> news:8659g.23076$mX1.20976@newsfe2-gui.ntli.net...
>
>>FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus
>>
>>The shipping with online verification is expensive from the uk .N But this
>>equipmenst may be worth it if you bid right !!
>>
>>http://cgi.ebay.co.uk/ws/eBayISAPI.dll?ViewItem&rd=1&item=7618143523
>>
>>emial me on glenron@ntlworld.com
>>
>
>
>
...then count the electrons...

3401. Re: FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-26 09:04:38 UTC
From: jasen <jasen@free.net.nz>
Message-ID: <66da.449fa326.573d6@clunker.homenet>
Source record: 11502
Cross-posted to: alt.electronics.manufacture.circuitboard,alt.engineering.electrical,aus.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.equipment,uk.radio.amateur

On 2006-06-25, ctyguy <ctyguy@webtv.net> wrote:
> Who pray tell, would have the need to measure coulombs? A "coulomb" is an
> abstract number of electrons assigned to current 'flow'."

someone who's dealing with static electricity.

--

Bye.
Jasen

3402. 1,000,000 FR.EE VISITORS ON YOUR SITE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-26 19:00:17 UTC
From: Moret van Zadelhoff <moretvz@gmail.com>
Message-ID: <e7p3qu$13l$8@ctb-nnrp2.saix.net>
Source record: 11503

Finding it tough to make money on the Internet?
What if I told you that a young man just became a millionaire
on the Internet and he is revealing the secret!

Click here : http://www.freeadguru.com/cgi-bin/i.pl?c=a&i=33089

MAF Anti-Spam ID: 20060611144834B6y2QrF0

3403. Re: Spurs on mixer output

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-27 10:57:56 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <Zu-dnaFcCNSokjzZnZ2dnUVZ_vednZ2d@bright.net>
Source record: 11504

Have you looked at the 44.545 MHz injection signal with the spectrum analyzer? What do you see there? Any spurs on it? I'm not exactly sure how you have it set up...are you saying you have disconnected the output of the 1st mixer so that it doesn't reached the 2nd mixer? If so, what does the 44.545 signal mix with to get the 455 KHz 2nd IF? Also, if the input to the 2nd mixer is simply disconnected, is the input port of the 2nd mixer terminated somehow? Also, are you feeding the proper level of 44.545 to it (not overdriving it are you??)? Not sure what level is required for the SBL-1.

Scott
N0EDV

john wilkinson wrote:
> Hi,
> If I feed my second mixer into a spectrum analyser, and inject a 44.545MHz
> LO, with no power to the first IF stage, I see spurs at about 48-50KHz
> intervals on the mixer output, from 0 to the 455KHz normal output freq.
>
> The mixer is an SBL-1.
>
> Any ideas as to where these are comming from?
>
> Best regards,
> John

3404. Re: Spurs on mixer output

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-27 11:46:06 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1151408766.115977.199700@b68g2000cwa.googlegroups.com>
Source record: 11505

Scott wrote:
> Have you looked at the 44.545 MHz injection signal with the spectrum
> analyzer? What do you see there? Any spurs on it? I'm not exactly
> sure how you have it set up...are you saying you have disconnected the
> output of the 1st mixer so that it doesn't reached the 2nd mixer? If
> so, what does the 44.545 signal mix with to get the 455 KHz 2nd IF?
> Also, if the input to the 2nd mixer is simply disconnected, is the input
> port of the 2nd mixer terminated somehow? Also, are you feeding the
> proper level of 44.545 to it (not overdriving it are you??)? Not sure
> what level is required for the SBL-1.
>

+7 dBm.

Leon

3405. Re: Spurs on mixer output

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-27 17:03:06 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <f3p2a2hqubskajv9eipr9qrqj56r59n976@4ax.com>
Source record: 11506

On Tue, 27 Jun 2006 21:37:44 +0100, john wilkinson
<johnwilkinson@clara.co.uk> wrote:

>Hi,
>If I feed my second mixer into a spectrum analyser, and inject a 44.545MHz
>LO, with no power to the first IF stage, I see spurs at about 48-50KHz
>intervals on the mixer output, from 0 to the 455KHz normal output freq.
>
>The mixer is an SBL-1.
>
>Any ideas as to where these are comming from?
>
>Best regards,
>John

You have spurs on one or both of the inputs to the SBL1. Passive
doide mixers will not generate spurs like that though they may pass
them through if the sources are dirty.

Also the IF could also be oscillating and your see ing that
contribution. If its the 100db IF duscussed before, thats a lot of
gain and I'd hope its bypassed and shielded very well.

Allison

3406. Re: A sudden thought

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-27 23:13:08 UTC
From: Dan Andersson <dan@andersson.co.uk>
Message-ID: <fS2dnR97P50ZJjzZSa8jmw@karoo.co.uk>
Source record: 11508

john wilkinson wrote:

> Thank you all for being pacient with me and my stupid questions.
>
> Another thought has just raised its head.
>
> I have 2 IF amps. 1ts with approx 20dB gain, second with 100dB gain.
> The first IF has a XTAL filter at 45MHz.
> The second has the collins mech filter at the beginnig, then 100dB gain,
> straight into a diode detector.
>
> I think I need some form of additional filtering at the output of the
> second IF, before the detector, to reduce the noise introduced by the
> 100dB amp, else it don't work. Except for strong signals.
>
> Is that right?
>
> Many thanks,
> John.

Yikes!

100dB?

I suggest you use a modern mixer IC like Analog Devices AD8343. You can achieve -50 to -57dB harmonics rejection with these mixers and each mixer presents a gain of 7dB as well.

Dan / M0DFI

3407. Re: Spurs on mixer output

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-28 00:50:03 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <fbk3a21duv1dj96n84ip8of0u1ie1sh41n@4ax.com>
Source record: 11509

On Wed, 28 Jun 2006 19:48:20 +0100, john wilkinson
<johnwilkinson@clara.co.uk> wrote:

>> You have spurs on one or both of the inputs to the SBL1. Passive
>> doide mixers will not generate spurs like that though they may pass
>> them through if the sources are dirty.
>>
>> Also the IF could also be oscillating and your see ing that
>> contribution. If its the 100db IF duscussed before, thats a lot of
>> gain and I'd hope its bypassed and shielded very well.
>>
>> Allison
>Hi Allison,
>
>I have disconected the second mixer from the output of the first IF amp.
>That amp is powered down, and disconnected from any supply.
>The LO input to the mixer is from a crystal oscillator, at 7-8dBm.
>The output from the mixer is into the spectrum analyser only, not the
>second IF.
>
>This morning I did an experiment. If I left the RF port unterminated, the
>output was quite clean on the analyser.
>If I put a 50 Ohm term to gnd, the spurs appear.

Either the LO is dirty and your not seeing it due to overdriving the
analyser or the stages after SBL1 are dirty.

What I'd expect with the input of the SBL1 terminated and the LO
applied is the LO (40db or so down) some second and third harmonic
also way down and if you go far enough down some noise.

>Maybe it is on the LO itself, but looking at the LO on the analyser it
>looks OK to me.

Ok whats at the output of the SBL1? Or more specifically whats
between the SBL1 and the Analyser?

Allison

3408. Re: A sudden thought

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-28 00:59:42 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <jkk3a21idn97k1stj9dcra43gimduu7nc2@4ax.com>
Source record: 11510

On Wed, 28 Jun 2006 22:10:46 +0100, john wilkinson
<johnwilkinson@clara.co.uk> wrote:

>Thank you all for being pacient with me and my stupid questions.
>
>Another thought has just raised its head.
>
>I have 2 IF amps. 1ts with approx 20dB gain, second with 100dB gain.
>The first IF has a XTAL filter at 45MHz.
>The second has the collins mech filter at the beginnig, then 100dB gain,
>straight into a diode detector.
>
>I think I need some form of additional filtering at the output of the
>second IF, before the detector, to reduce the noise introduced by the
>100dB amp, else it don't work. Except for strong signals.

is this FM or AM/SSB/CW?

IF FM the 100db amp will be limiting by time the input is around
10uV.

IF AM/SSB/CW you should be seeing AGC voltage developed
by time the input is 10uV (50 at the extreme max).

I suspect the 20db 1st IF is not happy. FYI those 45mhz filters
are fairly wide (usualy 15khz or more). So any selectivity
is developed in the latter stages (your MF). However the
problem is you can easily be overloaded by strong close
signals by then.

>Is that right?

Depends on the answer to the question.

>Many thanks,
>John.

Allison

3409. Re: Spurs on mixer output

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-28 12:43:20 UTC
From: tim gorman <tgorman2@cox.net>
Message-ID: <9c0u7e.qnd.ln@tg6124.ab0wr.net>
Source record: 11511

john wilkinson wrote:

>
>
> Hi,
> If I feed my second mixer into a spectrum analyser, and inject a 44.545MHz
> LO, with no power to the first IF stage, I see spurs at about 48-50KHz
> intervals on the mixer output, from 0 to the 455KHz normal output freq.
>
> The mixer is an SBL-1.
>
> Any ideas as to where these are comming from?
>
> Best regards,
> John

A couple of observations.

If you simply disconnected the second mixer from the 1st mixer then it sounds like you do not have the output of the 1st mixer properly terminated. Unless, that is, the spectrum analyzer provides a good 50ohm termination in the probe. The SBL-1 is a double-balanced mixer but in order to get the "balance" to work right you must properly terminate *all* ports. Otherwise all kinds of impedances can be "thrown" back to the other ports - causing all kinds of problems with attached LO's and RF stages.

Regularly spaced spurs from DC to 455khz does not sound like spurious mixing products. It sounds more like an oscillator being driven into saturation causing square waves to be produced which are providing regular harmonic outputs. This could be a product of poor terminations on the mixer ports.

Directly connecting the output of a SBL-1 to the input of another mixer, even another SBL-1, is not recommended either. The SBL-1 does not have built-in terminations. A good, symmetric, 50ohm 3db pad between the stages would provide a much better setup and would not significantly impact your overall noise factor. Be sure and connect your spectrum analyzer to the far side of the pad.

tim ab0wr

3410. Identification of rare/obsolete parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-28 13:41:36 UTC
From: Markus Wolfgart <markus.wolfgart@dlr.de>
Message-ID: <4gff8hF1nh7k7U1@news.dfncis.de>
Source record: 11512

Dear Friends,

I had currently buy some semiconducors at the ham radio exhibition in
Germany but there are some parts that are unknown to me.
Could you help me to solve that miracle or point me to a link where to
find some information on these parts.

Many thanks in advance for your help.

Markus
DL8MBY

imprint Manf. Case additional imprint

21H9983 ST QFP48 uC J920A009 controller ??
50H7012 IBM QFP48 1414PQ no ide
CTS9415 ??? SO16 passive part like r-chain ??
OATI A1A ??? SO8 no idea (opv)
PE-65101-001 Puls Eng. DIL WB 16 DC/DC Converter ??
IOR017G IR??? SMD (TO220) Power FET ??
M993Q0126D ST DIL16 62P00C/RFA Memory ??
32H9511 ??? ??? 75.000 KA 0050 XCO ??

3411. Re: Identification of rare/obsolete parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-28 14:40:02 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1151505602.458515.214910@75g2000cwc.googlegroups.com>
Source record: 11513

Markus Wolfgart wrote:
> PE-65101-001 Puls Eng. DIL WB 16 DC/DC Converter ??

This maker (and others) do broadband transformers in DIL packages.

Some of these (especially those used in twisted pair/Ethernet) very commonly show up on the surplus market.

It would be interesting to repurpose them for ham use (e.g. the 88mH toroids from the NA Bell system in the mid-20th century.)

Tim.

3412. Re: Identification of rare/obsolete parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-28 15:00:00 UTC
From: Markus Wolfgart <markus.wolfgart@dlr.de>
Message-ID: <4gfjrhF1mk64tU1@news.dfncis.de>
Source record: 11514

Hi Tim,

thanks for prompt reply.

In this case as it could be a passive device, I will try to
find the pinout by a ohm meter.

Bye

Markus

Tim Shoppa schrieb:
> Markus Wolfgart wrote:
>> PE-65101-001 Puls Eng. DIL WB 16 DC/DC Converter ??
>
> This maker (and others) do broadband transformers in DIL packages.
>
> Some of these (especially those used in twisted pair/Ethernet) very
> commonly show up on the surplus market.
>
> It would be interesting to repurpose them for ham use (e.g. the 88mH
> toroids from the NA Bell system in the mid-20th century.)
>
> Tim.
>

3413. Re: FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-28 15:46:39 UTC
From: ctyguy <ctyguy@webtv.net>
Message-ID: <zvxog.2764$NP4.62@newsread1.news.pas.earthlink.net>
Source record: 11515
Cross-posted to: alt.electronics.manufacture.circuitboard,alt.engineering.electrical,aus.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.equipment,uk.radio.amateur

It's impossible to count electrons because in the eyes of some scientists, they're fast. I can't buy that and believe these leaches just seek government loans.

What sayest thou?
"jasen" <jasen@free.net.nz> wrote in message news:66da.449fa326.573d6@clunker.homenet...
> On 2006-06-25, ctyguy <ctyguy@webtv.net> wrote:
>> Who pray tell, would have the need to measure coulombs? A "coulomb" is
>> an
>> abstract number of electrons assigned to current 'flow'."
>
> someone who's dealing with static electricity.
>
> --
>
> Bye.
> Jasen

3414. Re: FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-28 16:06:16 UTC
From: Robert Baer <robertbaer@earthlink.net>
Message-ID: <YNxog.2779$NP4.924@newsread1.news.pas.earthlink.net>
Source record: 11516
Cross-posted to: alt.electronics.manufacture.circuitboard,alt.engineering.electrical,aus.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.equipment,uk.radio.amateur

ctyguy wrote:
> It's impossible to count electrons because in the eyes of some scientists,
> they're fast. I can't buy that and believe these leaches just seek
> government loans.
>
> What sayest thou?
> "jasen" <jasen@free.net.nz> wrote in message
> news:66da.449fa326.573d6@clunker.homenet...
>
>>On 2006-06-25, ctyguy <ctyguy@webtv.net> wrote:
>>
>>>Who pray tell, would have the need to measure coulombs? A "coulomb" is
>>>an
>>>abstract number of electrons assigned to current 'flow'."
>>
>>someone who's dealing with static electricity.
>>
>>--
>>
>>Bye.
>> Jasen
>
>
>
Just remember the Milikan experiment...

3415. Re: FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-28 16:09:03 UTC
From: Roger leighton <roger.leighton@btinternet.com>
Message-ID: <CqKdnVa_zu48ND_ZRVny1w@bt.com>
Source record: 11517
Cross-posted to: alt.electronics.manufacture.circuitboard,alt.engineering.electrical,aus.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.equipment,uk.radio.amateur

"Robert Baer" <robertbaer@earthlink.net> wrote in message
news:YNxog.2779$NP4.924@newsread1.news.pas.earthlink.net...
> ctyguy wrote:
>> It's impossible to count electrons because in the eyes of some
>> scientists, they're fast. I can't buy that and believe these leaches
>> just seek government loans.
>>
>> What sayest thou?
>> "jasen" <jasen@free.net.nz> wrote in message
>> news:66da.449fa326.573d6@clunker.homenet...
>>
>>>On 2006-06-25, ctyguy <ctyguy@webtv.net> wrote:
>>>
>>>>Who pray tell, would have the need to measure coulombs? A "coulomb" is
>>>>an
>>>>abstract number of electrons assigned to current 'flow'."
>>>
>>>someone who's dealing with static electricity.
>>>
>>>--
>>>
>>>Bye.
>>> Jasen
>>
>>
>>
> Just remember the Milikan experiment...

Please don't mention Spike on here ...

Roger G4OWG

3416. Re: Spurs on mixer output

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-28 20:12:21 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <p9o5a21152qsldg22fqccf0tm1ba7grf2d@4ax.com>
Source record: 11520

On Wed, 28 Jun 2006 07:43:20 -0500, tim gorman <tgorman2@cox.net>
wrote:

>john wilkinson wrote:
>
>>
>>
>> Hi,
>> If I feed my second mixer into a spectrum analyser, and inject a 44.545MHz
>> LO, with no power to the first IF stage, I see spurs at about 48-50KHz
>> intervals on the mixer output, from 0 to the 455KHz normal output freq.

>
>> The mixer is an SBL-1.
>>
>> Any ideas as to where these are comming from?
>>
>> Best regards,
>> John
>
>A couple of observations.
>
>If you simply disconnected the second mixer from the 1st mixer then it
>sounds like you do not have the output of the 1st mixer properly
>terminated. Unless, that is, the spectrum analyzer provides a good 50ohm
>termination in the probe. The SBL-1 is a double-balanced mixer but in order
>to get the "balance" to work right you must properly terminate *all* ports.
>Otherwise all kinds of impedances can be "thrown" back to the other ports -
>causing all kinds of problems with attached LO's and RF stages.
>
>Regularly spaced spurs from DC to 455khz does not sound like spurious mixing
>products. It sounds more like an oscillator being driven into saturation
>causing square waves to be produced which are providing regular harmonic
>outputs. This could be a product of poor terminations on the mixer ports.

Tim, the LO is 45.455 (or 44.545) either way there should be no LF
outputs from the mixer below the LO injection unless it's a spur on
the LO.

>Directly connecting the output of a SBL-1 to the input of another mixer,
>even another SBL-1, is not recommended either. The SBL-1 does not have
>built-in terminations. A good, symmetric, 50ohm 3db pad between the stages
>would provide a much better setup and would not significantly impact your
>overall noise factor. Be sure and connect your spectrum analyzer to the far
>side of the pad.

Thats true though his testing is with a 20db IF after it and one would hope that does present a 50ohm match to the IF port. Usually if the poarts are badly matched the mixing spurs are greater and the port to port isolation go to pot. If the only thing going in is the LO then likely the LO is the source but if there is gain flollowing then the gain stage is also suspect.

I've worked with enough SBL1 and MD108s and all their similar DBMS to know the SBL1 in this case is not the offendor Even if misterminated. Likely causes are the 45mhz filter is looking reactive to the IF amp and the IF is unstable (makes a fine OSC) or there is some other source of RF that is unaccounted for (spurs).

Allison
Kb!GMX

3417. Re: A sudden thought

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-28 20:17:51 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <8so5a29n9grh749ja473j9sjqfhm93g35q@4ax.com>
Source record: 11521

On Thu, 29 Jun 2006 19:09:31 +0100, john wilkinson
<johnwilkinson@clara.co.uk> wrote:

>On Wed, 28 Jun 2006 22:10:46 +0100, john wilkinson wrote:
>
>> Thank you all for being pacient with me and my stupid questions.
>>
>> Another thought has just raised its head.
>>
>> I have 2 IF amps. 1ts with approx 20dB gain, second with 100dB gain.
>> The first IF has a XTAL filter at 45MHz.
>> The second has the collins mech filter at the beginnig, then 100dB gain,
>> straight into a diode detector.
>>
>> I think I need some form of additional filtering at the output of the
>> second IF, before the detector, to reduce the noise introduced by the
>> 100dB amp, else it don't work. Except for strong signals.
>>
>> Is that right?
>>
>> Many thanks,
>> John.
>I put a ceramic filter after my last AD603 amp, and bingo!!! I get quite
>good reception.
>
>I think the 2 off AD603 with no output filtering was swamping the diode
>detector with the noise floor level.

Maybe or the filter is stripping off out of band oscillations.

>However, the detector is buffered from the filter through an emitter
>follower, and guess what it oscillates at 170MHz.
>
>How do I cure this?
>
>Has anyone seen an emitter follower oscillating before?
>

Try 33ohm in the base lead. IF an emitter follower is oscilating
I'd syspect layout has it looking like a VHF colpits osc. Any
layout will oscilate if the effective gains is >1.

Allison

3418. Re: Filter type

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-28 20:27:15 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <k6p5a25jhi5dvmriet14ollm2k51taeput@4ax.com>
Source record: 11522

On Thu, 29 Jun 2006 19:17:53 +0100, john wilkinson
<johnwilkinson@clara.co.uk> wrote:

>Hi,
>When I was looking at an IF amp in the "Experimental mathods in RF", I
>noticed a filter I have not seen before.
>I will try to describe:

Cite page and figure for faster finding. Its a thick book.
I'd think it's described in the book.

>
>200 Ohm i/p impedance feeding 1 cap. The othe side of the cap feeds
>another cap down to ground and an inductor. The other side of the inductor
>has a cap down to ground. The junction of the ind and cap, has another cap
>feeding a load of 100 Ohm.
>
>When I simulate this it is a bandpass filter.

Likely it's a simple capacitively tapped tuned circuit.

>What do you call this filter, and where can I find some info about it?
>
>Thanks,
>John

Allison

3419. A sudden thought

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-28 21:10:46 UTC
From: john wilkinson <johnwilkinson@clara.co.uk>
Message-ID: <pan.2006.06.28.21.10.44.553170@clara.co.uk>
Source record: 11507

Thank you all for being pacient with me and my stupid questions.

Another thought has just raised its head.

I have 2 IF amps. 1ts with approx 20dB gain, second with 100dB gain.
The first IF has a XTAL filter at 45MHz.
The second has the collins mech filter at the beginnig, then 100dB gain,
straight into a diode detector.

I think I need some form of additional filtering at the output of the
second IF, before the detector, to reduce the noise introduced by the
100dB amp, else it don't work. Except for strong signals.

Is that right?

Many thanks,
John.

3420. Re: Filter type

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-28 22:27:05 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <ZmDog.7423$Yk.1212@trnddc06>
Source record: 11523

Values???; frequency???

"john wilkinson" <johnwilkinson@clara.co.uk> wrote in message
news:pan.2006.06.29.18.17.52.418843@clara.co.uk...
> Hi,
> When I was looking at an IF amp in the "Experimental mathods in RF", I
> noticed a filter I have not seen before.
> I will try to describe:
>
> 200 Ohm i/p impedance feeding 1 cap. The othe side of the cap feeds
> another cap down to ground and an inductor. The other side of the inductor
> has a cap down to ground. The junction of the ind and cap, has another cap
> feeding a load of 100 Ohm.
>
> When I simulate this it is a bandpass filter.
>
> What do you call this filter, and where can I find some info about it?
>
> Thanks,
> John

3421. Voip in Amateur Radio,Voip Updated Howto,

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-29 00:51:30 UTC
From: bandbroad@gmail.com
Message-ID: <1151542290.325594.6850@m73g2000cwd.googlegroups.com>
Source record: 11524

Voip in Amateur Radio,Voip Updated Howto,
Voice Over IP is a new communication means that let you telephone with
Internet at almost null cost.How this is possible, what is the
standard, what systems are used, how cost..

http://flying-rugs.com/voip/VoIP-HOWTO.html

3422. Re: Filter type

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-29 02:05:43 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1151546742.971630.126340@x69g2000cwx.googlegroups.com>
Source record: 11525

john wilkinson wrote:
> Hi,
> When I was looking at an IF amp in the "Experimental mathods in RF", I
> noticed a filter I have not seen before.
> I will try to describe:
>
> 200 Ohm i/p impedance feeding 1 cap. The othe side of the cap feeds
> another cap down to ground and an inductor. The other side of the inductor
> has a cap down to ground. The junction of the ind and cap, has another cap
> feeding a load of 100 Ohm.
>
> When I simulate this it is a bandpass filter.
>
> What do you call this filter, and where can I find some info about it?
>
> Thanks,
> John

Andy writes:

This is a 3 pole low pass filter. The type (butterworth,
chebychev, bessel, etc)
is determined by the component values, as are the frequency , skirt
selectivity and impedance.
Look in the ARRL handbook for typical configurations and
values....This
filter can also be used to transform impedances, although when that is
done
you leave the "type" classification and become more just a low pass
impedance transformer.....

It ain't rocket surgery, but if you aren't into LaPlace transforms,
you need
to stick with the tables.... or the simulator.....

The cap connected to the 200 ohm output is just for coupling and
is
usually really big, but, in some cases , may be made small enough to
provide a small breakpoint for high pass but at a frequency
considerably
lower than the low pass passband.....

If you use PSPICE , or equiv, to simulate it, you can learn a great
deal...

Andy W4OAH

3423. Re: FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-29 12:41:10 UTC
From: Ken Ward <ken.g1itv@MTLworld.com>
Message-ID: <GTPog.74316$uP.23943@newsfe2-gui.ntli.net>
Source record: 11526
Cross-posted to: alt.electronics.manufacture.circuitboard,alt.engineering.electrical,aus.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.equipment,uk.radio.amateur

"Roger leighton" <roger.leighton@btinternet.com> wrote in message
news:CqKdnVa_zu48ND_ZRVny1w@bt.com...
>> Just remember the Milikan experiment...
>
> Please don't mention Spike on here ...

What about a Bolt through the Nose?

KW

3424. Re: A sudden thought

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-29 17:42:04 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1151602924.643299.54390@y41g2000cwy.googlegroups.com>
Source record: 11527

john wilkinson wrote:
> Thank you all for being pacient with me and my stupid questions.
>
> Another thought has just raised its head.
>
> I have 2 IF amps. 1ts with approx 20dB gain, second with 100dB gain.
> The first IF has a XTAL filter at 45MHz.
> The second has the collins mech filter at the beginnig, then 100dB gain,
> straight into a diode detector.
>
> I think I need some form of additional filtering at the output of the
> second IF, before the detector, to reduce the noise introduced by the
> 100dB amp, else it don't work. Except for strong signals.
>
> Is that right?
>
> Many thanks,
> John.

Andy wries:

Exactly. The noise generated by a 100 db amp with a fairly wide
bandwidth with be great compared to the noise which is admitted thru
the narrow bandpass filter in front of it, and will probably be the
major
factor to the noise floor of the system..

Do NOT use the canned Noise Figure programs in a case like this
since they usually do not consider the bandpass of each individual
element..... You have to write your own. It ain't rocket surgery, but
canned programs have their limitations...

It is a very poorly designed receiver that has a high gain wide band
amp following a narrow filter...

Optimally, two narrow filters should be used --- one in front of
the
high gain amp to prevent interference and intermod from out of band
signals, and a second narrow band filter to keep the noise from the
high gain amp from reaching the detector.....and set the noise
bandwidth of the sytem...

In practice, filters are often distributed thru the gain of the
amplifier
to keep the noise bandwidth down in addition to stopping out of band
signals. Using two narrow band crystal filters is much more

expensive.

In my homebuilt receivers, I use the two xtal filter approach, and never
have a problem. But I am building one of a kind, not for production, and
don't mind spending a few more dollars in parts.....

But, again, yes you are correct in your analysis.... 100 db is far too
much gain to put in a wideband amp feeding a wideband detector for
keeping the noise floor down...

Regarding FM versus Am ---- noise floor is noisefloor... A high noise
floor will degrade FM as much as AM.... Limiting does NOT buy higher
sensitivity, since if the noise causes most of the limiting, the phase noise
introduced to an FM detector is just as bad as the amplitude noise
put into an AM detector..... One small, insignificant exception is a possible
5.6 db SNR improvement if the FM signal is wide band, but in narrow band
FM signals the SNR improvement is negligible.....Remember , you can't
tell narrowband FM from AM on a spectrum analyzer ---- the sideband
levels are about the same..... Fm starts having an advantage only when
you start adding in the extra sidebands (see Bessel function chart) since
the FM sidebands are coherent and the extra noise is not --- this is
an advantage that wide band FM has......

Andy W4OAH

3425. Re: A sudden thought

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-29 18:09:31 UTC
From: john wilkinson <johnwilkinson@clara.co.uk>
Message-ID: <pan.2006.06.29.18.09.30.74064@clara.co.uk>
Source record: 11518

On Wed, 28 Jun 2006 22:10:46 +0100, john wilkinson wrote:

> Thank you all for being pacient with me and my stupid questions.
>
> Another thought has just raised its head.
>
> I have 2 IF amps. 1ts with approx 20dB gain, second with 100dB gain.
> The first IF has a XTAL filter at 45MHz.
> The second has the collins mech filter at the beginnig, then 100dB gain,
> straight into a diode detector.
>
> I think I need some form of additional filtering at the output of the
> second IF, before the detector, to reduce the noise introduced by the
> 100dB amp, else it don't work. Except for strong signals.
>
> Is that right?
>
> Many thanks,
> John.

I put a ceramic filter after my last AD603 amp, and bingo!!! I get quite good reception.

I think the 2 off AD603 with no output filtering was swamping the diode detector with the noise floor level.

However, the detector is buffered from the filter through an emitter follower, and guess what it oscillates at 170MHz.

How do I cure this?

Has anyone seen an emitter follower oscillating before?

3426. Filter type

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-29 18:17:53 UTC
From: john wilkinson <johnwilkinson@clara.co.uk>
Message-ID: <pan.2006.06.29.18.17.52.418843@clara.co.uk>
Source record: 11519

Hi,
When I was looking at an IF amp in the "Experimental mathods in RF", I
noticed a filter I have not seen before.
I will try to describe:

200 Ohm i/p impedance feeding 1 cap. The othe side of the cap feeds
another cap down to ground and an inductor. The other side of the inductor
has a cap down to ground. The junction of the ind and cap, has another cap
feeding a load of 100 Ohm.

When I simulate this it is a bandpass filter.

What do you call this filter, and where can I find some info about it?

Thanks,
John

3427. Questions about I.F. Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-29 23:40:54 UTC
From: Jody <jlw_5178@yahoo.com>
Message-ID: <1151624454.814545.127930@p79g2000cwp.googlegroups.com>
Source record: 11528

I can't seem to find any I.F. transformers for 465 KHZ. I was wondering if you can use the 455 khz ones instead without changing any other components. I'm building a reciever that calls for 465. Can a 455 be tuned this high using the slug? or does anyone know of a source for these parts. Any advice would be greatly appreciated.

3428. Re: Questions about I.F. Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-30 00:04:38 UTC
From: David Snowdon <norway@netscape.ca>
Message-ID: <e81pht$358$1@nntp.aioe.org>
Source record: 11529

Jody wrote:
> I can't seem to find any I.F. transformers for 465 KHZ. I was wondering
> if you can use the 455 khz ones instead without changing any other
> components. I'm building a reciever that calls for 465. Can a 455 be
> tuned this high using the slug? or does anyone know of a source for
> these parts. Any advice would be greatly appreciated.
>
Most of these IF xformers have a fixed capacitor on the bottom of the
device. You can remove it, measure it's value, and place a capacitor of
a slightly lower value in its place.

David, VA3DKS

3429. Re: Questions about I.F. Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-30 00:09:49 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <huq8a25u9ju9spcqg96dpqb1js4c5372cm@4ax.com>
Source record: 11530

On 29 Jun 2006 16:40:54 -0700, "Jody" <jlw_5178@yahoo.com> wrote:

>I can't seem to find any I.F. transformers for 465 KHZ. I was wondering
>if you can use the 455 khz ones instead without changing any other
>components. I'm building a reciever that calls for 465. Can a 455 be
>tuned this high using the slug? or does anyone know of a source for
>these parts. Any advice would be greatly appreciated.

I've met very few that would not tune that far. It's easy enough to
test beforehand if ther eis uncertainty.

Allison

3430. Mosfet RF Amp "sprogging"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-30 01:20:52 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <U%_og.18623$ap3.1668@news-server.bigpond.net.au>
Source record: 11531

I am currently experimenting with construction of my first Dual-Gate
Mosfet Amp.

Below is an attempt to explain the circuit typology as best I can

Freq = 148 MHz to 152 MHz

Power supply is 8V, Bias on G2 is 4V. Source is grounded

Drain has Variable inductor to Vcc and Cap to ground to form first stage
of a double-tuned circuit. This then couples through a small cap to the
second half of the DTC.

RF input to Single tuned circuit with tapped capacitors attached to G1
of BF998.

C1 to ground is 56pF, C2 to G1 is 15pF, L from G1 to ground is variable
with nominal inductance of 85nH (tunes 75nH to 110nH), Q approx. 100

The Drain has the same type of inductor to Vcc (decoupled Vcc end).
C3 is 18pF from drain to ground (This forms part of the double-tuned
circuit on the output).
Coupling to second half of DTC is 1pF. Second half of DTC C4 = 18pF to
ground and L is same as previous inductors (85nH nom.).

This will later go to G1 of a Dual-Gate Mosfet mixer but for testing I
replaced the 15pF on second DTC with series 18pF and 56pF to form a
capacitive divider down to 50 Ohms for my spectrum analyzer input.

With this configuration the circuit will oscillate on its own when the
input is removed. If I replace the Capo from drain to ground with a trim
cap I can adjust it so the self-oscillation stops but as soon as I try
to change the tuning of the inductor from drain to Vcc, it starts to
oscillate on its own.

If I remove the cap from drain to ground altogether, the oscillations
stop but I almost the ability to tune the Inductor, it becomes extremely
broad tuning.(The input inductor and output DTC inductor tune fine though).

I have tried a series 33R between the Drain of the mosfet and the
Inductor/Capacitor and this did not help.

The measured gain with the capacitor removed was 17dB. Drain current was
4.8mA. 3dB bandwidth was 3.2MHz.

The circuit is laid out "dead-bug" style on a flat bare PCB. I'm not
sure if it is a layout problem or typology issue.
I have seen damping used across tuned circuits in output stages of

rf amps and may try this next. But, I would like to know what is happening because if I manage to stop the oscillation, I am not sure if it is marginal and will reappear with changes in temperature or drive level etc.

Any help much appreciated.

Regards

David

3431. MOSFET amp sprogging[2]

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-30 01:22:08 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <41%og.18624$ap3.1561@news-server.bigpond.net.au>
Source record: 11532

BTW: The device is a BF998 SMD package.

3432. Re: Mosfet RF Amp "sprogging"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-30 02:25:54 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <ph29a2lgmcvm9tfnet3onqievbdgbkcus0@4ax.com>
Source record: 11533

On Fri, 30 Jun 2006 01:20:52 GMT, David <dhuisman@bigpond.net.au>
wrote:

>I am currently experimenting with construction of my first Dual-Gate
>Mosfet Amp.
>
>Below is an attempt to explain the circuit typology as best I can
>
>Freq = 148 MHz to 152 MHz
>
>Power supply is 8V, Bias on G2 is 4V. Source is grounded
>
>Drain has Variable inductor to Vcc and Cap to ground to form first stage
>of a double-tuned circuit. This then couples through a small cap to the
>second half of the DTC.
>
>RF input to Single tuned circuit with tapped capacitors attached to G1
>of BF998.
>
>C1 to ground is 56pF, C2 to G1 is 15pF, L from G1 to ground is variable
>with nominal inductance of 85nH (tunes 75nH to 110nH), Q approx. 100
>
>The Drain has the same type of inductor to Vcc (decoupled Vcc end).
>C3 is 18pF from drain to ground (This forms part of the double-tuned
>circuit on the output).
>Coupling to second half of DTC is 1pF. Second half of DTC C4 = 18pF to
>ground and L is same as previous inductors (85nH nom.).
>
>This will later go to G1 of a Dual-Gate Mosfet mixer but for testing I
>replaced the 15pF on second DTC with series 18pF and 56pF to form a
>capacitive divider down to 50 Ohms for my spectrum analyzer input.
>
>With this configuration the circuit will oscillate on its own when the
>input is removed. If I replace the Capo from drain to ground with a trim
>cap I can adjust it so the self-oscillation stops but as soon as I try
>to change the tuning of the inductor from drain to Vcc, it starts to
>oscillate on its own.
>
>If I remove the cap from drain to ground altogether, the oscillations
>stop but I almost the ability to tune the Inductor, it becomes extremely
>broad tuning.(The input inductor and output DTC inductor tune fine though).
>
>I have tried a series 33R between the Drain of the mosfet and the
>Inductor/Capacitor and this did not help.

>
>The measured gain with the capacitor removed was 17dB. Drain current was
>4.8mA. 3dB bandwidth was 3.2MHz.
>
>The circuit is laid out "dead-bug" style on a flat bare PCB. I'm not
>sure if it is a layout problem or typology issue.
>I have seen damping used across tuned circuits in output stages of
>rf amps and may try this next. But, I would like to know what is
>happening because if I manage to stop the oscillation, I am not sure if
>it is marginal and will reappear with changes in temperature or drive
>level etc.
>
>Any help much appreciated.
>
>Regards
>
>David

Usually DGFET amps are stable. But they are also very high
gain.

The likely culprit is the input can see the output (incidental
coupling). I always build this with a shield partition right across
the device and also a ferrite bead in the G2 lead near the deivce
as possible (or for SMD in the Source leg bypass cap). These
devices will take off at uhf due to gain and less then careful
bypassing. That includes making sure the G2 bias resistor
(Gate to DC source) does not couple RF back. As part of this
also insure the input and output leads to the connector are short
as possible or even coax.

Allison

3433. Re: Mosfet RF Amp "sprogging"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-30 03:33:01 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12a96rj1pc6omaa@corp.supernews.com>
Source record: 11535

Your bypasses from G2 to ground and from the top of the drain inductor to ground should be physically small, have very nearly zero lead length, and connect directly to the drain or the bottom of the drain resistor if used.

Roy Lewallen, W7EL

3434. Re: Mosfet RF Amp "sprogging"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-30 03:36:28 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <0%0pg.18680$ap3.7270@news-server.bigpond.net.au>
Source record: 11534

Thanks for the feedback (no pun intended :) I appreciate it.

I will add a shield between input and output circuit. I do remember seeing this in other designs. In my prototype construction I do have the input and output coils fairly close and in the same orientation so I imagine there very well could be coupling between them.

the fact that the circuit oscillates very close to the tuned frequency is probably a clue that positive feedback between input and output is happening. The source is grounded so Drain - Gate seems feasible.

I will also take the advice of adding a ferrite bead between G2 pin and the voltage divider for G2. (Currently 100k+100k with 1n decoupling).

Can anyone suggest a reasonably simple method to determine noise figure of this stage ? I do not have a distortion meter. I have directional couplers, sig gens, sepctrum analyzer and digital power meter. Can I use these somehow ?

Thanks in advance again

Best regards

David

nospam@nouce.bellatlantic.net wrote:
> On Fri, 30 Jun 2006 01:20:52 GMT, David <dhuisman@bigpond.net.au>
> wrote:
>
>> I am currently experimenting with construction of my first Dual-Gate
>> Mosfet Amp.
>>
>> Below is an attempt to explain the circuit typology as best I can
>>
>> Freq = 148 MHz to 152 MHz
>>
>> Power supply is 8V, Bias on G2 is 4V. Source is grounded
>>
>> Drain has Variable inductor to Vcc and Cap to ground to form first stage
>> of a double-tuned circuit. This then couples through a small cap to the
>> second half of the DTC.
>>
>> RF input to Single tuned circuit with tapped capacitors attached to G1
>> of BF998.
>>
>> C1 to ground is 56pF, C2 to G1 is 15pF, L from G1 to ground is variable
>> with nominal inductance of 85nH (tunes 75nH to 110nH), Q approx. 100

>>
>> The Drain has the same type of inductor to Vcc (decoupled Vcc end).
>> C3 is 18pF from drain to ground (This forms part of the double-tuned
>> circuit on the output).
>> Coupling to second half of DTC is 1pF. Second half of DTC C4 = 18pF to
>> ground and L is same as previous inductors (85nH nom.).
>>
>> This will later go to G1 of a Dual-Gate Mosfet mixer but for testing I
>> replaced the 15pF on second DTC with series 18pF and 56pF to form a
>> capacitive divider down to 50 Ohms for my spectrum analyzer input.
>>
>> With this configuration the circuit will oscillate on its own when the
>> input is removed. If I replace the Capo from drain to ground with a trim
>> cap I can adjust it so the self-oscillation stops but as soon as I try
>> to change the tuning of the inductor from drain to Vcc, it starts to
>> oscillate on its own.
>>
>> If I remove the cap from drain to ground altogether, the oscillations
>> stop but I almost the ability to tune the Inductor, it becomes extremely
>> broad tuning.(The input inductor and output DTC inductor tune fine though).
>>
>> I have tried a series 33R between the Drain of the mosfet and the
>> Inductor/Capacitor and this did not help.
>>
>> The measured gain with the capacitor removed was 17dB. Drain current was
>> 4.8mA. 3dB bandwidth was 3.2MHz.
>>
>> The circuit is laid out "dead-bug" style on a flat bare PCB. I'm not
>> sure if it is a layout problem or typology issue.
>> I have seen damping used across tuned circuits in output stages of
>> rf amps and may try this next. But, I would like to know what is
>> happening because if I manage to stop the oscillation, I am not sure if
>> it is marginal and will reappear with changes in temperature or drive
>> level etc.
>>
>> Any help much appreciated.
>>
>> Regards
>>
>> David
>
> Usually DGFET amps are stable. But they are also very high
> gain.
>
> The likely culprit is the input can see the output (incidental
> coupling). I always build this with a shield partition right across
> the device and also a ferrite bead in the G2 lead near the deivce
> as possible (or for SMD in the Source leg bypass cap). These
> devices will take off at uhf due to gain and less then careful
> bypassing. That includes making sure the G2 bias resistor

> (Gate to DC source) does not couple RF back. As part of this
> also insure the input and output leads to the connector are short
> as possible or even coax.
>
>
> Allison

3435. Re: FA KEITHLEY 610C ELECTROMETER, PICO AMMETER COULOMB METER Plus

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-30 05:11:15 UTC
From: Alfred Green <nu8i@cox.net>
Message-ID: <Xn2pg.1198$RD.1063@fed1read08>
Source record: 11536

>>>
>>>
>> Just remember the Milikan experiment...
>
>
> Please don't mention Spike on here ...
>
>

You mean Milligna, the well-known typing error?

73 Alf MU8I
"Puckoon"

3436. Re: Mosfet RF Amp "sprogging"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-30 05:27:44 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <kD2pg.18708$ap3.7519@news-server.bigpond.net.au>
Source record: 11537

I have applied the suggestions and still can't manage to "tame the beast".

As long as the cap to ground from drain is in circuit the amp becomes
unstable at oscillates close to the centre frequency.

If I remove the cap the amp settles down but I loose tuning of the drain
circuit and the gain drops down.

I have a picture of the layout and schematic if anyone would be prepared
to take a look and see if there is something obvious.

The shield is placed right across the top of the BF998 to separate input
from output.
All component leads are cut as close to the component body as possible.

I also added another shield between G2 and the input circuit so the
input now is totally isolated from the rest of the ckt

Regards

David

Roy Lewallen wrote:
> Your bypasses from G2 to ground and from the top of the drain inductor
> to ground should be physically small, have very nearly zero lead length,
> and connect directly to the drain or the bottom of the drain resistor if
> used.
>
> Roy Lewallen, W7EL

3437. The beast (Dual gate Mosfet RF Amp) is settling down

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-30 06:28:17 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <5w3pg.18735$ap3.2463@news-server.bigpond.net.au>
Source record: 11538

I have conducted further investigation and discovered the following

1. Coupling between tuned circuits in DTC was a little high (reduce this from 1pF to 0.5pF)
2. The Cap from Drain to ground (1st tuned ckt in DTC) was a little large. Reduced this to 10pF from 15pF.

These changes enable smooth tuning of each inductor without any surprises. Gain has shot up to around 24dB and 3dB bandwidth is around 3.5MHz at 151 MHz Fo.

What I do notice is that when I remove the input cable from the signal generator, the circuit starts to oscillate. If I terminate the floating cable with say a 6dB attenuator, the oscillation stops.

Should I have something in front of the Single tuned input circuit such as a RFC, 3dB resistive pad or LPF to define input impedance ? Or is it maybe just the input floating as the Tapped capacitor divider has nothing to ground on the input side (FET side of course has the inductor to ground).

Thanks

Regards

David

David wrote:
> I have applied the suggestions and still can't manage to "tame the beast".
>
> As long as the cap to ground from drain is in circuit the amp becomes
> unstable at oscillates close to the centre frequency.
>
> If I remove the cap the amp settles down but I loose tuning of the drain
> circuit and the gain drops down.
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> I have a picture of the layout and schematic if anyone would be prepared
> to take a look and see if there is something obvious.
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> from output.
> All component leads are cut as close to the component body as possible.
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> I also added another shield between G2 and the input circuit so the
> input now is totally isolated from the rest of the ckt
>
> Regards

>
> David
>
> Roy Lewallen wrote:
>> Your bypasses from G2 to ground and from the top of the drain inductor
>> to ground should be physically small, have very nearly zero lead
>> length, and connect directly to the drain or the bottom of the drain
>> resistor if used.
>>
>> Roy Lewallen, W7EL

3438. Re: Mosfet RF Amp "sprogging"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-30 08:02:41 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <BU4pg.10810$j7.315106@news.indigo.ie>
Source record: 11539

On Fri, 30 Jun 2006 03:36:28 +0000, David wrote:

> Thanks for the feedback (no pun intended I appreciate it.
>
> I will add a shield between input and output circuit. I do remember
> seeing this in other designs. In my prototype construction I do have the
> input and output coils fairly close and in the same orientation so I
> imagine there very well could be coupling between them.

I had a similar problem with a 2M RF amp. I cured it by
reversing the winding direction of one of the inductors.

> Can anyone suggest a reasonably simple method to determine noise figure
> of this stage ?

I'm a bit reluctant to suggest a method that I haven't tried
mysef, but you should be able to calculate NF by measuring the
receiver noise output with a hot and cold resistor connected
to the input. The usual method involves boiling water and
melting ice. http://tinyurl.com/psdfo

73, Ed. EI9GQ.

--
Remove 'X' to reply by e-mail.
Linux 2.6.17

3439. Re: Spurs on mixer output

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-30 11:48:45 UTC
From: Pete KE9OA <p.gianako@comcast.net>
Message-ID: <1uudnfjaxZcAkjjZnZ2dnUVZ_vWdnZ2d@comcast.com>
Source record: 11540

What kind of spectrum analyzer are you using? What are the front end attenuator settings on the spectrum analyzer? What is your reference level? All of these things, especially the front end attenuator settings, can affect your result. If the 1st mixer in the spectrum analyzer is driven into nonlinearity, you can see all kinds of IMD products that are generated in the analyzer itself.
Also, why are you doing this test with the RF port of the mixer terminated in 50 Ohms? This type of termination is only used when doing either return loss tests or noise balance tests.
If you are driving the SBL-1 mixer with +7 to +9dBm of LO level and you are driving the RF port with a signal that is at least 20dB below the 1dB compression point of the SBL-1, the main things you should see at the I.F. port are a supressed LO signal, an upper sideband that is about 7dB lower in level than the RF injection level, and a lower sideband that is also about 7dB lower in level than the RF injection level.
The 1dB compression point on the SBL-1 is about 0dBm, so I would set the level to the RF port at -20dBm. If you go above this level, you will see higher conversion loss, and possibly more IMD products at the I.F. port of the mixer.
In conclusion, make sure that the IMD isn't being generated in your test setup, and make sure that you are not exceeding the recommended RF input level to the SBL-1.

Pete

<nospam@nouce.bellatlantic.net> wrote in message
news:p9o5a21152qsldg22fqccf0tm1ba7grf2d@4ax.com...
> On Wed, 28 Jun 2006 07:43:20 -0500, tim gorman <tgorman2@cox.net>
> wrote:
>
>>john wilkinson wrote:
>>
>>>
>>>
>>> Hi,
>>> If I feed my second mixer into a spectrum analyser, and inject a
>>> 44.545MHz
>>> LO, with no power to the first IF stage, I see spurs at about 48-50KHz
>>> intervals on the mixer output, from 0 to the 455KHz normal output freq.
>
>>
>>> The mixer is an SBL-1.
>>>
>>> Any ideas as to where these are comming from?
>>>

>>> Best regards,
>>> John
>>
>>A couple of observations.
>>
>>If you simply disconnected the second mixer from the 1st mixer then it
>>sounds like you do not have the output of the 1st mixer properly
>>terminated. Unless, that is, the spectrum analyzer provides a good 50ohm
>>termination in the probe. The SBL-1 is a double-balanced mixer but in
>>order
>>to get the "balance" to work right you must properly terminate *all*
>>ports.
>>Otherwise all kinds of impedances can be "thrown" back to the other
>>ports -
>>causing all kinds of problems with attached LO's and RF stages.
>>
>>Regularly spaced spurs from DC to 455khz does not sound like spurious
>>mixing
>>products. It sounds more like an oscillator being driven into saturation
>>causing square waves to be produced which are providing regular harmonic
>>outputs. This could be a product of poor terminations on the mixer ports.
>
> Tim, the LO is 45.455 (or 44.545) either way there should be no LF
> outputs from the mixer below the LO injection unless it's a spur on
> the LO.
>
>>Directly connecting the output of a SBL-1 to the input of another mixer,
>>even another SBL-1, is not recommended either. The SBL-1 does not have
>>built-in terminations. A good, symmetric, 50ohm 3db pad between the stages
>>would provide a much better setup and would not significantly impact your
>>overall noise factor. Be sure and connect your spectrum analyzer to the
>>far
>>side of the pad.
>
> Thats true though his testing is with a 20db IF after it and one would
> hope that does present a 50ohm match to the IF port. Usually if the
> poarts are badly matched the mixing spurs are greater and the port
> to port isolation go to pot. If the only thing going in is the LO
> then likely the LO is the source but if there is gain flollowing then
> the gain stage is also suspect.
>
> I've worked with enough SBL1 and MD108s and all their similar DBMS
> to know the SBL1 in this case is not the offendor Even if
> misterminated. Likely causes are the 45mhz filter is looking reactive
> to the IF amp and the IF is unstable (makes a fine OSC) or there is
> some other source of RF that is unaccounted for (spurs).
>
>
> Allison
> Kb!GMX

3440. Re: Mosfet RF Amp "sprogging"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-30 18:18:45 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e83pu5$kd6$1@avnika.corp.mot.com>
Source record: 11542

"Eamon Skelton" <Xnospam@oceanfree.net> wrote in message
news:BU4pg.10810$j7.315106@news.indigo.ie...
> On Fri, 30 Jun 2006 03:36:28 +0000, David wrote:
>
> > Thanks for the feedback (no pun intended I appreciate it.
> >
> > I will add a shield between input and output circuit. I do remember
> > seeing this in other designs. In my prototype construction I do have the
> > input and output coils fairly close and in the same orientation so I
> > imagine there very well could be coupling between them.
>
>
> I had a similar problem with a 2M RF amp. I cured it by
> reversing the winding direction of one of the inductors.
>
>
> > Can anyone suggest a reasonably simple method to determine noise figure
> > of this stage ?
>
> I'm a bit reluctant to suggest a method that I haven't tried
> mysef, but you should be able to calculate NF by measuring the
> receiver noise output with a hot and cold resistor connected
> to the input. The usual method involves boiling water and
> melting ice. http://tinyurl.com/psdfo
>
> 73, Ed. EI9GQ.
>

David,
I don't know your technical level, but here goes. I thought the dual gate is a type of cascode arrangement and should be stable owing to the isolation of the "top" device... Anyway...

You are very correct about trying to "band-aid" it with de-Q'ing resistors. You need to find the root cause, not hope a patch works. You are well aware of and trying to solve a possible proximity feedback issue, so I won't go there.

It is not clear what your term "sprogging" may mean. There was a term "Squeeging" which referred to oscillation or what is also called regen(regeneration) which is typically used for dirty (sideband-type), rather than clean (single frequency) oscillation.

Is the oscillation a clean, oscillator signal (pure carrier), or does it have sidebands?

If sidebands, are they clear and distinct or is it more of a wideband grunge/garbage?
Are the sidebands mirrored on both sides or are they lopsided?
These are all clues.

If you have regular sidebands or grunge, you have a low frequency oscillation component and need to also look at bypassing. 33-200 ohms or a ferrite bead in series with a bypass can help diagnose it.
If the sidebands are unequal, there are most likely both AM and FM components to the oscillation. Putting a regular scope on the supply or other places which are supposed to be bypassed might see the signal, helping to ID the cause.

Be aware that two bypasses in parallel, of different size, can become a tuned circuit and therefore a high impedance at frequencies where the larger one is above self resonance and appears inductive.

Pay extreemly close attention to the ground currents for the input and output circuitry. You want to have an absolute minimum of common path for these. I didn't see anything in your circuit description about the FET source. If it is self biased with a resistor & cap combination or what, but from the source you should have two distinct paths in the ground you have to the respectice components tith no length of this "ground current path" in common - where both currents share a common path. you can even cut the PCB so there are two distinct ground planes which only meet at the FET source or its resistor/bypass cap.
Watch the power supply side pretty much the same. Where does the Drain bypass connect to the plane?

Hope this helps.
73, Steve, K9DCI

3441. Re: Spurs on mixer output

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-30 18:23:58 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e83q7ukei1@avnika.corp.mot.com>
Source record: 11543
Body handling: HTML body converted to readable text

This didn't sound like the problem if I read it correctly, but...
To test for analyzedr generated effects, switch-in 10 dB of attenuatin in FRONT of the analyzer mixer (not in the analyzer IF). If the garbage drops more than 10dB (like 20 or 30) then you are over driving the analyzer. If it is coming from outside, then you'll se dB for dB changes.

73, Steve, K9DCI

Ain't the math of nonlinearity great?

"Pete KE9OA" wrote in message
news:1uudnfjaxZcAkjjZnZ2dnUVZ_vWdnZ2d@comcast.com...
> What kind of spectrum analyzer are you using? What are the front end
> attenuator settings on the spectrum analyzer? What is your reference level?
> All of these things, especially the front end attenuator settings, can
> affect your result. If the 1st mixer in the spectrum analyzer is driven into
> nonlinearity, you can see all kinds of IMD products that are generated in
> the analyzer itself.
> Also, why are you doing this test with the RF port of the mixer terminated
> in 50 Ohms? This type of termination is only used when doing either return
> loss tests or noise balance tests.
> If you are driving the SBL-1 mixer with +7 to +9dBm of LO level and you are
> driving the RF port with a signal that is at least 20dB below the 1dB
> compression point of the SBL-1, the main things you should see at the I.F.
> port are a supressed LO signal, an upper sideband that is about 7dB lower in
> level than the RF injection level, and a lower sideband that is also about
> 7dB lower in level than the RF injection level.
> The 1dB compression point on the SBL-1 is about 0dBm, so I would set the
> level to the RF port at -20dBm. If you go above this level, you will see
> higher conversion loss, and possibly more IMD products at the I.F. port of
> the mixer.
> In conclusion, make sure that the IMD isn't being generated in your test
> setup, and make sure that you are not exceeding the recommended RF input
> level to the SBL-1.
>
> Pete
>
> wrote in message
> news:p9o5a21152qsldg22fqccf0tm1ba7grf2d@4ax.com...

> > On Wed, 28 Jun 2006 07:43:20 -0500, tim gorman
> > wrote:
> >
> >>john wilkinson wrote:
> >>
> >>>
> >>>
> >>> Hi,
> >>> If I feed my second mixer into a spectrum analyser, and inject a
> >>> 44.545MHz
> >>> LO, with no power to the first IF stage, I see spurs at about 48-50KHz
> >>> intervals on the mixer output, from 0 to the 455KHz normal output
freq.
> >
> >>
> >>> The mixer is an SBL-1.
> >>>
> >>> Any ideas as to where these are comming from?
> >>>
> >>> Best regards,
> >>> John
> >>
> >>A couple of observations.
> >>
> >>If you simply disconnected the second mixer from the 1st mixer then it
> >>sounds like you do not have the output of the 1st mixer properly
> >>terminated. Unless, that is, the spectrum analyzer provides a good 50ohm
> >>termination in the probe. The SBL-1 is a double-balanced mixer but in
> >>order
> >>to get the "balance" to work right you must properly terminate *all*
> >>ports.
> >>Otherwise all kinds of impedances can be "thrown" back to the other
> >>ports -
> >>causing all kinds of problems with attached LO's and RF stages.
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> >>products. It sounds more like an oscillator being driven into saturation
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ports.
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> > Tim, the LO is 45.455 (or 44.545) either way there should be no LF
> > outputs from the mixer below the LO injection unless it's a spur on
> > the LO.
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> >>even another SBL-1, is not recommended either. The SBL-1 does not have
> >>built-in terminations. A good, symmetric, 50ohm 3db pad between the
stages

> >>would provide a much better setup and would not significantly impact
your
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> > hope that does present a 50ohm match to the IF port. Usually if the
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> > some other source of RF that is unaccounted for (spurs).
> >
> >
> > Allison
> > Kb!GMX
>
>

3442. Re: Spurs on mixer output

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-30 18:53:16 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12aasp1i154uoad@corp.supernews.com>
Source record: 11541

Pete KE9OA wrote:
>. . .
> In conclusion, make sure that the IMD isn't being generated in your test
> setup, and make sure that you are not exceeding the recommended RF input
> level to the SBL-1.

A quick test for spurs being generated by the spectrum analyzer is to increase the spectrum analyzer input attenuation by 10 dB. Real spurs will drop 10 dB. Most spurs generated by the analyzer will drop a greater amount -- 20 dB if they're second order, 30 dB if they're third order, and so forth. If any spurs do drop more than 10 dB, you have to reduce the SA attenuator setting or the input signal level to the SA -- at least the level of the signal(s) generating the spurs.

Roy Lewallen, W7EL

3443. Using Garage for Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-30 20:31:26 UTC
From: Alex <samalex@gmail.com>
Message-ID: <1151699486.365534.315290@y41g2000cwy.googlegroups.com>
Source record: 11544

Hi Everyone,

I hope to get my technician license for the first time in a month or two, and I've been thinking of setting-up shop in the garage once I start getting some radios and equipment.

Some questions though, the garage is on the corner of our brick house with one smaller window (facing front of house), two walls are interior walls with other two being exterior (one having garage door).

My thought is if I insulate the attic and the one exterior wall without the garage door then replace my aging garage door with a better sealing one, that should do the trick -- right? As for heating and cooling, i'm in central texas, and our summers do get hot. I don't think our A/C in the house could pump out enough cool air to cool an additional 430sqft, so any suggestions for that? The only window is on front of house, so don't want to use window unit. I have a radiant heater I've used in there for winter, and it works well.

Thanks for any suggestions or ideas ... we don't park our cars in the garage, and I hope to build a small shead in the back yard for the mowers and such -- so that's 430sqft of space that's going to waste.

Thanks again and take care ---

Alex

3444. Self-heating of crystal in inverter oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-30 20:48:03 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrneab3g3.9if.ben@saturn.home.ben.com>
Source record: 11545

I've got a 74HC86 (quad XOR) and I'm using 2 of the gates (with one input tied high) to make inverter oscillators. One crystal at 14.85MHz in a SMT package was relatively easy to start up and stabilize. The 25MHz crystal (in a short can package) was very sensitive to Rs (series resistor between the inverter output and one leg of the crystal) and low supply voltage. To get it to start reliably I ended up with Rs=110 @ 5V. The whole thing is drawing about 25mA.

The problem I have is that the 74HC86 and 25MHz crystal seem to warm up quickly and cause the 25MHz to drop by about 200Hz. This oscillator isn't intended to be on for long periods of time, so I'd like to avoid that. I've isolated those two parts by a combination of heating and cooling components to see which contribute the most (the temp swing is too small for me to feel, I'm just warming with a finger and cooling with a puff of compressed air).

So if I'm putting 15mA+ into that crystal, is that unusually high? What would be a typical amount for such an oscillator? Is there anything I can do about the effects of chip heating (I'm assuming the gate capacitance is going up as it heats)?

--
Ben Jackson
<ben@ben.com>
http://www.ben.com/

3445. Re: Self-heating of crystal in inverter oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-30 21:49:43 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <ct6ba2h4t6b2i4ghp51un28jurs331dt0g@4ax.com>
Source record: 11546

On Fri, 30 Jun 2006 15:48:03 -0500, Ben Jackson <ben@ben.com> wrote:

>I've got a 74HC86 (quad XOR) and I'm using 2 of the gates (with one input
>tied high) to make inverter oscillators. One crystal at 14.85MHz in a
>SMT package was relatively easy to start up and stabilize. The 25MHz
>crystal (in a short can package) was very sensitive to Rs (series resistor
>between the inverter output and one leg of the crystal) and low supply
>voltage. To get it to start reliably I ended up with Rs=110 @ 5V. The
>whole thing is drawing about 25mA.
>
>The problem I have is that the 74HC86 and 25MHz crystal seem to warm
>up quickly and cause the 25MHz to drop by about 200Hz. This oscillator
>isn't intended to be on for long periods of time, so I'd like to avoid
>that. I've isolated those two parts by a combination of heating and
>cooling components to see which contribute the most (the temp swing is
>too small for me to feel, I'm just warming with a finger and cooling
>with a puff of compressed air).
>
>So if I'm putting 15mA+ into that crystal, is that unusually high?
>What would be a typical amount for such an oscillator? Is there
>anything I can do about the effects of chip heating (I'm assuming
>the gate capacitance is going up as it heats)?

From a stability factor point of view those "inverter" based
oscillators are amoung the worst. I doubt it's all crystal heating
and I bet there are parameter shifts in the "chip" as it warms up
operating at high frequency like that. Also If you drive the crystal
hard like they do (15ma!!!) bad things happen. Those circuits are OK
for micros and other less critical apps.

I suggest a discrete Bipolar or FET where you can control the
operating point of the device better.

Allison

3446. Re: Spurs on mixer output

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-30 21:54:39 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <r77ba2dqivor2ss3msqp48u3lqm3962r76@4ax.com>
Source record: 11547
Body handling: HTML body converted to readable text

On Fri, 30 Jun 2006 06:48:45 -0500, "Pete KE9OA"
wrote:

>What kind of spectrum analyzer are you using? What are the front end

I'm not using one the author of the thread is.

>attenuator settings on the spectrum analyzer? What is your reference level?

Ask him not me.

>All of these things, especially the front end attenuator settings, can
>affect your result. If the 1st mixer in the spectrum analyzer is driven into
>nonlinearity, you can see all kinds of IMD products that are generated in
>the analyzer itself.
>Also, why are you doing this test with the RF port of the mixer terminated
>in 50 Ohms? This type of termination is only used when doing either return
>loss tests or noise balance tests.
>If you are driving the SBL-1 mixer with +7 to +9dBm of LO level and you are
>driving the RF port with a signal that is at least 20dB below the 1dB
>compression point of the SBL-1, the main things you should see at the I.F.
>port are a supressed LO signal, an upper sideband that is about 7dB lower in
>level than the RF injection level, and a lower sideband that is also about
>7dB lower in level than the RF injection level.
>The 1dB compression point on the SBL-1 is about 0dBm, so I would set the
>level to the RF port at -20dBm. If you go above this level, you will see
>higher conversion loss, and possibly more IMD products at the I.F. port of
>the mixer.
>In conclusion, make sure that the IMD isn't being generated in your test
>setup, and make sure that you are not exceeding the recommended RF input
>level to the SBL-1.
>
>Pete

You top posted to a reply that I'd posted to and your context is way
off as a result. Go bat to the root of the thread and read the
posting again.

Briefly, he's seeing spurs every 25 or 50 khz with a LO in the 45mhz
region and NO RF on the input (unterminated RF port).

Allison

>
> wrote in message
>news:p9o5a21152qsldg22fqccf0tm1ba7grf2d@4ax.com...

>> On Wed, 28 Jun 2006 07:43:20 -0500, tim gorman
>> wrote:
>>
>>>john wilkinson wrote:
>>>
>>>>
>>>>
>>>> Hi,
>>>> If I feed my second mixer into a spectrum analyser, and inject a
>>>> 44.545MHz
>>>> LO, with no power to the first IF stage, I see spurs at about 48-50KHz
>>>> intervals on the mixer output, from 0 to the 455KHz normal output freq.
>>
>>>
>>>> The mixer is an SBL-1.
>>>>
>>>> Any ideas as to where these are comming from?
>>>>
>>>> Best regards,
>>>> John
>>>
>>>A couple of observations.
>>>
>>>If you simply disconnected the second mixer from the 1st mixer then it
>>>sounds like you do not have the output of the 1st mixer properly
>>>terminated. Unless, that is, the spectrum analyzer provides a good 50ohm
>>>termination in the probe. The SBL-1 is a double-balanced mixer but in
>>>order
>>>to get the "balance" to work right you must properly terminate *all*
>>>ports.
>>>Otherwise all kinds of impedances can be "thrown" back to the other
>>>ports -
>>>causing all kinds of problems with attached LO's and RF stages.
>>>
>>>Regularly spaced spurs from DC to 455khz does not sound like spurious
>>>mixing
>>>products. It sounds more like an oscillator being driven into saturation
>>>causing square waves to be produced which are providing regular harmonic
>>>outputs. This could be a product of poor terminations on the mixer ports.
>>
>> Tim, the LO is 45.455 (or 44.545) either way there should be no LF
>> outputs from the mixer below the LO injection unless it's a spur on
>> the LO.
>>
>>>Directly connecting the output of a SBL-1 to the input of another mixer,
>>>even another SBL-1, is not recommended either. The SBL-1 does not have
>>>built-in terminations. A good, symmetric, 50ohm 3db pad between the stages
>>>would provide a much better setup and would not significantly impact your
>>>overall noise factor. Be sure and connect your spectrum analyzer to the
>>>far

>>>side of the pad.
>>
>> Thats true though his testing is with a 20db IF after it and one would
>> hope that does present a 50ohm match to the IF port. Usually if the
>> poarts are badly matched the mixing spurs are greater and the port
>> to port isolation go to pot. If the only thing going in is the LO
>> then likely the LO is the source but if there is gain flollowing then
>> the gain stage is also suspect.
>>
>> I've worked with enough SBL1 and MD108s and all their similar DBMS
>> to know the SBL1 in this case is not the offendor Even if
>> misterminated. Likely causes are the 45mhz filter is looking reactive
>> to the IF amp and the IF is unstable (makes a fine OSC) or there is
>> some other source of RF that is unaccounted for (spurs).
>>
>>
>> Allison
>> Kb!GMX
>

3447. Re: Mosfet RF Amp "sprogging"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-06-30 23:46:14 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <aJipg.19085$ap3.13820@news-server.bigpond.net.au>
Source record: 11448

Thanks all for your input into this issue. I appreciate all the feedback I have received.

I do like to discover and understand the mechanism for this issue so I can avoid it next time.

"Sprogging" was probably not the best term to use afterall.

The unwanted response is a clean carrier with no sidebands.
This carrier appears within the tuning band of the amp tuned circuits and moves as either the input tuning
or Drain tuning is adjusted.

The Source is connected to ground plane.

The circuit now only just starts to produce a very low level signal (maybe around 60 dB down) when I unplug the input cable from the signal generator. If I terminate the floating cable with a 50 Ohm attenuator, the oscillation stops.

The most improvement has been achieved by addition of shielding between Input circuit and drain circuit.

I suspect that I am getting radiated signal fed back. I also suppose that as long as the path loss between drain and input is greater than the gain of the amp then the circuit should not be able to oscillate.

One other issue I were considering was that even though the circuit is built with very short leads directly on a continuous ground plane (PCB), Some "Pads" have been made by cutting away copper. But because the PCB is double sided, I wonder if the interaction between these pads make the lower ground plane and pads act like a capacitor (ie. energy coupled from the pads into the lower ground plane and up into other pads through capacitive coupling).

Maybe if it was single sided board or I add heaps of track pins from top to bottom layer would prove if this was the case.

Another thing is the coils do not have their own shields so they probably act like antennas. I think it would be prudent to use only shielded cans as I cannot always ensure large physical distance between them.

Regards

David

Steve N. wrote:
> "Eamon Skelton" <Xnospam@oceanfree.net> wrote in message
> news:BU4pg.10810$j7.315106@news.indigo.ie...
>> On Fri, 30 Jun 2006 03:36:28 +0000, David wrote:
>>
>>> Thanks for the feedback (no pun intended I appreciate it.
>>>
>>> I will add a shield between input and output circuit. I do remember
>>> seeing this in other designs. In my prototype construction I do have the
>>> input and output coils fairly close and in the same orientation so I
>>> imagine there very well could be coupling between them.
>>
>> I had a similar problem with a 2M RF amp. I cured it by
>> reversing the winding direction of one of the inductors.
>>
>>
>>> Can anyone suggest a reasonably simple method to determine noise figure
>>> of this stage ?
>> I'm a bit reluctant to suggest a method that I haven't tried
>> mysef, but you should be able to calculate NF by measuring the
>> receiver noise output with a hot and cold resistor connected
>> to the input. The usual method involves boiling water and
>> melting ice. http://tinyurl.com/psdfo
>>
>> 73, Ed. EI9GQ.
>>
>
> David,
> I don't know your technical level, but here goes. I thought the dual
> gate is a type of cascode arrangement and should be stable owing to the
> isolation of the "top" device... Anyway...
>
> You are very correct about trying to "band-aid" it with de-Q'ing resistors.
> You need to find the root cause, not hope a patch works. You are well aware
> of and trying to solve a possible proximity feedback issue, so I won't go
> there.
>
> It is not clear what your term "sprogging" may mean. There was a term
> "Squeeging" which referred to oscillation or what is also called
> regen(regeneration) which is typically used for dirty (sideband-type),
> rather than clean (single frequency) oscillation.
>
> Is the oscillation a clean, oscillator signal (pure carrier), or does it
> have sidebands?
> If sidebands, are they clear and distinct or is it more of a wideband
> grunge/garbage?
> Are the sidebands mirrored on both sides or are they lopsided?
> These are all clues.
>
> If you have regular sidebands or grunge, you have a low frequency
> oscillation component and need to also look at bypassing. 33-200 ohms or a

> ferrite bead in series with a bypass can help diagnose it.
> If the sidebands are unequal, there are most likely both AM and FM
> components to the oscillation. Putting a regular scope on the supply or
> other places which are supposed to be bypassed might see the signal, helping
> to ID the cause.
>
> Be aware that two bypasses in parallel, of different size, can become a
> tuned circuit and therefore a high impedance at frequencies where the larger
> one is above self resonance and appears inductive.
>
> Pay extreemly close attention to the ground currents for the input and
> output circuitry. You want to have an absolute minimum of common path for
> these. I didn't see anything in your circuit description about the FET
> source. If it is self biased with a resistor & cap combination or what, but
> from the source you should have two distinct paths in the ground you have to
> the respectice components tith no length of this "ground current path" in
> common - where both currents share a common path. you can even cut the PCB
> so there are two distinct ground planes which only meet at the FET source or
> its resistor/bypass cap.
> Watch the power supply side pretty much the same. Where does the Drain
> bypass connect to the plane?
>
> Hope this helps.
> 73, Steve, K9DCI
>
>

3448. Re: Using Garage for Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 00:20:16 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1151713216.174488.87780@d30g2000cwa.googlegroups.com>
Source record: 11449

Alex wrote:
> Hi Everyone,
>
> I hope to get my technician license for the first time in a month or
> two, and I've been thinking of setting-up shop in the garage once I
> start getting some radios and equipment.
>
> Some questions though, the garage is on the corner of our brick house
> with one smaller window (facing front of house), two walls are interior
> walls with other two being exterior (one having garage door).
>
> My thought is if I insulate the attic and the one exterior wall without
> the garage door then replace my aging garage door with a better sealing
> one, that should do the trick -- right? As for heating and cooling,
> i'm in central texas, and our summers do get hot. I don't think our
> A/C in the house could pump out enough cool air to cool an additional
> 430sqft, so any suggestions for that? The only window is on front of
> house, so don't want to use window unit. I have a radiant heater I've
> used in there for winter, and it works well.
>
> Thanks for any suggestions or ideas ... we don't park our cars in the
> garage, and I hope to build a small shead in the back yard for the
> mowers and such -- so that's 430sqft of space that's going to waste.
>
> Thanks again and take care ---
>
> Alex

Andy comments:

I'm in Nawth Taxes near Dallas, and your're right --- it gets REAL
hot
here in the summer. You do need air condx. And to air condx a whole
garage (about 20 x 20) needs a large unit....

Here is a suggestion that you might consider.... Wall off a closet

sized part of your garage, either with cheap panelling or maybe
plastic curtains, and get a Home Depot $70 air conditioner to use
just for that part..... Also good for space heater in winter....

Perhaps you can make sliding curtains like they do around hospital
beds..... A little 5000 BTU unit will cool the hell out of a small
closet-like
area, even if it is poorly insulated and leaks like hell.... The air
condx

can be mounted on a little dolly or something......venting into the rest
of the garage. And slid off on the side when not in use...

This may not be a great idea, because you still have to get your wife's permission and it changes your garage some, but I know it would work well.... Just go into the "corner", pull the curtains round you,
or slide the panelling or sliding doors or whatever, turn on the air condx
open a beer, and start tapping out CQ...... It costs about ten cents an hour to run the little air condx, so cost isn't a big deal here......
Just shrink the size you need down to the minimum you are comfortable with ---- maybe 5 x 5 or so.....

Or maybe it's a bad idea..... just an opinion.....

I use my tornado shelter. It is small, and cozy, and doesn't need air condx much cause it is soil temp in winter or summer.... Still gets a little cold, tho.... And the wife NEVER goes there, so I can put up my Elvira posters and not get any grief......

Andy in Eureka, Texas W4OAH

3449. Re: Questions about I.F. Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 00:24:26 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1151713466.081240.250440@p79g2000cwp.googlegroups.com>
Source record: 11450

Andy comments:

I think they will probably go that far, and you might be able to decrease the external cap 2-3% to help... ALSO, you might be able to use a brass or aluminum slug to raise the freq.... Tears heck out of the Q tho, so it's probably a last resort......

Also, you might take out the ferrite slug, grind off a little, and put it back so you can still tune it without backing it out all the way....

Andy W4OAH

3450. Re: Mosfet RF Amp "sprogging"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 00:33:51 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <v2gba2pngmseudtf06s95h78uk4lkve3a3@4ax.com>
Source record: 11451

On Fri, 30 Jun 2006 23:46:14 GMT, David <dhuisman@bigpond.net.au>
wrote:

>Thanks all for your input into this issue. I appreciate all the feedback
>I have received.
>
>I do like to discover and understand the mechanism for this issue so I
>can avoid it next time.
>
>"Sprogging" was probably not the best term to use afterall.
>
>The unwanted response is a clean carrier with no sidebands.
>This carrier appears within the tuning band of the amp tuned circuits
>and moves as either the input tuning
>or Drain tuning is adjusted.
>
>The Source is connected to ground plane.
>
>The circuit now only just starts to produce a very low level signal
>(maybe around 60 dB down) when I unplug the input cable from
>the signal generator. If I terminate the floating cable with a 50 Ohm
>attenuator, the oscillation stops.
>
>The most improvement has been achieved by addition of shielding between
>Input circuit and drain circuit.
>
>I suspect that I am getting radiated signal fed back. I also suppose
>that as long as the path loss between drain and input is greater than
>the gain of the amp then the circuit should not be able to oscillate.

You may try changing the input coil (less L and more C) and see if
that helps.

>
>One other issue I were considering was that even though the circuit is
>built with very short leads directly on a continuous ground plane (PCB),
>Some "Pads" have been made by cutting away copper. But because the PCB
>is double sided, I wonder if the interaction between these pads make the
>lower ground plane and pads act like a capacitor (ie. energy coupled
>from the pads into the lower ground plane and up into other pads through
>capacitive coupling).

Grount the top to the bottom of two sided boards. I use foil or braid
to wrap the edges.
Also add a few holes and put wires from top to bottom near the source

lead.

Next time rather than cutting pads in the board try this, Cut tiny
islands of PCB material and super glue them down. Then you have
isolated pads for SMT parts. For devices like BF998 in SMT I've
used board "chips" that are 0.1x0.2 inch and that works fine.

FYI when I used that device the source has a 100 ohm resistor to
ground and the bypass cap is .001(for 6m) with a ferrite bead
on the non grounded lead. That is a "stock" circuit for DG fets
and it seems well behaved to me.

>Maybe if it was single sided board or I add heaps of track pins from top
>to bottom layer would prove if this was the case.

Do the latter. If you wrap the edges and put pins through near
grounded compnents that's enough (likely only a few needed).

>Another thing is the coils do not have their own shields so they
>probably act like antennas. I think it would be prudent to use only
>shielded cans as I cannot always ensure large physical distance between
>them.

That helps.

Also make sure the output side has a valid load on it too.

Do not load or resistive pad the input as that degrades the NF and
gain.

Allison

>
>Regards
>
>David
>
>Steve N. wrote:
>> "Eamon Skelton" <Xnospam@oceanfree.net> wrote in message
>> news:BU4pg.10810$j7.315106@news.indigo.ie...
>>> On Fri, 30 Jun 2006 03:36:28 +0000, David wrote:
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>>> reversing the winding direction of one of the inductors.
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>>> I'm a bit reluctant to suggest a method that I haven't tried
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>>> receiver noise output with a hot and cold resistor connected
>>> to the input. The usual method involves boiling water and
>>> melting ice. http://tinyurl.com/psdfo
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>>> 73, Ed. EI9GQ.
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>>
>> David,
>> I don't know your technical level, but here goes. I thought the dual
>> gate is a type of cascode arrangement and should be stable owing to the
>> isolation of the "top" device... Anyway...
>>
>> You are very correct about trying to "band-aid" it with de-Q'ing resistors.
>> You need to find the root cause, not hope a patch works. You are well aware
>> of and trying to solve a possible proximity feedback issue, so I won't go
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>> It is not clear what your term "sprogging" may mean. There was a term
>> "Squeeging" which referred to oscillation or what is also called
>> regen(regeneration) which is typically used for dirty (sideband-type),
>> rather than clean (single frequency) oscillation.
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>> have sidebands?
>> If sidebands, are they clear and distinct or is it more of a wideband
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>> Are the sidebands mirrored on both sides or are they lopsided?
>> These are all clues.
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>> If you have regular sidebands or grunge, you have a low frequency
>> oscillation component and need to also look at bypassing. 33-200 ohms or a
>> ferrite bead in series with a bypass can help diagnose it.
>> If the sidebands are unequal, there are most likely both AM and FM
>> components to the oscillation. Putting a regular scope on the supply or
>> other places which are supposed to be bypassed might see the signal, helping
>> to ID the cause.
>>
>> Be aware that two bypasses in parallel, of different size, can become a
>> tuned circuit and therefore a high impedance at frequencies where the larger
>> one is above self resonance and appears inductive.
>>
>> Pay extreemly close attention to the ground currents for the input and
>> output circuitry. You want to have an absolute minimum of common path for
>> these. I didn't see anything in your circuit description about the FET
>> source. If it is self biased with a resistor & cap combination or what, but
>> from the source you should have two distinct paths in the ground you have to

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>> common - where both currents share a common path. you can even cut the PCB
>> so there are two distinct ground planes which only meet at the FET source or
>> its resistor/bypass cap.
>> Watch the power supply side pretty much the same. Where does the Drain
>> bypass connect to the plane?
>>
>> Hope this helps.
>> 73, Steve, K9DCI
>>
>>

3451. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 06:30:05 UTC
From: larson@w6yx.stanford.edu
Message-ID: <e854pd$dj2$1@news.Stanford.EDU>
Source record: 11452

In article <1150742942.564318.271840@p79g2000cwp.googlegroups.com>
eternalsquire@comcast.net writes:

>Thank you all for your suggestions.
>
>This is not a hoax. But I too find the need sufficiently implausible
>that I feel a little bit queasy taking R&D fees for a cause like this
>at $50 per hour. The only reason that I'm not mentioning the
>consulting firm is that I could stand to get paid... and any money is
>better than no money. And if I'm the king's coin then I ought to make
>it work.
>
>I agree, Truck stops are a very good idea for commandeering CB's, but
>you only find those in the exurbs.. Yes, other commercial radio
>services could and maybe even should be drafted into this. The squad
>lead could then determine the tradeoffs based on the availability of
>foraged equipment.
>
>Allison, your idea of using the dummy loads to simulate fading over
>distance is OUTSTANDING. I'll do it!
>
>Using dummy loads as a demo, I could then get the consulting firm to
>ask the FCC for an STA for field tests.
>
>For my test rigs, I'm intending to plug in a laptop sound card I/O into
>the SSB mic and headphone jacks. Therefore no type acceptance needed
>because no mods.

As soon as you plug in something other than the approved mike, you have
probably broken type acceptance.

>My brother says ideally in the scenario, each squad leader should only
>need to carry a mini-CDROM in his or her pocket. The squad lead could
>then commandeer a laptop, an SSB CB radio, and then use an abandoned
>automobile as an electric generator for the laptop and radio. Antenna
>would be flung over a 3 story office building.

SSB CB radios are fairly rare nowdays.

The microphone connection is non-standard, and won't directly wire to
a sound card.

A wire flung over a 3 story office building won't be matched. It will
likely work poorly, or it may even fry the transmitter.

>One of the reasons for this scenario is to lighten the overall squad
>load and thereby increase the speed of response. That way each squad
>could break into an abandoned store and then set up a first responder
>posts.

A 1 to 2 pound VHF radio will give better coverage, will function as
they are going in, and will free up personnel labor for more important
tasks.

Wasting a person's time setting something like this up is more serious
than carrying a small hand-held radio.

Alan

3452. Re: is an STA needed to transmit data on CB channel 40?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 06:33:41 UTC
From: larson@w6yx.stanford.edu
Message-ID: <e85505dlf1@news.Stanford.EDU>
Source record: 11453

In article <1150761212.462138.299280@y41g2000cwy.googlegroups.com>
eternalsquire@comcast.net writes:
>
>jimp@specsol.spam.sux.com wrote:
>> eternalsquire@comcast.net wrote:
>
>> Let's see, all you have to do is find a bunch of laptops with 12V
>> adapters,
>
>12V power is standard power jack for laptops

No, it isn't. Many use higher voltages.

> a bunch of CB radios with documentation on the mic input,
>
>The docs could be on the CD-ROM. Squad leader or designate
>could read that using the laptop.
>
>> a soldering iron to make up a mic/laptop interface cable (assuming
>> you can use the existing mic cable connector).
>Shouldn't be too hard.
>
>>
>> The only problem left is how to get the abandoned automobile to the
>> top of the 3 story office building (if any are left standing in this
>> disaster).
>The feed could start at street level and connect to a dipole on the
>rooftop.

Carrying a 1 to 2 pound VHF radio in will provide communications all the
way in. Using it will save a lot of personnel time that can be used for
something more important that hacking together something with a CB that
would work very poorly if at all.

Conclusion: This must be a troll. I hope that nobody in our government
is *STUPID* enough to fall for such a plan.

Alan

3453. Re: Self-heating of crystal in inverter oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 07:23:19 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrneac8n7.lqd.ben@saturn.home.ben.com>
Source record: 11454

On 2006-06-30, nospam@nouce.bellatlantic.net <nospam@nouce.bellatlantic.net> wrote:
> From a stability factor point of view those "inverter" based
> oscillators are amoung the worst.

Good to know. I was trying to reduce part count -- the quad XOR provides
the two oscillators plus one mixer.

> and I bet there are parameter shifts in the "chip" as it warms up

The other parameter shift I was missing was droop in the 5V rail as
the 78L05 warmed up (rapidly!) and noise injected by a MAX202 charge
pump also on that 5V rail. I thought that regulator was just for an
(unused) LCD header, but I was wrong.

> I suggest a discrete Bipolar or FET where you can control the
> operating point of the device better.

If I can't tame this VCXO I will try that. This must be how Manhattan
prototyping branches off into "Ugly"...

--
Ben Jackson
<ben@ben.com>
http://www.ben.com/

3454. Re: Questions about I.F. Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 08:33:57 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <labca29uvhfcl0d43o6imba6jv6la8e49n@4ax.com>
Source record: 11455

On 29 Jun 2006 16:40:54 -0700, "Jody" <jlw_5178@yahoo.com> wrote:

>I can't seem to find any I.F. transformers for 465 KHZ. I was wondering
>if you can use the 455 khz ones instead without changing any other
>components. I'm building a reciever that calls for 465.

What exactly specifies that the 465 kHz must be used ?

Is there a frequency synthesiser or frequency counter with specifies a
fixed 465 kHz offset ? If not, just run the local oscillator at a
frequency 10 kHz lower to produce the 455 kHz IF and calibrate the
scale accordingly.

If this is a dual conversion receiver, change the second mixer
oscillator frequency.

Paul OH3LWR

3455. Re: Mosfet RF Amp "sprogging"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 10:56:49 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <PJudncQIGOd4yTvZRVnyrA@pipex.net>
Source record: 11456

> One other issue I were considering was that even though the circuit is
> built with very short leads directly on a continuous ground plane (PCB),
> Some "Pads" have been made by cutting away copper. But because the PCB
> is double sided, I wonder if the interaction between these pads make the
> lower ground plane and pads act like a capacitor (ie. energy coupled
> from the pads into the lower ground plane and up into other pads through
> capacitive coupling).
>
> Maybe if it was single sided board or I add heaps of track pins from top
> to bottom layer would prove if this was the case.
==========
With only having double sided PCB material I drill various holes and
bond the 2 planes at different locations by soldering wires on both planes.
For VHF/UHF circuits (in addition to the above) I line the circumference
of the material by folding 6mm wide thin (abt 0.2mm thick)copper strip
onto both planes and solder. I found a 'half a mile long ' roll of this
material at a flea market .

Frank GM0CSZ / KN6WH

3456. Re: Using Garage for Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 11:02:36 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <Ve6dnaV3y6fcyzvZRVnyjg@pipex.net>
Source record: 11457

> I use my tornado shelter. It is small, and cozy, and doesn't need
> air condx much cause it is soil temp in winter or summer.... Still
> gets a little cold, tho.... And the wife NEVER goes there, so I can
> put up my Elvira posters and not get any grief......
==========
I thought you would get enough excitement from Ham Radio alone.....;))

Frank GM0CSZ / KN6WH

3457. Re: Mosfet RF Amp "sprogging"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 13:43:29 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <5_upg.19499$ap3.6117@news-server.bigpond.net.au>
Source record: 11458

Thanks for your input everyone.

I re-constructed the layout using SMD components on a bare copper PCB.
This time I changed the typology slightly and added 100R with 1n in the
source of the BF998. I placed a 2k7 across the drain coil to set correct
Rp for the DTC bandwidth.

I also changed the tuning coils for fixed coils and tuned with variable
caps instead.

The circuit seems stable now. The Amp has total gain of 23dB (includes
loss of the input filter and double tuned circuit).
All caps are tuning properly with no unexpected behaviour.

I have not yet added any shielding or connected vias from top to bottom
plane of the PCB.

The tuning range is almost as calculated (6MHz Bandwidth at Fo = 150 MHz).

Does anyone know what an reasonable 1dB compression point would be for
a the BF998 at 150 Mhz ? The drain current seems a bit low (about 3mA)
and I think this may need increasing to get a reasonable dynamic range ?

The gate 2 bias is currently 4V. This should not be pinching off the
drain current at all. I wonder if the 100 Ohm in the source should be
made smaller ? Any ideas.

Thanks

Regards

David

Highland Ham wrote:
>> One other issue I were considering was that even though the circuit is
>> built with very short leads directly on a continuous ground plane
>> (PCB), Some "Pads" have been made by cutting away copper. But because
>> the PCB is double sided, I wonder if the interaction between these
>> pads make the lower ground plane and pads act like a capacitor (ie.
>> energy coupled from the pads into the lower ground plane and up into
>> other pads through capacitive coupling).
>>
>> Maybe if it was single sided board or I add heaps of track pins from
>> top to bottom layer would prove if this was the case.
> ============================
> With only having double sided PCB material I drill various holes and
> bond the 2 planes at different locations by soldering wires on both planes.
> For VHF/UHF circuits (in addition to the above) I line the circumference

> of the material by folding 6mm wide thin (abt 0.2mm thick)copper strip
> onto both planes and solder. I found a 'half a mile long ' roll of this
> material at a flea market .
>
> Frank GM0CSZ / KN6WH

3458. Re: Using Garage for Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 13:45:30 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1151761530.682577.246740@75g2000cwc.googlegroups.com>
Source record: 11459

Highland Ham wrote:
> > I use my tornado shelter. It is small, and cozy, and doesn't need
> > air condx much cause it is soil temp in winter or summer.... Still
> > gets a little cold, tho.... And the wife NEVER goes there, so I can
> > put up my Elvira posters and not get any grief......
> ==========
> I thought you would get enough excitement from Ham Radio alone.....;))
>
> Frank GM0CSZ / KN6WH

Andy replies:

Sure.... but with a cold beer, Elvira to look at, and some juicey DX
on the rig -------- hit don't git no better !!!

3459. Re: Mosfet RF Amp "sprogging"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 13:58:44 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <0cvca2p5c8l02ljro604h9jegjc6esen8j@4ax.com>
Source record: 11460

On Sat, 01 Jul 2006 13:43:29 GMT, David <dhuisman@bigpond.net.au>
wrote:

>Thanks for your input everyone.
>
>I re-constructed the layout using SMD components on a bare copper PCB.
>This time I changed the typology slightly and added 100R with 1n in the
>source of the BF998. I placed a 2k7 across the drain coil to set correct
>Rp for the DTC bandwidth.
>
>I also changed the tuning coils for fixed coils and tuned with variable
>caps instead.
>
>The circuit seems stable now. The Amp has total gain of 23dB (includes
>loss of the input filter and double tuned circuit).
>All caps are tuning properly with no unexpected behaviour.
>
>I have not yet added any shielding or connected vias from top to bottom
>plane of the PCB.
>
>The tuning range is almost as calculated (6MHz Bandwidth at Fo = 150 MHz).
>
>Does anyone know what an reasonable 1dB compression point would be for
>a the BF998 at 150 Mhz ? The drain current seems a bit low (about 3mA)
>and I think this may need increasing to get a reasonable dynamic range ?

Before you get too concerned over the amps DR you need to consider
that the RX following will be typically be degraded in DR by the
amount of gain ahead of it. That would be true for most cases unless
the RX has a IP if +10DBm or better.

I haven't meaured many of those amps for DR but 1db compression
is around a few DBm (one was at +2dbm and the other was +5dbm
output) by then most recievers are grossly overloaded.

>The gate 2 bias is currently 4V. This should not be pinching off the
>drain current at all. I wonder if the 100 Ohm in the source should be
>made smaller ? Any ideas.

FETs have good dynamic range for their current. You can lower the
100r but the increase in DR is small. You can also play with the
bias to gate 2 (go for the high current side of peak gain).

Allison

>
>Thanks
>
>Regards
>
>David
>
>
>
>Highland Ham wrote:
>>> One other issue I were considering was that even though the circuit is
>>> built with very short leads directly on a continuous ground plane
>>> (PCB), Some "Pads" have been made by cutting away copper. But because
>>> the PCB is double sided, I wonder if the interaction between these
>>> pads make the lower ground plane and pads act like a capacitor (ie.
>>> energy coupled from the pads into the lower ground plane and up into
>>> other pads through capacitive coupling).
>>>
>>> Maybe if it was single sided board or I add heaps of track pins from
>>> top to bottom layer would prove if this was the case.
>> ==============================
>> With only having double sided PCB material I drill various holes and
>> bond the 2 planes at different locations by soldering wires on both planes.
>> For VHF/UHF circuits (in addition to the above) I line the circumference
>> of the material by folding 6mm wide thin (abt 0.2mm thick)copper strip
>> onto both planes and solder. I found a 'half a mile long ' roll of this
>> material at a flea market .
>>
>> Frank GM0CSZ / KN6WH

3460. Re: Self-heating of crystal in inverter oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 14:04:33 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <8vvca294jm11qma8glha502eu4rrmgqgkv@4ax.com>
Source record: 11461

On Sat, 01 Jul 2006 02:23:19 -0500, Ben Jackson <ben@ben.com> wrote:

>On 2006-06-30, nospam@nouce.bellatlantic.net <nospam@nouce.bellatlantic.net> wrote:
>> From a stability factor point of view those "inverter" based
>> oscillators are amoung the worst.
>
>Good to know. I was trying to reduce part count -- the quad XOR provides
>the two oscillators plus one mixer.
>
>> and I bet there are parameter shifts in the "chip" as it warms up
>
>The other parameter shift I was missing was droop in the 5V rail as
>the 78L05 warmed up (rapidly!) and noise injected by a MAX202 charge
>pump also on that 5V rail. I thought that regulator was just for an
>(unused) LCD header, but I was wrong.

Those added elements don't help. However I've used flavors
(both TTL and CMOS) of the circuit and stability is only ok at best.
One use was a simple freq counter (commercial purchase) and I
could never get it to stay zeroed on WWV, it was always 100hz or
more off every time I'd check it. I tried everything and finally
pulled that out and added a simple transistor circuit. After than the
error was usually less than a few hz.

>> I suggest a discrete Bipolar or FET where you can control the
>> operating point of the device better.
>
>If I can't tame this VCXO I will try that. This must be how Manhattan
>prototyping branches off into "Ugly"...

It do at that. ;)

Allison

3461. Re: Using Garage for Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 14:36:40 UTC
From: john graesser <graesser@tca.net>
Message-ID: <12ad1pqjm50l90b@corp.supernews.com>
Source record: 11462

"Alex" <samalex@gmail.com> wrote in message
news:1151699486.365534.315290@y41g2000cwy.googlegroups.com...
> Hi Everyone,
>
> I hope to get my technician license for the first time in a month or
> two, and I've been thinking of setting-up shop in the garage once I
> start getting some radios and equipment.
>
> Some questions though, the garage is on the corner of our brick house
> with one smaller window (facing front of house), two walls are interior
> walls with other two being exterior (one having garage door).
>
> My thought is if I insulate the attic and the one exterior wall without
> the garage door then replace my aging garage door with a better sealing
> one, that should do the trick -- right? As for heating and cooling,
> i'm in central texas, and our summers do get hot. I don't think our
> A/C in the house could pump out enough cool air to cool an additional
> 430sqft, so any suggestions for that? The only window is on front of
> house, so don't want to use window unit. I have a radiant heater I've
> used in there for winter, and it works well.
>
> Thanks for any suggestions or ideas ... we don't park our cars in the
> garage, and I hope to build a small shead in the back yard for the
> mowers and such -- so that's 430sqft of space that's going to waste.

I'm also here in central TX and have the additional penalty in that I live in an apartment. My shack is in my car, it doesn't take up much room to install a vhf radio and an hf radio. I do have duplicates in the apartment in the event that the car is out of service. I just don't have the hf rig in the apt hooked up to an antenna full time since the manager is not ham friendly. If I want to work hf I just drive the car to the top of a hill and tune up, idling with the ac running it works just fine for the 9 months of summer, with the heater running for the 2 months of winter and with the windows open for each of the 2 weeks of spring and fall. If you are more interested in emergency operations, then tying yourself to your garage can be a negative.
thanks, John.
KC5DWD

3462. Re: Using Garage for Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 16:04:54 UTC
From: Larry Gagnon <lggagnon@fakeuniserve.com>
Message-ID: <pan.2006.07.01.16.04.54.394075@fakeuniserve.com>
Source record: 11463

On Fri, 30 Jun 2006 13:31:26 -0700, Alex wrote:

> Hi Everyone,
>
> I hope to get my technician license for the first time in a month or
> two, and I've been thinking of setting-up shop in the garage once I
> start getting some radios and equipment.
>
> Some questions though, the garage is on the corner of our brick house
> with one smaller window (facing front of house), two walls are interior
> walls with other two being exterior (one having garage door).

Andy: my answer is completely lateral thinking, but if for some reason the whole ham shcak thing at your home doesn't work out what about HF/VHF mobile from your car (with A/C of course), or join your local ham radio club that has its own station. I know from experience that many club stations often get very little use!

Good luck with your solutions...
Larry VE7EA

3463. IEEE Standard for RF Safety Levels

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 16:55:40 UTC
From: "Dr. Jeff" <drjeff@optonline.net>
Message-ID: <1151772940.769643.43270@v61g2000cwv.googlegroups.com>
Source record: 11464

Can anyone refer me to a link where I can access (for FREE) the "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields"; C95.1-1992 or similar document that covers exposure guidelines for specific RF frequencies.
I'm detecting extremely high levels of 4.2 to 4.5 Mhz. RF from a Cable TV companys pole mounted equipment in front of my home.

Jeff

3464. Re: IEEE Standard for RF Safety Levels

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 17:56:22 UTC
From: Bruce in Alaska <bruceg@btpost.net>
Message-ID: <bruceg-41A50B.09575701072006@netnews.worldnet.att.net>
Source record: 11465

In article <1151772940.769643.43270@v61g2000cwv.googlegroups.com>,
"Dr. Jeff" <drjeff@optonline.net> wrote:

> Can anyone refer me to a link where I can access (for FREE) the "IEEE
> Standard for Safety Levels with Respect to Human Exposure to Radio
> Frequency Electromagnetic Fields"; C95.1-1992 or similar document that
> covers exposure guidelines for specific RF frequencies.
> I'm detecting extremely high levels of 4.2 to 4.5 Mhz. RF from a Cable
> TV companys pole mounted equipment in front of my home.
>
> Jeff
>

Anything that is radiating from a "Cable Tv" cable will be FAR below the
Human Exposure Safety Level. The signal levels on those distribution
feeds rarely ever get above +10dbm and the frequency your seeing is
usually used in the "Return to Headend" direction which will have less
power than the Main Distribution Channels. The FCC has very strict
guidelines for ammount of RF Radiation allowed to leak from those type
systems, so I would contact the Cable company and let them know, but it
isn't a Health Hazard, or even close.

Bruce in alaska a reTIRED FCC Field Agent.....
--
add a <2> before @

3465. Re: IEEE Standard for RF Safety Levels

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 18:54:01 UTC
From: fmmck@aol.com
Message-ID: <fmmck-0107061454010001@aca4a659.ipt.aol.com>
Source record: 11466

In article <1151772940.769643.43270@v61g2000cwv.googlegroups.com>, "Dr. Jeff" <drjeff@optonline.net> wrote:

> Can anyone refer me to a link where I can access (for FREE) the "IEEE
> Standard for Safety Levels with Respect to Human Exposure to Radio
> Frequency Electromagnetic Fields"; C95.1-1992 or similar document that
> covers exposure guidelines for specific RF frequencies.
> I'm detecting extremely high levels of 4.2 to 4.5 Mhz. RF from a Cable
> TV companys pole mounted equipment in front of my home.

Jeff-

I don't know about the IEEE standard, but you might check out the FCC Safety web site at
www.fcc.gov/oet/rfsafety
and look for their Bulletins 56 and 65. In particular, Bulletin 65 describes alloowable levels and how to measure them, for various frequencies.

Bulletin 65 may have a reference to the IEEE standard you are looking for, if it exists.

Fred

3466. Re: Using Garage for Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 19:46:34 UTC
From: dkelly42@cox.net
Message-ID: <1151783194.552958.314490@m79g2000cwm.googlegroups.com>
Source record: 11467

I am in Central Oklahoma. It is a little cooler in Oklahoma but not much.

I built a garage shack a couple years ago. I framed a 9 x 9 room and insulated the ceiling and outside walls. I sheet rocked, texturized and painted the inside. One side is a rib-high workbench with shelves for parts, tools and my test gear. I was more concerned with the workspace but left room for an operating position on an opposite wall.

Check Ace Hardware's portable air conditioners. I have a roll-around that vents into the garage and sits in one corner on wheels. I am considering adding the house system at some time as the main unit is 3 feet from the room. However, the portable is better than I expected. These units can be purchased with heaters too.

I decided to make the room permanent. It is airtight and heats and cools well. But simple plywood and insulation would provide a good start.
Very temporary walls could be build but in my case I wanted a solid door. Also, a couple 100W light bulbs keep the room decent the whole winter at 60 deg or above.

I also have intake air drawn from a less unused portion of the house with a small one way dryer vent when I used the airconditioner. Not real efficient but I don't see the effect on my electric bill.

A little more complex but lets me use the shop during the hottest parts of the summer days.

I had always wanted a secluded room/shop of my own and I have been real happy with it. I build tube gear and its most enjoyable on those cold winter nights when no heater is needed with 21 tubes blazing away.

BTW, in my old house I merely put some heavy cloth material around the bench in the winter and used a small space heater. Totally unsafe but I was younger, dumber.....and luckier.

K5UOS

3467. Re: Spurs on mixer output

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 19:50:17 UTC
From: Pete KE9OA <p.gianako@comcast.net>
Message-ID: <FaKdnUGToqVITDvZnZ2dnUVZ_omdnZ2d@comcast.com>
Source record: 11468
Body handling: HTML body converted to readable text

This thread is directed at the author, not you. The purpose of my posting in the latest position of the thread is to move things in a chronological order. The original poster knows how to read, so it is quite possible that this person won't miss my posting.

Pete

wrote in message
news:r77ba2dqivor2ss3msqp48u3lqm3962r76@4ax.com...
> On Fri, 30 Jun 2006 06:48:45 -0500, "Pete KE9OA"
> wrote:
>
>>What kind of spectrum analyzer are you using? What are the front end
>
> I'm not using one the author of the thread is.
>
>>attenuator settings on the spectrum analyzer? What is your reference
>>level?
>
> Ask him not me.
>
>>All of these things, especially the front end attenuator settings, can
>>affect your result. If the 1st mixer in the spectrum analyzer is driven
>>into
>>nonlinearity, you can see all kinds of IMD products that are generated in
>>the analyzer itself.
>>Also, why are you doing this test with the RF port of the mixer terminated
>>in 50 Ohms? This type of termination is only used when doing either
>>return
>>loss tests or noise balance tests.
>>If you are driving the SBL-1 mixer with +7 to +9dBm of LO level and you
>>are
>>driving the RF port with a signal that is at least 20dB below the 1dB
>>compression point of the SBL-1, the main things you should see at the I.F.
>>port are a supressed LO signal, an upper sideband that is about 7dB lower
>>in
>>level than the RF injection level, and a lower sideband that is also about
>>7dB lower in level than the RF injection level.
>>The 1dB compression point on the SBL-1 is about 0dBm, so I would set the
>>level to the RF port at -20dBm. If you go above this level, you will see
>>higher conversion loss, and possibly more IMD products at the I.F. port of
>>the mixer.
>>In conclusion, make sure that the IMD isn't being generated in your test
>>setup, and make sure that you are not exceeding the recommended RF input

>>level to the SBL-1.
>>
>>Pete
>
> You top posted to a reply that I'd posted to and your context is way
> off as a result. Go bat to the root of the thread and read the
> posting again.
>
> Briefly, he's seeing spurs every 25 or 50 khz with a LO in the 45mhz
> region and NO RF on the input (unterminated RF port).
>
> Allison
>
>
>>
>> wrote in message
>>news:p9o5a21152qsldg22fqccf0tm1ba7grf2d@4ax.com...
>>> On Wed, 28 Jun 2006 07:43:20 -0500, tim gorman
>>> wrote:
>>>
>>>>john wilkinson wrote:
>>>>
>>>>>
>>>>>
>>>>> Hi,
>>>>> If I feed my second mixer into a spectrum analyser, and inject a
>>>>> 44.545MHz
>>>>> LO, with no power to the first IF stage, I see spurs at about 48-50KHz
>>>>> intervals on the mixer output, from 0 to the 455KHz normal output
>>>>> freq.
>>>
>>>>
>>>>> The mixer is an SBL-1.
>>>>>
>>>>> Any ideas as to where these are comming from?
>>>>>
>>>>> Best regards,
>>>>> John
>>>>
>>>>A couple of observations.
>>>>
>>>>If you simply disconnected the second mixer from the 1st mixer then it
>>>>sounds like you do not have the output of the 1st mixer properly
>>>>terminated. Unless, that is, the spectrum analyzer provides a good 50ohm
>>>>termination in the probe. The SBL-1 is a double-balanced mixer but in
>>>>order
>>>>to get the "balance" to work right you must properly terminate *all*
>>>>ports.
>>>>Otherwise all kinds of impedances can be "thrown" back to the other
>>>>ports -

>>>>causing all kinds of problems with attached LO's and RF stages.
>>>>
>>>>Regularly spaced spurs from DC to 455khz does not sound like spurious
>>>>mixing
>>>>products. It sounds more like an oscillator being driven into saturation
>>>>causing square waves to be produced which are providing regular harmonic
>>>>outputs. This could be a product of poor terminations on the mixer
>>>>ports.
>>>
>>> Tim, the LO is 45.455 (or 44.545) either way there should be no LF
>>> outputs from the mixer below the LO injection unless it's a spur on
>>> the LO.
>>>
>>>>Directly connecting the output of a SBL-1 to the input of another mixer,
>>>>even another SBL-1, is not recommended either. The SBL-1 does not have
>>>>built-in terminations. A good, symmetric, 50ohm 3db pad between the
>>>>stages
>>>>would provide a much better setup and would not significantly impact
>>>>your
>>>>overall noise factor. Be sure and connect your spectrum analyzer to the
>>>>far
>>>>side of the pad.
>>>
>>> Thats true though his testing is with a 20db IF after it and one would
>>> hope that does present a 50ohm match to the IF port. Usually if the
>>> poarts are badly matched the mixing spurs are greater and the port
>>> to port isolation go to pot. If the only thing going in is the LO
>>> then likely the LO is the source but if there is gain flollowing then
>>> the gain stage is also suspect.
>>>
>>> I've worked with enough SBL1 and MD108s and all their similar DBMS
>>> to know the SBL1 in this case is not the offendor Even if
>>> misterminated. Likely causes are the 45mhz filter is looking reactive
>>> to the IF amp and the IF is unstable (makes a fine OSC) or there is
>>> some other source of RF that is unaccounted for (spurs).
>>>
>>>
>>> Allison
>>> Kb!GMX
>>
>

3468. Re: Questions about I.F. Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 19:54:56 UTC
From: Pete KE9OA <p.gianako@comcast.net>
Message-ID: <8--dnVKnXamTTjvZnZ2dnUVZ_uydnZ2d@comcast.com>
Source record: 11469

If it is a Toko transformer, this will typically tune from around 400kHz to 500kHz, depending on the specific component.

Pete

"Paul Keinanen" <keinanen@sci.fi> wrote in message news:labca29uvhfcl0d43o6imba6jv6la8e49n@4ax.com...
> On 29 Jun 2006 16:40:54 -0700, "Jody" <jlw_5178@yahoo.com> wrote:
>
>>I can't seem to find any I.F. transformers for 465 KHZ. I was wondering
>>if you can use the 455 khz ones instead without changing any other
>>components. I'm building a reciever that calls for 465.
>
> What exactly specifies that the 465 kHz must be used ?
>
> Is there a frequency synthesiser or frequency counter with specifies a
> fixed 465 kHz offset ? If not, just run the local oscillator at a
> frequency 10 kHz lower to produce the 455 kHz IF and calibrate the
> scale accordingly.
>
> If this is a dual conversion receiver, change the second mixer
> oscillator frequency.
>
> Paul OH3LWR
>

3469. Re: IEEE Standard for RF Safety Levels

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-01 21:54:13 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <9aCpg.1822$uC3.1055@trnddc08>
Source record: 11470

Dr. Jeff wrote:
> Can anyone refer me to a link where I can access (for FREE) the "IEEE
> Standard for Safety Levels with Respect to Human Exposure to Radio
> Frequency Electromagnetic Fields"; C95.1-1992 or similar document that
> covers exposure guidelines for specific RF frequencies.
> I'm detecting extremely high levels of 4.2 to 4.5 Mhz. RF from a Cable
> TV companys pole mounted equipment in front of my home.
>
> Jeff
>

You are "detecting extremely high levels of 4.2 to 4.5 Mhz. RF"? How do you know?

Please give some numbers. In any units with which you are familiar.

3470. Re: IEEE Standard for RF Safety Levels

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 00:55:03 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1151801703.859338.130820@j8g2000cwa.googlegroups.com>
Source record: 11471

Dr. Jeff wrote:
> Can anyone refer me to a link where I can access (for FREE) the "IEEE
> Standard for Safety Levels with Respect to Human Exposure to Radio
> Frequency Electromagnetic Fields"; C95.1-1992 or similar document that
> covers exposure guidelines for specific RF frequencies.
> I'm detecting extremely high levels of 4.2 to 4.5 Mhz. RF from a Cable
> TV companys pole mounted equipment in front of my home.
>
> Jeff

Andy writes:

If I remember correctly, a graph is presented in the ARRL Handbook
giving the safety levels.

Just a minute --- I'll go look it up.....

Ok, from the 1992 ARRL handbook with the proposed 1991 ANSI standard,
the RF level at around 4.5 Mhz is:

For controlled environment 60 V/M

For Uncontrolled environment 30 V/M

I may be a little off since the graph isn't very big and is hard to
read....

If you need power density, just square the V/M and divide by 377 and
you will have watts per sq meter....(assuming far field0

If you need magnetic intensity, just divide the V/M by 377 and you
get amps per meter....(again, far field)

These are BIG fields. It takes a LOT of 4.5 Mhz field to hurt
you......

This stuff ain't rocket surgery..... Shucks, if big 80 meter fields
would
hurt a person, I'd have gone crazy long ago.... :>)))))))))

Anyway, more than likely these were the adopted standards. I don't
have
a more current book available....

Andy W4OAH (registered EMC engineer , expired after
retirement)

3471. Re: Filter type

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 01:14:17 UTC
From: Pete KE9OA <p.gianako@comcast.net>
Message-ID: <GIqdncmam4J1gDrZnZ2dnUVZ_oOdnZ2d@comcast.com>
Source record: 11472

It sounds like the shunt cap on the filter end may be used for tuning out
any inductive reactance in the filter itself. The rest of the circuit, with
the series L, shunt C might be used as an impedance matching network that
would step the impedance of the filter up to a new value.
This type of arrangement, without the shunt C at the input end is a classic
way of matching a 50 Ohm doubly-balanced mixer output to a high impedance
crystal filter. Good design practice would usually have the coupling caps to
have an impedance of between 1 and 2 Ohms.
Now, if you were feeding a lower impedance load, you could look at this
network from the load end as a series L, shunt C matching network that would
match the impedance of the load to the higher impedance of the crystal
filter. In this case, the shunt C would be to tune out the imaginary
inductive term at the input of the load itself (this would be called
conjugate matching).
If you were to connect this circuit to an RF network analyzer, you would be
able to see the magnitude and the angle of these terms, but a good
simulation program such as Ansoft Designer (free) would show you what is
going on. You would need to have models of the devices in the load itself
for maximum accuracy.
That's the fun part of RF design.....the experimentation and the
learning!

Pete

"AndyS" <andysharpe@juno.com> wrote in message
news:1151546742.971630.126340@x69g2000cwx.googlegroups.com...
>
> john wilkinson wrote:
>> Hi,
>> When I was looking at an IF amp in the "Experimental mathods in RF", I
>> noticed a filter I have not seen before.
>> I will try to describe:
>>
>> 200 Ohm i/p impedance feeding 1 cap. The othe side of the cap feeds
>> another cap down to ground and an inductor. The other side of the
>> inductor
>> has a cap down to ground. The junction of the ind and cap, has another
>> cap
>> feeding a load of 100 Ohm.
>>
>> When I simulate this it is a bandpass filter.
>>
>> What do you call this filter, and where can I find some info about it?
>>
>> Thanks,

>> John
>
> Andy writes:
>
> This is a 3 pole low pass filter. The type (butterworth,
> chebychev, bessel, etc)
> is determined by the component values, as are the frequency , skirt
> selectivity and impedance.
> Look in the ARRL handbook for typical configurations and
> values....This
> filter can also be used to transform impedances, although when that is
> done
> you leave the "type" classification and become more just a low pass
> impedance transformer.....
>
> It ain't rocket surgery, but if you aren't into LaPlace transforms,
> you need
> to stick with the tables.... or the simulator.....
>
> The cap connected to the 200 ohm output is just for coupling and
> is
> usually really big, but, in some cases , may be made small enough to
> provide a small breakpoint for high pass but at a frequency
> considerably
> lower than the low pass passband.....
>
> If you use PSPICE , or equiv, to simulate it, you can learn a great
> deal...
>
> Andy W4OAH
>

3472. Re: Using Garage for Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 01:44:58 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <eyFpg.40815$EX2.26089@bignews5.bellsouth.net>
Source record: 11473

Alex wrote:
> Hi Everyone,
>
> I hope to get my technician license for the first time in a month or
> two, and I've been thinking of setting-up shop in the garage once I
> start getting some radios and equipment.
>
> Some questions though, the garage is on the corner of our brick house
> with one smaller window (facing front of house), two walls are interior
> walls with other two being exterior (one having garage door).
>
> My thought is if I insulate the attic and the one exterior wall without
> the garage door then replace my aging garage door with a better sealing
> one, that should do the trick -- right? As for heating and cooling,
> i'm in central texas, and our summers do get hot. I don't think our
> A/C in the house could pump out enough cool air to cool an additional
> 430sqft, so any suggestions for that? The only window is on front of
> house, so don't want to use window unit. I have a radiant heater I've
> used in there for winter, and it works well.
>
> Thanks for any suggestions or ideas ... we don't park our cars in the
> garage, and I hope to build a small shead in the back yard for the
> mowers and such -- so that's 430sqft of space that's going to waste.
>
> Thanks again and take care ---
>
> Alex
>
Garage doors lack insulation, but you can do something about that.
I live in South Florida, and while it doesn't get as hot as in Texas,
it does get hot. We added insulation to our metal garage door in the
form of Styrofoam insulating panels slipped into the inside of the door
ducktaped in place. Fiberglass insulation with the cardboard backing
would work as well. (Which has the better R value??). You might have
to re-balance the door after adding the insulation, but in our case
the garage door opener didn't seem to care and isn't straining. The
insulation lowered the temperature in the garage during the summer by
at least 10 degrees F.

3473. Re: Spurs on mixer output

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 02:15:07 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <ftaea2tcnvusccfhks3o5g72t6qkr6u7p1@4ax.com>
Source record: 11474
Body handling: HTML body converted to readable text

Not to belabor but as explanation. I use Free Agent and it displays
in indented threaded form so your reply was nested two deep from
my first reply posting.

Allison
Kb1GMX

On Sat, 1 Jul 2006 14:50:17 -0500, "Pete KE9OA"
wrote:

>This thread is directed at the author, not you. The purpose of my posting in
>the latest position of the thread is to move things in a chronological
>order. The original poster knows how to read, so it is quite possible that
>this person won't miss my posting.
>
>Pete
>
> wrote in message
>news:r77ba2dqivor2ss3msqp48u3lqm3962r76@4ax.com...
>> On Fri, 30 Jun 2006 06:48:45 -0500, "Pete KE9OA"
>> wrote:
>>
>>>What kind of spectrum analyzer are you using? What are the front end
>>
>> I'm not using one the author of the thread is.
>>
>>>attenuator settings on the spectrum analyzer? What is your reference
>>>level?
>>
>> Ask him not me.
>>
>>>All of these things, especially the front end attenuator settings, can
>>>affect your result. If the 1st mixer in the spectrum analyzer is driven
>>>into
>>>nonlinearity, you can see all kinds of IMD products that are generated in
>>>the analyzer itself.
>>>Also, why are you doing this test with the RF port of the mixer terminated
>>>in 50 Ohms? This type of termination is only used when doing either
>>>return
>>>loss tests or noise balance tests.
>>>If you are driving the SBL-1 mixer with +7 to +9dBm of LO level and you
>>>are
>>>driving the RF port with a signal that is at least 20dB below the 1dB
>>>compression point of the SBL-1, the main things you should see at the I.F.

>>>port are a supressed LO signal, an upper sideband that is about 7dB lower
>>>in
>>>level than the RF injection level, and a lower sideband that is also about
>>>7dB lower in level than the RF injection level.
>>>The 1dB compression point on the SBL-1 is about 0dBm, so I would set the
>>>level to the RF port at -20dBm. If you go above this level, you will see
>>>higher conversion loss, and possibly more IMD products at the I.F. port of
>>>the mixer.
>>>In conclusion, make sure that the IMD isn't being generated in your test
>>>setup, and make sure that you are not exceeding the recommended RF input
>>>level to the SBL-1.
>>>
>>>Pete
>>
>> You top posted to a reply that I'd posted to and your context is way
>> off as a result. Go bat to the root of the thread and read the
>> posting again.
>>
>> Briefly, he's seeing spurs every 25 or 50 khz with a LO in the 45mhz
>> region and NO RF on the input (unterminated RF port).
>>
>> Allison
>>
>>
>>>
>>> wrote in message
>>>news:p9o5a21152qsldg22fqccf0tm1ba7grf2d@4ax.com...
>>>> On Wed, 28 Jun 2006 07:43:20 -0500, tim gorman
>>>> wrote:
>>>>
>>>>>john wilkinson wrote:
>>>>>
>>>>>>
>>>>>>
>>>>>> Hi,
>>>>>> If I feed my second mixer into a spectrum analyser, and inject a
>>>>>> 44.545MHz
>>>>>> LO, with no power to the first IF stage, I see spurs at about 48-50KHz
>>>>>> intervals on the mixer output, from 0 to the 455KHz normal output
>>>>>> freq.
>>>>
>>>>>
>>>>>> The mixer is an SBL-1.
>>>>>>
>>>>>> Any ideas as to where these are comming from?
>>>>>>
>>>>>> Best regards,
>>>>>> John
>>>>>
>>>>>A couple of observations.

>>>>>
>>>>>If you simply disconnected the second mixer from the 1st mixer then it
>>>>>sounds like you do not have the output of the 1st mixer properly
>>>>>terminated. Unless, that is, the spectrum analyzer provides a good 50ohm
>>>>>termination in the probe. The SBL-1 is a double-balanced mixer but in
>>>>>order
>>>>>to get the "balance" to work right you must properly terminate *all*
>>>>>ports.
>>>>>Otherwise all kinds of impedances can be "thrown" back to the other
>>>>>ports -
>>>>>causing all kinds of problems with attached LO's and RF stages.
>>>>>
>>>>>Regularly spaced spurs from DC to 455khz does not sound like spurious
>>>>>mixing
>>>>>products. It sounds more like an oscillator being driven into saturation
>>>>>causing square waves to be produced which are providing regular harmonic
>>>>>outputs. This could be a product of poor terminations on the mixer
>>>>>ports.
>>>>
>>>> Tim, the LO is 45.455 (or 44.545) either way there should be no LF
>>>> outputs from the mixer below the LO injection unless it's a spur on
>>>> the LO.
>>>>
>>>>>Directly connecting the output of a SBL-1 to the input of another mixer,
>>>>>even another SBL-1, is not recommended either. The SBL-1 does not have
>>>>>built-in terminations. A good, symmetric, 50ohm 3db pad between the
>>>>>stages
>>>>>would provide a much better setup and would not significantly impact
>>>>>your
>>>>>overall noise factor. Be sure and connect your spectrum analyzer to the
>>>>>far
>>>>>side of the pad.
>>>>
>>>> Thats true though his testing is with a 20db IF after it and one would
>>>> hope that does present a 50ohm match to the IF port. Usually if the
>>>> poarts are badly matched the mixing spurs are greater and the port
>>>> to port isolation go to pot. If the only thing going in is the LO
>>>> then likely the LO is the source but if there is gain flollowing then
>>>> the gain stage is also suspect.
>>>>
>>>> I've worked with enough SBL1 and MD108s and all their similar DBMS
>>>> to know the SBL1 in this case is not the offendor Even if
>>>> misterminated. Likely causes are the 45mhz filter is looking reactive
>>>> to the IF amp and the IF is unstable (makes a fine OSC) or there is
>>>> some other source of RF that is unaccounted for (spurs).
>>>>
>>>>
>>>> Allison
>>>> Kb!GMX
>>>

>>
>

3474. looking for help with icom725 internal power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 05:29:27 UTC
From: hamguy1 <hamguy1@optusnet.com.au>
Message-ID: <44a759b4$0$22358$afc38c87@news.optusnet.com.au>
Source record: 11475
Cross-posted to: alt.ham-radio.mods,alt.ham-radio.packet,alt.ham-radio.vhf-uhf,free.uk.amateur-radio,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

hi ham radiogroups, im after the internal power control or alc inside of a icom725 hf transceiver the radio is doing way to much power for the power supply, it currently is doing 150 watts it needs to be turned back down to around 100 watts .thanks in advance david from nsw australia .

3475. Help with Mosfet mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 05:53:05 UTC
From: David <websales@orbitcoms.com>
Message-ID: <5bJpg.19786$ap3.8783@news-server.bigpond.net.au>
Source record: 11476

I have constructed a Mixer for a VHF receiver (150MHz).
The IF frequency is 45 MHz and LO is 105 MHz.

Having not made a mixer before, I copied a typology directly from one of my fundamental electronics books.

The layout is...
RF signal into Gate 2 of BF998.
Source has 100R Par with 1n to ground.
G1 has 47K to ground and 100p to LO signal (I am using a sig gen for testing).

The drain has a Tuned circuit consisting of 100nH and 125pF.
A 1k resistor is across the coil to provide approx. 800 Ohms needed to interface to a 4-pole crystal filter.

For testing I used a tap-C down to 50 Ohms from the 800R tank in the drain of the mixer BF998.

I observe the frequencies coming out of the mixer when I inject the 150 MHz RF signal and find I can tune the 45MHz for a peak no problem.
There do not appear to be any instabilities.
The gain of the preceding stages (Input single tuned filter, MOSFET RF amp and Double Tuned Circuit) is around 24dB.

When I add the mixer I find the total system gain is the same (24dB),
The mixer seems to be mixing but adding no gain or loss. I also wonder where the mixer MOSFET is getting bias (from the LO ?) because the mixer stage doesn't appear to be drawing any current. I found the max. gain at the mixer output was when the LO level was anywhere from -5 to 0dBm.

Would someone please mind explaining how the bias of the mixer should be applied and how much gain/loss I should expect. (i hope I am asking the right questions here as have no previous experience with a discrete mixer).

Thank in advance.

Regards

David

3476. Re: IEEE Standard for RF Safety Levels

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 10:13:46 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <XKGdnVTt3vbRATrZRVnyuQ@pipex.net>
Source record: 11477

>
> Anyway, more than likely these were the adopted standards. I don't
> have
> a more current book available....
> Andy W4OAH (registered EMC engineer , expired after
> retirement)
==========
You might be retired ....but still have the knowledge
Tnx Andy for the useful posting

Frank GM0CSZ / KN6WH

3477. Re: Using Garage for Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 10:29:03 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <GYOdna31J9Z8AjrZRVny1g@pipex.net>
Source record: 11478

> Garage doors lack insulation, but you can do something about that.
> I live in South Florida, and while it doesn't get as hot as in Texas,
> it does get hot. We added insulation to our metal garage door in the
> form of Styrofoam insulating panels slipped into the inside of the door
> ducktaped in place. Fiberglass insulation with the cardboard backing
> would work as well. (Which has the better R value??). You might have
> to re-balance the door after adding the insulation, but in our case
> the garage door opener didn't seem to care and isn't straining. The
> insulation lowered the temperature in the garage during the summer by
> at least 10 degrees F.
==========
Normally this would be OT in this NG ,but mentioning styrofoam =
polystyrene , it is veeeeeeeeeeeeeeery flammable and if used in an
enclosed environment ,people inside would be in real trouble when a fire
broke out. Insulating material should be fireproof or at least flame
retardent while not emitting toxic/suffocating fumes.

Frank GM0CSZ / KN6WH

3478. Re: Using Garage for Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 11:13:06 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1151838786.123808.162450@m79g2000cwm.googlegroups.com>
Source record: 11479

Highland Ham wrote:
> > Garage doors lack insulation, but you can do something about that.
> > I live in South Florida, and while it doesn't get as hot as in Texas,
> > it does get hot. We added insulation to our metal garage door in the
> > form of Styrofoam insulating panels slipped into the inside of the door
> > ducktaped in place. Fiberglass insulation with the cardboard backing
> > would work as well. (Which has the better R value??). You might have
> > to re-balance the door after adding the insulation, but in our case
> > the garage door opener didn't seem to care and isn't straining. The
> > insulation lowered the temperature in the garage during the summer by
> > at least 10 degrees F.
> ================================
> Normally this would be OT in this NG ,but mentioning styrofoam =
> polystyrene , it is veeeeeeeeeeeeeeery flammable and if used in an
> enclosed environment ,people inside would be in real trouble when a fire
> broke out. Insulating material should be fireproof or at least flame
> retardent while not emitting toxic/suffocating fumes.
>
> Frank GM0CSZ / KN6WH

Andy comments:
My garage door is of the insulated type. It has some sort of
fiberglass stuff
like you get in those 4x2 ceiling tiles.... It is redundant and I
think more of a
sales gimmick than any real barrier to heat transfer.....

Regarding roll around air conditioners..... I like the idea a lot,
but they
are very very very expensive compared to a vanilla window unit....
Home Depot sells a window unit here for about $80 USD while the
cheapest
roll around I have seen is over $300 USD for about the same size....
A crafty ham would buy a window unit and then build a little roll
around
cabinet with some dryer vent hoses to make his own. After all, most of

the fun is building stuff, even if it doesn't look like a "finished"
product.....

(I am a big fan of The Red Green Show :>)))))

I am doing something like that in my attic ---- running the intake
duct
from the cooler garage below and the air exits into the attic, which is
already

hot so a little more heat won't matter..... Not a roll around, but a ducted
cabinet....... But then I have nothing better to do all day except to mess
around with this stuff .... probly not a great idea for everybody, tho.
I go thru a lot of duct tape..........

Just my dos centavos.....

Andy in Eureka, Texas W4OAH

3479. Re: looking for help with icom725 internal power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 11:19:50 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <edydnYuj5aBVNjrZRVnysw@pipex.net>
Source record: 11480
Cross-posted to: alt.ham-radio.mods,alt.ham-radio.packet,alt.ham-radio.vhf-uhf,free.uk.amateur-radio,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

hamguy1 wrote:
> hi ham radiogroups, im after the internal power control or alc inside of a
> icom725 hf transceiver the radio is doing way to much power for the power
> supply, it currently is doing 150 watts it needs to be turned back down to
> around 100 watts .thanks in advance david from nsw australia .
==========
If the current RF power output itself is not a problem ,but the max
current which can be supplied by the power supply unit (presumably
13.8V) I would suggest to put a sealed (car) battery in parallel.

The quoted 150W RF power is highly likely PEP ,so when operating SSB the
average current consumption is possibly half the peak current or less
even with some speech compression .
The battery will happily supply some of the current during peak demand.

Since the battery is permanently 'on the charger ' being in parallel
with the power supply unit , you don't need a deep cycle battery ; a
cheap and cheerful 40 -60Ah sealed car battery will do the job well.
It is essential to put a 25-30 A fuse in series with the battery .

Note : I recommend anybody to use a (sealed) battery and a low power PSU
to feed a transceiver requiring (13.5 -13.8 V-DC) external power.
During rx periods the PSU output could be (automatically) disconnected .
Receiving on battery power alone is often beneficial eg less noise and
mains borne interference. Although the low impedance of the battery
will cause it to 'kill' most external mains borne interference already.

A local ham uses a FT857 with a 110Ah sealed battery, without a mains
fed PSU . When not operating the battery is connected to an automatic
car battery charger ,which is only disconnected during operation.

Frank GM0CSZ / KN6WH

3480. Re: Using Garage for Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 12:52:43 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <1offa257jehmf67c1up3gqnfoes0e749ia@4ax.com>
Source record: 11481

On 30 Jun 2006 17:20:16 -0700, "AndyS" <andysharpe@juno.com> wrote:

> Here is a suggestion that you might consider.... Wall off a closet
>sized part of your garage, either with cheap panelling or maybe
>plastic curtains, and get a Home Depot $70 air conditioner to use
>just for that part..... Also good for space heater in winter....

Isolating a small volume from the garage makes sense since now the thermal resistance of the external wall and the closet walls are in series, thus reducing the heat leakage from the outside to the operating position and hence, reducing the heat that needs to be removed by the air conditioner.

Since the closet walls are much smaller than the garage wall inside dimensions, for a specific amount of isolation material (and cost) much better isolation can be obtained by isolating the closet than isolating the whole garage.

> Perhaps you can make sliding curtains like they do around hospital
>beds..... A little 5000 BTU unit will cool the hell out of a small
>closet-like
>area, even if it is poorly insulated and leaks like hell.... The air
>condx
>can be mounted on a little dolly or something......venting into the
>rest
>of the garage. And slid off on the side when not in use...

Venting into the rest of the garage does not make sense, especially with light closet walls, since this would be equivalent to an electric or acoustic short circuit.

If you look at the situation from the rest of the garage, the heat from the closet will enter the larger garage space, as well as the power required to run the air conditioner, as well as the leakage from the outside world through the garage walls.

The rest of the garage will get very hot and if the closet walls are light, leak back into the closet, requiring more air conditioner power to remove it etc. The temperature of the rest of the garage will continue to rise, until the temperature is sufficiently _above_ the outside temperature and sufficient amount of thermal energy will flow _out_ through the garage external walls.

Two ways to avoid this problem, one is to let the closet air conditioner pump the heat to the outside air or if the heat is pumped into the rest of the garage, at least open the garage door and use sufficiently good isolation in the closet walls to keep the air

conditional power requirements at a reasonable level.

After all, air conditioning is a similar problem as thermal management in any semiconductor systems, which use the analogies with resistances/conductances (thermal isolation/conduction) and capacitances (specific heat x mass).

Paul OH3LWR

3481. Re: Using Garage for Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 14:59:17 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <G7Rpg.4110$Oc5.444@bignews4.bellsouth.net>
Source record: 11482

Highland Ham wrote:
>> Garage doors lack insulation, but you can do something about that.
>> I live in South Florida, and while it doesn't get as hot as in Texas,
>> it does get hot. We added insulation to our metal garage door in the
>> form of Styrofoam insulating panels slipped into the inside of the door
>> ducktaped in place. Fiberglass insulation with the cardboard backing
>> would work as well. (Which has the better R value??). You might have
>> to re-balance the door after adding the insulation, but in our case
>> the garage door opener didn't seem to care and isn't straining. The
>> insulation lowered the temperature in the garage during the summer by
>> at least 10 degrees F.
> ================================
> Normally this would be OT in this NG ,but mentioning styrofoam =
> polystyrene , it is veeeeeeeeeeeeeeery flammable and if used in an
> enclosed environment ,people inside would be in real trouble when a fire
> broke out. Insulating material should be fireproof or at least flame
> retardent while not emitting toxic/suffocating fumes.
>
> Frank GM0CSZ / KN6WH
Styrofoam type insulating material that is designed for the purpose is
made in a fire-retardant form. You have to buy the material made for
the purpose!!!

3482. Re: Using Garage for Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 15:24:22 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1151853862.730876.167760@v61g2000cwv.googlegroups.com>
Source record: 11483

Paul Keinanen wrote:
> The rest of the garage will get very hot and if the closet walls are
> light, leak back into the closet, requiring more air conditioner power
> to remove it etc. The temperature of the rest of the garage will
> continue to rise, until the temperature is sufficiently _above_ the
> outside temperature and sufficient amount of thermal energy will flow
> _out_ through the garage external walls.
>
******* I am assuming the operator will put the garage door up
in the summer and down in the winter..... This ain't rocket
surgery....

> Two ways to avoid this problem, one is to let the closet air
> conditioner pump the heat to the outside air or if the heat is pumped
> into the rest of the garage, at least open the garage door and use
> sufficiently good isolation in the closet walls to keep the air
> conditional power requirements at a reasonable level.

*** Ahhh,... I see the idea occurred to you, also..... I know that
the
OP doesn't want to knock holes in his garage wall for a vent,
otherwise he would have just put it in a window or access door and
not bothered to post here for our whacko solutions ... :>))))

>
> After all, air conditioning is a similar problem as thermal management
> in any semiconductor systems, which use the analogies with
> resistances/conductances (thermal isolation/conduction) and
> capacitances (specific heat x mass).
>
***** Wow !! I am still reeling from the concept of a $80 air
conditioner
being used in the same sentence as : " the analogies with
> resistances/conductances (thermal isolation/conduction) "
Whew !! Maybe this IS rocket surgery !!! :>))))))

Andy W40AH (LPE (licensed professional engineer))

3483. Re: looking for help with icom725 internal power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 15:30:57 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <RERpg.4749$Oh1.2961@news01.roc.ny>
Source record: 11484
Cross-posted to: alt.ham-radio.mods,alt.ham-radio.packet,alt.ham-radio.vhf-uhf,free.uk.amateur-radio,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

hamguy1 wrote:
> hi ham radiogroups, im after the internal power control or alc inside of a
> icom725 hf transceiver the radio is doing way to much power for the power
> supply, it currently is doing 150 watts it needs to be turned back down to
> around 100 watts .thanks in advance david from nsw australia .
>
>
Go to
http://www.icom.co.jp/world/support/index.htm

click on 'Manuals,' agree to the license, scroll down to 'Amateur,'
download the manual for the IC-725, look at page 31 (34 in the Acrobat
window).

I think you may be interested in 'R210' for the 100W power adjust.

Watch the current, 73!
W8LNA

3484. Re: Help with Mosfet mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 17:27:37 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1151861257.221100.12120@j8g2000cwa.googlegroups.com>
Source record: 11485

Andy comments:

I haven't used that particular dual gate Mosfet, but I will tell you
how I have used 3n140, 3n141, and others:

G2 was used as the LO and was bias at around 3 volts DC with
resistors. The LO was cap coupled in at a leveL of about 2.5 Vrms.
It is useD as a switching signal to drive the MOSFET into and out
of conduction. It takes very little power from the LO, but the
2.5 Vrms swing was needed...

G1 was used as the RF port. G1 and the source were biased
pretty much as you described.

The drain was similar to your design. While using a 1K resistor
gives
a great source impedance to the xtal filter, it also absorbs most of
the signal.... If I remember, the output Z is 9 or 10 k for the devices
I used. I would use maybe a 7.5 K resistor and then impedance
match in the tuned circuit to get the source right. This usually took
some experimentation. Since the drain output was tuned to a different
frequency than the LO or the RFin, I never had a stability problem.
Power gains of 15 to 20 db were very common... (Note , I said
POWER gain, and not voltage gain , which could be anything...)

Maybe my experience is outdated with the newer Mosfets, but I
have never seen, or used a circuit that put the LO on G!.... It was
always on G2.. I used dual gate mosfets to build receiver front
ends and mixer from about 1967 to about 1990. Then I started
using doubly balanced stuff like SBLs and MDs ..... I followed them
with a nice amplifer and good termination.....It costs a little more,
but the designs were always more stable and gave better
performance.....

I hope this helps. Perhaps others here have used your particular
device and can give better guidance...

Andy W4OAH

3485. Re: Help with Mosfet mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 19:00:59 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <3v5ga253acrcja7n3igmui3tq30tp0mm8o@4ax.com>
Source record: 11486

On 2 Jul 2006 10:27:37 -0700, "AndyS" <andysharpe@juno.com> wrote:

>
>Andy comments:
>
> I haven't used that particular dual gate Mosfet, but I will tell you
>how I have used 3n140, 3n141, and others:
>
> G2 was used as the LO and was bias at around 3 volts DC with
>resistors. The LO was cap coupled in at a leveL of about 2.5 Vrms.
>It is useD as a switching signal to drive the MOSFET into and out
>of conduction. It takes very little power from the LO, but the
>2.5 Vrms swing was needed...
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> G1 was used as the RF port. G1 and the source were biased
>pretty much as you described.
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> The drain was similar to your design. While using a 1K resistor
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>a great source impedance to the xtal filter, it also absorbs most of
>the signal.... If I remember, the output Z is 9 or 10 k for the devices
>I used. I would use maybe a 7.5 K resistor and then impedance
>match in the tuned circuit to get the source right. This usually took
>some experimentation. Since the drain output was tuned to a different
>frequency than the LO or the RFin, I never had a stability problem.
>Power gains of 15 to 20 db were very common... (Note , I said
>POWER gain, and not voltage gain , which could be anything...)
>
>
>
> Maybe my experience is outdated with the newer Mosfets, but I
>have never seen, or used a circuit that put the LO on G!.... It was
>always on G2.. I used dual gate mosfets to build receiver front
>ends and mixer from about 1967 to about 1990. Then I started
>using doubly balanced stuff like SBLs and MDs ..... I followed them
>with a nice amplifer and good termination.....It costs a little more,
>but the designs were always more stable and gave better
>performance.....
>
> I hope this helps. Perhaps others here have used your particular
>device and can give better guidance...
>
> Andy W4OAH

Your experience is like mine and holds well for current generation DGfets or even a pair of casoded Jfets.

Allison

3486. Re: IEEE Standard for RF Safety Levels

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 22:42:49 UTC
From: "Dr. Jeff" <drjeff@optonline.net>
Message-ID: <1151880169.021648.297560@m73g2000cwd.googlegroups.com>
Source record: 11488

Ever since the Cable Company mounted a large (3'x2'x2') electronics box
on the telephone pole outside my home, I've picked up interference on
my General Coverage receiver at 4 Mhz. plus. Using my RF Frequency
Counter with 50 ohm antenna, I was able to pinpoint the source of the
RF to that box. Also, I am able to pick up the RF 400, 500 plus feet
away! Considering that the same meter doesn't pick up my cell or
cordless phone more than a foot or two away, I have to assume that the
4 Mhz. RF is in the watt range, rather than micro or milliwatts!

Jeff

John - KD5YI wrote:
> Dr. Jeff wrote:
> > Can anyone refer me to a link where I can access (for FREE) the "IEEE
> > Standard for Safety Levels with Respect to Human Exposure to Radio
> > Frequency Electromagnetic Fields"; C95.1-1992 or similar document that
> > covers exposure guidelines for specific RF frequencies.
> > I'm detecting extremely high levels of 4.2 to 4.5 Mhz. RF from a Cable
> > TV companys pole mounted equipment in front of my home.
> >
> > Jeff
> >
>
>
> You are "detecting extremely high levels of 4.2 to 4.5 Mhz. RF"? How do you
> know?
>
> Please give some numbers. In any units with which you are familiar.

3487. Re: Help with Mosfet mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 22:45:57 UTC
From: David <websales@orbitcoms.com>
Message-ID: <F0Ypg.20047$ap3.5939@news-server.bigpond.net.au>
Source record: 11487

I noted in We Hayward's book "Experimental Methods in RF Design" that he suggests the gain of a Dual Gate Mosfet in a mixer circuit is about 1/4 of the gain of the same device in an RF amp circuit. If this is true then the 6dB gain I now see in the mixer stage would be about right.

I cranked up the LO level and now have +/- 4V on G2. I tried biasing the Gate up to 3 but it made no difference than when just 47K to ground bias was used on G2.

The main issue I am having now is matching to the 4-pole filter.
I have tried several approaches and the performance is disgusting.

The current mixer to filter circuit is....

This "should" have matched down to 800R

100nH (Q=100) inductor to Vcc from Drain
6-30p trimmer to ground from drain
Split capacitor tap from drain to ground (220pF in series with 200pF)

1st filter, 4p7 to ground between 1st and second filter.

Output match to 50R from 800R for testing...
100nH to ground from filter output
82pF to ground
6-30p trimmer to ground
15pF in series to 50 Ohm load.

The loss through the filter is around 10dB instead of 3dB, the ripple is around 6-8db instead of 1dB. The filter response shows double peaks with dip between, either side of the peaks falls off extremely quickly at around 2 kHz off (should be +/- 15kHz bandwidth).

I would appreciate any help I can get to determine what is happening and to correctly match into this filter that requires 800R//3pF terminations at 45 MHz.

AndyS wrote:
> Andy comments:
>
> I haven't used that particular dual gate Mosfet, but I will tell you
> how I have used 3n140, 3n141, and others:
>
> G2 was used as the LO and was bias at around 3 volts DC with
> resistors. The LO was cap coupled in at a leveL of about 2.5 Vrms.
> It is useD as a switching signal to drive the MOSFET into and out
> of conduction. It takes very little power from the LO, but the

> 2.5 Vrms swing was needed...
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> G1 was used as the RF port. G1 and the source were biased
> pretty much as you described.
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> The drain was similar to your design. While using a 1K resistor
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> a great source impedance to the xtal filter, it also absorbs most of
> the signal.... If I remember, the output Z is 9 or 10 k for the devices
> I used. I would use maybe a 7.5 K resistor and then impedance
> match in the tuned circuit to get the source right. This usually took
> some experimentation. Since the drain output was tuned to a different
> frequency than the LO or the RFin, I never had a stability problem.
> Power gains of 15 to 20 db were very common... (Note , I said
> POWER gain, and not voltage gain , which could be anything...)
>
>
>
> Maybe my experience is outdated with the newer Mosfets, but I
> have never seen, or used a circuit that put the LO on G!.... It was
> always on G2.. I used dual gate mosfets to build receiver front
> ends and mixer from about 1967 to about 1990. Then I started
> using doubly balanced stuff like SBLs and MDs ..... I followed them
> with a nice amplifer and good termination.....It costs a little more,
> but the designs were always more stable and gave better
> performance.....
>
> I hope this helps. Perhaps others here have used your particular
> device and can give better guidance...
>
> Andy W4OAH
>

3488. Re: IEEE Standard for RF Safety Levels

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 22:49:48 UTC
From: "Dr. Jeff" <drjeff@optonline.net>
Message-ID: <1151880587.942126.226120@a14g2000cwb.googlegroups.com>
Source record: 11489

I'm not so much worried about hazardous effects, it's just that I don't think the cable company should be installing equipment 50 feet from my home that is broadcasting RF
so close to the 80 meter band! I'm also tired of doing "their job" for them: last year when the neighborhood experienced problems for weeks and weeks with their Internet system, I had to show their field engineer that there was a problem on the "uplink" side of their network. "By golly gee, you're right!" was the prognosis from the back of the Cable truck....

Jeff

AndyS wrote:
> Dr. Jeff wrote:
> > Can anyone refer me to a link where I can access (for FREE) the "IEEE
> > Standard for Safety Levels with Respect to Human Exposure to Radio
> > Frequency Electromagnetic Fields"; C95.1-1992 or similar document that
> > covers exposure guidelines for specific RF frequencies.
> > I'm detecting extremely high levels of 4.2 to 4.5 Mhz. RF from a Cable
> > TV companys pole mounted equipment in front of my home.
> >
> > Jeff
>
> Andy writes:
>
> If I remember correctly, a graph is presented in the ARRL Handbook
> giving the safety levels.
>
> Just a minute --- I'll go look it up.....
>
> Ok, from the 1992 ARRL handbook with the proposed 1991 ANSI standard,
> the RF level at around 4.5 Mhz is:
>
> For controlled environment 60 V/M
>
> For Uncontrolled environment 30 V/M
>
>
> I may be a little off since the graph isn't very big and is hard to
> read....
>
> If you need power density, just square the V/M and divide by 377 and
> you will have watts per sq meter....(assuming far field0
>
> If you need magnetic intensity, just divide the V/M by 377 and you

> get amps per meter....(again, far field)
>
> These are BIG fields. It takes a LOT of 4.5 Mhz field to hurt
> you......
>
> This stuff ain't rocket surgery..... Shucks, if big 80 meter fields
> would
> hurt a person, I'd have gone crazy long ago.... :>)))))))))
>
> Anyway, more than likely these were the adopted standards. I don't
> have
> a more current book available....
>
>
>
>
> Andy W4OAH (registered EMC engineer , expired after
> retirement)

3489. Re: Help with Mosfet mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 23:01:36 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <vujga2daae153na9pd1na7h9n103njb3js@4ax.com>
Source record: 11490

On Sun, 02 Jul 2006 22:45:57 GMT, David <websales@orbitcoms.com>
wrote:

Since everyone is top posting.

Having G2 driven hard is good for large signal handling as mixing
will occure with lesser levels. So that's why that needs to be done.
If driven hard enough bias has no effect.

I vaugely remember you saying your using two filters back to back...

If so you may have the interfilter coupling way off. Also the loss for
two 3db loss filters would be a bit higher than 6db if everything is
right.

Allison

>I noted in We Hayward's book "Experimental Methods in RF Design" that he
>suggests the gain of a Dual Gate Mosfet in a mixer circuit is about 1/4
>of the gain of the same device in an RF amp circuit. If this is true
>then the 6dB gain I now see in the mixer stage would be about right.
>
>I cranked up the LO level and now have +/- 4V on G2. I tried biasing the
>Gate up to 3 but it made no difference than when just 47K to ground
>bias was used on G2.
>
>The main issue I am having now is matching to the 4-pole filter.
>I have tried several approaches and the performance is disgusting.
>
>The current mixer to filter circuit is....
>
>This "should" have matched down to 800R
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>100nH (Q=100) inductor to Vcc from Drain
>6-30p trimmer to ground from drain
>Split capacitor tap from drain to ground (220pF in series with 200pF)
>
>1st filter, 4p7 to ground between 1st and second filter.
>
>Output match to 50R from 800R for testing...
>100nH to ground from filter output
>82pF to ground
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>15pF in series to 50 Ohm load.
>
>The loss through the filter is around 10dB instead of 3dB, the ripple is

>around 6-8db instead of 1dB. The filter response shows double peaks with
> dip between, either side of the peaks falls off extremely quickly at
>around 2 kHz off (should be +/- 15kHz bandwidth).
>
>I would appreciate any help I can get to determine what is happening and
>to correctly match into this filter that requires 800R//3pF terminations
>at 45 MHz.
>
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>AndyS wrote:
>> Andy comments:
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>> I haven't used that particular dual gate Mosfet, but I will tell you
>> how I have used 3n140, 3n141, and others:
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>> resistors. The LO was cap coupled in at a leveL of about 2.5 Vrms.
>> It is useD as a switching signal to drive the MOSFET into and out
>> of conduction. It takes very little power from the LO, but the
>> 2.5 Vrms swing was needed...
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>> G1 was used as the RF port. G1 and the source were biased
>> pretty much as you described.
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>> The drain was similar to your design. While using a 1K resistor
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>> a great source impedance to the xtal filter, it also absorbs most of
>> the signal.... If I remember, the output Z is 9 or 10 k for the devices
>> I used. I would use maybe a 7.5 K resistor and then impedance
>> match in the tuned circuit to get the source right. This usually took
>> some experimentation. Since the drain output was tuned to a different
>> frequency than the LO or the RFin, I never had a stability problem.
>> Power gains of 15 to 20 db were very common... (Note , I said
>> POWER gain, and not voltage gain , which could be anything...)
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>>
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>> Maybe my experience is outdated with the newer Mosfets, but I
>> have never seen, or used a circuit that put the LO on G!.... It was
>> always on G2.. I used dual gate mosfets to build receiver front
>> ends and mixer from about 1967 to about 1990. Then I started
>> using doubly balanced stuff like SBLs and MDs ..... I followed them
>> with a nice amplifer and good termination.....It costs a little more,
>> but the designs were always more stable and gave better
>> performance.....
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>> I hope this helps. Perhaps others here have used your particular
>> device and can give better guidance...
>>
>> Andy W4OAH

>>

3490. Re: Help with Mosfet mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 23:31:27 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1151883087.766705.136330@v61g2000cwv.googlegroups.com>
Source record: 11491

David wrote:
> I noted in We Hayward's book "Experimental Methods in RF Design" that he
> suggests the gain of a Dual Gate Mosfet in a mixer circuit is about 1/4
> of the gain of the same device in an RF amp circuit. If this is true
> then the 6dB gain I now see in the mixer stage would be about right.
>
> I cranked up the LO level and now have +/- 4V on G2. I tried biasing the
> Gate up to 3 but it made no difference than when just 47K to ground
> bias was used on G2.
>
> The main issue I am having now is matching to the 4-pole filter.
> I have tried several approaches and the performance is disgusting.
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> The current mixer to filter circuit is....
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> This "should" have matched down to 800R
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> 100nH (Q=100) inductor to Vcc from Drain
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> 1st filter, 4p7 to ground between 1st and second filter.
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> 82pF to ground
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> 15pF in series to 50 Ohm load.
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> The loss through the filter is around 10dB instead of 3dB, the ripple is
> around 6-8db instead of 1dB. The filter response shows double peaks with
> dip between, either side of the peaks falls off extremely quickly at
> around 2 kHz off (should be +/- 15kHz bandwidth).
>
> I would appreciate any help I can get to determine what is happening and
> to correctly match into this filter that requires 800R//3pF terminations
> at 45 MHz.
>
>
Andy writes:

Ok. Well, using +/- 4 volts (i am guessing rms) will certainly
drive
the mosfet from full on to cutoff so DC biasing wouldn't be required.

Less LO could be used with a DC bias, but if you have the LO power
available, there is no reason to change.

I am assuming that you have gotten rid of the 800 drain load.....
The split cap approach is fine and should give you about a 4/1
step down, so if the drain output imp is 3200 ohms or thereabout, the
match should be close... (I am doing this in my head, so forgive me if

I am off by a thousandfold :>))))

Now, the filter loss is something else. You did not tell me how you

measured it, and I am assuming that you just measured the voltages
and used that. This is a common mistake as there can be substantial
impedance change. The only accurate way to characterize filter loss
is with a special test jig which can measure the power into the load
without the filter and then the power into the load WITH the filter,
without
changing any of the tuning.... A purely resistive jig with a highZ
probe
can be fairly accurate, measuring voltage loss..... But you have to
allow
for any impedance changes in source and load.......

The inter match between the two filters should have both and L and
a C
making a parallel tank to make sure both the filter reactance, and the
stray reactances are tuned out. Usually filters are slightly
capacitive
, a couple pf, on their parallel terminal impedance......a tuned
circuit
will tune all this out..... giving you 800 to 800... You tune the tank
for minimum ripple in the passband... not for max gain at one of
the ripples.... tho it will be close...

The output transformation from 50 ohms up to 800 ohms represents
a 4 to 1 voltage transformation, or 12 db voltage loss..... In other
words,
if you used an 800 ohm resistive load (with a parallel tank to get rid
of the reactance and strays) you would, with a voltage probe, measure
12 db higher than you would when you transformed the load down to
50 ohms.... If you already knew this, and accounted for it, I
apologize for
assuming you didn't,, , but it is a common mistake some people have
made....

I don't disagree with Wes's book or explanation at all, but I am
surprised
that 12 db was the best the mosfet would do.....but, as I said, I have
never
used that particular one...

Remember, you have to match the RF generator UP to the input
Z of G1 in order to calculate the conversion gain. If you have just
connected G1 to a 50 ohm RF source, you are losing a lot of voltage
since the input Z of G! is probably a couple K..... That is quite a
voltage gain.... and that is before the conversion process even
starts....

It looks to me like you are on the right track. Again , I apologize
if it seemed
I was "talking down" to you, but I am just doing an all-purpose memory
dump
of all I remember about when I did this..... And I know for sure that

I got a hell of a lot more conversion gain out of a 3n141..... after
matching
both the input to G1 AND the output to a matched load....

Goodluck,,

Andy W4OAH

3491. Re: IEEE Standard for RF Safety Levels

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-02 23:41:48 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1151883708.793369.168480@h44g2000cwa.googlegroups.com>
Source record: 11492

Andy comments:

Well, a piece of wire on the input of a counter is a good way of measuring the freq if you have a strong enough field, but a counter has a threshold effect, and can't be used to infer signal strength other than the difference between "damn strong" and "I can't see it at all".....

Still, enough of a field to measure the 4mhz on a counter is a pretty
strong field.... Not enough to hurt you, but strong nevertheless.

Regarding the skill level of the technician that worked the problem you solved for them..... Well, there's all sorts of people who do this.
Some have the minimal training for installing systems, and some are old ham operators who know a hell of a lot but maybe didn't get a formal education, and are working as cable technicians..... It's good
that you had one that understood the problem when you pointed it out ---- some of them may not have caught on......

Unless you have accurate field strength equip, you can only guess at whether the field exceeds safety levels, but I really doubt, from the info you have given, that it is anywhere close to dangerous levels. More likely it will just annoy the hell out of you if you are trying to

receive a signal anywhere close... and I bet the 4 mhz has harmonics associated that could be annoying also.....

Good luck,

Andy W4OAH

3492. Re: Help with Mosfet mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-03 00:02:52 UTC
From: David <websales@orbitcoms.com>
Message-ID: <M8Zpg.20073$ap3.4084@news-server.bigpond.net.au>
Source record: 11493

Andy,

The input to the mixer on G1 is the second stage of a DTC. The DTC was
designed to provide the appropriate RP for a 6MHz bandwidth. I then
assumed that G1 will be extremely high impedance compared to the DTC
and therefore would not load it down.

The gain was measured by first measuring the power output of the mixer
and then measuring the power output at the end of the filter.

The manufacturer data for the filter specifies maximum loss of 3dB (they
supply 2 matches filters that connect to form a 4-pole).

The output of the filter was stepped down to 50 Ohms with a C-Tap
impedance transform on the tuned circuit.

The input was matched from 2800 Ohms (Rp of the coil in the mixer tank)
to 800 R using a C-Tap transform also.

I have since constructed a stand alone filter test jig for the filter
only with match on input from 50 Ohms up to 800 and 800 back to 50.

I calibrate the output level with bypass across filter first for
reference level on the spectrum analyzer and then include the filter
in the path.
With this method I measure 4.8 dB loss and the double peaking action has
gone. The 1dB bandwidth was measured at +/- 9kHz.
When I sweep across the required bandwidth (+/-15kHz) I get 2.8dB loss
at the low end and 7.5dB at the high end (relative to the centre peak).
The tuning caps are able to peak the circuit without being turned to max
or min c, so I expect the tuned circuits are resonating ok.

Regards

David

AndyS wrote:
> David wrote:
>> I noted in We Hayward's book "Experimental Methods in RF Design" that he
>> suggests the gain of a Dual Gate Mosfet in a mixer circuit is about 1/4
>> of the gain of the same device in an RF amp circuit. If this is true
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> Andy writes:
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> Ok. Well, using +/- 4 volts (i am guessing rms) will certainly
> drive
> the mosfet from full on to cutoff so DC biasing wouldn't be required.
> Less LO could be used with a DC bias, but if you have the LO power
> available, there is no reason to change.
>
> I am assuming that you have gotten rid of the 800 drain load.....
> The split cap approach is fine and should give you about a 4/1
> step down, so if the drain output imp is 3200 ohms or thereabout, the
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> impedance change. The only accurate way to characterize filter loss
> is with a special test jig which can measure the power into the load

> without the filter and then the power into the load WITH the filter,
> without
> changing any of the tuning.... A purely resistive jig with a highZ
> probe
> can be fairly accurate, measuring voltage loss..... But you have to
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> for any impedance changes in source and load.......
>
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> a 4 to 1 voltage transformation, or 12 db voltage loss..... In other
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> if you used an 800 ohm resistive load (with a parallel tank to get rid
> of the reactance and strays) you would, with a voltage probe, measure
> 12 db higher than you would when you transformed the load down to
> 50 ohms.... If you already knew this, and accounted for it, I
> apologize for
> assuming you didn't,, , but it is a common mistake some people have
> made....
>
> I don't disagree with Wes's book or explanation at all, but I am
> surprised
> that 12 db was the best the mosfet would do.....but, as I said, I have
> never
> used that particular one...
>
> Remember, you have to match the RF generator UP to the input
> Z of G1 in order to calculate the conversion gain. If you have just
> connected G1 to a 50 ohm RF source, you are losing a lot of voltage
> since the input Z of G! is probably a couple K..... That is quite a
> voltage gain.... and that is before the conversion process even
> starts....
>
> It looks to me like you are on the right track. Again , I apologize
> if it seemed
> I was "talking down" to you, but I am just doing an all-purpose memory
> dump
> of all I remember about when I did this..... And I know for sure that
>
> I got a hell of a lot more conversion gain out of a 3n141..... after

> matching
> both the input to G1 AND the output to a matched load....
>
> Goodluck,,
>
> Andy W4OAH
>

3493. Re: Help with Mosfet mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-03 02:01:56 UTC
From: David <websales@orbitcoms.com>
Message-ID: <oU_pg.20122$ap3.12601@news-server.bigpond.net.au>
Source record: 11494

Andy,

I realise when I re-read your post that I have not included the loss of the tuned circuit each side of the filter due to Rp of the inductors.

Taking this into account, the max. loss should be around 1.1dB per tuned circuit + 3dB max. for filter = 5.2dB.

I re-measured the response using the digital power meter as this is more accurate than the spectrum analyser relative measurements.

The insertion loss of filter AND tuned circuits was measured at 3.7dB

I then swept the filter and measured the -3dB bandwidth and found this to be -18kHz, + 15.5kHz (very close to the expected +/- 15 kHz).
Next I measured stop band attenuation at +/- 60kHz and measured -47.3 dB on low side and -50.7 dB on high side (manufacture data was for at least 40dB).

I then looked at ripple in the pass band. There was 1 ripple that produces a dip at +9kHz of 1.6dB and a slight peak at +13 kHz of 0.86dB.

This is very close to the 1dB figure mentioned in the datasheet. There was no ripple below Fo.

If I can now get the impedance transformation in my circuit working the same as this then I'm on my way.

I'll leave the output match as-is and if there are issues then it eliminates the output load and just leaves work to do at the mixer end.

This is the first discrete mixer and crystal filter I have constructed. I'm not sure if I am overlooking anything here but to me those figures now look good.

Does this all sound reasonable ?

Thanks heaps

Regards

David

AndyS wrote:
> David wrote:
>> I noted in We Hayward's book "Experimental Methods in RF Design" that he
>> suggests the gain of a Dual Gate Mosfet in a mixer circuit is about 1/4
>> of the gain of the same device in an RF amp circuit. If this is true
>> then the 6dB gain I now see in the mixer stage would be about right.

>>
>> I cranked up the LO level and now have +/- 4V on G2. I tried biasing the
>> Gate up to 3 but it made no difference than when just 47K to ground
>> bias was used on G2.
>>
>> The main issue I am having now is matching to the 4-pole filter.
>> I have tried several approaches and the performance is disgusting.
>>
>> The current mixer to filter circuit is....
>>
>> This "should" have matched down to 800R
>>
>> 100nH (Q=100) inductor to Vcc from Drain
>> 6-30p trimmer to ground from drain
>> Split capacitor tap from drain to ground (220pF in series with 200pF)
>>
>> 1st filter, 4p7 to ground between 1st and second filter.
>>
>> Output match to 50R from 800R for testing...
>> 100nH to ground from filter output
>> 82pF to ground
>> 6-30p trimmer to ground
>> 15pF in series to 50 Ohm load.
>>
>> The loss through the filter is around 10dB instead of 3dB, the ripple is
>> around 6-8db instead of 1dB. The filter response shows double peaks with
>> dip between, either side of the peaks falls off extremely quickly at
>> around 2 kHz off (should be +/- 15kHz bandwidth).
>>
>> I would appreciate any help I can get to determine what is happening and
>> to correctly match into this filter that requires 800R//3pF terminations
>> at 45 MHz.
>>
>>
> Andy writes:
>
> Ok. Well, using +/- 4 volts (i am guessing rms) will certainly
> drive
> the mosfet from full on to cutoff so DC biasing wouldn't be required.
> Less LO could be used with a DC bias, but if you have the LO power
> available, there is no reason to change.
>
> I am assuming that you have gotten rid of the 800 drain load.....
> The split cap approach is fine and should give you about a 4/1
> step down, so if the drain output imp is 3200 ohms or thereabout, the
> match should be close... (I am doing this in my head, so forgive me if
>
> I am off by a thousandfold :>))))
>
> Now, the filter loss is something else. You did not tell me how you

>
> measured it, and I am assuming that you just measured the voltages
> and used that. This is a common mistake as there can be substantial
> impedance change. The only accurate way to characterize filter loss
> is with a special test jig which can measure the power into the load
> without the filter and then the power into the load WITH the filter,
> without
> changing any of the tuning.... A purely resistive jig with a highZ
> probe
> can be fairly accurate, measuring voltage loss..... But you have to
> allow
> for any impedance changes in source and load.......
>
> The inter match between the two filters should have both and L and
> a C
> making a parallel tank to make sure both the filter reactance, and the
> stray reactances are tuned out. Usually filters are slightly
> capacitive
> , a couple pf, on their parallel terminal impedance......a tuned
> circuit
> will tune all this out..... giving you 800 to 800... You tune the tank
> for minimum ripple in the passband... not for max gain at one of
> the ripples.... tho it will be close...
>
> The output transformation from 50 ohms up to 800 ohms represents
> a 4 to 1 voltage transformation, or 12 db voltage loss..... In other
> words,
> if you used an 800 ohm resistive load (with a parallel tank to get rid
> of the reactance and strays) you would, with a voltage probe, measure
> 12 db higher than you would when you transformed the load down to
> 50 ohms.... If you already knew this, and accounted for it, I
> apologize for
> assuming you didn't,, , but it is a common mistake some people have
> made....
>
> I don't disagree with Wes's book or explanation at all, but I am
> surprised
> that 12 db was the best the mosfet would do.....but, as I said, I have
> never
> used that particular one...
>
> Remember, you have to match the RF generator UP to the input
> Z of G1 in order to calculate the conversion gain. If you have just
> connected G1 to a 50 ohm RF source, you are losing a lot of voltage
> since the input Z of G! is probably a couple K..... That is quite a
> voltage gain.... and that is before the conversion process even
> starts....
>
> It looks to me like you are on the right track. Again , I apologize
> if it seemed

> I was "talking down" to you, but I am just doing an all-purpose memory
> dump
> of all I remember about when I did this..... And I know for sure that
>
> I got a hell of a lot more conversion gain out of a 3n141..... after
> matching
> both the input to G1 AND the output to a matched load....
>
> Goodluck,,
>
> Andy W4OAH
>

3494. Re: Help with Mosfet mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-03 02:04:26 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <krtga29v087i4us6f8c2admsfab57h6p1s@4ax.com>
Source record: 11495

On 2 Jul 2006 16:31:27 -0700, "AndyS" <andysharpe@juno.com> wrote:

>
>David wrote:
>> I noted in We Hayward's book "Experimental Methods in RF Design" that he
>> suggests the gain of a Dual Gate Mosfet in a mixer circuit is about 1/4
>> of the gain of the same device in an RF amp circuit. If this is true
>> then the 6dB gain I now see in the mixer stage would be about right.
>>
>> I cranked up the LO level and now have +/- 4V on G2. I tried biasing the
>> Gate up to 3 but it made no difference than when just 47K to ground
>> bias was used on G2.
>>
>> The main issue I am having now is matching to the 4-pole filter.
>> I have tried several approaches and the performance is disgusting.
>>
>> The current mixer to filter circuit is....
>>
>> This "should" have matched down to 800R
>>
>> 100nH (Q=100) inductor to Vcc from Drain
>> 6-30p trimmer to ground from drain
>> Split capacitor tap from drain to ground (220pF in series with 200pF)
>>
>> 1st filter, 4p7 to ground between 1st and second filter.
>>
>> Output match to 50R from 800R for testing...
>> 100nH to ground from filter output
>> 82pF to ground
>> 6-30p trimmer to ground
>> 15pF in series to 50 Ohm load.
>>
>> The loss through the filter is around 10dB instead of 3dB, the ripple is
>> around 6-8db instead of 1dB. The filter response shows double peaks with
>> dip between, either side of the peaks falls off extremely quickly at
>> around 2 kHz off (should be +/- 15kHz bandwidth).
>>
>> I would appreciate any help I can get to determine what is happening and
>> to correctly match into this filter that requires 800R//3pF terminations
>> at 45 MHz.
>>
>>
>Andy writes:
>

> Ok. Well, using +/- 4 volts (i am guessing rms) will certainly
>drive
>the mosfet from full on to cutoff so DC biasing wouldn't be required.
>Less LO could be used with a DC bias, but if you have the LO power
>available, there is no reason to change.

You need to drive it hard for best overload performance.

DGfets were a favorite before DBMs and other high level mixers
or Gilbert cells.

> I am assuming that you have gotten rid of the 800 drain load.....
>The split cap approach is fine and should give you about a 4/1
>step down, so if the drain output imp is 3200 ohms or thereabout, the
>match should be close... (I am doing this in my head, so forgive me if
>
>I am off by a thousandfold :>))))

You likely right on. I used 5k as a round number years ago with
success with 3n203s and the BF998 devices have higher GM and
Idss so that would fit with your number.

If you load it low the gain drops but overload and noise performance
is not hurt badly.

>
> Now, the filter loss is something else. You did not tell me how you
>
>measured it, and I am assuming that you just measured the voltages
>and used that. This is a common mistake as there can be substantial
>impedance change. The only accurate way to characterize filter loss
>is with a special test jig which can measure the power into the load
>without the filter and then the power into the load WITH the filter,
>without
>changing any of the tuning.... A purely resistive jig with a highZ
>probe
>can be fairly accurate, measuring voltage loss..... But you have to
>allow
>for any impedance changes in source and load.......

The other nasty is most of those filters are more sensitive to
reactive loading than errors is resistive loading. So the scope
probe C (cheap probes can be 7-10pf) can be a real factor
in both meaurement error and circuit loading(capacitive termination).

> The inter match between the two filters should have both and L and
>a C
>making a parallel tank to make sure both the filter reactance, and the
>stray reactances are tuned out. Usually filters are slightly
>capacitive
>, a couple pf, on their parallel terminal impedance......a tuned
>circuit
>will tune all this out..... giving you 800 to 800... You tune the tank

>for minimum ripple in the passband... not for max gain at one of
>the ripples.... tho it will be close...
>
> The output transformation from 50 ohms up to 800 ohms represents
>a 4 to 1 voltage transformation, or 12 db voltage loss..... In other
>words,
>if you used an 800 ohm resistive load (with a parallel tank to get rid
>of the reactance and strays) you would, with a voltage probe, measure
>12 db higher than you would when you transformed the load down to
>50 ohms.... If you already knew this, and accounted for it, I
>apologize for
>assuming you didn't,, , but it is a common mistake some people have
>made....
>
> I don't disagree with Wes's book or explanation at all, but I am
>surprised
>that 12 db was the best the mosfet would do.....but, as I said, I have
>never used that particular one...

The fet is a square law mixer so gain and conversion figures are
not the same as if it were straight amplifer. The amplifier form is
two cascaded gain stages and the mixer form is an amplifer with a
series switch, least that model works for me.

> Remember, you have to match the RF generator UP to the input
>Z of G1 in order to calculate the conversion gain. If you have just
>connected G1 to a 50 ohm RF source, you are losing a lot of voltage
>since the input Z of G! is probably a couple K..... That is quite a
>voltage gain.... and that is before the conversion process even
>starts....
>
> It looks to me like you are on the right track. Again , I apologize
>if it seemed
>I was "talking down" to you, but I am just doing an all-purpose memory
>dump
>of all I remember about when I did this..... And I know for sure that
>I got a hell of a lot more conversion gain out of a 3n141..... after
>matching
>both the input to G1 AND the output to a matched load....

Big time! I found that the '141 and friends like to see around 1-2k
impedence level for best gain and at less than 600 ohms it was
pretty poor. Noise figure also improves.

Allison

>
> Goodluck,,
>
> Andy W4OAH

3495. Re: Help with Mosfet mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-03 02:47:51 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <3KGdnZh3W_TPGDXZnZ2dnUVZ_vadnZ2d@web-ster.com>
Source record: 11496

David wrote:

> Andy,
>
> The input to the mixer on G1 is the second stage of a DTC. The DTC was
> designed to provide the appropriate RP for a 6MHz bandwidth. I then
> assumed that G1 will be extremely high impedance compared to the DTC
> and therefore would not load it down.
>
> The gain was measured by first measuring the power output of the mixer
> and then measuring the power output at the end of the filter.
>
> The manufacturer data for the filter specifies maximum loss of 3dB (they
> supply 2 matches filters that connect to form a 4-pole).
>
> The output of the filter was stepped down to 50 Ohms with a C-Tap
> impedance transform on the tuned circuit.
>
> The input was matched from 2800 Ohms (Rp of the coil in the mixer tank)
> to 800 R using a C-Tap transform also.
>
-- snip --

This could be your problem right here -- at 45MHz it's probably not
realistic to expect no loss in the mixer drain circuit. I'd find the Q
of the mixer tank without the filter, and use that to calculate the
effective parallel resistance, as well as the attenuation of the filter.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

3496. Re: Self-heating of crystal in inverter oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-03 05:02:31 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrneah977.2ct6.ben@saturn.home.ben.com>
Source record: 11497

On 2006-07-01, nospam@nouce.bellatlantic.net <nospam@nouce.bellatlantic.net> wrote:
> On Sat, 01 Jul 2006 02:23:19 -0500, Ben Jackson <ben@ben.com> wrote:
>
>>> I suggest a discrete Bipolar or FET where you can control the
>>> operating point of the device better.
>>
>>If I can't tame this VCXO I will try that. This must be how Manhattan
>>prototyping branches off into "Ugly"...

Well, this might be the best advice I ever got from Usenet. I fought every parameter in the 'HC86 inverter oscillator and lost. The fact that it works great at 14.85MHz and the elegance of using up the extra gates lured me in. The whole thing is very voltage sensitive (around 1Hz/mV at the output of the gate, making it very sensitive to Rs as well). This might be due to the propagation parameters of the gate varying substantially with temperature and voltage.

I built a Colpitts oscillator with a plain old 2N3904 and it hasn't moved by more than a few Hz in the hour it's been on.

Thanks!

--
Ben Jackson
<ben@ben.com>
http://www.ben.com/

3497. Inductance Capacity meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-03 07:23:38 UTC
From: Paolo IW3ARV <iw3arv@inwind.it>
Message-ID: <1151911418.539954.235680@v61g2000cwv.googlegroups.com>
Source record: 11398

Hello,

anyone can suggest a schematics of a simple analog inductance/capacity
meter.

Thanks Paolo Iw3arv

3498. Re: Inductance Capacity meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-03 12:51:32 UTC
From: Paolo IW3ARV <iw3arv@inwind.it>
Message-ID: <1151931092.511584.326480@j8g2000cwa.googlegroups.com>
Source record: 11400

Many many thanks,

this is probably the cirquit that i need.

73 de IW3ARV Paolo

jack ha scritto:

> WB9LVI's "LMS" was described in QEX -- ultra simple -- just your sound card
> and an opamp or so:
> http://www.arrl.org/qex/2005/Steber.pdf there is a link to the exe file in
> the PDF.
>
> Jack
>
> "Paolo IW3ARV" <iw3arv@inwind.it> wrote in message
> news:1151911418.539954.235680@v61g2000cwv.googlegroups.com...
> > Hello,
> >
> > anyone can suggest a schematics of a simple analog inductance/capacity
> > meter.
> >
> > Thanks Paolo Iw3arv
> >

3499. Re: Help with Mosfet mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-03 12:58:29 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1151931509.862580.253050@75g2000cwc.googlegroups.com>
Source record: 11401

David wrote:
> Andy,
>
> Does this all sound reasonable ?
>
> Thanks heaps
>
> Regards
>
> David
>

Andy writes:

Sounds to me like you are well along the road to being the
world's best receiver designer....

One trick that I used myself when using a scope or spectrum
analyzer to probe volltage to check gain :

I would put about a 0.2 (yes 2/10) of a pf capacitor in series
with my probe, whether highz scope or 50 ohm spect analyzer...
This almost completely "unloads" the circuit when the probe touches
it. There is a great signal loss of course, but since the frequency
is the
same for both input and output measurements, the loss is the same
for each measurement. Relative readings are pretty accurate......
I liked using a spect analyzer cause I could turn the sensitivity
way the hell up, and my measurements would be in db.....

Worked well for me... Maybe others here have some favorite
tricks they can share, too....

Andy W4OAH in Eureka, Texas

(If you mowed your yard and found your missing car, you might
live in Eureka, Texas)

3500. Re: IEEE Standard for RF Safety Levels

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-03 13:24:31 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <44A91A88.9090707@invalid.invalid>
Source record: 11402

Dr. Jeff wrote:
> Ever since the Cable Company mounted a large (3'x2'x2') electronics box
> on the telephone pole outside my home, I've picked up interference on
> my General Coverage receiver at 4 Mhz. plus. Using my RF Frequency
> Counter with 50 ohm antenna, I was able to pinpoint the source of the
> RF to that box. Also, I am able to pick up the RF 400, 500 plus feet
> away! Considering that the same meter doesn't pick up my cell or
> cordless phone more than a foot or two away, I have to assume that the
> 4 Mhz. RF is in the watt range, rather than micro or milliwatts!

I would be pretty confident there is no safety issue.

Looking at
http://www.arrl.org/news/rfsafety/eval/ , the FCC has determined that amateur stations intentionally transmitting just below 4MHz do not need to evaluate human RF exposure until their transmitter power reaches 500 watts. At lower powers, the station simply cannot develop enough RF field to exceed safety standards.

(note that much lower powers trigger safety assessments at higher frequencies; shortwave RF is much less efficiently absorbed in the body, and thus is much safer)

I would be quite confident the RF power in this box is much less than 500 watts. At absolute maximum I could see 5 watts.

Now, the levels necessary to cause interference to shortwave radio reception, on the other hand, are much lower.

IMHO it really isn't necessary to assess the field strength; the cable system is not licensed to transmit at 4MHz, and thus is not allowed to cause interference to SW reception regardless of field.

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

3501. Re: IEEE Standard for RF Safety Levels

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-03 14:02:54 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <e8b82ekcj3@puck.litech.org>
Source record: 11403

Dr. Jeff <drjeff@optonline.net> wrote:
> I'm not so much worried about hazardous effects, it's just that I don't
> think the cable company should be installing equipment 50 feet from my
> home that is broadcasting RF
> so close to the 80 meter band! I'm also tired of doing "their job" for
> them: last year when the neighborhood experienced problems for weeks
> and weeks with their Internet system, I had to show their field
> engineer that there was a problem on the "uplink" side of their
> network. "By golly gee, you're right!" was the prognosis from the back
> of the Cable truck....

You're so right about not doing their job for them, and even more
so about them leaking interfering signals. I've got used to being
the first in the area to report problems with the cable: I depend
on the 'Net link being _UP_, and know (from my dayjob) how to do
problem determination and tracing. You get to be the first to report
their problem with something leaking around 4 MHz., and to press the
issue with your city management (if they're city-franchised, as so
many cablecos are) and up the line to the FCC if the cableco and the
franchisor are unresponsive.

Do please keep us posted.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

3502. Re: Spurs on mixer output

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-03 21:56:44 UTC
From: Pete KE9OA <p.gianako@comcast.net>
Message-ID: <IrWdnSqQRtIHDzTZnZ2dnUVZ_tqdnZ2d@comcast.com>
Source record: 11404
Body handling: HTML body converted to readable text

I figured something like that occured. Sometimes, I even receive direct
e-mails from group postings. No offense intended.

Pete

wrote in message
news:ftaea2tcnvusccfhks3o5g72t6qkr6u7p1@4ax.com...
>
> Not to belabor but as explanation. I use Free Agent and it displays
> in indented threaded form so your reply was nested two deep from
> my first reply posting.
>
> Allison
> Kb1GMX
>
> On Sat, 1 Jul 2006 14:50:17 -0500, "Pete KE9OA"
> wrote:
>
>>This thread is directed at the author, not you. The purpose of my posting
>>in
>>the latest position of the thread is to move things in a chronological
>>order. The original poster knows how to read, so it is quite possible that
>>this person won't miss my posting.
>>
>>Pete
>>
>> wrote in message
>>news:r77ba2dqivor2ss3msqp48u3lqm3962r76@4ax.com...
>>> On Fri, 30 Jun 2006 06:48:45 -0500, "Pete KE9OA"
>>> wrote:
>>>
>>>>What kind of spectrum analyzer are you using? What are the front end
>>>
>>> I'm not using one the author of the thread is.
>>>
>>>>attenuator settings on the spectrum analyzer? What is your reference
>>>>level?
>>>
>>> Ask him not me.
>>>
>>>>All of these things, especially the front end attenuator settings, can
>>>>affect your result. If the 1st mixer in the spectrum analyzer is driven
>>>>into
>>>>nonlinearity, you can see all kinds of IMD products that are generated

>>>>in
>>>>the analyzer itself.
>>>>Also, why are you doing this test with the RF port of the mixer
>>>>terminated
>>>>in 50 Ohms? This type of termination is only used when doing either
>>>>return
>>>>loss tests or noise balance tests.
>>>>If you are driving the SBL-1 mixer with +7 to +9dBm of LO level and you
>>>>are
>>>>driving the RF port with a signal that is at least 20dB below the 1dB
>>>>compression point of the SBL-1, the main things you should see at the
>>>>I.F.
>>>>port are a supressed LO signal, an upper sideband that is about 7dB
>>>>lower
>>>>in
>>>>level than the RF injection level, and a lower sideband that is also
>>>>about
>>>>7dB lower in level than the RF injection level.
>>>>The 1dB compression point on the SBL-1 is about 0dBm, so I would set the
>>>>level to the RF port at -20dBm. If you go above this level, you will see
>>>>higher conversion loss, and possibly more IMD products at the I.F. port
>>>>of
>>>>the mixer.
>>>>In conclusion, make sure that the IMD isn't being generated in your test
>>>>setup, and make sure that you are not exceeding the recommended RF input
>>>>level to the SBL-1.
>>>>
>>>>Pete
>>>
>>> You top posted to a reply that I'd posted to and your context is way
>>> off as a result. Go bat to the root of the thread and read the
>>> posting again.
>>>
>>> Briefly, he's seeing spurs every 25 or 50 khz with a LO in the 45mhz
>>> region and NO RF on the input (unterminated RF port).
>>>
>>> Allison
>>>
>>>
>>>>
>>>> wrote in message
>>>>news:p9o5a21152qsldg22fqccf0tm1ba7grf2d@4ax.com...
>>>>> On Wed, 28 Jun 2006 07:43:20 -0500, tim gorman
>>>>> wrote:
>>>>>
>>>>>>john wilkinson wrote:
>>>>>>
>>>>>>>
>>>>>>>
>>>>>>> Hi,

>>>>>>> If I feed my second mixer into a spectrum analyser, and inject a
>>>>>>> 44.545MHz
>>>>>>> LO, with no power to the first IF stage, I see spurs at about
>>>>>>> 48-50KHz
>>>>>>> intervals on the mixer output, from 0 to the 455KHz normal output
>>>>>>> freq.
>>>>>
>>>>>>
>>>>>>> The mixer is an SBL-1.
>>>>>>>
>>>>>>> Any ideas as to where these are comming from?
>>>>>>>
>>>>>>> Best regards,
>>>>>>> John
>>>>>>
>>>>>>A couple of observations.
>>>>>>
>>>>>>If you simply disconnected the second mixer from the 1st mixer then it
>>>>>>sounds like you do not have the output of the 1st mixer properly
>>>>>>terminated. Unless, that is, the spectrum analyzer provides a good
>>>>>>50ohm
>>>>>>termination in the probe. The SBL-1 is a double-balanced mixer but in
>>>>>>order
>>>>>>to get the "balance" to work right you must properly terminate *all*
>>>>>>ports.
>>>>>>Otherwise all kinds of impedances can be "thrown" back to the other
>>>>>>ports -
>>>>>>causing all kinds of problems with attached LO's and RF stages.
>>>>>>
>>>>>>Regularly spaced spurs from DC to 455khz does not sound like spurious
>>>>>>mixing
>>>>>>products. It sounds more like an oscillator being driven into
>>>>>>saturation
>>>>>>causing square waves to be produced which are providing regular
>>>>>>harmonic
>>>>>>outputs. This could be a product of poor terminations on the mixer
>>>>>>ports.
>>>>>
>>>>> Tim, the LO is 45.455 (or 44.545) either way there should be no LF
>>>>> outputs from the mixer below the LO injection unless it's a spur on
>>>>> the LO.
>>>>>
>>>>>>Directly connecting the output of a SBL-1 to the input of another
>>>>>>mixer,
>>>>>>even another SBL-1, is not recommended either. The SBL-1 does not have
>>>>>>built-in terminations. A good, symmetric, 50ohm 3db pad between the
>>>>>>stages
>>>>>>would provide a much better setup and would not significantly impact
>>>>>>your
>>>>>>overall noise factor. Be sure and connect your spectrum analyzer to

>>>>>>the
>>>>>>far
>>>>>>side of the pad.
>>>>>
>>>>> Thats true though his testing is with a 20db IF after it and one would
>>>>> hope that does present a 50ohm match to the IF port. Usually if the
>>>>> poarts are badly matched the mixing spurs are greater and the port
>>>>> to port isolation go to pot. If the only thing going in is the LO
>>>>> then likely the LO is the source but if there is gain flollowing then
>>>>> the gain stage is also suspect.
>>>>>
>>>>> I've worked with enough SBL1 and MD108s and all their similar DBMS
>>>>> to know the SBL1 in this case is not the offendor Even if
>>>>> misterminated. Likely causes are the 45mhz filter is looking reactive
>>>>> to the IF amp and the IF is unstable (makes a fine OSC) or there is
>>>>> some other source of RF that is unaccounted for (spurs).
>>>>>
>>>>>
>>>>> Allison
>>>>> Kb!GMX
>>>>
>>>
>>
>

3503. Re: Inductance Capacity meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-03 22:58:09 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <TpKdnWjFCMV3ajXZnZ2dnUVZ_rSdnZ2d@comcast.com>
Source record: 11399

WB9LVI's "LMS" was described in QEX -- ultra simple -- just your sound card
and an opamp or so:
http://www.arrl.org/qex/2005/Steber.pdf there is a link to the exe file in
the PDF.

Jack

"Paolo IW3ARV" <iw3arv@inwind.it> wrote in message
news:1151911418.539954.235680@v61g2000cwv.googlegroups.com...
> Hello,
>
> anyone can suggest a schematics of a simple analog inductance/capacity
> meter.
>
> Thanks Paolo Iw3arv
>

3504. frequency meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 01:27:32 UTC
From: Kirk <kirkmcloren@yahoo.com>
Message-ID: <1151976452.561672.72470@j8g2000cwa.googlegroups.com>
Source record: 11405

I have looked at used eqpt etc and kits. Most kits are partial kits.
How I wish Heath were still in business :(

Any recommendations for a frequency meter of good accuracy. I dont need high frequency capability - a few MHz is good enough but I need good accuracy.

thanks
Kirk
KC7THL

3505. Re: FOR SALE - A LONG LIST

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 03:04:12 UTC
From: gunsmoke <gunsmoke.2aeif0@news.radiobanter.com>
Message-ID: <gunsmoke.2aeif0@news.radiobanter.com>
Source record: 11406

60 FT ROHN 25g TOWER w/pointed top section
and rotator plate

Im interested in the tower ......gunsmoke241@hotmail.com

--
gunsmoke

3506. Re: frequency meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 03:30:52 UTC
From: fmmck@aol.com
Message-ID: <fmmck-0307062330520001@ac85d4d4.ipt.aol.com>
Source record: 11407

In article <1151976452.561672.72470@j8g2000cwa.googlegroups.com>, "Kirk" <kirkmcloren@yahoo.com> wrote:

> I have looked at used eqpt etc and kits. Most kits are partial kits.
> How I wish Heath were still in business :(
>
> Any recommendations for a frequency meter of good accuracy. I dont need
> high frequency capability - a few MHz is good enough but I need good
> accuracy.

Kirk-

Believe it or not, Heath did not go out of business. They just stopped selling Heathkits!

How accurate is accurate? If one part per million is acceptable, many counters will do that. If your requirement is better than that, look for a counter with an oven-controlled crystal oscillator. If that still isn't good enough, you may be able to obtain a Rubidium-controlled oscillator (or GPS-controlled) to use as an external timebase.

If you are willing to spend the money, look at Agilent (HP) and Phillips (Fluke) as sources. If you're looking for a bargain, then there are several HP and Fluke counters that show up on eBay that should meet your needs.

Examples are Fluke's 7220A, 7260A and 7261A. One of these with the high-accuracy option might sell for around $75.

Another good one is the HP 5328, also available with the high-stability option. I think this is the one that shows up in a military configuration that includes the high-stability oscillator as well as a 500 MHz pre-scaler.

Fred
K4DII

3507. How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 05:57:12 UTC
From: Beverly Erlebacher <bae@cs.toronto.edu>
Message-ID: <2hqacpnj1nwj$.1683sqqzgbbo2$.dlg@40tude.net>
Source record: 11408
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Can you help me roughly CALCULATE how to increase the range of my home Internet wireless WiFi setup to a shed 300 feet away from my house?

Presently, I can walk about half the way through the wooded area to the shed with my laptop in hand before I lose the connection to the PCMCIA 802.11b,g Linksys card. Basically I need to gain 150 feet in "range".

But how?

At the store, I immediately become confused as I try to compare $30 USD omnidirectional antennas (D-Link ANT24-070) that boost "power" by a claimed 7 db; $50 USD directional corner antennas (Hawking HAI15SC) that claim 15 dbi (whatever a dBi is); and $150 USD 802.11N routers that claim to boost omnidirectional "range" by 4x (Linksys WRT300N).

How does an omnidirectional 7 db or directional 15 dBi boost in "power" equate to range?

Approximately how many decibels of (omnidirectional or directional) power do I really need to boost my WiFi range from about 150 feet to the 300 feet I need?

Looking up what a decibel is (http://en.wikipedia.org/wiki/Decibel#Definition), I calculate the D-Link ANT24-070 omnidirectional antenna gives me about 5 times the power (assuming 7 db = 10^7/10 ~= 5); but does this get me the additional 150 feet of range to my shed?

Spending almost twice as much money on the Hawking HAI15SC directional antenna gets me roughly 30 times the power (assuming 15 db = 10^15/10 ~= 32); but is that enough power to get me the range to my shed?

Indeed, is there some way to add a Hawking 15db antenna on the receiving end to get 1,000 times the power (15 db + 15 db = 30 db = 10^30/10 ~= 1,000); but what would I hook the wire output from this receiving antenna to in the shed (I can't hook it to the pcmcia card, can I)?

Given those db calculations, how do I compare the antenna options with replacing my home 802.11b,g router with the 4X range $150 USD Linksys 802.11n WRT300N router and the required $120 USD Linksys WPC300N PCMCIA card (assuming 6 db = 10^6/10)?Will this three-antenna 802.11n router be forced to drop down to 1X speeds because inside my house my kid's laptops will all be using 802.11b or 802.11g? Or can the router work on both 802.11g to one computer and on 802.11n to the other computer at the same time?

I'm so confused!

All I want is to make a well-informed buying decision to increase my WiFi range reliably to 300 feet to a known point.

Can you help me sort out all these very confusing variable (to me anyway)? I have no training in electrical engineering; but I can google.

Thank you,
Beverly

3508. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 06:42:40 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <af2dnU-Kno86kzfZRVnyvw@bt.com>
Source record: 11409

"Beverly Erlebacher" <bae@cs.toronto.edu> wrote in message
news:2hqacpnj1nwj$.1683sqqzgbbo2$.dlg@40tude.net...
> Can you help me roughly CALCULATE how to increase the range of my
home
> Internet wireless WiFi setup to a shed 300 feet away from my house?
>
> Presently, I can walk about half the way through the wooded area to
the
> shed with my laptop in hand before I lose the connection to the
PCMCIA
> 802.11b,g Linksys card. Basically I need to gain 150 feet in
"range".
>
> But how?
>
> At the store, I immediately become confused as I try to compare $30
USD
> omnidirectional antennas (D-Link ANT24-070) that boost "power" by a
claimed
> 7 db; $50 USD directional corner antennas (Hawking HAI15SC) that
claim 15
> dbi (whatever a dBi is); and $150 USD 802.11N routers that claim to
boost
> omnidirectional "range" by 4x (Linksys WRT300N).
>
> How does an omnidirectional 7 db or directional 15 dBi boost in
"power"
> equate to range?
>
> Approximately how many decibels of (omnidirectional or directional)
power
> do I really need to boost my WiFi range from about 150 feet to the
300 feet
> I need?
>
> Looking up what a decibel is
> (http://en.wikipedia.org/wiki/Decibel#Definition), I
> calculate the D-Link ANT24-070 omnidirectional antenna gives me
about 5
> times the power (assuming 7 db = 10^7/10 ~= 5); but does this get me
the
> additional 150 feet of range to my shed?
>
> Spending almost twice as much money on the Hawking HAI15SC

directional
> antenna gets me roughly 30 times the power (assuming 15 db =
10^15/10 ~=
> 32); but is that enough power to get me the range to my shed?
>
> Indeed, is there some way to add a Hawking 15db antenna on the
receiving
> end to get 1,000 times the power (15 db + 15 db = 30 db = 10^30/10
~=
> 1,000); but what would I hook the wire output from this receiving
antenna
> to in the shed (I can't hook it to the pcmcia card, can I)?
>
> Given those db calculations, how do I compare the antenna options
with
> replacing my home 802.11b,g router with the 4X range $150 USD
Linksys
> 802.11n WRT300N router and the required $120 USD Linksys WPC300N
PCMCIA
> card (assuming 6 db = 10^6/10)?Will this three-antenna 802.11n
router be
> forced to drop down to 1X speeds because inside my house my kid's
laptops
> will all be using 802.11b or 802.11g? Or can the router work on both
> 802.11g to one computer and on 802.11n to the other computer at the
same
> time?
>
> I'm so confused!
>
> All I want is to make a well-informed buying decision to increase my
WiFi
> range reliably to 300 feet to a known point.
>
> Can you help me sort out all these very confusing variable (to me
anyway)?
> I have no training in electrical engineering; but I can google.
>
> Thank you,
> Beverly
==========

Very simply - four times the transmitter power (+6 dB) doubles the
range.

Is your receiver sufficiently sensitive? Or is the received signal
below the noise level?

Reg.

3509. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 06:49:19 UTC
From: Beverly Erlebacher <bae@cs.toronto.edu>
Message-ID: <ak3am11qrjdw$.12snkojoszmz0$.dlg@40tude.net>
Source record: 11410
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Tue, 04 Jul 2006 06:28:16 -0000, Dave Platt wrote:
>>Can you help me roughly CALCULATE how to increase the range of my home
>>Internet wireless WiFi setup from 150 feet to a shed 300 feet away?

> Doubling the range requires 6 dB of additional gain from the antennas
> at one end or the other.

Hi Dave,

First thank you for taking the time to help me and anyone who read this.
Second, I'm going to have to go slowly with you so I'll respond one by one.

Third, does your statement that 6 dB of gain equates to 2 times the range
mean that the "square root" of the power difference is my key to
calculating the range?

That is, is this range calculation from dB power roughly true (based on
what you said)?

6 dB = 10^(6/10) ~= 4X the power, where the square root of 4X equals a
doubling the range (assuming an omnidirectional antenna)?

Beverly

3510. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 07:22:44 UTC
From: Beverly Erlebacher <bae@cs.toronto.edu>
Message-ID: <c12amw79hacg$.c2e0aki95z9k.dlg@40tude.net>
Source record: 11411
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

> 6 dB = 10^(6/10) ~= 4X the power, where the square root of 4X equals a
> doubling the range (assuming an omnidirectional antenna)?

I'm hoping I can extrapolate from the above statement to calculate the dB gain for the $150 Linksys WRT300N router which claims a 4X range improvement (so I can compare the $50 antenna's effect with that of the 802.11n router).

Following your lead, the power improvement necessary for a 4X range improvement is 4^2 = 16X power gain.

This 16X power gain then equates to about 12 dB (since 12 dB = 10^[12/10] ~= 16X power).

So, is it safe to calculate that the claimed 4X range improvement of the Linksys WRT300N wireless broadband router can be compared to that of a 12 dB gain omnidirectional antenna?

Beverly

3511. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 07:36:53 UTC
From: Beverly Erlebacher <bae@cs.toronto.edu>
Message-ID: <1aea0pztwz017$.67s063ytjufg.dlg@40tude.net>
Source record: 11412
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Tue, 04 Jul 2006 06:28:16 -0000, Dave Platt wrote:
>>Can you help me roughly CALCULATE how to increase the range of my home
>>Internet wireless WiFi setup to a shed 300 feet away from my house?
>
> dBi refers to gain relative to an "isotropic" antenna
> dBd refers to gain relative to a half-wave dipole
> dBi numbers are approximately 2 dB higher than dBd numbers,
> for the same actual amount of gain.

Hi Dave,

Oh my. I guess the Hawking marketing folks were trying to trick me by
quoting a decibel number that was higher those I compared with.
15 dBi ~= 15 -2 ~= 13 dBd

That makes the $50 USD 15 dBi Hawking HAI15SC Hi_Gain Antenna drop down
from a gain of 32X power to only 20X power which gives me about a 4X range.

13 dBd = 10^(13/10) power ~= 20x power

Assuming the square of the power is the range, I get 4X range.
20^(1/2) ~= 4X range

Assuming my reliable range is 100 feet, that equates to 400 feet of range.
100 feet * 4 = 400 feet range

Interestingly, for comparison purposes, that is the SAME RANGE that the
much more expensive Linksys (Cisco) WRT300N router claims.

Do these calculations make sense?
Beverly

3512. quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 07:45:57 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <e8d6bk$s6n$1@news.onet.pl>
Source record: 11413

How to use quadrature detector to demodulate cw and ssb. I want to use AD607 in simple project. There is Quadrature detector on "the end" with two outputs I&Q - and internal phase shifter. How to detest SSB simplest way?

73

mac

3513. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 07:48:38 UTC
From: Beverly Erlebacher <bae@cs.toronto.edu>
Message-ID: <8gaum8k8ji29$.1iy8idw960gcu.dlg@40tude.net>
Source record: 11414
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Tue, 04 Jul 2006 06:28:16 -0000, Dave Platt wrote:
>>Can you help me roughly CALCULATE how to increase the range of my home
>>Internet wireless WiFi setup to a shed 300 feet away from my house?

> 3 dB of additional gain equates to twice the delivered power at a
> specific range. Because power falls off in proportion to the square
> of the distance, twice the power yields sqrt(2) or about 1.4 times the
> range, all else being equal (which it often isn't).
>
> 6 dB of additional gain is four times the delivered power at a given
> distance, or twice the range for the same amount of power.

So that I may compare the different options available at the store to me
for increasing my range, are these simplified calculations below correct?

a. 3 dBd additional gain = 10^(3/10) ~= 2x the delivered power
b. 2x power = 2^(1/2) effective range ~= 1.4X the range

b. 6 dBd additional gain = 10^(6/10) ~= 4x the delivered power
b. 4x power = 4^(1/2) effective range ~= 2X the range

Can someone let me know if these calculations are correct because that
helps me equate the different antennas and routers to the one measure I
desire, which is effective range in the area of 400 feet.

Beverly

3514. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 07:53:30 UTC
From: Beverly Erlebacher <bae@cs.toronto.edu>
Message-ID: <nzy6rdw7nmxf.g0gscd60doit$.dlg@40tude.net>
Source record: 11415
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

On Tue, 04 Jul 2006 06:28:16 -0000, Dave Platt wrote:
>> Approximately how many decibels of (omnidirectional or directional)
>> power do I really need to boost my WiFi range from about 150 feet
>> to the 300 feet I need?
>
> The _minimum_ you appear to need is 6 dB of additional gain. I'd
> recommend trying for 10 dB or more in order to ensure a reliable
> connection.

May I ask WHERE that 6 dBd of gain is coming from?

Is it ONLY from the "better" antenna?

If that additional 6 dBd is coming from a "better" antenna, then why didn't
they put that better antenna on my router in the first place?

Since the antenna isn't "powerered", there is no external amplifier .... so
I am a bit confused as to WHERE that power is coming from?

Can you unconfusify me here?
Beverly

3515. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 08:48:09 UTC
From: Beverly Erlebacher <bae@cs.toronto.edu>
Message-ID: <1sr34qtndtz8m.8y1znh8b5w9o$.dlg@40tude.net>
Source record: 11416
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

On Tue, 04 Jul 2006 06:28:16 -0000, Dave Platt wrote:
> It's possible to fabricate a corner reflector, or (even better) a
> parabolic reflector, out of material as inexpensive as cardboard
> (or posterboard or something like that) lined with aluminum foil.

Hmm. At first, I thought you were pulling my leg; but a simple google for
more details gave me more homemade WiFi antenna reading than I can handle
in a month. Whew. Here, for others to share, are the Yagi pringles can
antennas (aka cantenna) which purport to "refocus" the WiFi signal from my
router in my house to my shed 300 feet away.

http://en.wikipedia.org/wiki/Cantenna
http://www.oreillynet.com/cs/weblog/view/wlg/448
http://www.seattlewireless.net/index.cgi/PringlesCantenna
http://www.wi-fiplanet.com/reviews/article.php/3401501
http://www.turnpoint.net/wireless/has.html
http://www.binarywolf.com/249/pringles_cantenna.htm
http://verma.sfsu.edu/users/wireless/pringles.php
http://www.seattlewireless.net/index.cgi/CookieCantenna
http://webserver.computoredge.com/editorial/2339/cover.htm
http://www.signonsandiego.com/news/computing/personaltech/20050613-9999-lz1b13canned.html
http://www.overclock.net/faqs/17669-how-make-pringles-can-signal-booster.html
http://www.g4tv.com/screensavers/features/40546/Pringles_Can_WiFi_Antenna.html
http://www.netscum.com/~clapp/wireless.html
http://www.flickr.com/photos/binarywolf/sets/837698/
http://linuxathome.com/files_images/cantenna.pdf

Given that there are two fundamental design styles:
a) Parabola
b) Tube

Do folks here recommend the pringles cantenna or the pie tin antenna for my
2-antenna router 802.11b,g directional application where I need to also
feed the computers within the house in addition to the shed 300 feet away?

Beverly

3516. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 09:52:53 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrneakejl.o0p.ben@saturn.home.ben.com>
Source record: 11417

On 2006-07-04, MAc <mac_dx@tosiewytnie.poczta.onet.pl> wrote:
> How to use quadrature detector to demodulate cw and ssb. I want to use
> AD607 in simple project. There is Quadrature detector on "the end" with
> two outputs I&Q - and internal phase shifter. How to detest SSB simplest
> way?

If it does all that, you just have to choose USB, LSB or AM by chosing
sum, difference or magnitude of the IQ output.

--
Ben Jackson
<ben@ben.com>
http://www.ben.com/

3517. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 10:07:11 UTC
From: Beverly Erlebacher <bae@cs.toronto.edu>
Message-ID: <1i8d1tcl66zdn$.7knr5ebizk69.dlg@40tude.net>
Source record: 11418
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

On Tue, 04 Jul 2006 05:50:02 -0400, Rï¿½gï¿½r wrote:
>> Do folks here recommend the pringles cantenna or the pie tin antenna for my
>> 2-antenna router 802.11b,g directional application where I need to also
>> feed the computers within the house in addition to the shed 300 feet away?
>
> I use panel antennas almost exclusively, exceptions being some 24dbi
> mesh antennas for backhaul.

Hi Rï¿½gï¿½r,

After reading all the articles posted, I now understand that:

a) The pringles can is hip; but it's the worst performer
http://www.oreillynet.com/cs/weblog/view/wlg/448
(it's not even metal foil lined and it's too small in diameter)

b) The coffee cantenna is more effective than the pringles cantenna
http://www.oreillynet.com/cs/user/view/wlg/1124

c) The dish antenna is the simplest of all and almost as good
http://www.freeantennas.com/projects/template
http://www.freeantennas.com/projects/template2/index.html

I also see, as Rod Speed so kindly noted, that the give and take is that we
lose range in some directions in favor of range in the desired direction.
Fair enough.

My one question is a practical one.

Why are there two antennas on my router anyway? Is one transmit and the
other receive? Or are they both transmit and receive?

Given I have TWO omnidirectional antennas on my wireless router, if I put
the parabolic dish antenna on one to direct it to my shed, does that allow
the OTHER antenna to radiate around the house to handle the other computers
roving around the house?

Beverly

3518. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 10:14:00 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <e8df1a$r4s$1@news.onet.pl>
Source record: 11419

Ben Jackson napisaďż˝(a):
> On 2006-07-04, MAc <mac_dx@tosiewytnie.poczta.onet.pl> wrote:
>> How to use quadrature detector to demodulate cw and ssb. I want to use
>> AD607 in simple project. There is Quadrature detector on "the end" with
>> two outputs I&Q - and internal phase shifter. How to detest SSB simplest
>> way?
>
> If it does all that, you just have to choose USB, LSB or AM by chosing
> sum, difference or magnitude of the IQ output.
>
Thank you

what frequency should be for Local oscilator?

MAc

3519. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 11:21:32 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <Cc2dnRvAlL-h0jfZRVnyiA@pipex.net>
Source record: 11420

Beverly Erlebacher wrote:
> Can you help me roughly CALCULATE how to increase the range of my home
> Internet wireless WiFi setup to a shed 300 feet away from my house?
>
> Presently, I can walk about half the way through the wooded area to the
> shed with my laptop in hand before I lose the connection to the PCMCIA
> 802.11b,g Linksys card. Basically I need to gain 150 feet in "range".
>
> But how?
==========
Having followed today's postings on this topic , I see that there is a wooded area between your house and shed, hence there seems to be no free line of sight between the house and the shed.
That's why it is difficult to calculate/predict the Gain you need to penetrate the wooded area with a 2.4 GHz signal.

If you wish to use the laptop inside the shed at a fixed location it MIGHT be good enough if you install (for example)a corner reflector yagi (High Gain)antenna at both the house AND the shed. However then your laptop needs a plug-in PCMCIA WiFi tansceiver with a connection for an external antenna.
One of such units is the Make: Buffalo - Air Station Turbo G ,High Power -unit which also has a built-in antenna.
Note : The coaxial cable between the 2 devices and their associated antenna should be limited to only a few metres because of the high frequency being 2.4GHz

Communication here is 2 way . Your laptop might receive the (antenna amplified) signal from your router located in the house ,but that does not mean the router will receive the signal from the laptop without additional facilities at the laptop.

Again , because of the probably partly obstructed path (wooded area) it is difficult making any sensible calculations.

Frank GM0CSZ / KN6WH

3520. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 11:55:40 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <e8dkvsgtm1@news.onet.pl>
Source record: 11421

Ben Jackson napisaďż˝(a):
> On 2006-07-04, MAc <mac_dx@tosiewytnie.poczta.onet.pl> wrote:
>> How to use quadrature detector to demodulate cw and ssb. I want to use
>> AD607 in simple project. There is Quadrature detector on "the end" with
>> two outputs I&Q - and internal phase shifter. How to detest SSB simplest
>> way?
>
> If it does all that, you just have to choose USB, LSB or AM by chosing
> sum, difference or magnitude of the IQ output.
>

What is the signal on "I" output - other way what I will have on "I"
output when I put 9MHz on Input and BFO on LO input.

3521. Re: frequency meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 12:15:24 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <_Zsqg.282$Ak3.217@fe04.lga>
Source record: 11422

If you aren't afraid of picking up a soldering iron, it is pretty cheap and easy to build a counter. Counters count -- really --, so precision is completely dependent on how long you are willing to wait. 1 second = 1 Hz, 10 seconds = 0.1 Hz. Counters up to about 60 MHz can be built for under $15. (Well, OK, if your junk box isn't very good, and you don't have other projects, shipping for the parts will probably double or triple the cost.) Accuracy is dependent on a crystal, so if you want to get under something like 0.01% you are probably going to have to add an oven to the typical designs you will find on the web. For "a few MHZ", construction is very non-critical. Take a look at OM3CPH's designs for a starting place.

..

"Kirk" <kirkmcloren@yahoo.com> wrote in message
news:1151976452.561672.72470@j8g2000cwa.googlegroups.com...
>I have looked at used eqpt etc and kits. Most kits are partial kits.
> How I wish Heath were still in business :(
>
> Any recommendations for a frequency meter of good accuracy. I dont need
> high frequency capability - a few MHz is good enough but I need good
> accuracy.
>
> thanks
> Kirk
> KC7THL
>

3522. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 12:30:46 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <octqg.284$Ak3.0@fe04.lga>
Source record: 11423

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:Cc2dnRvAlL-h0jfZRVnyiA@pipex.net...

> Having followed today's postings on this topic , I see that there is a
> wooded area between your house and shed, hence there seems to be no free
> line of sight between the house and the shed.
> That's why it is difficult to calculate/predict the Gain you need to
> penetrate the wooded area with a 2.4 GHz signal.

YES - exactly.

I have been able to go laptop to laptop almost a mile with normal PCMCIA cards, using patch antennas. (Well - normal cards modified to bring out the signal to the antenna.) These antennas can be astonishingly directional. Indeed, at 2.4 MHz, it is pretty easy to get antennas with amazing amounts of gain. This translates into VERY CAREFUL aiming of the antenna. Also keep in mind that at 2.4 GHz, RG-58 ain't gonna cut it. Most of what you put in to one end of any normal coax will be sucked up by the coax and won't make it out the other end. You need to use cable appropriate to the frequency.

With a wooded area, not only is it very difficult to calculate, but tiny differences in the positioning of the two ends is going to make a huge difference, as is summer to winter. Even a windy day is going to change things.

Because of the small size, it can be pretty simple to build a yagi for wireless. Yagis won' t have the gain of some of the other types of antennas, but at the same time, they won't be nearly as critical.

Depending on your situation, you may find a directional antenna a better choice than more power. Lots of people driving by like to "borrow" your wireless, and I personally don't like the idea of strangers roaming my LAN, even if they aren't typical crackers. (Seems to me that salesmen are the most common intruders. They have learned that they can find a wireless connection almost anywhere). I find getting coverage into the back yard, while NOT getting coverage well into the street is a bit of a challenge. Yes, I use encryption and MAC filtering, but I'd still rather not have lots of wardrivers trying to break in.

..

3523. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 12:44:10 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <uotqg.2631$283.1345@trnddc08>
Source record: 11424

It's not that easy Ben.....

The I-Q demodulator in this chip doesn't include the required 90 deg audio phase shift network. That's usually one of the toughest parts of any phasing-type detector. Also, the LO phase balance is specified as 1.2 deg and the amplitude balance is specified as 0.2 dB. These imbalances would combine to give an opposite sidenabd rejection of less than 40 dB, maybe 35 dB. Not too good by modern standards.

Furthermore, the detector circuits only work at IF frequencies, not RF frequencies. This implies that the internal mixer would have to be used in a downconversion mode, resulting in a requirement for an image-reject bandpass filter at the mixer input and some measure of bandpass filtering at the mixer output.

On top of all this, the LO noise floor is only -100 dBc/Hz, which would probably cause pretty bad reciprocal mixing under crowded band conditions.

All things considered, I think that by the time one made this chip do what it has to do for SSB/AM, one would be better off starting from scratch with more conventional components.

Joe
W3JDR

"Ben Jackson" <ben@ben.com> wrote in message
news:slrneakejl.o0p.ben@saturn.home.ben.com...
> On 2006-07-04, MAc <mac_dx@tosiewytnie.poczta.onet.pl> wrote:
>> How to use quadrature detector to demodulate cw and ssb. I want to use
>> AD607 in simple project. There is Quadrature detector on "the end" with
>> two outputs I&Q - and internal phase shifter. How to detest SSB simplest
>> way?
>
> If it does all that, you just have to choose USB, LSB or AM by chosing
> sum, difference or magnitude of the IQ output.
>
> --
> Ben Jackson
> <ben@ben.com>
> http://www.ben.com/

3524. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 12:57:43 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <e8dok7$tt6$1@news.onet.pl>
Source record: 11425

W3JDR napisaďż˝(a):
> It's not that easy Ben.....
>
> The I-Q demodulator in this chip doesn't include the required 90 deg audio
> phase shift network. That's usually one of the toughest parts of any
> phasing-type detector.

What will be if I treat "I" mixer as a typical product detector. Will it
work?

MAc

3525. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 13:11:22 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <e8dpdr$1gp$1@news.onet.pl>
Source record: 11427

To clarify - the idea is to build very simple receiver - Not "play with quadrature detector". AD607 look simply and small

3526. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 13:30:10 UTC
From: gsm@mendelson.com
Message-ID: <slrneakr45.39f.gsm@cable.mendelson.com>
Source record: 11428

xpyttl wrote:

> I have been able to go laptop to laptop almost a mile with normal PCMCIA
> cards, using patch antennas. (Well - normal cards modified to bring out the
> signal to the antenna.) These antennas can be astonishingly directional.
> Indeed, at 2.4 MHz, it is pretty easy to get antennas with amazing amounts
> of gain.

There are restrictions on the RADIATED power, transmitter output power, etc of unlicensed 2.4gHz transmitters, such as WiFi. You should check them out. They vary from country to country.

If you have a ham license, then you can use 2.4gHz for data transmission, but then you are restricted in transmission mode, encryption and data content.

For example, the infamous Pringles can antenna was developed in the U.S. by an FBI agent in the course of an investigation. It's use as a WiFi transmission antenna is illegal in many places. The well pubicised long distance link in Egypt was illegal.

Here in Israel we are limited to 100mW EIRP for civilian useage, except for ham satellite operations which are limited to 25w.

BTW, there are limitations in the U.S. too, I just don't know them.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 IL Fax: 972-2-648-1443 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

3527. Re: Self-heating of crystal in inverter oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 14:02:52 UTC
From: Mike Monett <No@email.adr>
Message-ID: <Xns97F6660099171Noemailadr@208.49.80.251>
Source record: 11429

Ben Jackson <ben@ben.com> wrote:

>
> Well, this might be the best advice I ever got from Usenet. I fought
> every parameter in the 'HC86 inverter oscillator and lost. The fact
> that it works great at 14.85MHz and the elegance of using up the extra
> gates lured me in. The whole thing is very voltage sensitive (around
> 1Hz/mV at the output of the gate, making it very sensitive to Rs as
> well). This might be due to the propagation parameters of the gate
> varying substantially with temperature and voltage.

> I built a Colpitts oscillator with a plain old 2N3904 and it hasn't
> moved by more than a few Hz in the hour it's been on.

> Thanks!

> Ben Jackson

Hi Ben,

I have been following this interesting thread. Thanks for posting the data.

Could you do me a favor and post your 2N3904 schematic? I'd like to put it
in my SPICE Crystal Analysis program and see if it can verify the
performance you obtain. If you are interested, the paper is at

http://tinyurl.com/qpcoz

Regards,

Mike Monett

3528. Re: Inductance Capacity meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 14:25:28 UTC
From: Mike Monett <No@email.adr>
Message-ID: <Xns97F669D59A2C1Noemailadr@208.49.80.251>
Source record: 11430

"jack" <jdwalton@comcast.net> wrote:

> WB9LVI's "LMS" was described in QEX -- ultra simple -- just your sound
> card and an opamp or so:
> http://www.arrl.org/qex/2005/Steber.pdf there is a link to the exe
> file in the PDF.

> Jack

Hi Jack,

Thanks for posting this. It looks very interesting, but the .exe file seems to be a DLL for Visual Basic 6.0 and not the main program. I searched the article for more references to .zip and .exe, but couldn't find any. Do you have any more information on where to obtain professor Steber's program?

Regards,

Mike Monett

3529. Re: Inductance Capacity meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 14:34:19 UTC
From: Paolo IW3ARV <iw3arv@inwind.it>
Message-ID: <1152023659.154801.237240@m73g2000cwd.googlegroups.com>
Source record: 11431

jack ha scritto:

> WB9LVI's "LMS" was described in QEX -- ultra simple -- just your sound card
> and an opamp or so:
> http://www.arrl.org/qex/2005/Steber.pdf there is a link to the exe file in
> the PDF.

I've check the QEX article but I've found that the minimum C or L range
is very hight for my needs

Thanks Paolo Iw3arv

3530. Re: Inductance Capacity meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 14:43:33 UTC
From: Mike Monett <No@email.adr>
Message-ID: <Xns97F66CE5E45F5Noemailadr@208.49.80.251>
Source record: 11432

Mike Monett <No@email.adr> wrote:

> Do you
> have any more information on where to obtain professor Steber's program?

OK, I found it. It's http://www.arrl.org/qexfiles/LMSProg.zip

(Also, more good stuff to check at http://www.arrl.org/files/)

The zip is very short - 51k, but it contains the program and some auxilary files. The program ran instantly on my Win98 computer. The VB DLL was already installed in \windows\system from previous downloads.

Jack, this looks very interesting and easy to do. Thanks for posting the url.

Regards,

Mike Monett

3531. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 16:18:30 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1152029909.830687.271940@m79g2000cwm.googlegroups.com>
Source record: 11433

MAc wrote:
> To clarify - the idea is to build very simple receiver - Not "play with
> quadrature detector". AD607 look simply and small

Andy writes:

While I agree with everything MAC wrote, I think a point is being
missed.
A Quadrature detector is normally used only for FM demodulation. It
accomplishes this by limiting the signal and applying it to one port
of a 90deg detector. If the limited signal is shifted 90 degrees
(narrow
band), the quad detector will detect FM... If the limited signal is
shifted
ZERO degrees, the quad detector will detect AM, and in a much more
linear way than a diode type detector......

With CW, there would be no signal to zero beat with, and no audio
note would be formed.... Exactly the same with SSB....all the output
would be "DC"...

Mac's explanation is correct for an IQ detector... In this case a
local
signal EQUAL to the suppressed carrier of the SSB signal has to
be supplied..... I don't know how a local carrier can be synchronized
to
a SSB carrier that, if done really well, doesn't exist......

In Homodyne receivers, it is easy, since the transmit signal can be

the LO signal..... Otherwise, it has to be "guessed" at..... With
really
really really stable local oscillators, the guess can be really close,
and
the difference will creat an error that is so small it doesn't
matter... But,
since you don't know the incident phase of the received signal, you
have to do both I and Q and shift the IF by 90 degrees and sum (or
difference, depending whether you want USB or LSB) the outputs of
the two channels...... For SSB detection, the RF port is NOT shifted,
the LO port is both 0 and 90 degrees, and the IF port (I and Q) are
shifted 90 and combined........

It is a hell of a lot easier to "approximate" the LO, and shift it
manually
until Donald Duck starts sounding human.... In older SSB rigs, this was

called a "clarifier" control..... It isn't necessary in many modern systems
with really really really good TCXOs and stuff....

Just my two cents worth.... If anyone disagrees, I'd be happy to learn from them where my explanation is wrong..... but I warn you, it ain't far wrong.... cause it worked for me for many many years in designing receivers for both commercial and military products ...:>)))))

Andy in Eureka, W4OAH (retired comm/radar engineer and ham for 45 years)

3532. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 16:27:19 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <e8e4t7$7v7$1@news.onet.pl>
Source record: 11434

AndyS wrote:
> A Quadrature detector is normally used only for FM demodulation.

Yes.

but (from Analog Devices):
"...Applications of the AD607 include narrowband systems with a high
first IF (21.4 MHz to 300 MHz) and a second IF at 10.7 MHz, 455 kHz, or
450 kHz. These include Dual Conversion IS136, GSM, TETRA, and MSAT
Receivers; and Single or Dual Conversion VHF and HF AM, SSB, CW, or QPSK
Receivers... "

But :-) I did not find any SSB application :-(So I need an example.

Just my two cents worth.... If anyone disagrees, I'd be happy to
> learn from them where my explanation is wrong..... but I warn you,
> it ain't far wrong.... cause it worked for me for many many years
> in designing receivers for both commercial and military products
> ...:>)))))

Andy Thanks for your cents, rather dollars.

PS there is internal quadrature pll in ad607.

MAc

3533. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 16:58:50 UTC
From: Beverly Erlebacher <bae@cs.toronto.edu>
Message-ID: <tddozxncbbwg.16twuyku4z6j9$.dlg@40tude.net>
Source record: 11435
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Tue, 4 Jul 2006 11:03:49 -0400, Peter Pan wrote:
>> Can you help me roughly CALCULATE how to increase the range of my
>> home Internet wireless WiFi setup to a shed 300 feet away
...
> I Had a linksys WRT54G in the house attached to my sat,
> and used one of the 4 router outputs to daisy chain one to the wan input of
> another WRT54G (same ssid) and a semi-directional antenna pointed towards
> the garage about 500ft away,

Hi Peter Pan,

Oh my! Is "wireless" daisy chaining workable? Is it that easy?

I did not think I could just daisy chain multiple routers! Are you sure?
(My shed has no power but I think I could run an extension cord into it if
that would make things workable.)

Would I just set the second Linksys router (which, amazingly, has it's own
wikipedia entry at http://en.wikipedia.org/wiki/WRT54G) in the shed on the
same channel (SSID=12, name = default) as the first router in the house?

That is, could I put one linksys WRT54G in the house (perhaps with one
antenna replaced with a 7 dBd higher-gain directional antenna); and then
put the other Linksys WRT54G in the shed 300 feet away (perhaps with one of
it's antennas replaced with a similar 7 dBd directional antenna)?

Or, is it best to hardwire with cat5 the first router downstairs in the
house to the second router, say upstairs in the attic window pointing the
antenna toward the shed? I didn't even know that two routers could be daisy
chained. That might solve my dilemma.

Can someone confirm that two routers could be daisy chained either by wire
cat5 cable or by wireless signals as long as they use the same SSID channel
and network name? That solution seems to easy to be true ...

Beverly

3534. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 17:15:39 UTC
From: Beverly Erlebacher <bae@cs.toronto.edu>
Message-ID: <8yqb919lnyrr.1f50bcplmn26a.dlg@40tude.net>
Source record: 11436
Cross-posted to: alt.internet.wireless,misc.consumers.frugal-living,rec.radio.amateur.homebrew

On Tue, 04 Jul 2006 09:07:39 -0500, bearclaw@cruller.invalid wrote:
> Here is an easy way to hack your $60 wireless router into a $600
> router (they use Linksys as the example):

Wow. I've never "modified" a router before but that is interesting that one can increase the $75 Linksys WRT54G router (http://en.wikipedia.org/wiki/WRT54G) RF output from 28 millwatts up to 251 milliwatts (http://tinyurl.com/lpk7w).

Being true to the original intent of this thread, how do I CALCULATE what that does to my range?

Is this 9 dBd calculation of the modification roughly correct?
a) Power gain = Power2/Power1 = 251/28 milliwatts = 9x power gain
b) Range gain = sqrt(Power gain) = sqrt(9) = 3X range gain
c) Range = original range * range gain = 100 feet * 3 = 300 feet

Beverly

3535. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 17:18:49 UTC
From: Beverly Erlebacher <bae@cs.toronto.edu>
Message-ID: <410kzzswtlgd$.1jcc2o88kv83h$.dlg@40tude.net>
Source record: 11437
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

On Tue, 04 Jul 2006 11:48:12 +0100, Highland Ham wrote:

> Beverly Erlebacher wrote:
>> Can you help me roughly CALCULATE how to increase the range of my home
>> Internet wireless WiFi setup to a shed 300 feet away from my house?
>>
>> Presently, I can walk about half the way through the wooded area to the
>> shed with my laptop in hand before I lose the connection to the PCMCIA
>> 802.11b,g Linksys card. Basically I need to gain 150 feet in "range".
>>
>> But how?
> ==
> Having followed today's postings on this topic , I see that there is a
> wooded area between your house and shed, hence there seems to be no free
> line of sight between the house and the shed.
> That's why it is difficult to calculate/predict the Gain you need to
> penetrate the wooded area with a 2.4 GHz signal.
>
> If you wish to use the laptop inside the shed at a fixed location it
> MIGHT be good enough if you install a corner reflector yagi (High
> Gain)antenna at both the house AND the shed. However then your laptop
> needs a plug-in PCMCIA WiFi tansceiver with a connection for an external
> antenna.
> One of such units is the Make: Buffalo - Air Station Turbo G ,High Power
> -unit which also has a built-in antenna.
> Note : The coaxial cable between the 2 devices and their associated
> antenna should be limited to only a few metres because of the high
> frequency being 2.4GHz
>
> Communication here is 2 way . Your laptop might receive the (antenna
> amplified) signal from your router located in the house ,but that does
> not mean the router will receive the signal from the laptop without
> additional facilities at the laptop.
>
> Again , because of the probably partly obstructed path (wooded area) it
> is difficult making any sensible calculations.
>
> Frank GM0CSZ / KN6WH

Hi Highland Ham,

I see there are multiple solutions. Probably on the end of my list is
adding a wire to the laptop because then it wouldn't be wireless. Still,
it's an intriguing idea (I never knew laptops could have fixed antenna's

connected to them by wire).

If I do use two antennas, does that "add" the gain?

a) Antenna 1 transmits with a directional gain of, say 7 dBd
b) Antenna 2 receives with a directional gain of, say 7 dBd
c) Does that get me a 14 dBd overall gain?

Beverly

3536. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 17:40:18 UTC
From: Beverly Erlebacher <bae@cs.toronto.edu>
Message-ID: <ly6pp2c8zwp.1eytm0wtuwomt.dlg@40tude.net>
Source record: 11438
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Tue, 04 Jul 2006 06:11:27 -0700, Dan Richardsonk6mhe wrote:
> If your goal is to increase your range then add an extender
> (hams would prefer to call them repeaters).

Oh my. The seemingly perfect option.

I had come across the concept of wireless "repeaters" in my initial googling before I went to the store, e.g., in this Microsoft "how to increase range" article http://www.microsoft.com/athome/moredone/wirelesstips.mspx and in this "Extending WLAN Range" article http://www.wi-fiplanet.com/tutorials/article.php/1571601

The repeater most often recommended was the "Linksys Wireless-G Range Expander WRE54G".

However, I can't find that 802.11b,g WiFi repeater (aka range expander or extender) anywhere in the local stores. The salesperson who sold me the $300 USD 802.11n router and PCMCIA card combination said they didn't work so they dropped it.

This solution seems to be the most elegant of all (but someone else suggested just using a second router).

Can someone unconfusify the situation?

Is placing a repeater (on the same SSID) in the shed really the same as adding a second router instead?

Beverly

3537. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 17:47:27 UTC
From: Beverly Erlebacher <bae@cs.toronto.edu>
Message-ID: <150qlbhdez36g$.1ougzyb53jjsu.dlg@40tude.net>
Source record: 11439
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

On Tue, 04 Jul 2006 08:17:19 -0700, David wrote:
> A "range extender" or "repeater" will cut the speed in half.

Hi David,

Interesting this speed difference. I'm worried about RANGE and all of a sudden other factors come into play! Thank you for enlightening me. I know more now than I ever did from you wonderful guys!

As I noted to someone else just now, I DID try to find the "Linksys Wireless-G Range Expander WRE54G" WiFi repeater in the local stores but they did not exist in any of the three stores I checked.

Also, some of the articles talk about an "access point" (http://www.wi-fiplanet.com/tutorials/article.php/1571601).

Can someone tell me what part of my setup I would call the "access point"?

Beverly

3538. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 18:06:56 UTC
From: Beverly Erlebacher <bae@cs.toronto.edu>
Message-ID: <11of8oney2ztt.1rzsok8gvo9mf.dlg@40tude.net>
Source record: 11440
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Tue, 04 Jul 2006 17:57:22 GMT, stephen wrote:
> but - you mentioned you could run power out to your shed. Why not plumb it
> in for power and networking?
> then you can add a separate access point there and avoid antennae, gain,
> loss through leaves and the rest.

Hi Stephen,
I'm confused about this "access point" thing.

Is that the same as a "router"?

Is it as simple as buying a second router (routers are familiar to me) and
just hooking that second router to the first router by cable and that would
extend my range by the distance of the cable connecting the two routers?

This is a key confusion point for me!
Beverly

3539. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 18:11:35 UTC
From: Rod Speed <rod.speed.aaa@gmail.com>
Message-ID: <4gvpaqF1ojse0U1@individual.net>
Source record: 11441
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

Beverly Erlebacher <bae@cs.toronto.edu> wrote:
> On Tue, 04 Jul 2006 08:17:19 -0700, David wrote:
>> A "range extender" or "repeater" will cut the speed in half.
>
> Hi David,
>
> Interesting this speed difference. I'm worried about RANGE and all of
> a sudden other factors come into play! Thank you for enlightening me.
> I know more now than I ever did from you wonderful guys!
>
> As I noted to someone else just now, I DID try to find the "Linksys
> Wireless-G Range Expander WRE54G" WiFi repeater in the local stores
> but they did not exist in any of the three stores I checked.
>
> Also, some of the articles talk about an "access point"
> (http://www.wi-fiplanet.com/tutorials/article.php/1571601).

> Can someone tell me what part of my setup I would call the "access point"?

The wireless part.

3540. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 18:11:43 UTC
From: Rod Speed <rod.speed.aaa@gmail.com>
Message-ID: <4gvpb5F1oatv7U1@individual.net>
Source record: 11442
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

Beverly Erlebacher <bae@cs.toronto.edu> wrote:
> On Tue, 04 Jul 2006 05:50:02 -0400, R�g�r wrote:
>>> Do folks here recommend the pringles cantenna or the pie tin
>>> antenna for my 2-antenna router 802.11b,g directional application
>>> where I need to also feed the computers within the house in
>>> addition to the shed 300 feet away?
>>
>> I use panel antennas almost exclusively, exceptions being some 24dbi
>> mesh antennas for backhaul.
>
> Hi R�g�r,
>
> After reading all the articles posted, I now understand that:
>
> a) The pringles can is hip; but it's the worst performer
> http://www.oreillynet.com/cs/weblog/view/wlg/448
> (it's not even metal foil lined and it's too small in diameter)
>
> b) The coffee cantenna is more effective than the pringles cantenna
> http://www.oreillynet.com/cs/user/view/wlg/1124
>
> c) The dish antenna is the simplest of all and almost as good
> http://www.freeantennas.com/projects/template
> http://www.freeantennas.com/projects/template2/index.html
>
> I also see, as Rod Speed so kindly noted, that the give and take is
> that we lose range in some directions in favor of range in the
> desired direction. Fair enough.
>
> My one question is a practical one.
>
> Why are there two antennas on my router anyway?

That gives a more reliable coverage than with one.

> Is one transmit and the other receive?
> Or are they both transmit and receive?

They're normally both transmit and receive.

> Given I have TWO omnidirectional antennas on my wireless router,
> if I put the parabolic dish antenna on one to direct it to my shed,
> does that allow the OTHER antenna to radiate around the house
> to handle the other computers roving around the house?

Yes.

3541. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 18:38:24 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <dByqg.47$OB.6@fe05.lga>
Source record: 11443

"Geoffrey S. Mendelson" <gsm@mendelson.com> wrote in message
news:slrneakr45.39f.gsm@cable.mendelson.com...

> If you have a ham license, then you can use 2.4gHz for data transmission,
> but then you are restricted in transmission mode, encryption and data
> content.

And wireless channels, as well. Some of the channels are outside the U.S.
ham bands. Since this is an amateur radio newsgroup, I made the (possibly
rash) assumption that OP was aware of these limitations. For amateurs in
the U.S., the main issue is encryption. Few of us can afford to get
anywhere near the power limits at these frequencies!

..

3542. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 19:31:00 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnealgn5.2ffv.bit-bucket@shell.config.com>
Source record: 11444

On Tue, 4 Jul 2006 08:30:46 -0400, xpyttl wrote:

...
> Indeed, at 2.4 MHz, it is pretty easy to get antennas with amazing amounts
> of gain. ......

Sigh... If only that were true! HI!HI!

Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
38.24N 104.55W | @ config.com | Jonesy | OS/2
*** Killfiling google posts: <http//jonz.net/ng.htm>

3543. FS: Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 21:06:40 UTC
From: Bob <bobZstein@sbcglobal.net>
Message-ID: <ALAqg.33992$VE1.20312@newssvr14.news.prodigy.com>
Source record: 11445

The following panel meters are all dc moving coil (D'Arsonval) types
except as noted.
MFR SCALE TYPE PRICE REMARKS
Ammon 0-50-100 1.75" square $10 (2-0-2 mA FS, zero
center)
BA 0-1500 V 3" square 10 (200 uA FS)
Beede 0-1 mA 4"x5" rect 10
Bird 0-15-60 W 3.5" round Free (bad movement)
G.E. 0-10 Vac 3.5" square 5 (scratch on face)
G.E. 0-500 mA 3.5" round 10
G.E. 0-500 mA ac 3.5" square 10
HP 0-10 V, -10-+3 dBm 2.25" half round 7 (1 mA FS)
HP 0-100% Modulation 4.25" square 25 (50 uA FS)
Knight 0-50 uA 3"x4.5" rect 10
Modutec -10-+2 dBm 3"x3.5" rect 10 (1 mA FS)
Shurite -20-+3 VU 1.5x0.5 edge 10 (NIB)
Sierra 0-10-50 W 3.5" square 5 (may have cracked jewel)
Simpson 0-1 mA 1.75" square 7
Simpson 0-1.0 3.5" round 5 (0.5 mA FS)
Simpson 0-25 uA 2.5" square 5 (broken housing)
Simpson 0-250 Vac 3.5" square 20 (NOS)
Sun 0-1 mA 2.5" round 7
Triplett 0-250 Vac 4" square 25 (NOS)
Triplett 0-500 A 2.5" square 5 (7.5 mA FS, broken
mounting screws)
Weston 0-50 mA 3.5" round 10
Weston 1-10-Inf VSWR 3.5" round 10 (30 uA FS)
Weston 50-0-50 mA 3.5" round 20 (zero center)

Above prices do not include shipping from 94024. Will entertain
offers on any or all.

Bob, W6NBI

3544. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 21:09:09 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1152047349.512115.325270@a14g2000cwb.googlegroups.com>
Source record: 11446

>
> Andy Thanks for your cents, rather dollars.
>
> PS there is internal quadrature pll in ad607.
>
> MAc

Andy responds;

Ok.. I admit that I didn't go find the AD607 and study it before
replying
to Mac... However,,, I'll bet you a dollar that the fellow who wrote
the
app note that Mac refers to has a hell of a lot less experience than
either Mac or myself..... not that I would expect a young app note
writer to overstate the applications of his product (big damn grin
)...
The AD606 really makes a great tie-tac if you glue an alligator clip
to it, tho I've never actually seen one for sale... :>)))))))

if the gilbert cell, or single ended long tailed pair multiplier
used as a
quad detector allows external coupling to the ports, it can be used as
a BFO for CW or SSB,..., HOWEVER, having a limiting stage in the
linear path of such a device is NOT a great idea.... Sure, it can be
made
to work, but..... well, heck... I've built a LOT of things that were
really
bad ideas, and I try not to duplicate them again, or tell others about

them.... especially in app notes that I've made input to......
I've seen the MC3372 used as an SSB receiver in either Ham Radio
or some such.... and I never seriously considered doing it myself since
the limitations were so obvious....

An 811A can be used a a product detector also, but the
manufacturers
don't advertise it as such,..... because it is a REALLY BAD idea....
If a fellow wants a simple CW/SSB receiver, a much better idea is to
use something like an NE602..... I've done that, for a home project ,
and
it works OK,..... but certainly not something I'd try to produce as a
receiver for Bendix, Texas Instruments, or Raytheon..... There's a
limit
to how far one should stretch an application.....

Thanks Mac, for your input. I bet we agree on almost
everything.....

Andy W4OAH

3545. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 21:19:29 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <BXAqg.2685$283.1416@trnddc08>
Source record: 11447

> Ok.. I admit that I didn't go find the AD607 and study it before
> replying.....

>.....HOWEVER, having a limiting stage in the
> linear path of such a device is NOT a great idea

Andy,

You really should go and read the data sheet on the AD607.

1) It's a linear component with no limiter stages
2) It has an "I-Q" detector, not a "quadrature detector".

Comparing it to the MC3372, or any other FM detector chip, is as far off
base as comparing it to an 811.

However, having said all that, I think we would agree that there are better
and simpler solutions for amateur SSB and AM applications.

Joe
W3JDR

"AndyS" <andysharpe@juno.com> wrote in message
news:1152047349.512115.325270@a14g2000cwb.googlegroups.com...
> >
>> Andy Thanks for your cents, rather dollars.
>>
>> PS there is internal quadrature pll in ad607.
>>
>> MAc
>
>
> Andy responds;
>
> Ok.. I admit that I didn't go find the AD607 and study it before
> replying
> to Mac... However,,, I'll bet you a dollar that the fellow who wrote
> the
> app note that Mac refers to has a hell of a lot less experience than
> either Mac or myself..... not that I would expect a young app note
> writer to overstate the applications of his product (big damn grin
>)...
> The AD606 really makes a great tie-tac if you glue an alligator clip
> to it, tho I've never actually seen one for sale... :>)))))))
>
> if the gilbert cell, or single ended long tailed pair multiplier

> used as a
> quad detector allows external coupling to the ports, it can be used as
> a BFO for CW or SSB,..., HOWEVER, having a limiting stage in the
> linear path of such a device is NOT a great idea.... Sure, it can be
> made
> to work, but..... well, heck... I've built a LOT of things that were
> really
> bad ideas, and I try not to duplicate them again, or tell others about
>
> them.... especially in app notes that I've made input to......
> I've seen the MC3372 used as an SSB receiver in either Ham Radio
> or some such.... and I never seriously considered doing it myself since
> the limitations were so obvious....
>
> An 811A can be used a a product detector also, but the
> manufacturers
> don't advertise it as such,..... because it is a REALLY BAD idea....
> If a fellow wants a simple CW/SSB receiver, a much better idea is to
> use something like an NE602..... I've done that, for a home project ,
> and
> it works OK,..... but certainly not something I'd try to produce as a
> receiver for Bendix, Texas Instruments, or Raytheon..... There's a
> limit
> to how far one should stretch an application.....
>
> Thanks Mac, for your input. I bet we agree on almost
> everything.....
>
> Andy W4OAH
>

3546. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 21:31:06 UTC
From: gsm@mendelson.com
Message-ID: <slrnealn4k.okj.gsm@cable.mendelson.com>
Source record: 11298
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Beverly Erlebacher wrote:
> I'm confused about this "access point" thing.

An access point is a device with an ethernet port on one side and a wifi port on the other. In technical terms it would be called a "bridge". It "bridges" two seperate network segments, although in this case they use different topologies (100Base-T and WiFi).

> Is that the same as a "router"?

The usual WiFi router consists of a four port ethernet hub (LAN ports), a seperate single ethernet port (WAN port) and a WiFi access point. It is set up to "route" between the single (aka WAN) port and the other two ports, the LAN and WiFi. Most of what it does for routing is NAT (network address translation) and some sort of IP tunneling.

If you ignore the WAN port and just use the LAN ports, you have a four port hub and an access point.

> Is it as simple as buying a second router (routers are familiar to me) and
> just hooking that second router to the first router by cable and that would
> extend my range by the distance of the cable connecting the two routers?

Yes. Just make sure to use the LAN ports. It would be best to use different channels. Most WiFi clients are smart enough to use the channel that is the strongest if they have access points on more than one with the same SSID.

Make sure to use encryption. Encryption is NOT to keep your data safe, nothing can do that. If someone is intent on accessing your network, WEP encryption will not keep them out.

What it is for is to convince the guy driving down the street looking for an open network to send out SPAM, or "share" kiddie porn, to drive on. Unfortunately, most users don't even change the SSID of their network, let alone set an encryption key.

Having tuned in late, if you want to have an open network, look up PublicIP. It's a "live cd" that runs on a PII or better (x86) computer and provides all the functions you need to offer a secure and safe open network.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 IL Fax: 972-2-648-1443 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

3547. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 21:31:07 UTC
From: gsm@mendelson.com
Message-ID: <slrnealnam.okj.gsm@cable.mendelson.com>
Source record: 11299
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

Rod Speed wrote:
>> Is one transmit and the other receive?
>> Or are they both transmit and receive?
>
> They're normally both transmit and receive.

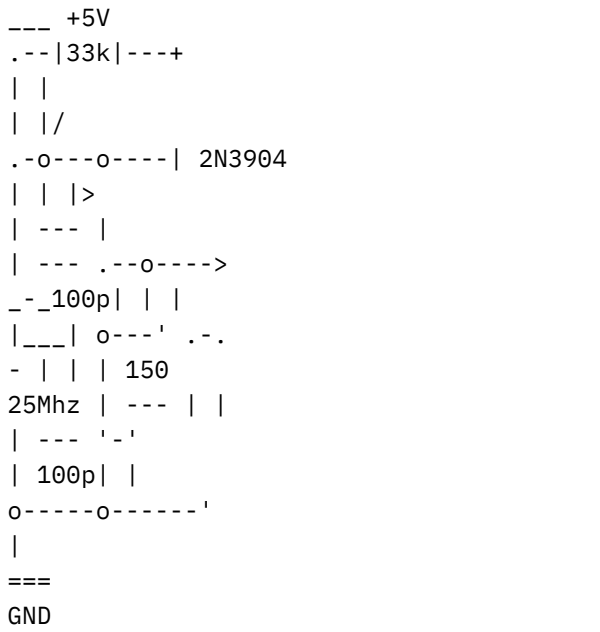
That's a shame. Here in Israel we are limited to 100mw EIRP, which severly limits the transmit antenna. There is NO limitation on the receive antenna.

Geoff.
--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 IL Fax: 972-2-648-1443 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

3548. Re: Self-heating of crystal in inverter oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 22:17:41 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrnealq85.1ag9.ben@saturn.home.ben.com>
Source record: 11300

On 2006-07-04, Mike Monett <No@email.adr> wrote:
> Ben Jackson <ben@ben.com> wrote:
>
>> I built a Colpitts oscillator with a plain old 2N3904 and it hasn't
>> moved by more than a few Hz in the hour it's been on.
>
> Could you do me a favor and post your 2N3904 schematic?



The 33k/150 were chosen to get CMOS compatible output. The circuit will
oscillate with much higher values for each.

The two 100p might be slightly too high for the 18p crystal I'm using,
but I didn't tune those carefully because I want to pull the crystal
slightly, and in my actual circuit the grounded leg of the crystal is
actually in series with a variable capacitance to tune the VCXO.

(created by AACircuit v1.28.6 beta 04/19/05 www.tech-chat.de)

--
Ben Jackson
<ben@ben.com>
http://www.ben.com/

3549. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 22:27:05 UTC
From: Rod Speed <rod.speed.aaa@gmail.com>
Message-ID: <4h089vF1pk0rnU1@individual.net>
Source record: 11301
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

Geoffrey S. Mendelson <gsm@mendelson.com> wrote
> Rod Speed wrote

>>> Is one transmit and the other receive?
>>> Or are they both transmit and receive?

>> They're normally both transmit and receive.

> That's a shame. Here in Israel we are limited to 100mw EIRP, which severly
> limits the transmit antenna. There is NO limitation on the receive antenna.

A receive antenna has no EIRP, it doesnt radiate any real power.

3550. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 22:32:57 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <e8eqap$f10$1@news.onet.pl>
Source record: 11302

AndyS napisa?(a):
I bet we agree on almost
> everything.....

Generally Yesss

But (always but) :-))))

I never used mc3372 as ssb rx, but permanently used mc3362.
But... - mc3362 id dual conversion RX and i used second mixer as a
product detector leaving original fm detector "out of business".
I am not good in quadrature detectors, and i don't know what
(technically) is mixer (rather mixers) in ad607. I have only 1 piece of
IC, it's surface mount, and I'm afraid, that if I use it in my test
board I will have nothing to use in my receiver.

Of course I used ne602/612 in many constructions, (genetally trx with
switched BFO/VFO - Atlas idea), but this time the idea is to use as low
elements as possible to build a rx with "quite good" performance.

Serious (other or better ;-)) idea in my wokshop is TGX with1st mixer
on fst3125 with companion of ad600 IF ampli (only one) in typical
application (application note with simple ad590 and one transistor AGC)
- not this "high performance agc system from Exp. Methods...

On the other hand - it is the best way in our HAM life - to use parts in
the way, which was not inntended by "creators". It's a part of our love
to ham radio :-)

Nice and inspirating talk Andy. Greetings from Poland

MAc
sp9mrn

3551. Re: Self-heating of crystal in inverter oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 22:34:03 UTC
From: Mike Monett <No@email.adr>
Message-ID: <Xns97F6BCA9C9AEBNoemailadr@208.49.80.251>
Source record: 11303

Ben Jackson <ben@ben.com> wrote:

> The 33k/150 were chosen to get CMOS compatible output. The circuit will
> oscillate with much higher values for each.

> The two 100p might be slightly too high for the 18p crystal I'm using,
> but I didn't tune those carefully because I want to pull the crystal
> slightly, and in my actual circuit the grounded leg of the crystal is
> actually in series with a variable capacitance to tune the VCXO.

> (created by AACircuit v1.28.6 beta 04/19/05 www.tech-chat.de)

> Ben Jackson

Hi Ben, Thanks. What is the nominal setting of the cap in series with the crystal? 18pf or so?

Do you have any info on the crystal, such as make and model?

Or any idea what the series resistance might be?

Would you like me to post the results to my web site?

Regards,

Mike Monett

3552. Re: Self-heating of crystal in inverter oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 22:36:08 UTC
From: Mike Monett <No@email.adr>
Message-ID: <Xns97F6BD04B466ENoemailadr@208.49.80.251>
Source record: 11304

Mike Monett <No@email.adr> wrote:

> Would you like me to post the results to my web site?

To clarify - so you can see the waveforms?

Regards,

Mike Monett

3553. Re: Inductance Capacity meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 23:00:42 UTC
From: Ted <kilocycles**@**yahoo.com>
Message-ID: <3fsla2lsmg5vp3i84udf3t5ev9pr0cmfo9@4ax.com>
Source record: 11305

The Columbus, Ohio QRP Club did a group build of an LC meter based on the project in "Everyday Practical Electronics" magazine, February 2004 issue. The URL is http://www.qsl.net/cqrp/projects.html.

For some reason, the link to the members' meters is no longer working.

This meter has slightly better capacitance range specs than the AADE meter, as reported by ARRL on the website awhile ago.

If you are interested, I am building this meter, and I can give you some additional information about it. Please email me directly, removing the ** from my email address.

Regards,
Ted KX4OM

3554. Re: Self-heating of crystal in inverter oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 23:28:20 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrnealuck.1c25.ben@saturn.home.ben.com>
Source record: 11306

On 2006-07-04, Mike Monett <No@email.adr> wrote:
> Ben Jackson <ben@ben.com> wrote:
>
>> The two 100p might be slightly too high for the 18p crystal I'm using,
>
> Hi Ben, Thanks. What is the nominal setting of the cap in series with the
> crystal? 18pf or so?

The "varicap" is actually a red LED, which G0UPL characterized as about
30p down to about 20p over 0..5V:

http://www.hanssummers.com/radio/varicap/index.htm

> Do you have any info on the crystal, such as make and model?

It's a Digi-Key X231-ND, mfg p/n ECS-250-18-4-F. Digikey has the
datasheet. I think the ESR was 40 ohms.

> Would you like me to post the results to my web site?

Sure.

--
Ben Jackson
<ben@ben.com>
http://www.ben.com/

3555. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-04 23:47:48 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1152056868.087427.226000@m73g2000cwd.googlegroups.com>
Source record: 11307

W3JDR wrote:
> Andy,
>
> You really should go and read the data sheet on the AD607.

Andy replies,

You're right. I should have dug a little further before I started
rattling off "the world according to Andy"....
When the OP started with the "quadrature det" question and
the reply was concerning I/Q , I just jumped right in...

Sorry I wasted your time......

Andy W4OAH

3556. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-05 00:18:30 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1152058710.356360.61600@m73g2000cwd.googlegroups.com>
Source record: 11308

MAc wrote:.
I have only 1 piece of
> IC, it's surface mount, and I'm afraid, that if I use it in my test
> board I will have nothing to use in my receiver.
>
Andy writes:

God how I hate surface mount.... It used to be that I could send
away for a freebee, or buy a chip from Digikey, and get normal,
civilized, 1/10 lead spacing pins that I could use in a socket, or
use the pins as tie point for "dead bug".....
I could build a circuit up as fast as I could go and the connecting
of the parts together was an insignificant part of the process...

NOW, for the last several years, all freebees I have received have
been surface mount. I have to work under a magnifying glass, with
a special thingy for my soldering iron, and use small pieces of copper
wire strand that I get out of lamp cord to expand the chip to the point
where I can actually attach resistors and capacitors.... it takes more
time
to expand the surface mount than to build the rest of the circuit... As
a
result, I lose enthusiasm a lot.....

I have a few things that I have done with surface mount, but I long
for the good old days..... Fortunately, I have about 30 years of
accumulated freebees that I haven't gotten around to using, and can
usually come up with a way to build something.... However, the miracle
chips (as I call them) that Analog Dev, and others, are coming out with
are just too damn much trouble for me.......

If anyone here has some SIMPLE solutions for the surface mount thing,
that does NOT include making a custom PC board, I'd like to learn
about them.....

Andy in Eureka, Texas

3557. Re: frequency meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-05 01:05:33 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <HZmdnQVhS-fY-jfZnZ2dnUVZ_s-dnZ2d@comcast.com>
Source record: 11426

I second the HP 5328 -- you can also get very good results with the HP 3586 measurement receiverif you only need to go to some 10's of MHz. These often show up with stabilized crystal ovens.

I have also used an HP5334 and much prefer the HP5328.

3558. Re: Self-heating of crystal in inverter oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-05 01:28:23 UTC
From: Mike Monett <No@email.adr>
Message-ID: <Xns97F6DA37AC76ANoemailadr@208.49.80.251>
Source record: 11309

Ben Jackson <ben@ben.com> wrote:

> It's a Digi-Key X231-ND, mfg p/n ECS-250-18-4-F. Digikey has the
> datasheet. I think the ESR was 40 ohms.

>> Would you like me to post the results to my web site?

> Sure.

Hi Ben,

I found the ECS spec at http://www.ecsxtal.com/search.html

The numbers are:

Shunt capacitance C0 7pf

drive level 0.5mW maximum

max esr 30 ohms

Using these values plus the standard beta value supplied with the SPICE model for the 2N3904, the oscillator runs pretty good. It doesn't clip, and puts out a good signal to drive CMOS.

But the crystal dissipation is about 5.88 milliwatts, or about 11.7 times the max spec value.

Since this is so far above spec, there's not much reason to go further and spend the time to post the waveforms.

Regards,

Mike Monett

3559. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-05 03:22:58 UTC
From: "Dana H. Myers" <dana.myers@gmail.com>
Message-ID: <4qudnSy48p4XrTbZnZ2dnUVZ_oOdnZ2d@comcast.com>
Source record: 11310

AndyS wrote:

> If anyone here has some SIMPLE solutions for the surface mount thing,
> that does NOT include making a custom PC board, I'd like to learn
> about them.....

Take a look at Surfboards, stocked by Digi-Key:

http://dkc3.digikey.com/PDF/T062/1634.pdf

Dana K6JQ

3560. Garage hamshacks? Here is my garage "secret lab"...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-05 06:03:43 UTC
From: Straydog <asd@panix.com>
Message-ID: <Pine.NEB.4.63.0607050142060.14331@panix2.panix.com>
Source record: 11311

(FYI/FWIW)

Recently there were a lot of comments on using a garage as a hamshack.

My problem was not the hamshack, but where to build my "retro" tube-based ham gear (HF) and my garage gets cold in the winter (30s F and below at worst) and too hot (90 F) and humid in the summer. So I decided to build a "cubicle" out of plywood (5/8" for me, leftover from a hurricane passby that I used to cover our most expensive windows). So I had these pieces of 4' x 6' that I put together to make a cubicle 6' high, 4' wide, and 8' deep, and put in a 18" wide "bench" (made out of a piece of lam pine about 6-7' long. This gets the drill noises, the soldering smoke, and all the little metal shavings, drillings, file dust, etc., out of the house and away from our rugs and somewhere where I don't have to be constantly cleaning it up.

For the winter, a standard electric space heater easily warms up the inside in less than 1/2 hour, and in the summer, a small A/C cools it off in minutes. The A/C vents the hot air into the garage but it does not seem to warm up the garage much beyond what it warms up in normal hot weather (I mention this because the warranty says it will be voided if you do this, but I'm only doing this once a week all, or as much of the day, as possible). On the A/C, many will collect significant amounts of condensed water and then excess will drip out on the "outside" but I've found in such a small cubicle that running the A/C for many hours does not cause significant amounts of water to accumulate and perhaps this is due to the small volume of the cubicle and once it is dehumidified, not much new water vapor enters over a whole afternoon or more. I mention this because I was concerned about having a constant drip of water onto the garage floor. This has not happened yet (not a drop has come out).

For anyone who wants to see images of this cubicle (for building stuff), they along with images of some of my homebrew gear, kludge-ugly-all-from-the-junkbox, can be found at:

http://www.panix.com/~asd

Just look for the links to the "secret lab" and click on them.

FYI/FWIW: The rest of that index page lists the done projects and the in progress projects (as well as pics of prior rigs of mostly commercial gear I've had during most of my ham career).

73
Art, W4PON

3561. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-05 12:18:49 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <B7Oqg.154$sX2.25@fe04.lga>
Source record: 11312

hehe -- getting gain at the antenna isn't such a big deal ... getting the goo TO the antenna is a whole 'nuther can of worms. It's pretty easy to come up with 10 dB of gain and 20 dB of feedline loss! Of course, for WiFi, we're often interested in gain AND omnidirectional -- that is something of a challenge.

..

"Allodoxaphobia" <bit-bucket@config.com> wrote in message news:slrnealgn5.2ffv.bit-bucket@shell.config.com...
> On Tue, 4 Jul 2006 08:30:46 -0400, xpyttl wrote:
>
> ...
>> Indeed, at 2.4 MHz, it is pretty easy to get antennas with amazing
>> amounts
>> of gain. ......
>
> Sigh... If only that were true! HI!HI!
>
> Jonesy
> --
> Marvin L Jones | jonz | W3DHJ | linux
> 38.24N 104.55W | @ config.com | Jonesy | OS/2
> *** Killfiling google posts: <http//jonz.net/ng.htm>

3562. EN300220 and phase noise

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-05 12:25:04 UTC
From: Robert Lacoste <see-my-email-at@www.alciom.com>
Message-ID: <44abafa2$0$850$ba4acef3@news.orange.fr>
Source record: 11313
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Hi all,

Any EN 300-220 European standard guru out there ?

I have some difficulties to deduce the maximum phase noise profile of a transmitter from this standard in the case of a very narrow bandwidth transmitter (say 10KHz bandwidth, operating in a non-standard VHF frequency band) :

- Standard gives a limitation of the transmitted power in the adjacent channels (10 W integrated over each adjacent channel). Fine
- Standard gives a limitation for the spurious emissions (-36/-54dBm under 1GHz with 100KHz spectrum analyzer bandwidth depending on the frequency). Fine.

But what is the maximum noise or side modulation levels say 2, 3 or 10 channels away from the carrier ? My first assumption was that the "spurious" specification was applicable, but with a 100KHz resolution bandwidth I would be measuring the carrier power if I do the measurement even 5 channels away from the carrier...

Any help welcome...

Friendly yours,
Robert

3563. Re: Questions about I.F. Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-05 13:01:14 UTC
From: steve.balstone@hotmail.co.uk
Message-ID: <1152104474.401430.37870@m79g2000cwm.googlegroups.com>
Source record: 11314

Jody wrote:
> I can't seem to find any I.F. transformers for 465 KHZ. I was wondering
> if you can use the 455 khz ones instead without changing any other
> components. I'm building a reciever that calls for 465. Can a 455 be
> tuned this high using the slug? or does anyone know of a source for
> these parts. Any advice would be greatly appreciated.

It'll tune to 465Khz no problem.
But if not, use an aluminium slug instead of the ferrite one. This will
have the opposite effect to the original one. ie - more aluminium
inside the transformer = Higher operating frequency

Stephen Balstone steve balstone

3564. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-05 13:30:03 UTC
From: gsm@mendelson.com
Message-ID: <slrneanfm6.560.gsm@cable.mendelson.com>
Source record: 11315

xpyttl wrote:
> hehe -- getting gain at the antenna isn't such a big deal ... getting the
> goo TO the antenna is a whole 'nuther can of worms. It's pretty easy to
> come up with 10 dB of gain and 20 dB of feedline loss! Of course, for WiFi,
> we're often interested in gain AND omnidirectional -- that is something of a
> challenge.

POE! POE! POE! (Power over ethernet). Put the access point at the antenna,
run a cat-5 cable (4 twisted pairs) to it. Four get used for the network
connection, 4 get used for DC.

Not only does it work well, but CAT-5 wire is cheap, 2.4gHz low loss coax
is not.

Geoff.
--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 IL Fax: 972-2-648-1443 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

3565. Re: IEEE Standard for RF Safety Levels

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-05 13:41:38 UTC
From: Christopher Cole <cole@scoob.coledd.com>
Message-ID: <mkPqg.16503$u11.7441@tornado.ohiordc.rr.com>
Source record: 11316

On page 26 (PDF page 30) the FCC's Human Exposure to RF Guidelines document,

http://www.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet65/oet65c.pdf

There is a nice chart for MPE limits. However, there is no information given
for frequencies below 300kHz. Does anyone know what the MPE limits would
be for both electric and magnetic field strength at 80kHz?

Thanks,
-Chris

--
/> Christopher Cole <\ <\
<< Cole Design and Development \\ email: cole@coledd.com \\
\\ Computer Networking & Embedded Electronics \\ web: http://coledd.com >>
\> \> </

3566. Re: IEEE Standard for RF Safety Levels

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-05 15:56:05 UTC
From: Straydog <asd@panix.com>
Message-ID: <Pine.NEB.4.63.0607051152490.28222@panix1.panix.com>
Source record: 11317

On Wed, 5 Jul 2006, Christopher Cole wrote:

> On page 26 (PDF page 30) the FCC's Human Exposure to RF Guidelines document,
>
> http://www.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet65/oet65c.pdf
>
> There is a nice chart for MPE limits. However, there is no information given
> for frequencies below 300kHz. Does anyone know what the MPE limits would
> be for both electric and magnetic field strength at 80kHz?

I'm going to make a guess on this. At pretty low f, absorbtion starts to
go down. I know they communicate with submarines with RF carriers around
12-14 kc because ocean water is almost transparent. Only when absorption
of RF gets high then there are "bioeffects" (mostly thermal, but there is
controversy about non-thermal effects). Others here might be able to be
more specific for that range 14 khz to 300 khz.

> Thanks,
> -Chris
>
> --
> /> Christopher Cole <\ <\
> << Cole Design and Development \\ email: cole@coledd.com \\
> \\ Computer Networking & Embedded Electronics \\ web: http://coledd.com >>
> \> \> </
>

3567. Parts for Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-05 17:27:13 UTC
From: hikezilla@yahoo.com
Message-ID: <1152120433.359568.4860@a14g2000cwb.googlegroups.com>
Source record: 11318
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I have moved my junkbox surplus stuff to a new website.
http://www.hamradparts.com

1N4148 Diodes $3.00 for 100, $4.00 for 200
1N4001 - 1 Amp 50v General Purpose Rectifier Diodes - $3.00 for 50

33pf NPO Caps, SMT 0805, 50V - $3.00 for 100
150pf NPO Caps, SMT 0805, 50V - $3.00 for 100
220pf NPO Caps, SMT 0805, 50V - $3.00 for 100
390pf Caps, SMT 1206, 50V - $3.00 for 100
1500pf NPO Caps, SMT 0805, 50V - $3.00 for 100
3300pf Caps, SMT 0805, 25V - $3.00 for 100
.1uF Caps, SMT 0805, 50V - $3.00 for 100

SPECIAL SMT PACK - 50 of each listed value $9.00
350 total parts

2N3704 NPN TO92 - 20 for $2.00
2N2907 PNP TO92 Package - $4.00 for 50
2N3904 NPN TO92 Package - $4.00 for 50
2N2222 NPN TO18 (metal) Package - 5 for $1.00
MMBT4403 PNP SMT transistor - 50 for $4.00

SPECIAL: 100pcs PN2222A Motorola $7.00- FREE SHIPPING

2N2222 NPN TO92 Package - $4.00 for 50
The 2N2222 is a bulk transistor...meaning the part is not labeled.
They ship in a Zip Lock packet and the packet is clearly labeled.

2N3906 PNP TO92 Package - $4.00 for 50
The 2N3906 is a bulk transistor...meaning the part is not labeled.
They ship in a Zip Lock packet and the packet is clearly labeled.

IRF510 - MOSFET AMP TO220 - 4 for $5.00

Crystal Ladder Filters anyone?
3.575611 Mhz HC49 Crystals - 5 for $2.00
4.9152 Mhz HC49 Crystals - 10 for $3.00
9.830 Mhz Crystals (SS2 package) - 20 for $3.00
LM7805ACV 5v Positive Voltage Regulators (TO220) 5 for $2.00
LM386N-1 - Audio Amp 6 for $5.00

Sticky Back Rubber Feet for your projects, self adhesive - 8 to a strip
- 2 Strips for $1.00

Panasonic Wall Warts - 12VDC, 500mA (center negative) $6.00 each
If you need center positiove, cut off the end and reverse it. I use

these to power my
rock mites, my TT2, and all of my homebrew test gear.

8pf NPO Ceramic 50 for $3.00
11pf NPO Ceramic 50 for $3.00
12pf NPO Ceramic 50 for $3.00
22pf Ceramic 50 for $3.00
470pf Ceramic 50 for $3.00
560pf Ceramic 50 for $3.00
.1 uF (104J) NPO Ceramic 50 for $3.00
.01uF (103K) Ceramic 50 for $3.00

SPECIAL PACK - 25 of each listed ceramic $10.00
200 parts total

Cash, check, paypal now accepted

Paypal to: orders@hamradparts.com

Add $3.00 shipping to any order under $50.00 unless you are ordering
the
special Motorola PN2222 transistors.

Brian Murrey
47 Grassy Drive
New Whiteland IN 46184

73 de KB9BVN

3568. Re: frequency meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-05 17:29:33 UTC
From: hikezilla@yahoo.com
Message-ID: <1152120573.766175.190310@m73g2000cwd.googlegroups.com>
Source record: 11319

Small Wonder Labs sells the Freq Mite for $20.00 - if you build it and put it in an Altoids tin, you'd have a nice small portable freq counter.

http://www.smallwonderlabs.com

73 de KB9BVN

Kirk wrote:
> I have looked at used eqpt etc and kits. Most kits are partial kits.
> How I wish Heath were still in business :(
>
> Any recommendations for a frequency meter of good accuracy. I dont need
> high frequency capability - a few MHz is good enough but I need good
> accuracy.
>
> thanks
> Kirk
> KC7THL

3569. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-05 19:27:08 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e8h3qd$5ce$1@avnika.corp.mot.com>
Source record: 11320

"MAc" <mac_dx@tosiewytnie.poczta.onet.pl> wrote in message
news:e8d6bk$s6n$1@news.onet.pl...
> How to use quadrature detector to demodulate cw and ssb. I want to use
> AD607 in simple project. There is Quadrature detector on "the end" with
> two outputs I&Q - and internal phase shifter. How to detest SSB simplest
> way?
>
> 73
>
> mac

With all that...

AD607 does NOT have a "quadrature detector". It has an "I & Q demodulator".
BIG difference. You must read the datasheet and app notes to use it
correctly. It is capable of demudulating many types of modulation. [typo
accepted]

73, Steve, K9DCI

3570. Re: frequency meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-05 19:49:00 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e8h53d$5g2$1@avnika.corp.mot.com>
Source record: 11321

"Kirk" <kirkmcloren@yahoo.com> wrote in message
news:1151976452.561672.72470@j8g2000cwa.googlegroups.com...
> I have looked at used eqpt etc and kits. Most kits are partial kits.
> How I wish Heath were still in business :(
>
> Any recommendations for a frequency meter of good accuracy. I dont need
> high frequency capability - a few MHz is good enough but I need good
> accuracy.
>
> thanks
> Kirk
> KC7THL
>

You need to be more specific. There are "frequency counters" (common) that
are different from "frequency meters" (older equipment and more rare).
How many is a "few MHz."
What is "good accuracy" ?
What are you measuring ?
What is your price range ?

If a Heath frequency counter will do, then any frequency counter available
will probably do.

Elenco has small counters that start at $150
http://www.elenco.com/

Similar small units:
http://www.optoelectronics.com/cub.htm

http://www.apogeekits.com/frequency_counter.htm

73, Steve, K9DCI
Not sure what you mean by partial kit, but:
http://www.piclist.com/techref/piclist/weedfreq.htm ~ $49

73, Steve, K9DCI

3571. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-05 21:05:30 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <e8h9iq$144$1@news.onet.pl>
Source record: 11322

Steve N. napisaďż˝(a):

> AD607 does NOT have a "quadrature detector". It has an "I & Q demodulator".
> BIG difference. You must read the datasheet and app notes to use it
> correctly. It is capable of demudulating many types of modulation. [typo
> accepted]

My mistake, I undersand. But datasheet says nothing more exept "it is
possible to detect ssb with ad607"

Thanks
MAc

3572. Re: IEEE Standard for RF Safety Levels

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-05 22:48:30 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1152139710.519301.317210@a14g2000cwb.googlegroups.com>
Source record: 11323

Christopher Cole wrote:
>
> There is a nice chart for MPE limits. However, there is no information given
> for frequencies below 300kHz. Does anyone know what the MPE limits would
> be for both electric and magnetic field strength at 80kHz?
>
> Thanks,
> \> </

Andy comments:
Using the 1992 ARRL handbook regarding the proposed ANSI standard,
Figure 4, page 36-4, I get the following at 80 khz..

Efield : 600 V/m or 100mw/ sq cm (these are the same levels)

Hfield: 1000 watt/ sq cm (this is a power density form of H
field)
This is 163 amps/meter

These are for both controlled and uncontrolled environments, and
are DIFFERENT levels.. In other words, the allowable safe H field
is a LOT more powerful than the safe E field .

These are really damn big numbers and I don't think you should worry
much about them unless you play golf in the rain.......... :>)))))

Andy in Eureka, Texas W4OAH\

(The chart is small, and my glasses are thick, so I apologize for
any lack of precision....)

3573. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-05 23:55:32 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <M6qdnUxB7sv0zDHZnZ2dnUVZ_vWdnZ2d@web-ster.com>
Source record: 11324

MAc wrote:
> Steve N. napisaďż˝(a):
>
>> AD607 does NOT have a "quadrature detector". It has an "I & Q
>> demodulator".
>> BIG difference. You must read the datasheet and app notes to use it
>> correctly. It is capable of demudulating many types of modulation.
>> [typo
>> accepted]
>
>
> My mistake, I undersand. But datasheet says nothing more exept "it is
> possible to detect ssb with ad607"
>
> Thanks
> MAc

Do a search on the phasing method of SSB reception, then the "Weaver" method. Either of those should get you a block diagram showing what to do with the I and Q outputs.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

3574. Re: Garage hamshacks? Here is my garage "secret lab"...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-06 00:57:22 UTC
From: Kirk <kirkmcloren@yahoo.com>
Message-ID: <1152147442.917448.256100@m73g2000cwd.googlegroups.com>
Source record: 11325

A thermometer is the only safe way to know how much it is heating the
garage.
It is not how many days a week you do this that is dangerous - it is
the peak temperature. Pressure in the system is a function of condenser
temperature and the manufacturer often doesnt design beyond 110F as
tubing isnt free (heat exchanger) nor fan horsepower(plus most weather
is below 110 except in a few places). Excessive pressure increases the
run current on the pump (compressor) which is cooled by refrigerant
flow. As temperature rises on the air to the condenser heat in the
system also increases due to higher run current so it stacks up fast.
The higher EER units have more heat exchanger and are a bit more
tolerant.
Straydog wrote:
> (FYI/FWIW)
>
> Recently there were a lot of comments on using a garage as a hamshack.
>
> My problem was not the hamshack, but where to build my "retro" tube-based
> ham gear (HF) and my garage gets cold in the winter (30s F and below at
> worst) and too hot (90 F) and humid in the summer. So I decided to build a
> "cubicle" out of plywood (5/8" for me, leftover from a hurricane passby
> that I used to cover our most expensive windows). So I had these pieces of
> 4' x 6' that I put together to make a cubicle 6' high, 4' wide, and 8'
> deep, and put in a 18" wide "bench" (made out of a piece of lam pine about
> 6-7' long. This gets the drill noises, the soldering smoke, and all the
> little metal shavings, drillings, file dust, etc., out of the house and
> away from our rugs and somewhere where I don't have to be constantly
> cleaning it up.
>
> For the winter, a standard electric space heater easily warms up the
> inside in less than 1/2 hour, and in the summer, a small A/C cools it off
> in minutes. The A/C vents the hot air into the garage but it does not seem
> to warm up the garage much beyond what it warms up in normal hot weather
> (I mention this because the warranty says it will be voided if you do
> this, but I'm only doing this once a week all, or as much of the day, as
> possible). On the A/C, many will collect significant amounts of condensed
> water and then excess will drip out on the "outside" but I've found in
> such a small cubicle that running the A/C for many hours does not cause
> significant amounts of water to accumulate and perhaps this is due to the
> small volume of the cubicle and once it is dehumidified, not much new
> water vapor enters over a whole afternoon or more. I mention this because
> I was concerned about having a constant drip of water onto the garage
> floor. This has not happened yet (not a drop has come out).
>

> For anyone who wants to see images of this cubicle (for building stuff),
> they along with images of some of my homebrew gear, kludge-ugly-all-from-
> the-junkbox, can be found at:
>
> http://www.panix.com/~asd
>
> Just look for the links to the "secret lab" and click on them.
>
> FYI/FWIW: The rest of that index page lists the done projects and the in
> progress projects (as well as pics of prior rigs of mostly commercial gear
> I've had during most of my ham career).
>
> 73
> Art, W4PON

3575. Matching SA602 mixer to SA605

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-06 10:13:07 UTC
From: David <websales@orbitcoms.com>
Message-ID: <Tm5rg.412$tE5.236@news-server.bigpond.net.au>
Source record: 11326

I am looking for a reasonably efficient method of coupling a 602 mixer output to a 605 input at 45MHz.

I have tried a tuned circuit with coupling caps and did not get good results. Both the 602 and 605 are working fine independently. (I tested the 605 with a match up from 50 Ohms to 1k5).

I am wanting a receiver with around 10dB signal to noise ratio at -115 to -118dBm.
Signal frequency is 151 MHz.
1st IF is 45MHz, 2nd IF is 455kHz(+/-15 kHz bandwidth).
The input filter has a bandwidth of 6MHz.
The image should not be an issue as it is way down at 60MHz.

I don't want to loose much gain between the 602 and 605 (about 3-5dB would be acceptable).

Thanks in advance

Regards

David

3576. Re: Matching SA602 mixer to SA605

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-06 10:38:19 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <vK5rg.15756$5i3.357@trnddc01>
Source record: 11327

> I have tried a tuned circuit with coupling caps and did not get good
> results.

David,

"...did not get good results" is a very fuzzy description of the problem you encountered. Can you be more specific?. Is the problem a sensitivity problem? Why do you think it's an interstage coupling issue?

You don't say whether you're coupling from the '602's mixer output into the '605's mixer input, or from the '602's mixer output into the '605's IF input. In the former case, the 605's input resistance is in the 4.5K range while in the latter case the input resistances is about 1.5K. The '602 output resistance is also in the 1.5K range. In either case the output/input resistances are already close enough to be within a few dB of optimum with just a DC blocking cap for coupling (assuming the interface is resonant). I don't know why you weren't successful in just resonating the output of the '602 and capacitively coupling into the '605 with a large coupling cap. Can you tell us what values you used?

Without analyzing this in detail, I'd say that if your interstage coupling is resonant and tight (large coupling cap), then your sensitivity performance will probably be limited by the noise figures of the two mixers in cascade (assuming that the tuned input circuit isn't real lossy).

Joe
W3JDR

"David" <websales@orbitcoms.com> wrote in message
news:Tm5rg.412$tE5.236@news-server.bigpond.net.au...
>I am looking for a reasonably efficient method of coupling a 602 mixer
>output to a 605 input at 45MHz.
>
> I have tried a tuned circuit with coupling caps and did not get good
> results. Both the 602 and 605 are working fine independently. (I tested
> the 605 with a match up from 50 Ohms to 1k5).
>
> I am wanting a receiver with around 10dB signal to noise ratio at -115
> to -118dBm.
> Signal frequency is 151 MHz.
> 1st IF is 45MHz, 2nd IF is 455kHz(+/-15 kHz bandwidth).
> The input filter has a bandwidth of 6MHz.
> The image should not be an issue as it is way down at 60MHz.
>
> I don't want to loose much gain between the 602 and 605 (about 3-5dB would

> be acceptable).
>
> Thanks in advance
>
> Regards
>
> David

3577. need part

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-06 19:10:08 UTC
From: john carson <nhoj@epix.net>
Message-ID: <kedrg.293$Pa.33424@news1.epix.net>
Source record: 11328

Hello group --- What is replacement for Toshiba K2746 transistor. John

3578. Re: need part

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-06 20:26:32 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <Ylerg.11180$j7.315115@news.indigo.ie>
Source record: 11329

On Thu, 06 Jul 2006 19:10:08 +0000, john carson wrote:

> Hello group --- What is replacement for Toshiba K2746 transistor. John

Most likely it is a 2SK2746 MOSFET. The datasheet might give you some
clues:

http://www.semicon.toshiba.co.jp/docget.jsp?pid=2SK2746&lang=en&type=datasheet

73, Ed. EI9GQ.

--
Remove 'X' to replay by e-mail.
Linux 2.6.17

3579. Re: need part

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-06 20:32:24 UTC
From: dplatt@radagast.org
Message-ID: <12aqsqo85p4lc6e@corp.supernews.com>
Source record: 11330

In article <kedrg.293$Pa.33424@news1.epix.net>,
john carson <nhoj@epix.net> wrote:

>Hello group --- What is replacement for Toshiba K2746 transistor. John

It's almost certainly a 2SK2746: "Silicon N-channel MOS type field effect transistor for high speed, high current switching, DC-DC converter and motor drive applications" according to the info at www.datasheetarchive.com. Maximum ratings are 800 volts, 7 amps DC, 21 amps pulse, 30 volts on the gate, 150 watts dissipation.

http://www.mark5.co.uk/ seems to have some in stock, but the prices seem high. DigiKey carries the 2SK2746 but it looks as if they don't care to sell them in quantities less than 3000 pieces, special-order only.

It looks to me as if an International Rectifier IRFPE50 might quality as a substitute (same voltage rating, same threshold-voltage range, slightly better Rds(on), Id, and Pd ratings) - DigiKey has these in stock for under $7 each.

One site suggests the SSM09N70F as a substitute.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

3580. Re: Some GHz hacking

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-07 03:01:20 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12arjk1c36rl83c@corp.supernews.com>
Source record: 11332

"jack" <jdwalton@comcast.net> wrote in message
news:0ZCdnenIUNdPKTDZnZ2dnUVZ_tCdnZ2d@comcast.com...
> http://www.drivebywifiguide.com/TetraBrikHowTo.htm

I'm leery of anyone selling an antenna (or a book of how to build antennas, in this case) that doesn't even measure return loss...

3581. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-07 04:51:59 UTC
From: Pete KE9OA <p.gianako@comcast.net>
Message-ID: <_KydndkeM5n0dTDZnZ2dnUVZ_uidnZ2d@comcast.com>
Source record: 11333

I never tried to use this chip as an SSB detector, but I did design an AM sync detector a couple of years back. I remember that I had to limit the input level to around 30uV when used in the fashion, but it wasn't bad for that purpose.

Pete

"MAc" <mac_dx@tosiewytnie.poczta.onet.pl> wrote in message news:e8e4t7$7v7$1@news.onet.pl...
> AndyS wrote:
> > A Quadrature detector is normally used only for FM demodulation.
>
> Yes.
>
> but (from Analog Devices):
> "...Applications of the AD607 include narrowband systems with a high first
> IF (21.4 MHz to 300 MHz) and a second IF at 10.7 MHz, 455 kHz, or 450 kHz.
> These include Dual Conversion IS136, GSM, TETRA, and MSAT Receivers; and
> Single or Dual Conversion VHF and HF AM, SSB, CW, or QPSK Receivers... "
>
> But :-) I did not find any SSB application :-(So I need an example.
>
>
>
> Just my two cents worth.... If anyone disagrees, I'd be happy to
>> learn from them where my explanation is wrong..... but I warn you,
>> it ain't far wrong.... cause it worked for me for many many years
>> in designing receivers for both commercial and military products
>> ...:>)))))
>
>
> Andy Thanks for your cents, rather dollars.
>
> PS there is internal quadrature pll in ad607.
>
> MAc

3582. looking for 2 metre mobile radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-07 07:06:41 UTC
From: hamguy1 <hamguy1@optusnet.com.au>
Message-ID: <44ae07f7$1$21440$afc38c87@news.optusnet.com.au>
Source record: 11334
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.mods,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

hi there newgroups, i live in australia im looking for either a yaesu kenwood icom or similar 2 metre for my mobile with dtmf mic preferably if anyone in the usa etc has 1 i would pay shipping to australia .thanks in advance david nsw australia .

3583. Confused with BF998

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-07 08:29:54 UTC
From: David <websales@orbitcoms.com>
Message-ID: <6Yorg.900$tE5.231@news-server.bigpond.net.au>
Source record: 11335

I am going around in circles attempting to understand the datsheet for the BF998 Dual Gate FET.

From what I can gather, with Vcc = 8V and 4V on G1 and ID of 10mA, at 150 MHz
Input appears to be 1700 Ohms with 2.1pF par
Output appears to be 1250 Ohms with 1pF par

(I thought Fets had hundreds of K ohm input impedance - or is this only at low Freq ?)

The typology I have is.

L/C tuned circuit to G1
100K+100K providing 4V to G2 (with 100n Bypass cap close to gate)
The source has 100R with 100n Par to ground.
The Drain has the Inductor of the tuned circuit to Vcc (and bypassing on Vcc side as well as 47R series resistor for additional decoupling).

The tuning cap goes from Drain to ground.

I have about 250mV on the source (only 2.5mV bias current).

How do I obtain 10mA drain current ? Or are they only referring to AC current ?

Would someone mind please giving me a bit of overview of these devices.

Thanks in advance

Regards

David

3584. Re: Confused with BF998

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-07 09:37:34 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1152265054.713381.59030@k73g2000cwa.googlegroups.com>
Source record: 11336

David wrote:
> I am going around in circles attempting to understand the datsheet for
> the BF998 Dual Gate FET.
>
> From what I can gather, with Vcc = 8V and 4V on G1 and ID of 10mA, at
> 150 MHz
> Input appears to be 1700 Ohms with 2.1pF par
> Output appears to be 1250 Ohms with 1pF par
>
> (I thought Fets had hundreds of K ohm input impedance - or is this only
> at low Freq ?)
>
> The typology I have is.
>
> L/C tuned circuit to G1
> 100K+100K providing 4V to G2 (with 100n Bypass cap close to gate)
> The source has 100R with 100n Par to ground.
> The Drain has the Inductor of the tuned circuit to Vcc (and bypassing on
> Vcc side as well as 47R series resistor for additional decoupling).
>
> The tuning cap goes from Drain to ground.
>
> I have about 250mV on the source (only 2.5mV bias current).
>
> How do I obtain 10mA drain current ? Or are they only referring to AC
> current ?
>
> Would someone mind please giving me a bit of overview of these devices.

MOSFETs have a very high input resistance, but the actual input
impedance at high frequencies is a lot lower.

Leon

3585. Re: Confused with BF998

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-07 11:54:51 UTC
From: David <websales@orbitcoms.com>
Message-ID: <fYrrg.1008$tE5.721@news-server.bigpond.net.au>
Source record: 11337

Opps, I see my finger trouble.

The input was stated as Y = 0.06mS +j 2mS . This would be almost 17K in
parallel with 2.1pF NOT 1k7

The output was Y = 0.08mS +j 0.8mS. This should be 12.5k in par with
just under 1pF. Not 1250 Ohms

OK, I am getting some understanding I just need some gaps filled in now.

I see that when the recommended gate voltage is applied to G2 that Rs is
adjusted for the required current (say 10mA for lowest noise figure).

So, If I put 4V of G2, grounded G1 via and RFC and RFC on drain to Vcc
then placed a 100R in the source, I could adjust the 100R till 10mA
flowed to set the bias point.

I suppose then you would match the 12k drain impedance to a tank
circuit. Or place the tank circuit as the load.

Is the gain of the amp just related to Gm and the load impedance on the
drain.
So that if the DC bias was set for specific VDS and VGS then there would
be a specific transfer admittance that would produce a current through
the load. With RFC there would be max. gain or gain could be fixed by
specific load less than this?

Thanks

Regards

David

Leon wrote:
> David wrote:
>> I am going around in circles attempting to understand the datsheet for
>> the BF998 Dual Gate FET.
>>
>> From what I can gather, with Vcc = 8V and 4V on G1 and ID of 10mA, at
>> 150 MHz
>> Input appears to be 1700 Ohms with 2.1pF par
>> Output appears to be 1250 Ohms with 1pF par
>>
>> (I thought Fets had hundreds of K ohm input impedance - or is this only
>> at low Freq ?)
>>
>> The typology I have is.
>>

>> L/C tuned circuit to G1
>> 100K+100K providing 4V to G2 (with 100n Bypass cap close to gate)
>> The source has 100R with 100n Par to ground.
>> The Drain has the Inductor of the tuned circuit to Vcc (and bypassing on
>> Vcc side as well as 47R series resistor for additional decoupling).
>>
>> The tuning cap goes from Drain to ground.
>>
>> I have about 250mV on the source (only 2.5mV bias current).
>>
>> How do I obtain 10mA drain current ? Or are they only referring to AC
>> current ?
>>
>> Would someone mind please giving me a bit of overview of these devices.
>
> MOSFETs have a very high input resistance, but the actual input
> impedance at high frequencies is a lot lower.
>
> Leon
>

3586. Re: Confused with BF998

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-07 12:17:54 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <aljsa2dls73qdug9cb7ptpchljg53pdi4d@4ax.com>
Source record: 11338

On Fri, 07 Jul 2006 08:29:54 GMT, David <websales@orbitcoms.com>
wrote:

>I am going around in circles attempting to understand the datsheet for
>the BF998 Dual Gate FET.
>
> From what I can gather, with Vcc = 8V and 4V on G1 and ID of 10mA, at
>150 MHz
>Input appears to be 1700 Ohms with 2.1pF par
>Output appears to be 1250 Ohms with 1pF par
>
>(I thought Fets had hundreds of K ohm input impedance - or is this only
>at low Freq ?)

At DC and low frequencies the inputs are effectively open circuits
(very high R) with a small C across it. As frequency increases the
package(leads and all) and that small C combine to reflect
a decreasing impedence.

Also those numbers are for best noise performance as RF amplifier.

>
>The typology I have is.
>
>L/C tuned circuit to G1
>100K+100K providing 4V to G2 (with 100n Bypass cap close to gate)

I'd usually use lower value resistors like 10k to ground and 47k to V+
for G2. G1 is returned to ground through tuned circuit L.

I use 12V on the drain.

>The source has 100R with 100n Par to ground.
>The Drain has the Inductor of the tuned circuit to Vcc (and bypassing on
> Vcc side as well as 47R series resistor for additional decoupling).
>
>The tuning cap goes from Drain to ground.
>
>I have about 250mV on the source (only 2.5mV bias current).
>
>How do I obtain 10mA drain current ? Or are they only referring to AC
>current ?

As RF amp or mixer? As RF the bias on G1 and G2 must be correct.
For Mixer that would likely not be the case.

Allison

>
>Would someone mind please giving me a bit of overview of these devices.
>
>Thanks in advance
>
>Regards
>
>David

3587. Some GHz hacking

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-07 13:13:17 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <0ZCdnenIUNdPKTDZnZ2dnUVZ_tCdnZ2d@comcast.com>
Source record: 11331

pointed out to me by one of "my three sons" -- i could never get any of them to pick up Morse:

http://www.drivebywifiguide.com/TetraBrikHowTo.htm

3588. 813 power amplifier - design safety advice/tips?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-07 18:04:10 UTC
From: dave <foda01@epix.net>
Message-ID: <umxrg.322$Pa.38929@news1.epix.net>
Source record: 11339

Hello,

I am putting together a push-pull power amplifier based on the 813 power tube. It will have about 1.5 to 1.7kV on the plates and put out at least 260 watts into a 9k load.

I am not new to high voltage tube circuits, but this is the first time I will be working with potentials this high (above 1kV). I am aware of all of the usual safety precautions, but I was hoping to get some specific tips for putting together a design like this from some people who work with these sort of voltages, hence the posting here.

For the plate supply, I have a Hammond power transformer laying around here rated at 1000-0-1000 volts @ 200mA. From the ap notes on the 813, I am know that the tubes will idle at about 50 mA and peak at about 305 mA. Would this Hammond be ok for this type of use? I dont *think* I would be drawing 300 mils anywhere near continuously, but you never know. This amp will be part of a bass guitar amplifier for live performance use.

I want to use solid state rectifiers and in studying some older ARRL handbooks, they tell you to use equalizing resistors and small caps across series-strung diodes to get up to the peak inverse voltage you need. However I have seen a newer part in Mouser, made by Rectron, rated at 800mA and 8kV PIV. Would something like this be all I would need (four in a bridge configuration)? I would think it would be easier than making all of those strings up from individual diodes. Or is there a better way?

I want to use a choke-input supply and I happen to have a large old filter reactor made by Chicago Transformer rated at 20H @ 250mA, with a test voltage of 6kV.

As for filter caps, I guess the cheapest way to go is to string together series electrolytics with balancing resistors.

Also I have seen a lot of supplies use soft-start relays in the primary - would you think this would be necessary in this application? I am looking to get about 1.6kV out of this supply.

So basically you have a 2000vac secondary feeding a bridge of high voltage rectifier diodes, then a 20H choke, and then a string of 'lytics. How much capacitance would be sufficient to elliminate the hum in the plates? I know that with push-pull and beam power tubes you can probably stang higher ripple in the plates but is there a good ballpark figure?

Also since the 813 is directly-heated, would it be ok to have one 10v, 10A filament transformer to light them both or would it be best to have two separate ones to allow for hum balance -pots or for some other reason?

I also will have to make a screen supply for 750 volts at 45mA max. Would this have to be a regulated supply?

I had planned on ordering some Belden 18awg high voltage test lead wire rated to 10kV for all of the plate supply wiring. Would this be ok, or is there a better wire for this application?

By the way I am having Heyboer custom wind an output transformer for this thing. It was fairly expensive (around $200) so I want to protect it as best as possible - fuses, etc - any ideas there?

Basically I'm looking for any ideas that might not be at first obvious, in terms of providing safety to me, the operator, or the most exensive components -

Any and all ideas/tips/etc. most welcome

Dave

3589. What is a wire antenna's impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-07 19:29:54 UTC
From: jo9s8as@yahoo.com
Message-ID: <1152300593.974477.241010@35g2000cwc.googlegroups.com>
Source record: 11340

I searched all over the Internet and many books but just could not find a formula or rough number of a wire antenna's impedance (not dipole or anything else, just a simple, plain wire). I need this number to match my small transmitter's final stage output, about 10mW, at 450MHz. The final stage's transistor has fT of 6GHz, and is not unconditionally stable at 450MHz. So I need to match it using Smith Chart. I know those portion of work. But I just don't know the wire's impedance's range, say, is it in the 50-80 ohms or in the 500-600 ohms range or even 1000-2000 ohms? Right now I do not guess this number right, and my transmitter seems always oscillating at a wrong frequency. So take an example, if I use a wire antenna, say, 22 AWG, spools of solid, and the length=wavelength/4, what is its approximate impedance? Thanks.

3590. Re: What is a wire antenna's impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-07 19:46:13 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12ateg444hqtn52@corp.supernews.com>
Source record: 11341

<jo9s8as@yahoo.com> wrote in message
news:1152300593.974477.241010@35g2000cwc.googlegroups.com...
>I searched all over the Internet and many books but just could not find
> a formula or rough number of a wire antenna's impedance (not dipole or
> anything else, just a simple, plain wire).

Have you tried "Antennas for All Applications" by Kraus
(http://www.amazon.com/gp/product/0072321032/sr=8-1/qid=1152301289/ref=pd_bbs_1/002-7389034-2641652?ie=UTF8)?
It has plenty of plots of input impedance for various antennas. Any
university library will have some edition of Kraus' book; it's been around for
decades.

I'm about 99% certain the ARRL handbook has plenty of antenna impledance plots
as well.

> But I just don't know the wire's impedance's range,
> say, is it in the 50-80 ohms or in the 500-600 ohms range or even
> 1000-2000 ohms?

For most antennas at least in the ballpark of resonance, you'll be in the
30-300 ohm range. Real antennas often have tens to hundreds of ohms of
reactance as well, though.

> So take an
> example, if I use a wire antenna, say, 22 AWG, spools of solid, and the
> length=wavelength/4, what is its approximate impedance?

In the ballpark of 72 ohms assuming it's a dipole (lambda/4 on either side);
if you're operating lambda/4 above a ground plane, it'll be roughly half that.

---Joel Kolstad

3591. Re: What is a wire antenna's impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-07 20:30:46 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <65hta251poe3h4la7hhl1b1uublk7d8ca1@4ax.com>
Source record: 11342

I believe the demo (free!) version of EZNEC will answer your
questions. Google for it. One of the most critical aspects of any
antenna is where it is with respect to ground.
John W8CCW

On 7 Jul 2006 12:29:54 -0700, jo9s8as@yahoo.com wrote:

>I searched all over the Internet and many books but just could not find
>a formula or rough number of a wire antenna's impedance (not dipole or
>anything else, just a simple, plain wire). I need this number to match
>my small transmitter's final stage output, about 10mW, at 450MHz. The
>final stage's transistor has fT of 6GHz, and is not unconditionally
>stable at 450MHz. So I need to match it using Smith Chart. I know those
>portion of work. But I just don't know the wire's impedance's range,
>say, is it in the 50-80 ohms or in the 500-600 ohms range or even
>1000-2000 ohms? Right now I do not guess this number right, and my
>transmitter seems always oscillating at a wrong frequency. So take an
>example, if I use a wire antenna, say, 22 AWG, spools of solid, and the
>length=wavelength/4, what is its approximate impedance? Thanks.
John Ferrell W8CCW

3592. Re: What is a wire antenna's impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-07 20:46:38 UTC
From: jo9s8as@yahoo.com
Message-ID: <1152305198.772929.240580@s13g2000cwa.googlegroups.com>
Source record: 11343

Thank you both above. But as I mentioned, I only wanted to know the impedance of a simple, plain wire. No dipole, no complex antenna structure. Please help.

3593. Re: What is a wire antenna's impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-07 21:05:34 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <w1Arg.78$9a2.68@fe04.lga>
Source record: 11344

As the other posters pointed out, it depends on it's length, where it is above what kind of ground, and how it is fed. It will be influenced by stuff around it like aluminum siding, fences, trees, and all sorts of things. Some of the influences aren't minor, unless they are all wavelengths away.

If you have an end-fed quarter wave, which I suspect is what you are describing, then it needs to be fed against something, most likely ground. In that case, it will be about thirty ohms at resonance, plus the resistance of your ground, which could be substantial. That assumes "free space", of course, which isn't bloody likely. More likely you are relatively close to a less than perfect ground, so the impedance could be almost anything. Even in a perfect world, with pefect ground, the impedance varies with height above ground.

It isn't like there is some simple answer that is being kept secret. It is a complex question, with lots of variables. As one poster pointed out, the best answer short of measuring it, is to model it with something like EZNEC.

You indicated your objective was to come up with some sort of impedance transformation from a rig you are building to this antenna. Given the opportunity for significant reactance, I would suggest you locate someone locally with an antenna analyzer and measure it! An SWR bridge won't tell you enough to design the matching circuit; there will be reactance, and a 2:1 SWR says IF it is all resistive, maybe it is 25 ohms, maybe 100. You have no reason to suspect either and likely there is some reactance so probably it is neither.

So go measure it!

..

<jo9s8as@yahoo.com> wrote in message
news:1152305198.772929.240580@s13g2000cwa.googlegroups.com...
> Thank you both above. But as I mentioned, I only wanted to know the
> impedance of a simple, plain wire. No dipole, no complex antenna
> structure. Please help.
>

3594. Re: What is a wire antenna's impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-07 22:23:23 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <gjnta2p08lo6h3j1quk9uifq88r933fg22@4ax.com>
Source record: 11345

On 7 Jul 2006 13:46:38 -0700, jo9s8as@yahoo.com wrote:

>Thank you both above. But as I mentioned, I only wanted to know the
>impedance of a simple, plain wire. No dipole, no complex antenna
>structure. Please help.

Very dependent on length, distance from groundplane, diameter
and skin resistance of the material.

The best answer is knowing it's only a wire and no defined information
more than that is: 42!

Allison

3595. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-07 22:28:54 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e8mn77$m6l$1@avnika.corp.mot.com>
Source record: 11346

"MAc" <mac_dx@tosiewytnie.poczta.onet.pl> wrote in message
news:e8h9iq$144$1@news.onet.pl...
> Steve N. napisa(a):
>
> > AD607 does NOT have a "quadrature detector". It has an "I & Q
demodulator".
> > BIG difference. You must read the datasheet and app notes to use it
> > correctly. It is capable of demudulating many types of modulation.
[typo
> > accepted]
>
> My mistake, I undersand. But datasheet says nothing more exept "it is
> possible to detect ssb with ad607"
>
> Thanks
> MAc

OK MAc,
All I know is the I & Q modulator and demodulators are the industry
standard in commercial radios like the ones my company designs. I hrae that
you can get anything you want. I'm too far away from the current designs to
know anything specific.
A Google resulted in this , but it doesn't appear to be a complete how-to.
http://www.merrimacind.com/rfmw/02intro_modulators.pdf

Perhaps someone can explain how to "I & Q" to get SSB, etc.

Good luck 73, K9DCI

3596. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-07 23:18:07 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <e8mq3f$4bt$1@news.onet.pl>
Source record: 11347

> Perhaps someone can explain how to "I & Q" to get SSB, etc.
>

The simplest way I found - is to use an ear in companion of brain - :-)
I am serious - look for "binaural DC receiver" (Exp. Methods in RF
design) when one can see, that "i" is and "q" are simply amplified and
feed headphones. Thats all. But then we have still problem with lsb/usb.

Thanks for link.

MAc
sp9mrn

3597. Re: 813 power amplifier - design safety advice/tips?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 00:15:47 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <KaidnWfXDb63ZDPZnZ2dnUVZ8qidnZ2d@pipex.net>
Source record: 11348

1) The power supply transformer has a centre tap ,hence is meant to be a 1000 V -200 mA ,hence 200Watts supply device. When you would use it as a 2000V-AC device the primary winding and or the 'iron' will highly likely be inadequate to produce 400W of power.
So the transformer will NOT be capable of supplying 1600* 0.305 equals 490 Watts. You will need a transformer which can supply at least 2.5 times the power you get from your available transformer .

2)Depending on the transformer voltage available say 1300 V the max rectified DC voltage (due to the capacitor(s) will be 1.4* 1300 equals 1820 V ,hence the PIV of a bridge diode string would have to be at least twice as high ,with a safety factor ,say 4000 if not 5000 V
It depends of the type of diode you use but if it is one with a PIV of 1000V you'll need 4 to 5 diodes in a bridge arm string.
Modern avalanche diodes are known not needing parallel capacitors or resistors . The Recton diodes are highly likely a molded set of lower PIV diodes . You could find out how many diodes are in series by applying a low forward bias dc current and measure the voltage across the module At approx 0.7 V across each diode you then can determine the number of diodes in the module. You obviously can also use a string of 1N4007 1 Ampere diodes each having a PIV of 1000 V

3)The choke designed for 250 mA might be OK ,although is somewhat marginal .Its resistance will cause a drop of the DC voltage hence in order to get the required final DC supply voltage at max load the transformer voltage has to be adequate . It also means that you have to determine how much 'voltage sagging' is permissable.

4) If you use a string of electrolytic filter capacitors you need a sufficient number to suit the rectifier bridge output voltage multiplied by 1.4 and should apply a decent safety factor. Assuming you use identical caps ,the overall capacitance is of course the value of 1 divided by the number of caps .
You have to pay much attention to the equalising resistors taking into account both their voltage and power rating .
A well know RF Power Amplifier designer ,AG6K , recommends MOF =Metal Oxide Film
resistors , although often one sees high power wire wound resistors on a ceramic core being used.

5) You also need to decide in which operating Class the valves will have to work in view of the acceptable distortion level of the amplifier. Class A would be best but a waste of energy. In the intended push pull configuration Class B would be OK.

6) The screen voltage of both valves will have to be stabilised

7) You also have to ensure that the valves are being cooled ,by means of one or more small fans. A good method is to have an airtight under-chassis pressurised by a small centrifugal fan and the valve sockets fitted just below the chassis (on stand-offs)such that the air flows along the valve bases and up. It might also be useful to apply anode connectors with cooling fins.

8) If amplifier enclosure has a hatch giving access to High Voltage carrying components it is essential that when the hatch is opened a microswitch opens ,cutting all external power if left on. Normally of course power should be cut (power supply plug pulled) and then ,only after a few minutes, the hatch should be opened, because of retention of charge by the filter capacitors for some time (depending on the value of the voltage equalising resistors).

These are just a few of many aspects to consider when building a valve power amplifier.

Frank GM0CSZ / KN6WH
==========
> I am putting together a push-pull power amplifier based on the 813 power
> tube. It will have about 1.5 to 1.7kV on the plates and put out at least
> 260 watts into a 9k load.
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> I am not new to high voltage tube circuits, but this is the first time I
> will be working with potentials this high (above 1kV). I am aware of all of
> the usual safety precautions, but I was hoping to get some specific tips for
> putting together a design like this from some people who work with these
> sort of voltages, hence the posting here.
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> For the plate supply, I have a Hammond power transformer laying around here
> rated at 1000-0-1000 volts @ 200mA. From the ap notes on the 813, I am know
> that the tubes will idle at about 50 mA and peak at about 305 mA. Would
> this Hammond be ok for this type of use? I dont *think* I would be drawing
> 300 mils anywhere near continuously, but you never know. This amp will be
> part of a bass guitar amplifier for live performance use.
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> I want to use solid state rectifiers and in studying some older ARRL
> handbooks, they tell you to use equalizing resistors and small caps across
> series-strung diodes to get up to the peak inverse voltage you need.
> However I have seen a newer part in Mouser, made by Rectron, rated at 800mA
> and 8kV PIV. Would something like this be all I would need (four in a
> bridge configuration)? I would think it would be easier than making all of
> those strings up from individual diodes. Or is there a better way?
>
> I want to use a choke-input supply and I happen to have a large old filter
> reactor made by Chicago Transformer rated at 20H @ 250mA, with a test
> voltage of 6kV.
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> As for filter caps, I guess the cheapest way to go is to string together
> series electrolytics with balancing resistors.
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> Also I have seen a lot of supplies use soft-start relays in the primary -
> would you think this would be necessary in this application? I am looking
> to get about 1.6kV out of this supply.
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> So basically you have a 2000vac secondary feeding a bridge of high voltage
> rectifier diodes, then a 20H choke, and then a string of 'lytics. How much
> capacitance would be sufficient to elliminate the hum in the plates? I know
> that with push-pull and beam power tubes you can probably stang higher
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> Also since the 813 is directly-heated, would it be ok to have one 10v, 10A
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> I also will have to make a screen supply for 750 volts at 45mA max. Would
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> thing. It was fairly expensive (around $200) so I want to protect it as
> best as possible - fuses, etc - any ideas there?
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> Basically I'm looking for any ideas that might not be at first obvious, in
> terms of providing safety to me, the operator, or the most exensive
> components -
>
> Any and all ideas/tips/etc. most welcome
>
> Dave
>
>
>
>

3598. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 02:24:15 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <1m4ua25u1ajr0n4qadj3vr50pfkshbmp1r@4ax.com>
Source record: 11349

On Fri, 7 Jul 2006 17:28:54 -0500, "Steve N."
<stuevue.nouskuowuicuz@moutouroula.com> wrote:

>
>"MAc" <mac_dx@tosiewytnie.poczta.onet.pl> wrote in message
>news:e8h9iq$144$1@news.onet.pl...
>> Steve N. napisaï¿½(a):
>>
>> > AD607 does NOT have a "quadrature detector". It has an "I & Q
>demodulator".
>> > BIG difference. You must read the datasheet and app notes to use it
>> > correctly. It is capable of demudulating many types of modulation.
>[typo
>> > accepted]
>>
>> My mistake, I undersand. But datasheet says nothing more exept "it is
>> possible to detect ssb with ad607"
>>
>> Thanks
>> MAc
>
>OK MAc,
> All I know is the I & Q modulator and demodulators are the industry
>standard in commercial radios like the ones my company designs. I hrae that
>you can get anything you want. I'm too far away from the current designs to
>know anything specific.
>A Google resulted in this , but it doesn't appear to be a complete how-to.
>http://www.merrimacind.com/rfmw/02intro_modulators.pdf
>
>Perhaps someone can explain how to "I & Q" to get SSB, etc.
>
>Good luck 73, K9DCI
>

Havent looked much at the AD part but... it's a mixer
(actually two of them).

See articles by KK7B and Breed. Basically the I (inphase)
and Q (quadrature) mixers are fed with RF at 90 degree relation to
each other. The resulting output is then put through a 90degree
delay (use 3rd order allpass networks for that) and sum or difference
the result and you have a phasing SSB/CW reciever. If you can keep
the phase and amplitude errors better than 1% (easy with modern parts)
you get 40+ db of alternate sideband suppression. All the work is
done in the audio range so Opamps are good for this or DSP. Look up

R2, MIniR2, or R2pro for more details. Summary is if you delay the Q path by 90degrees and add the result there will be a frequency(s) where the results add to each other and as you get past zero beat they will subtract from each other.

One note on alternate sideband suppression, 40db is pretty good sounding, 50db is achieveable and 60db is tough.

I've built a SSB transceiver using the KK7B miniR2 design and opposite sideband suppression is 45db or so and it sounds far better on the air than the typical minimal RX with a 4 crystal ladder filter. I run a MiniR2 and T2 (phasing TX) on 6m with a 6W output. Gets rave reviews for clean signal and it's very good TRX for DX.

Allison

3599. Re: What is a wire antenna's impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 02:38:05 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12au6khlbu5kl74@corp.supernews.com>
Source record: 11350

Unfortunately, there's no such thing as a "simple, plain, wire". Any current you put into the wire will force an equal current into the "ground" connection. If, for example, you just plug a wire into the center conductor of your transmitter's output connector, a current will flow out of the connector along the outside transmitter's chassis. This current will equal the current into your wire. So the radio, along with the path to the Earth, becomes the other half of a very asymmetrical dipole. You can't avoid this, except by making the return current flow where you want, for example into the other half of a regular symmetrical dipole.

So to simply answer your question, if the wire is very close to a quarter wavelength and connected as I've said, the resistance can be anything from 10 or a few tens of ohms (if it's close to the chassis) to a thousand or more ohms (if the path to the Earth is particular lengths). The reactance can easily be plus or minus a few hundred ohms.

That's why you don't find a simple formula. If you did find one, it would be wrong and useless.

Roy Lewallen, W7EL

jo9s8as@yahoo.com wrote:
> I searched all over the Internet and many books but just could not find
> a formula or rough number of a wire antenna's impedance (not dipole or
> anything else, just a simple, plain wire). I need this number to match
> my small transmitter's final stage output, about 10mW, at 450MHz. The
> final stage's transistor has fT of 6GHz, and is not unconditionally
> stable at 450MHz. So I need to match it using Smith Chart. I know those
> portion of work. But I just don't know the wire's impedance's range,
> say, is it in the 50-80 ohms or in the 500-600 ohms range or even
> 1000-2000 ohms? Right now I do not guess this number right, and my
> transmitter seems always oscillating at a wrong frequency. So take an
> example, if I use a wire antenna, say, 22 AWG, spools of solid, and the
> length=wavelength/4, what is its approximate impedance? Thanks.
>

3600. Re: 813 power amplifier - design safety advice/tips?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 03:03:59 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <c26ua2t00g5lgoradts4h075n9m9ip758b@4ax.com>
Source record: 11351

On Fri, 07 Jul 2006 18:04:10 GMT, "dave" <foda01@epix.net> wrote:

>Hello,
>
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>I am putting together a push-pull power amplifier based on the 813 power
>tube. It will have about 1.5 to 1.7kV on the plates and put out at least
>260 watts into a 9k load.
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>will be working with potentials this high (above 1kV). I am aware of all of
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>that the tubes will idle at about 50 mA and peak at about 305 mA. Would
>this Hammond be ok for this type of use? I dont *think* I would be drawing
>300 mils anywhere near continuously, but you never know. This amp will be
>part of a bass guitar amplifier for live performance use.

If the XFmer is 1000-0-1000 with rectifiers (Full wave configuration)
you can count on around 1550V at 200ma or ~310W DC power.
You can load that higher if the peak to average is in the 300W range.
If you use a full wave bridge you can get twice the voltage and run
the same 200ma at ~2800-3000V for 600W.

The nasty with a 3000V supply is everything has to stand at least
10KV (allow for transients at least 2x or 3x the supply). Also 813s
may arc over at this high a voltage. (use 4-400s!).

The caveat is for sound amps and music overbuilding is a good thing.
Serious overbuilding is sometime required for commercial (stage)
use. Nothing worse than an amp smoking when the perfromer was.
Most I knew back when used multiple smaller amps rather than one
BIG one all driven from one head.

>
>I want to use solid state rectifiers and in studying some older ARRL
>handbooks, they tell you to use equalizing resistors and small caps across
>series-strung diodes to get up to the peak inverse voltage you need.
>However I have seen a newer part in Mouser, made by Rectron, rated at 800mA
>and 8kV PIV. Would something like this be all I would need (four in a
>bridge configuration)? I would think it would be easier than making all of
>those strings up from individual diodes. Or is there a better way?

Either way works. follow the recommeded add xxx percent over rating to prevent the smoke from escaping.

>I want to use a choke-input supply and I happen to have a large old filter
>reactor made by Chicago Transformer rated at 20H @ 250mA, with a test
>voltage of 6kV.

Ok to 250ma and the power xfmer is 200ma so it's a winner to those limits. You can go past that but then heating and peak to average considerations apply (and shorter life is possible).

>As for filter caps, I guess the cheapest way to go is to string together
>series electrolytics with balancing resistors.

It is the way to go. Lots of them! Don't forget all those resistors are eating up that limited 200ma, they are needed but it emphasizes the limited transformer your using.

>Also I have seen a lot of supplies use soft-start relays in the primary -
>would you think this would be necessary in this application? I am looking
>to get about 1.6kV out of this supply.

Yes, saves popping mains fuses from power on surges and also is easier on the HV components.

FYI: the filliments on the 813s must be up to temp before DC plate or screen power is applied.

>So basically you have a 2000vac secondary feeding a bridge of high voltage
>rectifier diodes, then a 20H choke, and then a string of 'lytics. How much
>capacitance would be sufficient to elliminate the hum in the plates? I know
>that with push-pull and beam power tubes you can probably stang higher
>ripple in the plates but is there a good ballpark figure?

Enough to keep the ripple at full load less than 1%. Start around 60-100uf.

See caveat for ~3000V on plates!

Pushpull will help balance out ripple.

>Also since the 813 is directly-heated, would it be ok to have one 10v, 10A
>filament transformer to light them both or would it be best to have two
>separate ones to allow for hum balance -pots or for some other reason?

One of adaquate current rating with a 50 ohm pot with the wiper to ground for balance will do. That 50ohm pot is a high power resistor. The alternate is a 10V center tapped or two 5V transformers.

>I also will have to make a screen supply for 750 volts at 45mA max. Would
>this have to be a regulated supply?

Absolutely. Likely you will need another transformer, rectifier and filter for that voltage as you only have a 200ma transformer for the plates so why waste some of it on the screens. Also the screen supply must not be applied before the plate voltage.

Not needed if you use 811 or other power triode.

>I had planned on ordering some Belden 18awg high voltage test lead wire
>rated to 10kV for all of the plate supply wiring. Would this be ok, or is
>there a better wire for this application?

Consider that the environment is not only HV but also HOT. Make sure
the wire (and all your parts) can stand heat too.

>By the way I am having Heyboer custom wind an output transformer for this
>thing. It was fairly expensive (around $200) so I want to protect it as
>best as possible - fuses, etc - any ideas there?

Fuses should abound. Minimally, mains input, and DC to plate
transformer.

>Basically I'm looking for any ideas that might not be at first obvious, in
>terms of providing safety to me, the operator, or the most exensive
>components -

ENCLOSE everything with HV on it. Finger proof it. and provide
interlocks. Consider cooling as well.

>Any and all ideas/tips/etc. most welcome

Reminder 2 813s with only filliments lit are pumping out some 100W
of heat! (10V at 5A).

The tubes should be biased between class AB1 and B for minimum
distortion. that means at idle you likely standing 20-50ma per tube
(another 50-150W of heat!).

You also need a -V (0-100V) negative to bias the tubes.
Another small transformer as trivial current is needed
mostly for bias pot and bleeders.

Mechanical construction is important as with all that iron
(transformers) it's going to be heavy. I mean wheels on this
beast are a must.

You also need a driver and that will have it's own power needs
though only a few watts need be developed. The low level amps
need to be kept far from the power transformers or it will HUM.

Allison

>
>Dave
>
>
>

3601. Re: IEEE Standard for RF Safety Levels

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 03:21:29 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <44AF249E.6A4C9DBC@earthlink.net>
Source record: 11352

"Dr. Jeff" wrote:
>
> Ever since the Cable Company mounted a large (3'x2'x2') electronics box
> on the telephone pole outside my home, I've picked up interference on
> my General Coverage receiver at 4 Mhz. plus. Using my RF Frequency
> Counter with 50 ohm antenna, I was able to pinpoint the source of the
> RF to that box. Also, I am able to pick up the RF 400, 500 plus feet
> away! Considering that the same meter doesn't pick up my cell or
> cordless phone more than a foot or two away, I have to assume that the
> 4 Mhz. RF is in the watt range, rather than micro or milliwatts!
>
> Jeff
>
> John - KD5YI wrote:
> > Dr. Jeff wrote:
> > > Can anyone refer me to a link where I can access (for FREE) the "IEEE
> > > Standard for Safety Levels with Respect to Human Exposure to Radio
> > > Frequency Electromagnetic Fields"; C95.1-1992 or similar document that
> > > covers exposure guidelines for specific RF frequencies.
> > > I'm detecting extremely high levels of 4.2 to 4.5 Mhz. RF from a Cable
> > > TV companys pole mounted equipment in front of my home.
> > >
> > > Jeff
> > >
> >
> >
> > You are "detecting extremely high levels of 4.2 to 4.5 Mhz. RF"? How do you
> > know?
> >
> > Please give some numbers. In any units with which you are familiar.

That sounds like a pole mounted UPS. I used to design CATV systems
and headends.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

3602. Re: What is a wire antenna's impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 03:24:48 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <go2dnZ1ECf_UuzLZRVnyvw@bt.com>
Source record: 11353

<jo9s8as@yahoo.com> wrote in message
news:1152300593.974477.241010@35g2000cwc.googlegroups.com...
> I searched all over the Internet and many books but just could not
find
> a formula or rough number of a wire antenna's impedance (not dipole
or
> anything else, just a simple, plain wire). I need this number to
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> my small transmitter's final stage output, about 10mW, at 450MHz.
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> final stage's transistor has fT of 6GHz, and is not unconditionally
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> portion of work. But I just don't know the wire's impedance's range,
> say, is it in the 50-80 ohms or in the 500-600 ohms range or even
> 1000-2000 ohms? Right now I do not guess this number right, and my
> transmitter seems always oscillating at a wrong frequency. So take
an
> example, if I use a wire antenna, say, 22 AWG, spools of solid, and
the
> length=wavelength/4, what is its approximate impedance? Thanks.
=======================================

It is not clear what impedance you are talking about.

If you are asking what is the Zo impedance of an antenna conductor
considered as a transmission line, then it is -

Zo = 60 * (Ln(4 * L / D) - 1) ohms,

where L is length of the conductir, D is its diameter, and Ln is
natural logarithms to base e. L and D are in the same measurement
units.

You have mentioned Smith Charts in your query. Zo is usually in the
region of 300 to 600 ohms for wire antennas. The above formula is
approximate and is good enough for ordinary purposes.

Reg.

3603. Re: 813 power amplifier - design safety advice/tips?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 03:59:01 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1152331141.045643.113600@b28g2000cwb.googlegroups.com>
Source record: 11354

nospam@nouce.bellatlantic.net wrote:
> On Fri, 07 Jul 2006 18:04:10 GMT, "dave" <foda01@epix.net> wrote:
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> (another 50-150W of heat!).
>
> You also need a -V (0-100V) negative to bias the tubes.
> Another small transformer as trivial current is needed
> mostly for bias pot and bleeders.
>
> Mechanical construction is important as with all that iron
> (transformers) it's going to be heavy. I mean wheels on this
> beast are a must.

>
> You also need a driver and that will have it's own power needs
> though only a few watts need be developed. The low level amps
> need to be kept far from the power transformers or it will HUM.
>
>
> Allison
>
>
> >
> >Dave
> >
> >
> >

Have you got the audio output transformer for this beastie? - if not, get a price before you start - you might reconsider the project.

It is going to be physicaly big, very heavy, and fragile - 813 filaments dont like being knocked around in the back of a truck (and you will need a truck or SUV to move it) so if its intended to go on the road, it might be more trouble than its worth.

But, so saying that, ----- nice lunatic fringe project - worth doing, just for the hell of it, and ignore practical realities......

Andrew VK3BFA.

3604. Re: 813 power amplifier - design safety advice/tips?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 04:01:33 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1152331293.525106.187900@m73g2000cwd.googlegroups.com>
Source record: 11355

Sorry - didnt read closely enough - you have the output transformer....

Andrew VK3BFA.

3605. Re: Using Garage for Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 05:09:35 UTC
From: "Matt J. McCullar" <mccullar@flash.net>
Message-ID: <j6Hrg.627$2v.445@newssvr25.news.prodigy.net>
Source record: 11356

I spent several years in my teens using my dad's Heathkit SB-102 rig out in the garage in Fort Worth. Yes, it does get hot around here during the summer, make no mistake about it. I'm a night owl by nature, and I can't count how many times I worked DX until the sun came up.

Pros and Cons:

* Keep the garage door open, and open the back door as well to let air flow through. Cheap, but effective only during the day. At night, june bugs and other critters are attracted by the interior lights and will make life miserable for you. (I'll never forget one on-air conversation when a june bug flew right down my shirt. "WHAAAAUUUGH!!!") These days, unfortunately, it's not wise to leave your garage door open unattended because some *@#$ might come in and steal all of your power tools. (Bitter experience.) Or worse.

* Our garage had a VERY good wall-mounted air conditioner. It worked beautifully, even during the long, crushingly hot summer of 1980. In fact, it saved my parents' bacon when the house's main A/C unit failed and it took a couple of days to get it fixed. Mom & Dad just backed the car out of the garage, plopped down a mattress, turned on the wall-mounted A/C, and slept in cool comfort. [I'm sure Dad woke up each morning wondering, "What did she do to the bedroom now?"] Nice backup to have. I could work 40 meters all night long without worrying about the heat or the bugs.

* The garage also served as a nice workshop, complete with parts cabinets, two workbenches, and lots of tools. Easy to try out new RF circuits quickly.

I like the tornado-shelter idea. It's smaller and easier to keep cool. Also easier to secure valuable equipiment.

3606. Re: 813 power amplifier - design safety advice/tips?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 11:55:19 UTC
From: dave <foda01@epix.net>
Message-ID: <H2Nrg.361$Pa.42002@news1.epix.net>
Source record: 11357

Thanks to all who responded - some very good points to ponder...

I think I should spring for a different plate transformer, since I don't want to be running this one too marginally. Also, I suppose I could do away with the choke and still get under 1% ripple. That would definitely lighten up the weight. The Hammond # 720 is rated 625-0-625 V at 300mA CCS and 500mA ICAS, so I guess that would be adequate.

I am using a free program called PSU Designer II to calculate the power supply values and outputs. With the Hammond #720 and a 40uF/47ohm/40uF C-R-C filter after the diode bridge, I should get about 1760VDC at 50mA and about 1660VDC at 300mA.

I was also thinking of using three toggle switches across the front panel for filaments, plates, and screens, arranged so as to reflect the order in which to apply the power. I suppose some sort of relay or other device could be used to make sure the screens never got power before or in place of the plates. It is a good idea about the interlocks on the chassis too - I know nobody else will be using this amp besides me but still always a good idea to design in the safety. Also it won't be toured around as I play in basement bands most of the time so it probably won't see too much road use. It's more of a crazy way to generate 300 watts rather than go with the ordinary 'three pairs of KT88 's' route.

thanks again sincerely for all the input!

Dave

3607. Re: 813 power amplifier - design safety advice/tips?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 15:03:10 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <DsydnWh3R4u-VDLZnZ2dnUVZ8s6dnZ2d@pipex.net>
Source record: 11358

> I was also thinking of using three toggle switches across the front panel
> for filaments, plates, and screens, arranged so as to reflect the order in
> which to apply the power. I suppose some sort of relay or other device
> could be used to make sure the screens never got power before or in place of
> the plates. It is a good idea about the interlocks on the chassis too - I
> know nobody else will be using this amp besides me but still always a good
> idea to design in the safety.
==========
Instead of having 3 separate switches ,go for a single manual switch , a
sequential timer or separate timers and have 3 front panel lights for
filaments ,anodes and screen voltages. With 3 separate switches you
might operate these in the wrong sequence. With the 3 lights to come on
sequentially you quickly can detect any possible sequential switching
problems.

Frank GM0CSZ / KN6WH

3608. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 16:08:23 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <XLQrg.2896$bd4.372@trnddc01>
Source record: 11359
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

Rod Speed wrote:
> Geoffrey S. Mendelson <gsm@mendelson.com> wrote
>
>>Rod Speed wrote
>
>
>>>>Is one transmit and the other receive?
>>>>Or are they both transmit and receive?
>
>
>>>They're normally both transmit and receive.
>
>
>>That's a shame. Here in Israel we are limited to 100mw EIRP, which severly
>>limits the transmit antenna. There is NO limitation on the receive antenna.
>
>
> A receive antenna has no EIRP, it doesnt radiate any real power.
>
>

Actually, when properly matched, it radiates half the received power.

3609. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 17:37:45 UTC
From: Don K <dk@dont_bother_me.com>
Message-ID: <V8GdnVWjfOv8cDLZnZ2dnUVZ_tudnZ2d@comcast.com>
Source record: 11360
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

"John - KD5YI" <groups5munge@verizon.net> wrote in message
news:XLQrg.2896$bd4.372@trnddc01...
> Rod Speed wrote:
>>
>> A receive antenna has no EIRP, it doesnt radiate any real power.
>
> Actually, when properly matched, it radiates half the received power.

How do you get that?
If the receiver input impedance is matched to the antenna, all the
received power is absorbed. There is no reflection. There is no radiation.

If the receiver matching is for optimal noise figure, there may be
some reflection and reradiation, but there's nothing pinning it to
be half the received power.

Don

3610. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 19:26:18 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12b01murlm8kt86@corp.supernews.com>
Source record: 11361
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

Don K wrote:
> "John - KD5YI" <groups5munge@verizon.net> wrote in message
news:XLQrg.2896$bd4.372@trnddc01...
>> Rod Speed wrote:
>>> A receive antenna has no EIRP, it doesnt radiate any real power.
>> Actually, when properly matched, it radiates half the received power.
>
>
> How do you get that?
> If the receiver input impedance is matched to the antenna, all the
> received power is absorbed. There is no reflection. There is no radiation.
>
> If the receiver matching is for optimal noise figure, there may be
> some reflection and reradiation, but there's nothing pinning it to
> be half the received power.

John is correct. A receiving antenna, when matched, reradiates half the power it receives. An impinging field induces current in the antenna. This causes radiation, just like the current in a transmitting antenna. As it turns out, when the antenna is matched, the amount of power radiated equals the amount of power delivered to the load, and that's the best you can do. If you'd like a more in-depth and mathematical explanation, you can find it in any antenna text, often discussed as "scattering".

If a receiving antenna did absorb all the impinging power, it would be a lot easier to make a shield or a stealth aircraft.

Roy Lewallen, W7EL

3611. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 19:35:39 UTC
From: Rod Speed <rod.speed.aaa@gmail.com>
Message-ID: <4hafodF1pqdbmU1@individual.net>
Source record: 11362
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

John - KD5YI <groups5munge@verizon.net> wrote:
> Rod Speed wrote:
>> Geoffrey S. Mendelson <gsm@mendelson.com> wrote
>>
>>> Rod Speed wrote
>>
>>
>>>>> Is one transmit and the other receive?
>>>>> Or are they both transmit and receive?
>>
>>
>>>> They're normally both transmit and receive.
>>
>>
>>> That's a shame. Here in Israel we are limited to 100mw EIRP, which
>>> severly limits the transmit antenna. There is NO limitation on the
>>> receive antenna.
>>
>>
>> A receive antenna has no EIRP, it doesnt radiate any real power.
>>
>>
>
>
> Actually, when properly matched, it radiates half the received power.

Wrong.

3612. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 19:39:30 UTC
From: Rod Speed <rod.speed.aaa@gmail.com>
Message-ID: <4hafvkF1qu4d3U1@individual.net>
Source record: 11363
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

Roy Lewallen <w7el@eznec.com> wrote
> Don K wrote
>> John - KD5YI <groups5munge@verizon.net> wrote
>>> Rod Speed wrote

>>>> A receive antenna has no EIRP, it doesnt radiate any real power.

>>> Actually, when properly matched, it radiates half the received power.

>> How do you get that?
>> If the receiver input impedance is matched to the antenna, all the
>> received power is absorbed. There is no reflection. There is no
>> radiation.

>> If the receiver matching is for optimal noise figure, there may be
>> some reflection and reradiation, but there's nothing pinning it to
>> be half the received power.

> John is correct.

Nope.

> A receiving antenna, when matched, reradiates half the power it receives.

Yes but that ISNT ANY REAL POWER in the EIRP restriction sense.

> An impinging field induces current in the antenna. This causes radiation, just like the
> current in a transmitting antenna. As it turns out, when the antenna is matched, the
> amount of power radiated equals the amount of power delivered to the load, and that's
> the best you can do.

Yes but that ISNT ANY REAL POWER in the EIRP restriction sense.

> If you'd like a more in-depth and mathematical explanation, you can find it in any
> antenna text, often discussed as "scattering".

Not relevant to the original point, any effect on the EIRP restriction.

> If a receiving antenna did absorb all the impinging power, it would be a lot easier to
> make a shield or a stealth aircraft.

Not relevant to the original point, any effect on the EIRP restriction.

3613. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 20:42:59 UTC
From: "John L. Sielke" <w2agnNOSPAM@w2agn.net>
Message-ID: <44B018D3.2020900@w2agn.net>
Source record: 11364
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

Rod Speed wrote:
> Roy Lewallen <w7el@eznec.com> wrote
>> Don K wrote
>>> John - KD5YI <groups5munge@verizon.net> wrote
>>>> Rod Speed wrote
>
>>>>> A receive antenna has no EIRP, it doesnt radiate any real power.
>
>>>> Actually, when properly matched, it radiates half the received power.
>
>>> How do you get that?
>>> If the receiver input impedance is matched to the antenna, all the
>>> received power is absorbed. There is no reflection. There is no
>>> radiation.
>
>>> If the receiver matching is for optimal noise figure, there may be
>>> some reflection and reradiation, but there's nothing pinning it to
>>> be half the received power.
>
>> John is correct.
>
> Nope.
>
>> A receiving antenna, when matched, reradiates half the power it receives.
>
> Yes but that ISNT ANY REAL POWER in the EIRP restriction sense.
>
>> An impinging field induces current in the antenna. This causes radiation, just like the
>> current in a transmitting antenna. As it turns out, when the antenna is matched, the
>> amount of power radiated equals the amount of power delivered to the load, and that's
>> the best you can do.
>
> Yes but that ISNT ANY REAL POWER in the EIRP restriction sense.
>
>> If you'd like a more in-depth and mathematical explanation, you can find it in any
>> antenna text, often discussed as "scattering".
>
> Not relevant to the original point, any effect on the EIRP restriction.
>
>> If a receiving antenna did absorb all the impinging power, it would be a lot easier to
>> make a shield or a stealth aircraft.
>
> Not relevant to the original point, any effect on the EIRP restriction.

>
>
Always amazinmg how when some people are proven wrong, the revert to the "Is NOT, IS NOT," type of argument used by small children, then when that doesn't work, the argument becomes irrelevant.

Rod, I suggest you LEARN something from your intellectual and technical betters BEFORE you show the world your ignorance.

John

3614. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 20:45:20 UTC
From: "John L. Sielke" <w2agnNOSPAM@w2agn.net>
Message-ID: <V7KdnY9xDfLEhC3ZnZ2dnUVZ_oydnZ2d@comcast.com>
Source record: 11365
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

Rod Speed wrote:
> Roy Lewallen <w7el@eznec.com> wrote
>> Don K wrote
>>> John - KD5YI <groups5munge@verizon.net> wrote
>>>> Rod Speed wrote
>
>>>>> A receive antenna has no EIRP, it doesnt radiate any real power.
>
>>>> Actually, when properly matched, it radiates half the received power.
>
>>> How do you get that?
>>> If the receiver input impedance is matched to the antenna, all the
>>> received power is absorbed. There is no reflection. There is no
>>> radiation.
>
>>> If the receiver matching is for optimal noise figure, there may be
>>> some reflection and reradiation, but there's nothing pinning it to
>>> be half the received power.
>
>> John is correct.
>
> Nope.
>
>> A receiving antenna, when matched, reradiates half the power it receives.
>
> Yes but that ISNT ANY REAL POWER in the EIRP restriction sense.
>
>> An impinging field induces current in the antenna. This causes radiation, just like the
>> current in a transmitting antenna. As it turns out, when the antenna is matched, the
>> amount of power radiated equals the amount of power delivered to the load, and that's
>> the best you can do.
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> Yes but that ISNT ANY REAL POWER in the EIRP restriction sense.
>
>> If you'd like a more in-depth and mathematical explanation, you can find it in any
>> antenna text, often discussed as "scattering".
>
> Not relevant to the original point, any effect on the EIRP restriction.
>
>> If a receiving antenna did absorb all the impinging power, it would be a lot easier to
>> make a shield or a stealth aircraft.
>
> Not relevant to the original point, any effect on the EIRP restriction.

>
>
Always amazinmg how when some people are proven wrong, the revert to the "Is NOT, IS NOT," type of argument used by small children, then when that doesn't work, the argument becomes irrelevant.

Rod, I suggest you LEARN something from your intellectual and technical betters BEFORE you show the world your ignorance.

John

3615. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 21:00:56 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12b078dq4db14bf@corp.supernews.com>
Source record: 11366
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

Rod Speed wrote:
> Roy Lewallen <w7el@eznec.com> wrote
> . . .
>> A receiving antenna, when matched, reradiates half the power it receives.
>
> Yes but that ISNT ANY REAL POWER in the EIRP restriction sense.
> . . .

It's real power, but that power all comes from the impinging field; it's not contributing any new power. So you're right that the EIRP restriction doesn't apply. The receive antenna reduces the amount of power in the field by the amount delivered to the antenna's termination, plus any losses along the way. The intent of the EIRP restriction is to limit the amount of field strength added by a transmitter.

Roy Lewallen, W7EL

3616. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 21:12:11 UTC
From: Rod Speed <rod.speed.aaa@gmail.com>
Message-ID: <4halddF1qsfidU1@individual.net>
Source record: 11367
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

John L. Sielke <w2agnNOSPAM@w2agn.net> wrote:
> Rod Speed wrote:
>> Roy Lewallen <w7el@eznec.com> wrote
>>> Don K wrote
>>>> John - KD5YI <groups5munge@verizon.net> wrote
>>>>> Rod Speed wrote
>>
>>>>>> A receive antenna has no EIRP, it doesnt radiate any real power.
>>
>>>>> Actually, when properly matched, it radiates half the received
>>>>> power.
>>
>>>> How do you get that?
>>>> If the receiver input impedance is matched to the antenna, all the
>>>> received power is absorbed. There is no reflection. There is no
>>>> radiation.
>>
>>>> If the receiver matching is for optimal noise figure, there may be
>>>> some reflection and reradiation, but there's nothing pinning it to
>>>> be half the received power.
>>
>>> John is correct.
>>
>> Nope.
>>
>>> A receiving antenna, when matched, reradiates half the power it
>>> receives.
>>
>> Yes but that ISNT ANY REAL POWER in the EIRP restriction sense.
>>
>>> An impinging field induces current in the antenna. This causes
>>> radiation, just like the current in a transmitting antenna. As it
>>> turns out, when the antenna is matched, the amount of power
>>> radiated equals the amount of power delivered to the load, and
>>> that's the best you can do.
>>
>> Yes but that ISNT ANY REAL POWER in the EIRP restriction sense.
>>
>>> If you'd like a more in-depth and mathematical explanation, you can
>>> find it in any antenna text, often discussed as "scattering".
>>
>> Not relevant to the original point, any effect on the EIRP
>> restriction.

>>
>>> If a receiving antenna did absorb all the impinging power, it would
>>> be a lot easier to make a shield or a stealth aircraft.
>>
>> Not relevant to the original point, any effect on the EIRP
>> restriction.

> Always amazinmg how when some people are proven wrong, the
> revert to the "Is NOT, IS NOT," type of argument used by small
> children, then when that doesn't work, the argument becomes irrelevant.

Never ever could bullshit its way out of a wet paper bag.

> Rod, I suggest you LEARN something from your intellectual and
> technical betters BEFORE you show the world your ignorance.

Never ever could bullshit its way out of a wet paper bag.

While your original was technically correct, its completely
irrelevant to what was actually being discussed, WHETHER
THE RECEIVE ANTENNA EVER RADIATES ENOUGH TO
BE RELEVANT TO THE EIRP RESTRICTION.

3617. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 21:15:05 UTC
From: Rod Speed <rod.speed.aaa@gmail.com>
Message-ID: <4halirF1q1aemU1@individual.net>
Source record: 11368
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

Roy Lewallen <w7el@eznec.com> wrote:
> Rod Speed wrote:
>> Roy Lewallen <w7el@eznec.com> wrote
>> . . .
>>> A receiving antenna, when matched, reradiates half the power it
>>> receives.
>>
>> Yes but that ISNT ANY REAL POWER in the EIRP restriction sense.

> It's real power,

Yes, BUT NOT IN THE EIRP RESTRICTION SENSE.

> but that power all comes from the impinging field; it's not contributing any new power.
> So you're right that the EIRP restriction doesn't apply.

And that is what was being discussed when John made such a
spectacular fool of himself mindlessly rabbiting on about what
is no news to anyone with a clue about receiving antennas.

> The receive antenna reduces the amount of power in the field by the amount delivered to
> the antenna's termination, plus any losses along the way. The intent of the EIRP
> restriction is to limit the amount of field strength added by a
> transmitter.

Duh. So John was mindlessly rabbiting on about a complete
irrelevancy WHEN THE EIRP RESTRICTION WAS BEING DISCUSSED.

3618. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 22:08:34 UTC
From: Mark McIntyre <markmcintyre@spamcop.net>
Message-ID: <fna0b2h1154tl1th603pf1l3f8hlnkai1h@4ax.com>
Source record: 11369
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

On Sun, 9 Jul 2006 07:12:11 +1000, in alt.internet.wireless , "Rod Speed" <rod.speed.aaa@gmail.com> wrote:

>John L. Sielke <w2agnNOSPAM@w2agn.net> wrote:
>
>> Always amazinmg how when some people are proven wrong, the
>> revert to the "Is NOT, IS NOT," type of argument used by small
>> children, then when that doesn't work, the argument becomes irrelevant.
>
>Never ever could bullshit its way out of a wet paper bag.
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>> Rod, I suggest you LEARN something from your intellectual and
>> technical betters BEFORE you show the world your ignorance.
>
>Never ever could bullshit its way out of a wet paper bag.
>
>While your original was technically correct, its completely
>irrelevant to what was actually being discussed, WHETHER
>THE RECEIVE ANTENNA EVER RADIATES ENOUGH TO
>BE RELEVANT TO THE EIRP RESTRICTION.

I've not been following this thread, but I can tell you straight off, I am significantly more inclined to believe the guys who are not shouting and hurling abuse.

Make of that what you will, but my suggestion is to counter with rational argument backed up by references and facts, rather than insults and obscenities.

--
Mark McIntyre

3619. Re: need part

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 23:21:47 UTC
From: kyle <kyle_not_xy@notxy.com>
Message-ID: <44B03E09.BB75BE9A@notxy.com>
Source record: 11370

hi

http://nte01.nteinc.com/nte/NTExRefSemiProd.nsf/$$Search?OpenForm

nte online xref search reports NTE2377 as substitute part
mouser.com has them in stock $ 11.39
no min. order needed. ships same day as ordered.

http://www.mouser.com/search/refine.aspx?Ntt=nte2377

73 kyle

3620. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-08 23:30:46 UTC
From: Rod Speed <rod.speed.aaa@gmail.com>
Message-ID: <4hath8F1r3h9lU1@individual.net>
Source record: 11371
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

Mark McIntyre <markmcintyre@spamcop.net> wrote
> Rod Speed <rod.speed.aaa@gmail.com> wrote
>> John L. Sielke <w2agnNOSPAM@w2agn.net> wrote

>>> Always amazinmg how when some people are proven wrong, the
>>> revert to the "Is NOT, IS NOT," type of argument used by small
>>> children, then when that doesn't work, the argument becomes irrelevant.

>> Never ever could bullshit its way out of a wet paper bag.

>>> Rod, I suggest you LEARN something from your intellectual and
>>> technical betters BEFORE you show the world your ignorance.

>> Never ever could bullshit its way out of a wet paper bag.

>> While your original was technically correct, its completely
>> irrelevant to what was actually being discussed, WHETHER
>> THE RECEIVE ANTENNA EVER RADIATES ENOUGH TO
>> BE RELEVANT TO THE EIRP RESTRICTION.

> I've not been following this thread, but I can tell you
> straight off, I am significantly more inclined to believe
> the guys who are not shouting and hurling abuse.

You have always been, and always will be, completely and utterly irrelevant.

What you may or may not be inclined to believe in spades.

Anyone with a clue considers the facts, not the style stuff, fuckwit.

> Make of that what you will,

I flush it where it belongs.

> but my suggestion is to counter with rational
> argument backed up by references and facts,

Dont need 'references' on that basic fact that even
when the receiving antenna does reradiate about
half of what it receives, THAT IS COMPLETELY
IRRELEVANT TO THE LEGISLATED ERIP LEVEL.

> rather than insults and obscenities.

I suggest you take your stupid suggestion
and shove it up your arse, where it belongs.

3621. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 00:50:07 UTC
From: Don K <dk@dont_bother_me.com>
Message-ID: <BpqdnSH5KOUrzy3ZnZ2dnUVZ_sSdnZ2d@comcast.com>
Source record: 11372
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:12b01murlm8kt86@corp.supernews.com...
> Don K wrote:
>> "John - KD5YI" <groups5munge@verizon.net> wrote in message
news:XLQrg.2896$bd4.372@trnddc01...
>>> Rod Speed wrote:
>>>> A receive antenna has no EIRP, it doesnt radiate any real power.
>>> Actually, when properly matched, it radiates half the received power.
>>
>>
>> How do you get that?
>> If the receiver input impedance is matched to the antenna, all the
>> received power is absorbed. There is no reflection. There is no radiation.
>>
>> If the receiver matching is for optimal noise figure, there may be
>> some reflection and reradiation, but there's nothing pinning it to
>> be half the received power.
>
> John is correct. A receiving antenna, when matched, reradiates half the power it
receives. An
> impinging field induces current in the antenna. This causes radiation, just like the
current in a
> transmitting antenna. As it turns out, when the antenna is matched, the amount of power
radiated
> equals the amount of power delivered to the load, and that's the best you can do. If
you'd like a
> more in-depth and mathematical explanation, you can find it in any antenna text, often
discussed
> as "scattering".
>
> If a receiving antenna did absorb all the impinging power, it would be a lot easier to
make a
> shield or a stealth aircraft.
>
> Roy Lewallen, W7EL

Maybe to some extent, it's a matter of nit-picking over what
"received power" means. You can think of an antenna as having an
effective aperture size over which it captures all the energy
crossing that cross-sectional area. To me it's logical to think
of "received power" as the power that actually gets scooped
up and delivered.

Effective aperture increases with antenna gain. Obviously something like a dipole has a relatively small effective aperture. But the effective aperture of a high-gain horn antenna for instance, will approach its actual physical cross-sectional area.

For instance, look at Figure 13 in this pdf.
http://www.coe.montana.edu/ee/rwolff/EE548/EE548-S06/UWB/Intro_UWBAntennas.pdf

Don

3622. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 01:43:49 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <pbZrg.2472$F8.679@trnddc02>
Source record: 11373
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

Rod Speed wrote:
> John - KD5YI <groups5munge@verizon.net> wrote:
>
>>Rod Speed wrote:
>>
>>>Geoffrey S. Mendelson <gsm@mendelson.com> wrote
>>>
>>>
>>>>Rod Speed wrote
>>>
>>>
>>>>>Is one transmit and the other receive?
>>>>>Or are they both transmit and receive?
>>>
>>>
>>>>They're normally both transmit and receive.
>>>
>>>
>>>That's a shame. Here in Israel we are limited to 100mw EIRP, which
>>>severly limits the transmit antenna. There is NO limitation on the
>>>receive antenna.
>>>
>>>
>>>A receive antenna has no EIRP, it doesnt radiate any real power.
>>>
>>>
>>
>>
>>Actually, when properly matched, it radiates half the received power.
>
>
> Wrong.

Wrong.

3623. Re: looking for 2 metre mobile radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 05:27:55 UTC
From: "Mike, who else?" <Mike@nowhere.net>
Message-ID: <vt0sg.138629$IK3.21348@pd7tw1no>
Source record: 11374
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.mods,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On Fri, 07 Jul 2006 17:06:41 +1000, hamguy1 wrote:

> hi there newgroups, i live in australia im looking for either a yaesu
> kenwood icom or similar 2 metre for my mobile with dtmf mic preferably if
> anyone in the usa etc has 1 i would pay shipping to australia .thanks in
> advance david nsw australia .

www.ebay.com

3624. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 10:00:23 UTC
From: xray <notreally@hotmail.invalid>
Message-ID: <9pj1b2hie3r7lfkmf92i3ulahgkq4up92a@4ax.com>
Source record: 11375
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

On Sun, 9 Jul 2006 09:30:46 +1000, "Rod Speed" <rod.speed.aaa@gmail.com>
wrote, in part:

>What you may or may not be inclined to believe in spades.

That assemblage does not appear to be a sentence.

>
>Anyone with a clue considers the facts, not the style stuff, fuckwit.

But it is distracting when you choose to code your message content in
the style of an illiterate A-hole. I also think you should have said
"content" rather than "facts." Most of what you have been posting here
recently seems to be opinion rather than fact.

3625. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 10:21:59 UTC
From: Mark McIntyre <markmcintyre@spamcop.net>
Message-ID: <43m1b21l1tq69s9lkgr6lrmgj4l5v7h072@4ax.com>
Source record: 11376
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

On Sun, 9 Jul 2006 09:30:46 +1000, in alt.internet.wireless , "Rod Speed" <rod.speed.aaa@gmail.com> wrote:

>You have always been, and always will be, completely and utterly irrelevant.

Oh, I've just recognised your name. Conversation over, I don't waste my time talking to the sort of fool who thinks that because they're hiding on usenet they can emit language which would get them a severe slapping in real life.

Nobody cares what you think. Not even you.

plonk
--
Mark McIntyre

3626. Part Pinout

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 14:16:15 UTC
From: Arlon Nelson <anelson@min.midco.net>
Message-ID: <efKdndRBVK3tkizZnZ2dnUVZ_t6dnZ2d@midco.net>
Source record: 11377

I'm in need of the pinout of a 3SK274 Dual Gate Mosfet. It has one short lead and 3 long leads.
I have check my ARRL handbooks and cannot find out which one is source,drain,g1 and g2

Thanks for any help

Nels W0TUP

3627. Re: Part Pinout

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 15:01:41 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pT8sg.11277$j7.315385@news.indigo.ie>
Source record: 11378

On Sun, 09 Jul 2006 09:16:15 -0500, Arlon Nelson wrote:

> I'm in need of the pinout of a 3SK274 Dual Gate Mosfet. It has one short
> lead and 3 long leads.
> I have check my ARRL handbooks and cannot find out which one is
> source,drain,g1 and g2
>
> Thanks for any help
>
> Nels W0TUP

What type of package is it in? The Toshiba data-sheet says
it is a gual-gate GaAs FET in a surface mount package.

Your description sounds more like a TO-50 pill or X type package.
Most Japanese dual-gate FETs in pill packages use the same
pinout as the BF981. The long lead is probably the drain,
although I have seen a few that had a long lead for G1.

73, Ed. EI9GQ

--
Remove 'X' to reply by e-mail.
Linux 2.6.17

3628. Re: What is a wire antenna's impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 16:37:56 UTC
From: jo9s8as@yahoo.com
Message-ID: <1152463076.490252.133390@b28g2000cwb.googlegroups.com>
Source record: 11379

Thanks, everyone. But you guys still made things complicated. I said it is just wire antenna, only for a very small output power, 10mW. In order to eliminate the confusion or misunderstanding, let me put some pictures to illustrate:

(1) This transmitter, 10mW, at 450MHz, wire length(lambda/4 for 450MHz)=16cm. What is the wire antenna's impedance?
http://www.charto.info/antq1.jpg
(2) This transmitter, 10MW, at 450MHz, Rod Extendable Antenna is extended exactly as 16cm(lambda/4 for 450MHz). What is its antenna's impedance?
http://www.charto.info/antq2.jpg

Given that such specific conditions are as shown in the pictures, is it still difficult to tell, even for a rough number within a range such as 50 to 80 ohms, or 500-800 ohms?

3629. Re: What is a wire antenna's impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 17:33:57 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <96bsg.3011$pB.2982@trnddc06>
Source record: 11380

jo9s8as@yahoo.com wrote:
> Thanks, everyone. But you guys still made things complicated.

No, they didn't. Antennas themselves are complicated. Formulas exist only for specific well-defined environments, none of which fits your configuration close enough to be meaningful.

> I said it
> is just wire antenna, only for a very small output power, 10mW.

Output power has nothing to do with antenna impedance.

> In
> order to eliminate the confusion or misunderstanding, let me put some
> pictures to illustrate:
>
> (1) This transmitter, 10mW, at 450MHz, wire length(lambda/4 for
> 450MHz)=16cm. What is the wire antenna's impedance?
> http://www.charto.info/antq1.jpg
> (2) This transmitter, 10MW, at 450MHz, Rod Extendable Antenna is
> extended exactly as 16cm(lambda/4 for 450MHz). What is its antenna's
> impedance?
> http://www.charto.info/antq2.jpg
>
> Given that such specific conditions are as shown in the pictures, is it
> still difficult to tell, even for a rough number within a range such as
> 50 to 80 ohms, or 500-800 ohms?

Yes, it is. And, whatever number you are given will not necessarily be correct from one time to another. The impedance will change if you pick up the radio or the camera. The impedance will change if you change position to be near another object.

Suppose you are told that the impedance will be 20-j35? What will you do about it? Since you feel that the expert advice you received simply complicated the issue, one can only assume that you do not have the knowledge to cope with an answer.

Go to your local ham club and find somebody with an antenna analyzer. Put a quarter-wave wire into the connector and wander around while recording the maximum resistance and reactance. You can see it change all over the place. No, it doesn't go from zero to infinity. The impedance will be different from that when the antenna is installed on your actual object.

Here is a number. Do with it what you will.... Z ~ 35-j35. If you don't like this number, get EZNEC and model your own antenna. Or, get your own analyzer and measure your wire. Be sure to include hand and body capacitance in your

model. Also be sure to model your tripod, soil conditions, nearby trees, the object enclosure, etc.

Good luck.

John

3630. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 18:10:46 UTC
From: Rod Speed <rod.speed.aaa@gmail.com>
Message-ID: <4hcv58F1qgjuqU1@individual.net>
Source record: 11381
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

xray <notreally@hotmail.invalid> wrote:
> Rod Speed <rod.speed.aaa@gmail.com> wrote

<reams of your puerile shit flushed where it belongs>

> Most of what you have been posting here
> recently seems to be opinion rather than fact.

Best get your seems machinery seen to then.

Its a fact that even when a receiving antenna does radiate back
half of what it recieves, THAT IS NOT RELEVANT TO WHAT WAS
BEING DISCUSSED, THE LEGISLATED EIRP LEVEL ALLOWED.

Not a shred of opinion involved what so ever.

3631. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 18:11:48 UTC
From: Oscar Jones <oj@ojqw.com>
Message-ID: <44b146e5$0$17543$61c65585@un-2park-reader-01.sydney.pipenetworks.com.au>
Source record: 11382
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

Some terminal fuckwit claiming to be
Mark McIntyre <markmcintyre@spamcop.net>
wrote just the puerile shit thats all it can ever manage.

3632. Re: quadrature detector & SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 19:36:35 UTC
From: charlesh3@msn.com
Message-ID: <CsedneaURv9cxyzZnZ2dnUVZ_r2dnZ2d@giganews.com>
Source record: 11383

Hi -

The best not-terribly-mathematical place to get started probably is a Popular Electronics (of all places) article from '82 called "Build a Synchronous Detector for AM Radio" by Dave Hershberger.

Chuck

3633. Re: Part Pinout

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 19:50:45 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1152474645.651376.35850@h48g2000cwc.googlegroups.com>
Source record: 11384

See

http://www.alldatasheet.co.kr/datasheet-pdf/pdf_kor/TOSHIBA/3SK274.html

-Mark.

Arlon Nelson wrote:
> I'm in need of the pinout of a 3SK274 Dual Gate Mosfet. It has one short
> lead and 3 long leads.
> I have check my ARRL handbooks and cannot find out which one is
> source,drain,g1 and g2
>
> Thanks for any help
>
> Nels W0TUP

3634. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 20:12:30 UTC
From: Rex <me@hutmail.invalid>
Message-ID: <lsn2b211g9t3egqi3d6upagclofmhidsbn@4ax.com>
Source record: 11385
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

On Mon, 10 Jul 2006 04:10:46 +1000, "Rod Speed"
<rod.speed.aaa@gmail.com> wrote:

>xray <notreally@hotmail.invalid> wrote:
>> Rod Speed <rod.speed.aaa@gmail.com> wrote
>
><reams of your puerile shit flushed where it belongs>
>
>> Most of what you have been posting here
>> recently seems to be opinion rather than fact.
>
>Best get your seems machinery seen to then.
>
>Its a fact that even when a receiving antenna does radiate back
>half of what it recieves, THAT IS NOT RELEVANT TO WHAT WAS
>BEING DISCUSSED, THE LEGISLATED EIRP LEVEL ALLOWED.
>
>Not a shred of opinion involved what so ever.
>

Look at this part of the thread...

[John said:]
If the receiver matching is for optimal noise figure, there may be
some reflection and reradiation, but there's nothing pinning it to
be half the received power.

[Roy said:]
John is correct.

[Rod said:]
Nope.

[Roy said:]
A receiving antenna, when matched, reradiates half the power it
receives.

[Rod said:]
Yes but that ISNT ANY REAL POWER in the EIRP restriction sense.

So John made a factual statment. Roy agreed. Your opinion was to
disagree with the simple factual statment.

Roy added a clarifying statment. You started to go off the hook and
SHOUT because you were fixated on EIRP. When I read it I never saw any

direct implication about EIRP or legalities in the explanation; it was a simple explanation about antennas.

Your *opinion* was involved in deciding you knew the exact intent of the posting and that it had implications in the EIRP thing, just because that is the interpretation that passed through your mind.

Ok, I'm done here. Not sure why I took the time for this one last post.

3635. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 20:25:14 UTC
From: Rod Speed <rod.speed.aaa@gmail.com>
Message-ID: <4hd71cF1qjo3vU1@individual.net>
Source record: 11386
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

Rex <me@hutmail.invalid> wrote
> Rod Speed <rod.speed.aaa@gmail.com> wrote
>> xray <notreally@hotmail.invalid> wrote
>>> Rod Speed <rod.speed.aaa@gmail.com> wrote

>>> Most of what you have been posting here
>>> recently seems to be opinion rather than fact.

>> Best get your seems machinery seen to then.

>> Its a fact that even when a receiving antenna does radiate back
>> half of what it recieves, THAT IS NOT RELEVANT TO WHAT WAS
>> BEING DISCUSSED, THE LEGISLATED EIRP LEVEL ALLOWED.

>> Not a shred of opinion involved what so ever.

> Look at this part of the thread...

> [John said:]
> If the receiver matching is for optimal noise figure, there may be
> some reflection and reradiation, but there's nothing pinning it to
> be half the received power.
>
> [Roy said:]
> John is correct.
>
> [Rod said:]
> Nope.

Not about that particular para of John's. I was saying that John was
not correct on the original point about whatever the receiving anntenna
radiates BEING RELEVANT TO THE LEGISLATED EIRP LEVEL.

No opinion there, just fact.

> [Roy said:]
> A receiving antenna, when matched, reradiates half the power it
> receives.

> [Rod said:]
> Yes but that ISNT ANY REAL POWER in the EIRP restriction sense.

> ---
> So John made a factual statment. Roy agreed.

It wasnt relevant to what was actually being discussed,
WHETHER WHATEVER THE RECEIVING ANTENNA

RADIATES HAS ANYTHING TO DO WITH THE LEGISLATED
EIRP WAS ACTUALLY BEING DISCUSSED.

> Your opinion was to disagree with the simple factual statment.

It wasnt an opinion, it was a statement of fact that that
comment John made WAS NOT RELEVANT TO THE
LEGISLATED EIRP LEVEL THAT WAS BEING DISCUSSED.

> Roy added a clarifying statment. You started to go off the
> hook and SHOUT because you were fixated on EIRP.

The legislated EIRP level WAS WHAT WAS BEING DISCUSSED
WHEN JOHN MADE SUCH A SPECTACULAR FOOL OF HIMSELF
RABBITING ON ABOUT WHAT THE RECIEVING ANTENNA RADIATES.

> When I read it I never saw any direct implication about EIRP or legalities
> in the explanation; it was a simple explanation about antennas.

Pity it was a comment made WHEN THE LEGISLATED EIRP LEVEL WAS
BEING DISCUSSED WITH REFERENCE TO THE RECEIVING ANTENNA.

> Your *opinion* was involved in deciding you knew the exact intent of the posting

Wrong again. It is a FACT that John's comment had no
relevance what so ever to what was being discussed,
whether the receiving antenna has any relevance what
so ever to the legislated EIRP level. It doesnt.

> and that it had implications in the EIRP thing, just because
> that is the interpretation that passed through your mind.

Nothing to do with my mind, it was what was being discussed.

> Ok, I'm done here. Not sure why I took the time for this one last post.

Yeah, you just made a VERY spectacular fool of yourself, yet again.

3636. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 20:33:43 UTC
From: Jeff Liebermann <jeffl@comix.santa-cruz.ca.us>
Message-ID: <oto2b2dli3iigfd0qjt3arj7na0nb5vm6m@4ax.com>
Source record: 11387
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew

[misc.consumers.frugal-living dropped from distribution list.]

Roy Lewallen <w7el@eznec.com> hath wroth:

>Don K wrote:
>> "John - KD5YI" <groups5munge@verizon.net> wrote in message
news:XLQrg.2896$bd4.372@trnddc01...
>>> Rod Speed wrote:
>>>> A receive antenna has no EIRP, it doesnt radiate any real power.
>>> Actually, when properly matched, it radiates half the received power.
>>
>>
>> How do you get that?
>> If the receiver input impedance is matched to the antenna, all the
>> received power is absorbed. There is no reflection. There is no radiation.
>>
>> If the receiver matching is for optimal noise figure, there may be
>> some reflection and reradiation, but there's nothing pinning it to
>> be half the received power.
>
>John is correct. A receiving antenna, when matched, reradiates half the
>power it receives. An impinging field induces current in the antenna.
>This causes radiation, just like the current in a transmitting antenna.
>As it turns out, when the antenna is matched, the amount of power
>radiated equals the amount of power delivered to the load, and that's
>the best you can do. If you'd like a more in-depth and mathematical
>explanation, you can find it in any antenna text, often discussed as
>"scattering".
>
>If a receiving antenna did absorb all the impinging power, it would be a
>lot easier to make a shield or a stealth aircraft.
>
>Roy Lewallen, W7EL

I'm not so sure. I couldn't find any specific references to this
effect in several books I skimmed. Same with internet searches. If
true, then the concept of converting solar power in an orbital
satellite, converting it to microwaves, beaming it down to an antenna
array in the middle of the desert, and converting it back to
electricity, isn't going to work if the array re-radiates half the
power. That's going to ruin quite a few nifty science fiction stories
and innovative business plans.

I also note that the common microwave path analysis calculations don't take re-radiation into account. For example, if I start with an EIRP of perhaps XX dBm from a transmit antenna, -YY dB of path loss, and ZZ dB receive antenna gain, the power delivered to the receiver (ignoring coax losses) is calculated at (XX - YY + ZZ) dBm without any mention of the -3dB that would need to be subtracted if half the receive power is re-radiated from the rx antenna. It would seem that the common formula and web forms for link calculations are -3dB off.

I trust your judgement in such matters and you have far more expience than me, but something seems wrong or I'm missing something. Can you point me to any books or refernences? I just skimmed Chapter 2 (Fundamentals of Antennas) in "Antenna Engineering Handbook" by Jasik (1961) and found no obvious mention of this effect.

--
Jeff Liebermann jeffl@comix.santa-cruz.ca.us
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3637. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 21:40:28 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <gJesg.3617$F8.2736@trnddc02>
Source record: 11388
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew

Jeff Liebermann wrote:
> [misc.consumers.frugal-living dropped from distribution list.]
>
> Roy Lewallen <w7el@eznec.com> hath wroth:
>
>
>>Don K wrote:
>>
>>>"John - KD5YI" <groups5munge@verizon.net> wrote in message
news:XLQrg.2896$bd4.372@trnddc01...
>>>
>>>>Rod Speed wrote:
>>>>
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>>>
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>>>If the receiver input impedance is matched to the antenna, all the
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>>power it receives. An impinging field induces current in the antenna.
>>This causes radiation, just like the current in a transmitting antenna.
>>As it turns out, when the antenna is matched, the amount of power
>>radiated equals the amount of power delivered to the load, and that's
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>>Roy Lewallen, W7EL
>
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> I'm not so sure. I couldn't find any specific references to this
> effect in several books I skimmed. Same with internet searches. If

> true, then the concept of converting solar power in an orbital
> satellite, converting it to microwaves, beaming it down to an antenna
> array in the middle of the desert, and converting it back to
> electricity, isn't going to work if the array re-radiates half the
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> dB receive antenna gain, the power delivered to the receiver (ignoring
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> is re-radiated from the rx antenna. It would seem that the common
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> point me to any books or refernences? I just skimmed Chapter 2
> (Fundamentals of Antennas) in "Antenna Engineering Handbook" by Jasik
> (1961) and found no obvious mention of this effect.
>

Antennas For All Applications by John D. Kraus and Ronald J. Marhefka
Third Edition
Page 746, Paragraph 21-15

"Prec=(Rr/(Ra+Rr))Pa

where

Rr=receiver impedance, ohms
Ra=antenna radiation resistance, ohms

For a perfect match, Rr=Ra, so that

Prec=(Rr/(Rr+Rr))Pa=0.5Pa (W)

and the receiver gets 1/2 the power collected by the antenna. The other half
is reradiated."

Also see "TV and Other Receiving Antennas" by Arnold B. Bailey published in
1950 by Rider Publishing. Beginning on page 235 near the bottom:

"In radio receiving antennas the predominant resistance is, strangely
enough, largely due to the fact that no electrons can move on the antenna
surface *without also sending radio energy back out into space*. So here we
have the paradox of a receiving antenna, having the prime function of
collecting or extracting energy from space, but unable to do so *without
itself returning radio energy of like kind* into space. The amount which it
returns is one-half of the total that it extracts under properly matched
conditions. In a good installation, with the antenna properly connected to
its receiver load, the receiving antenna will be able to *deliver to its

load one-half of the energy* it extracts from the oncoming radio wave but, by necessity, *must return the other half to free space*. A receiving antenna, then, is itself a *new source* of radiation. This is not so surprising, since *any* reflecting surface, as we have seen, establishes a new source of radiation"

(Note: The emphasis in the book was italics)

Cheers,
John

3638. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 21:40:41 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <tJesg.3618$F8.3447@trnddc02>
Source record: 11389
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew

Jeff Liebermann wrote:
> [misc.consumers.frugal-living dropped from distribution list.]
>
> Roy Lewallen <w7el@eznec.com> hath wroth:
>
>
>>Don K wrote:
>>
>>>"John - KD5YI" <groups5munge@verizon.net> wrote in message
news:XLQrg.2896$bd4.372@trnddc01...
>>>
>>>>Rod Speed wrote:
>>>>
>>>>>A receive antenna has no EIRP, it doesnt radiate any real power.
>>>>
>>>>Actually, when properly matched, it radiates half the received power.
>>>
>>>
>>>How do you get that?
>>>If the receiver input impedance is matched to the antenna, all the
>>>received power is absorbed. There is no reflection. There is no radiation.
>>>
>>>If the receiver matching is for optimal noise figure, there may be
>>>some reflection and reradiation, but there's nothing pinning it to
>>>be half the received power.
>>
>>John is correct. A receiving antenna, when matched, reradiates half the
>>power it receives. An impinging field induces current in the antenna.
>>This causes radiation, just like the current in a transmitting antenna.
>>As it turns out, when the antenna is matched, the amount of power
>>radiated equals the amount of power delivered to the load, and that's
>>the best you can do. If you'd like a more in-depth and mathematical
>>explanation, you can find it in any antenna text, often discussed as
>>"scattering".
>>
>>If a receiving antenna did absorb all the impinging power, it would be a
>>lot easier to make a shield or a stealth aircraft.
>>
>>Roy Lewallen, W7EL
>
>
> I'm not so sure. I couldn't find any specific references to this
> effect in several books I skimmed. Same with internet searches. If

> true, then the concept of converting solar power in an orbital
> satellite, converting it to microwaves, beaming it down to an antenna
> array in the middle of the desert, and converting it back to
> electricity, isn't going to work if the array re-radiates half the
> power. That's going to ruin quite a few nifty science fiction stories
> and innovative business plans.
>
> I also note that the common microwave path analysis calculations don't
> take re-radiation into account. For example, if I start with an EIRP
> of perhaps XX dBm from a transmit antenna, -YY dB of path loss, and ZZ
> dB receive antenna gain, the power delivered to the receiver (ignoring
> coax losses) is calculated at (XX - YY + ZZ) dBm without any mention
> of the -3dB that would need to be subtracted if half the receive power
> is re-radiated from the rx antenna. It would seem that the common
> formula and web forms for link calculations are -3dB off.
>
> I trust your judgement in such matters and you have far more expience
> than me, but something seems wrong or I'm missing something. Can you
> point me to any books or refernences? I just skimmed Chapter 2
> (Fundamentals of Antennas) in "Antenna Engineering Handbook" by Jasik
> (1961) and found no obvious mention of this effect.
>

Antennas For All Applications by John D. Kraus and Ronald J. Marhefka
Third Edition
Page 746, Paragraph 21-15

"Prec=(Rr/(Ra+Rr))Pa

where

Rr=receiver impedance, ohms
Ra=antenna radiation resistance, ohms

For a perfect match, Rr=Ra, so that

Prec=(Rr/(Rr+Rr))Pa=0.5Pa (W)

and the receiver gets 1/2 the power collected by the antenna. The other half
is reradiated."

Also see "TV and Other Receiving Antennas" by Arnold B. Bailey published in
1950 by Rider Publishing. Beginning on page 235 near the bottom:

"In radio receiving antennas the predominant resistance is, strangely
enough, largely due to the fact that no electrons can move on the antenna
surface *without also sending radio energy back out into space*. So here we
have the paradox of a receiving antenna, having the prime function of
collecting or extracting energy from space, but unable to do so *without
itself returning radio energy of like kind* into space. The amount which it
returns is one-half of the total that it extracts under properly matched
conditions. In a good installation, with the antenna properly connected to
its receiver load, the receiving antenna will be able to *deliver to its

load one-half of the energy* it extracts from the oncoming radio wave but, by necessity, *must return the other half to free space*. A receiving antenna, then, is itself a *new source* of radiation. This is not so surprising, since *any* reflecting surface, as we have seen, establishes a new source of radiation"

(Note: The emphasis in the book was italics)

Cheers,
John

3639. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 21:49:02 UTC
From: Mark McIntyre <markmcintyre@spamcop.net>
Message-ID: <g3u2b219bl84koqkc4ui06gjtte14153nv@4ax.com>
Source record: 11390
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew

On Sun, 09 Jul 2006 13:33:43 -0700, in alt.internet.wireless , Jeff
Liebermann <jeffl@comix.santa-cruz.ca.us> wrote:

>[misc.consumers.frugal-living dropped from distribution list.]
>
>Roy Lewallen <w7el@eznec.com> hath wroth:
>
>>John is correct. A receiving antenna, when matched, reradiates half the
>>power it receives.

>>If a receiving antenna did absorb all the impinging power, it would be a
>>lot easier to make a shield or a stealth aircraft.
>>
>
>I'm not so sure. I couldn't find any specific references to this
>effect in several books I skimmed.
>
>I trust your judgement in such matters and you have far more expience
>than me, but something seems wrong or I'm missing something. Can you
>point me to any books or refernences? I just skimmed Chapter 2
>(Fundamentals of Antennas) in "Antenna Engineering Handbook" by Jasik
>(1961) and found no obvious mention of this effect.

Scroggie's "Foundations of Wireless", the book I cut my teeth on (and
my father before me...) mentions this in the chapter on Radiation and
Aerials where he describes the reratiation as a fact of great
importance in recieving aerial design.

I think however Rod's final remark is perhaps the most telling - if an
antenna really did absorb all the energy landing on it, there would be
highly curious side effects.
--
Mark McIntyre

3640. Computer alternative to Smith Chart?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 22:30:57 UTC
From: "Bob D." <bobmgtd@insightbb.com>
Message-ID: <fOKdnYOV9rs8HizZnZ2dnUVZ_vidnZ2d@insightbb.com>
Source record: 11391

I haven't used a Smith Chart in over 30 years, and to say the least, I'm a bit rusty. I'm thinking there must be computer programs that can do the calculations with values you just plugs in. Any recommendations? I'm specifically interested in finding the impedances of antenna whips much shorter than 1/4 wave.
--
Bob D.
ND9B

3641. Re: What is a wire antenna's impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 23:02:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12b32o61rrsfke3@corp.supernews.com>
Source record: 11392

jo9s8as@yahoo.com wrote:
> Thanks, everyone. But you guys still made things complicated. I said it
> is just wire antenna, only for a very small output power, 10mW. In
> order to eliminate the confusion or misunderstanding, let me put some
> pictures to illustrate:
>
> (1) This transmitter, 10mW, at 450MHz, wire length(lambda/4 for
> 450MHz)=16cm. What is the wire antenna's impedance?
> http://www.charto.info/antq1.jpg
> (2) This transmitter, 10MW, at 450MHz, Rod Extendable Antenna is
> extended exactly as 16cm(lambda/4 for 450MHz). What is its antenna's
> impedance?
> http://www.charto.info/antq2.jpg
>
> Given that such specific conditions are as shown in the pictures, is it
> still difficult to tell, even for a rough number within a range such as
> 50 to 80 ohms, or 500-800 ohms?

Absolutely.

You could get a pretty good idea of the impedance of the antenna with a carefully constructed model and a modeling program if the device case is metal and you assume that the device won't be anywhere near a person or other conducting object. If it is, the person or object has to be included in the model. There's no nifty and simple equation or rule of thumb which will tell you.

You don't seem to understand that the "antenna" is only part of the antenna whose impedance you're asking. The other part is the box and whatever it's attached to or whomever is holding it. The "antenna"'s impact on the impedance is no greater or less than the impact of the rest of the real antenna, i.e., the box and what it's connected to.

If the box is plastic, then internal wires and boards are the other part of the real antenna, and have a major impact on the impedance.

Roy Lewallen, W7EL

3642. Re: Computer alternative to Smith Chart?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-09 23:04:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12b32s4aliba388@corp.supernews.com>
Source record: 11393

I'm curious. How do you use a Smith chart to find an antenna impedance?

There certainly are programs specifically designed to find such things
as antenna impedances. The free EZNEC demo program from http://eznec.com
would be adequate and ideal for your purpose.

Roy Lewallen, W7EL

Bob D. wrote:
> I haven't used a Smith Chart in over 30 years, and to say the least, I'm a
> bit rusty. I'm thinking there must be computer programs that can do the
> calculations with values you just plugs in. Any recommendations? I'm
> specifically interested in finding the impedances of antenna whips much
> shorter than 1/4 wave.

3643. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 02:02:09 UTC
From: Jeff Liebermann <jeffl@comix.santa-cruz.ca.us>
Message-ID: <tbb3b2lc4cdphj2jnr76jm65piae3nejkb@4ax.com>
Source record: 11394
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew

John - KD5YI <groups5munge@verizon.net> hath wroth:

>Antennas For All Applications by John D. Kraus and Ronald J. Marhefka
>Third Edition
>Page 746, Paragraph 21-15
>
>"Prec=(Rr/(Ra+Rr))Pa
>
>where
>
>Rr=receiver impedance, ohms
>Ra=antenna radiation resistance, ohms
>
>For a perfect match, Rr=Ra, so that
>
>Prec=(Rr/(Rr+Rr))Pa=0.5Pa (W)
>
>and the receiver gets 1/2 the power collected by the antenna. The other half
>is reradiated."

OK, that make sense. Thanks much.

So, why is NASA and other disreputable organizations still pushing
beaming solar power down to earth via microwaves?
| http://en.wikipedia.org/wiki/Solar_power_satellite
| http://en.wikipedia.org/wiki/Microwave_power_transmission
| http://science.nasa.gov/headlines/y2001/ast23mar_1.htm
| http://www.spacefuture.com/archive/conceptual_study_of_a_solar_power_satellite_sps_2000.
shtml
| http://www.msfc.nasa.gov/news/news/releases/1999/99-096.html
| http://www.ieee-virtual-museum.org/exhibit/exhibit.php?id=159265&lid=1&seq=13
No mention in any of these that half the delivered power gets
re-radiated. If the receive array were anywhere as directional as the
xmit array, then it would cook the satellite. The re-radiated power
has to go somewhere. Oh, maybe because it's a government project the
number don't need to be correct?

I'll spare you the usual anal joke about rectenna.

Also, why is there no -3dB added loss on the receive end of wireless
path calculation? From what I can deduce from the path calcs, the
receive antenna delivers all the power to the coax cable and then to
the receiver. Where's the half power (-3dB) loss?

I'm still (half way) mystified.

>Also see "TV and Other Receiving Antennas" by Arnold B. Bailey published in
>1950 by Rider Publishing. Beginning on page 235 near the bottom:

Argh. That was published 2 years after I was born.

>"In radio receiving antennas the predominant resistance is, strangely
>enough, largely due to the fact that no electrons can move on the antenna
>surface *without also sending radio energy back out into space*.

Resistance? Unless he's thinking of ohmic resistance, most antennas
don't have any resistance. (Well, a rhombic has a 300-400 ohm load,
but that's not what we're discussing). If the signal gets
re-radiated, without any loss, there can't be any dissipative elements
in the system. What resistance?

--
Jeff Liebermann jeffl@comix.santa-cruz.ca.us
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3644. foulradio.com

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 02:22:50 UTC
From: littleflurry <nospam@sbcglobal.net>
Message-ID: <_Risg.1651$2v.208@newssvr25.news.prodigy.net>
Source record: 11395

Lots of fun with this midwest duo!
foulradio.com

3645. Re: Computer alternative to Smith Chart?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 04:43:30 UTC
From: budgie <me@privacy.net>
Message-ID: <imm3b2p0klsheomvtopb7v1h48sope8nrl@4ax.com>
Source record: 11396

On Sun, 9 Jul 2006 17:30:57 -0500, "Bob D." <bobmgtd@insightbb.com> wrote:

>I haven't used a Smith Chart in over 30 years, and to say the least, I'm a
>bit rusty. I'm thinking there must be computer programs that can do the
>calculations with values you just plugs in. Any recommendations? I'm
>specifically interested in finding the impedances of antenna whips much
>shorter than 1/4 wave.

There's a nice impedance spiral in Kraus: "Antennas".

3646. Re: Computer alternative to Smith Chart?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 05:11:02 UTC
From: dplatt@radagast.org
Message-ID: <12b3ob6mss62208@corp.supernews.com>
Source record: 11397

>>I haven't used a Smith Chart in over 30 years, and to say the least, I'm a
>bit rusty. I'm thinking there must be computer programs that can do the
>calculations with values you just plugs in. Any recommendations?

For Linux (and probably other Unix-type systems running X) there's a
nice free program called Linsmith.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3647. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 05:15:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12b3oil818krpe3@corp.supernews.com>
Source record: 11248
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew

Jeff Liebermann wrote:
>
> I'm not so sure. I couldn't find any specific references to this
> effect in several books I skimmed. Same with internet searches. If
> true, then the concept of converting solar power in an orbital
> satellite, converting it to microwaves, beaming it down to an antenna
> array in the middle of the desert, and converting it back to
> electricity, isn't going to work if the array re-radiates half the
> power. That's going to ruin quite a few nifty science fiction stories
> and innovative business plans.
>
> I also note that the common microwave path analysis calculations don't
> take re-radiation into account. For example, if I start with an EIRP
> of perhaps XX dBm from a transmit antenna, -YY dB of path loss, and ZZ
> dB receive antenna gain, the power delivered to the receiver (ignoring
> coax losses) is calculated at (XX - YY + ZZ) dBm without any mention
> of the -3dB that would need to be subtracted if half the receive power
> is re-radiated from the rx antenna. It would seem that the common
> formula and web forms for link calculations are -3dB off.
>
> I trust your judgement in such matters and you have far more expience
> than me, but something seems wrong or I'm missing something. Can you
> point me to any books or refernences? I just skimmed Chapter 2
> (Fundamentals of Antennas) in "Antenna Engineering Handbook" by Jasik
> (1961) and found no obvious mention of this effect.

I could add more references to the ones already mentioned, but you should be able to find it in most antenna texts. Look in the index under aperture and scattering cross section. When dealing with path loss calculations, the effective aperture is used, and this has the reradiation already accounted for. In fact, the reradiated power has its own descriptive unit, the scattering aperture. A good and brief description of these can be found in Kraus' _Antennas_, p. 29ff, and many other texts.

You're right that the antennas used to receive beamed power will catch only half of it at best. But many, many business plans have been developed and billions in stock sold for schemes which are much less plausible. For starters, how about the current idea of hydrogen "fuel", "made from water"? (For those not acquainted with the harsh reality of thermodynamics, it takes more energy to extract hydrogen from water than you'll get back when you burn it. Charlatans notwithstanding, there's just flat no way around this little fact.) Then there's SDI. . .

Roy Lewallen, W7EL

3648. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 05:30:55 UTC
From: John Navas <spamfilter0@navasgroup.com>
Message-ID: <g6p3b2dlgaitd58jt6u7bdsdeufn9638a1@4ax.com>
Source record: 11249
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew

On Sun, 09 Jul 2006 22:15:00 -0700, Roy Lewallen <w7el@eznec.com> wrote
in <12b3oil818krpe3@corp.supernews.com>:

>You're right that the antennas used to receive beamed power will catch
>only half of it at best. But many, many business plans have been
>developed and billions in stock sold for schemes which are much less
>plausible. For starters, how about the current idea of hydrogen "fuel",
>"made from water"? (For those not acquainted with the harsh reality of
>thermodynamics, it takes more energy to extract hydrogen from water than
>you'll get back when you burn it. Charlatans notwithstanding, there's
>just flat no way around this little fact.) Then there's SDI. . .

The point of hydrogen is a means of energy storage and transmission, not
power generation. Typically the hydrogen will be released from water by
solar or nuclear power. See:
<http://en.wikipedia.org/wiki/Hydrogen_economy>
<http://auto.howstuffworks.com/hydrogen-economy.htm>
>http://www.aip.org/pt/vol-57/iss-12/p39.html>

--
Best regards, FAQ for Wireless Internet: <http://Wireless.wikia.com>
John Navas FAQ for Wi-Fi: <http://wireless.wikia.com/wiki/Wi-Fi>
Wi-Fi How To: <http://wireless.wikia.com/wiki/Wi-Fi_How_To>
Fixes to Wi-Fi Problems: <http://wireless.wikia.com/wiki/Wi-Fi_Fixes>

3649. Toroid or molded inductor in low voltage tank?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 06:50:58 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrneb3u6i.172.ben@saturn.home.ben.com>
Source record: 11250

In a coupling circuit such as:

```
C1|| C3||
IN>----||----o----o----||--OUT>
|| | | ||
--- C
--- C L1
C2| C
| |
'----'
|
===
GND
```

(see, eg, the "38 Special" NorCal 30m QRP tranceiver sch connecting the NE602 single-ended output to an amplification stage: http://www.amqrp.org/kits/38spcl/)

What is the purpose maximizing the Q of L1 by using, say, a hand-wound toroid vs a molded inductor? Rs of a 1.8uH moulded inductor might be 1.5 ohms vs .1 ohm for 5 inches of 24ga wire. However the expected effect in tank bandwidth doesn't seem to matter compared to the large effect of varying C1 (very narrow for small C1, 5p in the example).

I can see why a homebrewer would prefer to keep a bag of T37-2 and some enamelled wire around, but in a kit such as that, wouldn't a moulded inductor do just as well?

--
Ben Jackson AD7GD
<ben@ben.com>
http://www.ben.com/

3650. Re: Toroid or molded inductor in low voltage tank?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 07:49:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12b41k06r8inu93@corp.supernews.com>
Source record: 11251

The much lower Q of the molded inductor can result in significantly worse rejection of spurious outputs from the amplifier. I don't know whether that's important for this particular design or not. But a toroid also has other advantages over a solenoidal inductor. A toroid has a much smaller external field, so it can be mounted close to other components including other inductors with minimal mutual coupling. For the same reason, a solenoid's Q can be degraded substantially by proximity to other components or conductors, while a toroid is relatively immune to this problem.

Roy Lewallen, W7EL

Ben Jackson wrote:
> In a coupling circuit such as:
>
> C1|| C3||
> IN>----||----o----o----||--OUT>
> || | | ||
> --- C
> --- C L1
> C2| C
> | |
> '----'
> |
> ===
> GND
>
> (see, eg, the "38 Special" NorCal 30m QRP tranceiver sch connecting
> the NE602 single-ended output to an amplification stage:
> http://www.amqrp.org/kits/38spcl/)
>
> What is the purpose maximizing the Q of L1 by using, say, a hand-
> wound toroid vs a molded inductor? Rs of a 1.8uH moulded inductor
> might be 1.5 ohms vs .1 ohm for 5 inches of 24ga wire. However the
> expected effect in tank bandwidth doesn't seem to matter compared to
> the large effect of varying C1 (very narrow for small C1, 5p in the
> example).
>
> I can see why a homebrewer would prefer to keep a bag of T37-2 and
> some enamelled wire around, but in a kit such as that, wouldn't a
> moulded inductor do just as well?
>

3651. Re: Toroid or molded inductor in low voltage tank?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 09:59:19 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <Xxpsg.5474$F8.1614@trnddc02>
Source record: 11252

Ben,

Don't confuse the 'unloaded' Q of the part with the 'loaded Q' of the
circuit.

The unloaded Q of the part is a measure of internal resistance in the part
and will mainly affect the loss of the network, not the bandwidth. The
loaded Q of the network is a measure of the external network resistance that
the part is embedded in and will mainly determine the bandwidth.
The ratio of unloaded Q to loaded Q will determine the losses of the network
(higher unloaded Q is better).

In general, high unloaded component Q is 'goodness'.

Joe
W3JDR

"Ben Jackson" <ben@ben.com> wrote in message
news:slrneb3u6i.172.ben@saturn.home.ben.com...
> In a coupling circuit such as:
>
> C1|| C3||
> IN>----||----o----o----||--OUT>
> || | | ||
> --- C
> --- C L1
> C2| C
> | |
> '----'
> |
> ===
> GND
>
> (see, eg, the "38 Special" NorCal 30m QRP tranceiver sch connecting
> the NE602 single-ended output to an amplification stage:
> http://www.amqrp.org/kits/38spcl/)
>
> What is the purpose maximizing the Q of L1 by using, say, a hand-
> wound toroid vs a molded inductor? Rs of a 1.8uH moulded inductor
> might be 1.5 ohms vs .1 ohm for 5 inches of 24ga wire. However the
> expected effect in tank bandwidth doesn't seem to matter compared to
> the large effect of varying C1 (very narrow for small C1, 5p in the
> example).
>
> I can see why a homebrewer would prefer to keep a bag of T37-2 and
> some enamelled wire around, but in a kit such as that, wouldn't a

> moulded inductor do just as well?
>
> --
> Ben Jackson AD7GD
> <ben@ben.com>
> http://www.ben.com/

3652. Re: Computer alternative to Smith Chart?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 12:20:08 UTC
From: jo9s8as@yahoo.com
Message-ID: <1152534008.905417.146880@h48g2000cwc.googlegroups.com>
Source record: 11253

Smith Chart 3.0 is great.
http://www.antennadesignassociates.com/smithexample.gif

3653. Re: Computer alternative to Smith Chart?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 12:20:41 UTC
From: AB2RC <AB2RC@localhost.localdomain>
Message-ID: <slrneb4hgp.305.Silfax@minimac.linux1.lan>
Source record: 11254

On 2006-07-09, Bob D. <bobmgtd@insightbb.com> wrote:
> I haven't used a Smith Chart in over 30 years, and to say the least, I'm a
> bit rusty. I'm thinking there must be computer programs that can do the
> calculations with values you just plugs in. Any recommendations? I'm
> specifically interested in finding the impedances of antenna whips much
> shorter than 1/4 wave.

For real operating systems (anything Unix based -- Linux OSX or a real Unix)
try Linsmith http://jcoppens.com/soft/linsmith/index.en.php

3654. Re: Computer alternative to Smith Chart?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 13:33:17 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <7bmdnZ8kucZ8yi_ZRVny0Q@bt.com>
Source record: 11255

You will find half dozen programs which deal with performance of short
verticals at the website below.

From the Index, go to "Download programs from here" and read the
one-line description under each program name.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

3655. Re: Computer alternative to Smith Chart?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 14:29:49 UTC
From: Andrew Tweddle <sarason_not_me@alphalink.com.au>
Message-ID: <44b263a2$1_1@news.chariot.net.au>
Source record: 11256

Bob D. wrote:

> I haven't used a Smith Chart in over 30 years, and to say the least, I'm a
> bit rusty. I'm thinking there must be computer programs that can do the
> calculations with values you just plugs in. Any recommendations? I'm
> specifically interested in finding the impedances of antenna whips much
> shorter than 1/4 wave.

You could try this one.
<http://tools.rfdude.com/RFdude_Smith_Chart_Program/RFdude_smith_chart_program.html>

regards
Andrew

3656. Re: Computer alternative to Smith Chart?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 17:00:03 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <nIvsg.5550$F8.1227@trnddc02>
Source record: 11257

Bob D. wrote:
> I haven't used a Smith Chart in over 30 years, and to say the least, I'm a
> bit rusty. I'm thinking there must be computer programs that can do the
> calculations with values you just plugs in. Any recommendations? I'm
> specifically interested in finding the impedances of antenna whips much
> shorter than 1/4 wave.

Hi, Bob -

http://zaffora.f2o.org/W9DMK/W9dmk.html has one.

About 3/4 of the way down the page.

It won't help you find antenna impedance unless you plan to measure the Z at the input end of the line and use the tool to get antenna Z. As has been said, you can use EZNEC to model your antenna and get its impedance.

However, a Smith chart can be very useful for matching a thing to another thing.

The one I use (a demo) I got from the University of Applied Sciences in Berne, Switzerland. I like it. However, it appears that it has been removed from the host. If you want it, I can send it to you. It is zipped to 306 kb in size.

Cheers,
John

3657. Re: Computer alternative to Smith Chart?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 20:45:32 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1152564332.319191.323380@75g2000cwc.googlegroups.com>
Source record: 11258

Andy adds:

I have often used a modified Smith Chart , called an
Impedance/Admittance
chart , to do matching..... If the impedances are not greatly
mismatched,
it is very easy and accurate.... and very very intuitive...

The ones I used have the impedance cordinates in black and the
admittance coordinates in red.....

I found them extremly useful in the design of an automated antenna
tuner
which I designed for a Texas Instruments Marine SSB unit, back in the
late 70s..... You could literally track the impedance transormation
mentally
with series and shunt elements.....

Andy W4OAH

3658. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 22:11:13 UTC
From: Invalid@charter.net
Message-ID: <doj5b29m0puk3fm9jtj8k02uv5ppktaa24@4ax.com>
Source record: 11259
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

On Sat, 08 Jul 2006 16:08:23 GMT, John - KD5YI
<groups5munge@verizon.net> wrote:

>Rod Speed wrote:
>> Geoffrey S. Mendelson <gsm@mendelson.com> wrote
>>
>>>Rod Speed wrote
>>
>>
>>>>>Is one transmit and the other receive?
>>>>>Or are they both transmit and receive?
>>
>>
>>>>They're normally both transmit and receive.
>>
>>
>>>That's a shame. Here in Israel we are limited to 100mw EIRP, which severly
>>>limits the transmit antenna. There is NO limitation on the receive antenna.
>>
>>
>> A receive antenna has no EIRP, it doesnt radiate any real power.
>>
>>
>
>
>Actually, when properly matched, it radiates half the received power.

True, but it's such a low level as to normally be considered
insignificant. Unfortunately some take that to mean there is none.

If there were none, a Yagi antenna which used all passive elements
save for the driven element would not work. On receive that driven
element plays an active (pardon the pun) roll.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com

Roger

3659. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 22:24:27 UTC
From: Invalid@charter.net
Message-ID: <ldk5b21fokqqgs5gr5rp0b1ri867nirhv2@4ax.com>
Source record: 11260
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Tue, 4 Jul 2006 21:31:06 +0000 (UTC), gsm@mendelson.com (Geoffrey
S. Mendelson) wrote:

>Beverly Erlebacher wrote:
>> I'm confused about this "access point" thing.
>
>An access point is a device with an ethernet port on one side and a wifi
>port on the other. In technical terms it would be called a "bridge". It
>"bridges" two seperate network segments, although in this case they use
>different topologies (100Base-T and WiFi).
>
>> Is that the same as a "router"?
>
>
>The usual WiFi router consists of a four port ethernet hub (LAN ports),
>a seperate single ethernet port (WAN port) and a WiFi access point.
>It is set up to "route" between the single (aka WAN) port and the other
>two ports, the LAN and WiFi. Most of what it does for routing is NAT (network
>address translation) and some sort of IP tunneling.
>
>If you ignore the WAN port and just use the LAN ports, you have a four port
>hub and an access point.
>
>
>> Is it as simple as buying a second router (routers are familiar to me) and
>> just hooking that second router to the first router by cable and that would
>> extend my range by the distance of the cable connecting the two routers?
>
>Yes. Just make sure to use the LAN ports. It would be best to use different
>channels. Most WiFi clients are smart enough to use the channel that is the
>strongest if they have access points on more than one with the same SSID.
>
>Make sure to use encryption. Encryption is NOT to keep your data safe,
>nothing can do that. If someone is intent on accessing your network, WEP
>encryption will not keep them out.

True, but the ones that use the dynamic encryption can do a reasonably
good job along with a firewall and router. The golden rule is
"Nothing is bullet proof"

>
>What it is for is to convince the guy driving down the street looking for an
>open network to send out SPAM, or "share" kiddie porn, to drive on.
>Unfortunately, most users don't even change the SSID of their network, let

>alone set an encryption key.
>

One of the locals mentioned doing a bit of "war driving" around town
just for curiosity. About 80 to 90% of the networks heard were
unencrypted AND over half of those _still_used_
the_default_name_and_PW.
I use hard wired Cat5e in a gigabit network as with the amount of
traffic wireless is just too slow even if it is full duplex.

NOTE I only receive the two amateur radio news groups.
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com

>Having tuned in late, if you want to have an open network, look up PublicIP.
>It's a "live cd" that runs on a PII or better (x86) computer and provides
>all the functions you need to offer a secure and safe open network.
>
>Geoff.
Roger

3660. Re: Toroid or molded inductor in low voltage tank?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 22:27:14 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1152570434.601377.304290@35g2000cwc.googlegroups.com>
Source record: 11261

For a quick graphic demonstration of what the other posters are pointing out without having to build and measure a physical circuit, try putting this circuit into "RFSim99" (a free program), and select "Use physical model" in the inductor value dialog box. Then change the unloaded Q of the inductor there to see the effects on performance, both loss and filter sharpness (--> rejection of unwanted signals). You'll need to connect "IN" and "OUT" to measurement ports (one of the available components in RFSim99) that you set to appropriate impedances.

Such a simulation doesn't address the effects that Roy mentioned of coupling to external fields and lowering of Q by coupling to external material. On the other hand, though toroid coils have lower coupling to externals, their coupling isn't zero, especially when you use a low-mu core---so be careful how you mount the toroids, too. In a couple minutes, the simulation can give you some insights to get you started and save a lot of time soldering, but expect to ultimately learn even more by actually building and measuring the circuit.

Cheers,
Tom

Ben Jackson wrote:
> In a coupling circuit such as:
>
> C1|| C3||
> IN>----||----o----o----||--OUT>
> || | | ||
> --- C
> --- C L1
> C2| C
> | |
> '----'
> |
> ===
> GND
>
> (see, eg, the "38 Special" NorCal 30m QRP tranceiver sch connecting
> the NE602 single-ended output to an amplification stage:
> http://www.amqrp.org/kits/38spcl/)
>
> What is the purpose maximizing the Q of L1 by using, say, a hand-
> wound toroid vs a molded inductor? Rs of a 1.8uH moulded inductor
> might be 1.5 ohms vs .1 ohm for 5 inches of 24ga wire. However the
> expected effect in tank bandwidth doesn't seem to matter compared to

> the large effect of varying C1 (very narrow for small C1, 5p in the
> example).
>
> I can see why a homebrewer would prefer to keep a bag of T37-2 and
> some enamelled wire around, but in a kit such as that, wouldn't a
> moulded inductor do just as well?
>
> --
> Ben Jackson AD7GD
> <ben@ben.com>
> http://www.ben.com/

3661. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 22:34:24 UTC
From: Rod Speed <rod.speed.aaa@gmail.com>
Message-ID: <4hg2viF1r60boU1@individual.net>
Source record: 11262
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

Invalid@charter.net wrote
> John - KD5YI <groups5munge@verizon.net> wrote
>> Rod Speed wrote
>>> Geoffrey S. Mendelson <gsm@mendelson.com> wrote
>>>> Rod Speed wrote

>>>>>> Is one transmit and the other receive?
>>>>>> Or are they both transmit and receive?

>>>>> They're normally both transmit and receive.

>>>> That's a shame. Here in Israel we are limited to
>>>> 100mw EIRP, which severly limits the transmit
>>>> antenna. There is NO limitation on the receive antenna.

>>> A receive antenna has no EIRP, it doesnt radiate any real power.

>> Actually, when properly matched, it radiates half the received power.

> True, but it's such a low level as to normally be considered insignificant.

Which is what I said in different words.

> Unfortunately some take that to mean there is none.

The word REAL was used for a reason.

> If there were none, a Yagi antenna which used all passive
> elements save for the driven element would not work. On
> receive that driven element plays an active (pardon the pun) roll.

Having fun thrashing that straw man are you ?

3662. Re: Toroid or molded inductor in low voltage tank?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 23:10:04 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrneb5nic.l52.ben@saturn.home.ben.com>
Source record: 11263

On 2006-07-10, K7ITM <k7itm@msn.com> wrote:
> try putting this circuit into "RFSim99" (a free program)

Thanks, I'd been looking for something like that.

> unloaded Q of the inductor there to see the effects on performance,
> both loss and filter sharpness (--> rejection of unwanted signals).

I see. So the reason that the Q matters so much is not that it affects the filter shape much (in this topology), but that it has a big effect on the amplitude of the (tiny) passband which provides additional separation from the unwanted signals. In this case it looks like raising from Q=50 to 250 gives about 4dB of "wanted" signal without really affecting anything else.

> couple minutes, the simulation can give you some insights to get you
> started and save a lot of time soldering, but expect to ultimately
> learn even more by actually building and measuring the circuit.

I actually have such a circuit built, and I took some measurements today. I'll wind a 1.8uH inductor on a T37-2 tonight and compare.

Thanks to all for the responses.

--
Ben Jackson AD7GD
<ben@ben.com>
http://www.ben.com/

3663. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 23:51:19 UTC
From: John Navas <spamfilter0@navasgroup.com>
Message-ID: <utp5b256u4qog3fjqpupaabgkdlbrtjmuq@4ax.com>
Source record: 11264
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

On Tue, 11 Jul 2006 08:34:24 +1000, "Rod Speed"
<rod.speed.aaa@gmail.com> wrote in <4hg2viF1r60boU1@individual.net>:

>Invalid@charter.net wrote
>> John - KD5YI <groups5munge@verizon.net> wrote
>>> Rod Speed wrote
>>>> Geoffrey S. Mendelson <gsm@mendelson.com> wrote
>>>>> Rod Speed wrote
>
>>>>>> Is one transmit and the other receive?
>>>>>> Or are they both transmit and receive?
>
>>>>>> They're normally both transmit and receive.
>
>>>>> That's a shame. Here in Israel we are limited to
>>>>> 100mw EIRP, which severly limits the transmit
>>>>> antenna. There is NO limitation on the receive antenna.
>
>>>> A receive antenna has no EIRP, it doesnt radiate any real power.
>
>>> Actually, when properly matched, it radiates half the received power.
>
>> True, but it's such a low level as to normally be considered insignificant.
>
>Which is what I said in different words.
>
>> Unfortunately some take that to mean there is none.
>
>The word REAL was used for a reason.
>
>> If there were none, a Yagi antenna which used all passive
>> elements save for the driven element would not work. On
>> receive that driven element plays an active (pardon the pun) roll.
>
>Having fun thrashing that straw man are you ?

Take a deep breath. He was more or less on your side.
Not nice to lash out at him too (or anyone for that matter).

--
Best regards, FAQ for Wireless Internet: <http://Wireless.wikia.com>
John Navas FAQ for Wi-Fi: <http://wireless.wikia.com/wiki/Wi-Fi>
Wi-Fi How To: <http://wireless.wikia.com/wiki/Wi-Fi_How_To>
Fixes to Wi-Fi Problems: <http://wireless.wikia.com/wiki/Wi-Fi_Fixes>

3664. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 23:51:42 UTC
From: Don K <dk@dont_bother_me.com>
Message-ID: <IqadnShlsNSQdS_ZnZ2dnUVZ_vGdnZ2d@comcast.com>
Source record: 11265
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

<Invalid@charter.net> wrote in message news:doj5b29m0puk3fm9jtj8k02uv5ppktaa24@4ax.com...
> On Sat, 08 Jul 2006 16:08:23 GMT, John - KD5YI
> <groups5munge@verizon.net> wrote:
>>
>>Actually, when properly matched, it radiates half the received power.
>
> True, but it's such a low level as to normally be considered
> insignificant. Unfortunately some take that to mean there is none.
>
> If there were none, a Yagi antenna which used all passive elements
> save for the driven element would not work. On receive that driven
> element plays an active (pardon the pun) roll.

Still, that's a special case.

I can choose a different special case with a different result.
For a large, high-gain aperture-type antenna such as a big horn or dish,
virtually the received energy orthogonally incident on its cross-section
will be sucked up and absorbed.

Therefore you can't really say that an antenna always radiates at least
half the received power.

Don

3665. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-10 23:54:49 UTC
From: John Navas <spamfilter0@navasgroup.com>
Message-ID: <80q5b2ham4td8qh78hvsal8mugijqivknn@4ax.com>
Source record: 11266
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Mon, 10 Jul 2006 18:24:27 -0400, Invalid@charter.net wrote in
<ldk5b21fokqqgs5gr5rp0b1ri867nirhv2@4ax.com>:

>On Tue, 4 Jul 2006 21:31:06 +0000 (UTC), gsm@mendelson.com (Geoffrey
>S. Mendelson) wrote:

>>Make sure to use encryption. Encryption is NOT to keep your data safe,
>>nothing can do that. If someone is intent on accessing your network, WEP
>>encryption will not keep them out.
>
>True, but the ones that use the dynamic encryption can do a reasonably
>good job along with a firewall and router. The golden rule is
>"Nothing is bullet proof"

Not even in the same universe -- WEP is easily cracked in minutes,
little more than the Emperor's new clothes. Use WPA with a strong
passphrase for any real security.

>One of the locals mentioned doing a bit of "war driving" around town
>just for curiosity. About 80 to 90% of the networks heard were
>unencrypted AND over half of those _still_used_
>the_default_name_and_PW.

Yep ... really bad ... shame on the wireless hardware companies!

>I use hard wired Cat5e in a gigabit network as with the amount of
>traffic wireless is just too slow even if it is full duplex.

Wi-Fi is half duplex.

--
Best regards, FAQ for Wireless Internet: <http://Wireless.wikia.com>
John Navas FAQ for Wi-Fi: <http://wireless.wikia.com/wiki/Wi-Fi>
Wi-Fi How To: <http://wireless.wikia.com/wiki/Wi-Fi_How_To>
Fixes to Wi-Fi Problems: <http://wireless.wikia.com/wiki/Wi-Fi_Fixes>

3666. Sept 9+10 - ARRL MDC Section Convention

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 01:32:35 UTC
From: VOA SWLer <Reply_Here@bogus.com>
Message-ID: <g4idnY_vte8tYi_ZnZ2dnUVZ_tCdnZ2d@comcast.com>
Source record: 11267

Click on:
<http://www.farfest.org/> for info.

3667. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 01:35:37 UTC
From: Rod Speed <rod.speed.aaa@gmail.com>
Message-ID: <4hgdjbF1rbknvU1@individual.net>
Source record: 11268
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

John Navas <spamfilter0@navasgroup.com> wrote
> Rod Speed <rod.speed.aaa@gmail.com> wrote
>> Invalid@charter.net wrote
>>> John - KD5YI <groups5munge@verizon.net> wrote
>>>> Rod Speed wrote
>>>>> Geoffrey S. Mendelson <gsm@mendelson.com> wrote
>>>>>> Rod Speed wrote

>>>>>>> Is one transmit and the other receive?
>>>>>>> Or are they both transmit and receive?

>>>>>> They're normally both transmit and receive.

>>>>> That's a shame. Here in Israel we are limited to
>>>>> 100mw EIRP, which severly limits the transmit
>>>>> antenna. There is NO limitation on the receive antenna.

>>>> A receive antenna has no EIRP, it doesnt radiate any real power.

>>> Actually, when properly matched, it radiates half the received power.

>> True, but it's such a low level as to normally be considered insignificant.

>> Which is what I said in different words.

>> Unfortunately some take that to mean there is none.

>> The word REAL was used for a reason.

>> If there were none, a Yagi antenna which used all passive
>> elements save for the driven element would not work. On
>> receive that driven element plays an active (pardon the pun) roll.

>> Having fun thrashing that straw man are you ?

> Take a deep breath.

Get stuffed.

> He was more or less on your side.

Duh.

> Not nice to lash out at him too

You wouldnt know what a lash was if it was applied to your lard arse.

> (or anyone for that matter).

You get no say what so ever on whose arse gets lashed either.

3668. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 01:37:37 UTC
From: John Navas <spamfilter0@navasgroup.com>
Message-ID: <f606b21u14vlsi6fh6cedbuoh93d04gl1b@4ax.com>
Source record: 11269
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

On Tue, 11 Jul 2006 11:35:37 +1000, "Rod Speed"
<rod.speed.aaa@gmail.com> wrote in <4hgdjbF1rbknvU1@individual.net>:

>[SNIP]

plonk

--
Best regards, FAQ for Wireless Internet: <http://Wireless.wikia.com>
John Navas FAQ for Wi-Fi: <http://wireless.wikia.com/wiki/Wi-Fi>
Wi-Fi How To: <http://wireless.wikia.com/wiki/Wi-Fi_How_To>
Fixes to Wi-Fi Problems: <http://wireless.wikia.com/wiki/Wi-Fi_Fixes>

3669. Re: What is a wire antenna's impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 02:57:03 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <12b64rut80ida99@corp.supernews.com>
Source record: 11270

"John - KD5YI" <groups5munge@verizon.net> wrote in message
news:96bsg.3011$pB.2982@trnddc06...
> jo9s8as@yahoo.com wrote:
> Output power has nothing to do with antenna impedance.

At least until the antenna starts to melt. :-)

I have a suspicion that many of the "random wire" antennas you see on something like his video transmitter are actually roughly lambda/2 ("end-fed zepps") -- seems to me their impedance wouldn't be as sensitive to the exact positioning relative to the case, his hands, etc., and that the higher impedance is often easier to match to for a low-power transmitter anyway.

3670. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 03:09:28 UTC
From: Oscar Jones <oj@ojqw.com>
Message-ID: <44b31668$0$17541$61c65585@un-2park-reader-01.sydney.pipenetworks.com.au>
Source record: 11271
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

John Navas <spamfilter0@navasgroup.com> wrote:
> On Tue, 11 Jul 2006 11:35:37 +1000, "Rod Speed"
> <rod.speed.aaa@gmail.com> wrote in <4hgdjbF1rbknvU1@individual.net>:
>
>> [SNIP]
>
> *plonk*

Fat lot of good that will do you, you stupid plonker.

3671. Re: What is a wire antenna's impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 04:43:02 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <q%Fsg.4349$bd4.975@trnddc01>
Source record: 11272

Joel Kolstad wrote:
> "John - KD5YI" <groups5munge@verizon.net> wrote in message
> news:96bsg.3011$pB.2982@trnddc06...
>
>>jo9s8as@yahoo.com wrote:
>>Output power has nothing to do with antenna impedance.
>
>
> At least until the antenna starts to melt. :-)
>
> I have a suspicion that many of the "random wire" antennas you see on
> something like his video transmitter are actually roughly lambda/2 ("end-fed
> zepps") -- seems to me their impedance wouldn't be as sensitive to the exact
> positioning relative to the case, his hands, etc., and that the higher
> impedance is often easier to match to for a low-power transmitter anyway.
>

There was an article on 1/2 wave whips for handhelds a few months ago in QEX. The author did quite a bit of experimentation, as I recall, and specifically made a hand-held metal box on which to mount the antenna so that his body, hands, etc would be included in his measurements. I remember his comment about how far away from his mouth he held the box and antenna to make his measurements.

But, I don't know how this would compare with a 1/4 wave whip for sensitivities. It is interesting to insert a 1/4 wave whip into an MFJ269, walk around, and watch the readings.

3672. Re: Toroid or molded inductor in low voltage tank?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 04:54:52 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrneb6bos.r7q.ben@saturn.home.ben.com>
Source record: 11273

On 2006-07-10, Ben Jackson <ben@ben.com> wrote:
>
> I actually have such a circuit built, and I took some measurements
> today. I'll wind a 1.8uH inductor on a T37-2 tonight and compare.

Ok, I wound 20 turns of about 30ga wire on a T30-2 and compared before/
after (each with the trim cap set for peak) and it's about 2.75V p-p
vs 2.0V p-p, or ~3dB. I'll put it on the spectrum analyzer at work
again to make sure the unwanted products are still in the same place,
but it looks like a win for high Q.

Thanks to everyone who replied, it was very educational!

Anyone have any tips for securing fine-wire toroids in
Ugly/Manhattan construction? :)

--
Ben Jackson AD7GD
<ben@ben.com>
http://www.ben.com/

3673. 2MHz stepup transformer formula ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 05:49:27 UTC
From: Georg Holderied <Georg.Holderied@unibas.ch>
Message-ID: <44b39e24@maser.urz.unibas.ch>
Source record: 11281

I need to build a transformer that transforms the output of a signal
generator (0.5-2 Mhz 0-20Vpp into 50 ohms) into two opposite phases
at 0-250V.

Load is a few picofarads and a short length of shielded cable.

Where can I find formulas for winding such a transformer ?

Is it preferable to build it as an air or on a ferrite core ?

What ferrite material would I use ?

BTW the signal is used for driving multipole ion traps.

I am an electrical engineer but have not much experience with RF.

George

3674. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 05:59:52 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <07e6b2tnk25h4fl6c25lmlscqd3m4foan4@4ax.com>
Source record: 11274
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,misc.consumers.frugal-living

On Mon, 10 Jul 2006 18:11:13 -0400, Invalid@charter.net wrote:

>If there were none, a Yagi antenna which used all passive elements
>save for the driven element would not work. On receive that driven
>element plays an active (pardon the pun) roll.

The driven elements should be resonant and connected to a matched
load, while the parasitic elements are off-resonance and not connected
to a matched load, but they are just grounded to the (virtual) boom.

Thus, it is quite natural, that the parasitic elements will reradiate
any energy from the passing field and hopefully the reradiation from
all parasitic elements arrive in correct phase to the driven element,
to form the desired radiation pattern.

Paul

3675. Re: Toroid or molded inductor in low voltage tank?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 07:29:05 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12b6kq2b9cp1uef@corp.supernews.com>
Source record: 11275

Ben Jackson wrote:
> . . .
> Anyone have any tips for securing fine-wire toroids in
> Ugly/Manhattan construction? :)

A dab of hot melt glue or RTV. Or a Nylon screw through the middle. Or a couple of holes in the board and a cable tie. The only thing to avoid is laying it down flat on a solid copper plane.

Roy Lewallen, W7EL

3676. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 09:53:18 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <h-SdnRSmCuKS6C7ZRVny2A@pipex.net>
Source record: 11276
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

```
>> One of the locals mentioned doing a bit of "war driving" around town
>> just for curiosity. About 80 to 90% of the networks heard were
>> unencrypted AND over half of those _still_used_
>> the_default_name_and_PW.
>
> Yep ... really bad ... shame on the wireless hardware companies!
========================
You probably mean 'shame on the users' who haven't got a clue.

By the way it is the same situation here in the north of Scotland .
Driving in Inverness you can freely access WiFi points allover town
,from commercial companies to hotels..........but not at locations where
you would expect it ....like 'Starbuck' and bookshops like 'Borders'
Also in California you have to pay for WiFi access at
Starbuck.........must constitute a increasing part of their
income,considering the number of people with laptops.....usually without
a coffee..

I know ,I know ...life isn't a freebee

Frank GM0CSZ / KN6WH
```

3677. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 10:31:03 UTC
From: gsm@mendelson.com
Message-ID: <slrneb6ved.eh.gsm@cable.mendelson.com>
Source record: 11277
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Highland Ham wrote:

> By the way it is the same situation here in the north of Scotland .
> Driving in Inverness you can freely access WiFi points allover town
> ,from commercial companies to hotels.....but not at locations where
> you would expect it ....like 'Starbuck' and bookshops like 'Borders'

This will go on until the Scotish police start doing what the English do. They track traffic at the ISP level looking for "kidde porn". Once they find it, they locate the person sending or receiving the files.

They have no trouble getting a warrant and come in and arrest the owner of the account and confiscate their equipment.

As soon as they do this, "users" will go looking for unencrypted networks and use them, if they don't know I don't know Scotish law, but in most places the owner of the network is responsible for what is done with it.

There was a case in Canada of a man found driving five miles per hour in a residential neighborhood. When the police stopped him, his pants were around his ankles and there was a laptop on his lap.

Canada unlike most places has a law prohibiting using other people's internet connections without permission. Most places don't.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 IL Fax: 972-2-648-1443 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

3678. Re: Toroid or molded inductor in low voltage tank?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 12:02:48 UTC
From: John Hague <john.hague@philips.com>
Message-ID: <op.tciw2ypz4pv9tc@gbrsoupss1dt089.code1.emi.philips.com>
Source record: 11278

On Tue, 11 Jul 2006 08:29:05 +0100, Roy Lewallen <w7el@eznec.com> wrote:

> Ben Jackson wrote:
>> . . .
>> Anyone have any tips for securing fine-wire toroids in
>> Ugly/Manhattan construction? :)
>
> A dab of hot melt glue or RTV. Or a Nylon screw through the middle. Or a
> couple of holes in the board and a cable tie. The only thing to avoid
> is laying it down flat on a solid copper plane.
>
> Roy Lewallen, W7EL

Roy

Excuse my ignorance, but what is the problem with laying a toroid down on a solid copper plane? I thought the magnetic field was contained within the toroid and thus minimised external effects. I have completed a couple of projects recently with some of the inductors like that and didn't notice any real problem. Mind you, I guess they might have performed better if not mounted that way :o)

Best 73

John, G4GOY

--
Using Opera's revolutionary e-mail client: http://www.opera.com/mail/

3679. Sprint Time

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 12:28:25 UTC
From: hikezilla@yahoo.com
Message-ID: <1152620905.299015.268010@m73g2000cwd.googlegroups.com>
Source record: 11279

http://www.fpqrp.com/fpqrprun.html

Folks,

The Flying Pigs Run For The Bacon is Sunday Night! Get ready for some
CW QRP
sprint fun!

To clear up any confusion about the time of the event, the RFTB will
ALWAYS be from:

9-11 Eastern time
8-10 Central time
7-9 Mountain time
6-8 Pacific time

This is year around, regardless of any daylight savings/standard time
changes.

Hope to hear you Sunday Night!

3680. Re: Computer alternative to Smith Chart?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 12:40:19 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <lLidnZf-8rqZAC7ZnZ2dnUVZ8qCdnZ2d@bt.com>
Source record: 11280

"AndyS" <andysharpe@juno.com> wrote in message
news:1152564332.319191.323380@75g2000cwc.googlegroups.com...
> Andy adds:
>
> I have often used a modified Smith Chart , called an
> Impedance/Admittance
> chart , to do matching..... If the impedances are not greatly
> mismatched,
> it is very easy and accurate.... and very very intuitive...
>
> The ones I used have the impedance cordinates in black and the
> admittance coordinates in red.....
>
> I found them extremly useful in the design of an automated
antenna
> tuner
> which I designed for a Texas Instruments Marine SSB unit, back in
the
> late 70s..... You could literally track the impedance transormation
> mentally
> with series and shunt elements.....
>
> Andy W4OAH
==========

As an Engineer in my eighties with a long association with transmission lines of all sorts I have never used a Smith Chart, in anger, in the whole of my life. I have always used log tables, sliderules, pocket calculators or, more recently, dedicated computer programs.

Use of mathematics gives one a more 'intuitive' insight into how transmission lines work than any chart. But it's a just a matter of opinion and depends on one's basic education.

As useful as they were only at HF, Smith Charts became redundent when the personal computer came in. Old habits die hard!

Reg.

3681. Re: How to calculate increase of home wireless router range?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 13:53:52 UTC
From: John Navas <spamfilter0@navasgroup.com>
Message-ID: <b7b7b2hrbi3uplh3115phq5ofntvloprhb@4ax.com>
Source record: 11282
Cross-posted to: alt.internet.wireless,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Tue, 11 Jul 2006 10:53:18 +0100, Highland Ham
<abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in
<h-SdnRSmCuKS6C7ZRVny2A@pipex.net>:

>>> One of the locals mentioned doing a bit of "war driving" around town
>>> just for curiosity. About 80 to 90% of the networks heard were
>>> unencrypted AND over half of those _still_used_
>>> the_default_name_and_PW.
>>
>> Yep ... really bad ... shame on the wireless hardware companies!
>=========================
>You probably mean 'shame on the users' who haven't got a clue.

No, I mean shame on the wireless hardware companies, as I wrote, for
such a gross disservice to their customers -- it shouldn't be necessary
to be an IT expert to use Wi-Fi safely. It should just work properly.
Otherwise it's not ready for the market.

--
Best regards, FAQ for Wireless Internet: <http://Wireless.wikia.com>
John Navas FAQ for Wi-Fi: <http://wireless.wikia.com/wiki/Wi-Fi>
Wi-Fi How To: <http://wireless.wikia.com/wiki/Wi-Fi_How_To>
Fixes to Wi-Fi Problems: <http://wireless.wikia.com/wiki/Wi-Fi_Fixes>

3682. Re: Toroid or molded inductor in low voltage tank?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 14:21:51 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <4tc7b21hdqakk76ln3keeuri0t0shc2ukr@4ax.com>
Source record: 11283

On Tue, 11 Jul 2006 13:02:48 +0100, "John Hague"
<john.hague@philips.com> wrote:

>On Tue, 11 Jul 2006 08:29:05 +0100, Roy Lewallen <w7el@eznec.com> wrote:
>
>> Ben Jackson wrote:
>>> . . .
>>> Anyone have any tips for securing fine-wire toroids in
>>> Ugly/Manhattan construction? :)
>>
>> A dab of hot melt glue or RTV. Or a Nylon screw through the middle. Or a
>> couple of holes in the board and a cable tie. The only thing to avoid
>> is laying it down flat on a solid copper plane.
>>
>> Roy Lewallen, W7EL
>
>Roy
>
>Excuse my ignorance, but what is the problem with laying a toroid down on
>a solid copper plane? I thought the magnetic field was contained within
>the toroid and thus minimised external effects. I have completed a couple
>of projects recently with some of the inductors like that and didn't
>notice any real problem. Mind you, I guess they might have performed
>better if not mounted that way :o)

Twofold. One is added capacitance across the windings and secondary
is the proximitry of a conductor to the small field around the wire(s)
that are not in direct contact with the toroid.

Allison

>
>Best 73
>
>John, G4GOY

3683. Re: Computer alternative to Smith Chart?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 14:46:11 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <TQOsg.129496$dW3.63864@newssvr21.news.prodigy.com>
Source record: 11284

Reg Edwards wrote:

> "AndyS" <andysharpe@juno.com> wrote in message
> news:1152564332.319191.323380@75g2000cwc.googlegroups.com...
>
>>Andy adds:
>>
>> I have often used a modified Smith Chart , called an
>>Impedance/Admittance
>>chart , to do matching..... If the impedances are not greatly
>>mismatched,
>>it is very easy and accurate.... and very very intuitive...
>>
>> The ones I used have the impedance cordinates in black and the
>>admittance coordinates in red.....
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>> I found them extremly useful in the design of an automated
>
> antenna
>
>>tuner
>>which I designed for a Texas Instruments Marine SSB unit, back in
>
> the
>
>>late 70s..... You could literally track the impedance transormation
>>mentally
>>with series and shunt elements.....
>>
>> Andy W4OAH
>
> ==
> As an Engineer in my eighties with a long association with
> transmission lines of all sorts I have never used a Smith Chart, in
> anger, in the whole of my life. I have always used log tables,
> sliderules, pocket calculators or, more recently, dedicated computer
> programs.
>
> Use of mathematics gives one a more 'intuitive' insight into how
> transmission lines work than any chart. But it's a just a matter of
> opinion and depends on one's basic education.
>
> As useful as they were only at HF, Smith Charts became redundent when
> the personal computer came in. Old habits die hard!

> ----
> Reg.
>
>

Reg,
have you ever taken the time to learn _how_ to use one? Actually,
they're just as mathematical as the formulas you've always used, and,
for some people, just as useful.
73,
Tom Donaly, KA6RUH

3684. Re: 2MHz stepup transformer formula ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 15:08:49 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <5aPsg.9750$Ep.2532@trnddc08>
Source record: 11285

Georg,

If you transform a 20VAC signal from a 50 ohm source into a 250VAC signal, the 250VAC output will be at an impedance of about 7,800 ohms (conservation of energy; Po = Pin). At this high impedance you won't be able to drive virtually any length of coax, even open-circuited, as just a few tens of pF of cable capacitance will cause a significant rolloff at 2 MHz. What load impedance do you intend to drive?

BTW, 20Vpp at 50 ohms out of your 'signal generator' is quite a signal - about 1 watt. Is this really the case?

Joe
W3JDR

"Georg Holderied" <Georg.Holderied@unibas.ch> wrote in message news:44b39e24@maser.urz.unibas.ch...
> I need to build a transformer that transforms the output of a signal
> generator (0.5-2 Mhz 0-20Vpp into 50 ohms) into two opposite phases
> at 0-250V.
>
> Load is a few picofarads and a short length of shielded cable.
>
> Where can I find formulas for winding such a transformer ?
>
> Is it preferable to build it as an air or on a ferrite core ?
>
> What ferrite material would I use ?
>
> BTW the signal is used for driving multipole ion traps.
>
> I am an electrical engineer but have not much experience with RF.
>
> George
>
>

3685. Re: Computer alternative to Smith Chart?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 16:28:24 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <Z9-dnT7sStkeTy7ZnZ2dnUVZ8s2dnZ2d@bt.com>
Source record: 11286

"Tom Donaly" wrote >
> Reg,
> have you ever taken the time to learn _how_ to use one?
Actually,
> they're just as mathematical as the formulas you've always used,
and,
> for some people, just as useful.
==========
Yes. Many years ago I attended a lecture. The lecturer handed round Smith Charts as a tutorial. We spent 10 minutes on it. But these days I'm well out of practice.

The Smith Chart was only of any use at HF and above. That's what it was invented for. Fine for radio amateurs who only use the HF bands and above. It followed on from previous, more complicated Victorian Age charts to ease calculations involving complex Hyperbolic functions. Very good while it lasted.

Small, dedicated computer programs these days are more accurate and time saving than charts and their 'what-if' operating procedures are much more educational.

But I appreciate the sentimental attachment, indeed affection, many old timers have for the good old Smith Chart. By all means carry on using them.

Reg.

3686. Re: Computer alternative to Smith Chart?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 19:39:32 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <p0v7b2p4j9r7fohadglhdma7s1qfkoqa1t@4ax.com>
Source record: 11287

I think that is the engineer in you speaking!

I find the Smith Chart interesting as a tool. I am more interested in how it works while you are interested in what it is good for!

My desk drawers still contain a couple of slide rules, a polar planimeter, a drafting set and a Kurta Calculator. In spite of being surrounded by an assortment of computers, I keep a good battery in my HP Calculator and I remain fond of nomograms.

The Smith Chart is a tool. I cannot possibly have too many tools...

Of course I have archived the programs at g4fgq as well...

We could quit teaching Calculus as well, Computers make quick work of graphic solutions!

On Tue, 11 Jul 2006 17:28:24 +0100, "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote:

>The Smith Chart was only of any use at HF and above. That's what it
>was invented for. Fine for radio amateurs who only use the HF bands
>and above. It followed on from previous, more complicated Victorian
>Age charts to ease calculations involving complex Hyperbolic
>functions. Very good while it lasted.
>
>Small, dedicated computer programs these days are more accurate and
>time saving than charts and their 'what-if' operating procedures are
>much more educational.
>
>But I appreciate the sentimental attachment, indeed affection, many
>old timers have for the good old Smith Chart. By all means carry on
>using them.
>----
>Reg.
>
John Ferrell W8CCW

3687. Re: Computer alternative to Smith Chart?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 22:36:43 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <sJidncR_5YxYtSnZnZ2dnUVZ8qidnZ2d@bt.com>
Source record: 11289

John Ferrell, W8CCW wrote
> I think that is the engineer in you speaking!
>
> I find the Smith Chart interesting as a tool. I am more interested
in
> how it works while you are interested in what it is good for!
==========
John, you've weighed me up fairly well.
On the other hand I see much beauty in Mathematics. And program source coding is the labour of love and a Work of Art. But Maths is a much neglected subject in our Western schools and universities these days. Even teachers don't know what five sevens are - and that's only arithmetic.

I once asked a prospective Member of Parliament just before a General Election what seven nines are. He didn't know. He lost his £500 deposit. Didn't get enough votes. Otherwise he might have ended up as Chancellor of the Exchequer.
==========
> My desk drawers still contain a couple of slide rules, a polar
> planimeter, a drafting set and a Kurta Calculator. In spite of being
> surrounded by an assortment of computers, I keep a good battery in
my
> HP Calculator and I remain fond of nomograms.
==========
My Casio scientific calculator must be about 10 years old. I've never changed the battery.
==========
> The Smith Chart is a tool. I cannot possibly have too many tools...
==========
I bet you are an amateur carpenter as well.
==========
> Of course I have archived the programs at g4fgq as well...
==========
Don't throw away your old computer. Being DOS programs there are ominous signs they won't work too well on new versions of Windows.
==========
> We could quit teaching Calculus as well, Computers make quick work
of
> graphic solutions!
==========
I deliberately avoided graphics. Graphics depend on screen driving software thus losing portability between machines.

My favourite Victorian is Oliver Heaviside. He invented the beautiful Operational Calculus which magically transforms ordinary calculus into simple algebra and converts functions of frequency on transmission lines into functions of time. Now everything is going digital at Megabits per second he was about 130 years in advance of his time.

All the best to you and yours.

Reg, G4FGQ.

3688. SA602A oscillator load capacitance

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 22:37:55 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrneb8a23.1gh6.ben@saturn.home.ben.com>
Source record: 11288

I'm trying to figure out the load capacitance of the oscillator pins 6
and 7 on the SA602A. I've got a 14.85MHz fundamental crystal with a
specified load capacitance of 13pF running about 1300Hz slow (with
27+22p). The datasheet doesn't say much about the oscillator pins.

The best hint I've found is about the SA605:

From AN1994 about the SA605:

Because the Colpitts configuration is for parallel resonance
mode, it is important to know, when ordering crystals, that
the load capacitance of the SA605 is 10pF.

That would suggest I'm way, WAY off, and my external load capacitors
should only amount to 3p!

The SA612A datasheet has an example where it specifies the crystal load
capacitance, but then it doesn't specify C1/C2 values. Then it has
another example with specific values for C1/C2 (which are 4.5p in series)
but does not mention the load capacitance of the 3OT crystal. One at
that freq made by CTS has a load capacitance of 13p, which would suggest
that the oscillator is about 8.5p. The 602A has a similar example with
another unspecified crystal...

--
Ben Jackson AD7GD
<ben@ben.com>
http://www.ben.com/

3689. Re: SA602A oscillator load capacitance

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-11 23:45:03 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <3KWsg.3642$Th7.2568@trnddc05>
Source record: 11290

Ben,

When a crystal manufacturer specifies a load capacitance for a crystal, it is usually a good indication that the crystal is meant to operate in the 'parallel resonant' mode. This is a very misleading term however, as the quartz blank only has one pure resonance, and that is a series resonance. However, the equivalent LCR circuit of this series resonant circuit will look like a capacitive or inductive reactance at frequencies removed from the series resonant frequency. At some frequency, the crystal will look inductive enough to resonate an external capacitance of a value specified as the 'load capacitance".

Your crystal will will form a parallel resonant circuit at the marked frequency with an external capacitance of 13 pF. This is fairly low, as most crystals are specified for 20-32 pf loads. If your circuit already has too much capacitance, you can lower the net capacitance seen by the crystal by either using a small coupling cap whose value in series with the circuit capacitance equals the load capacitance, or you can put an inductor across the crystal whose value in parallel with the circuit capacitance will result in a net capacitance value equal to the 'load capacitance'. In the former case, the low value of coupling cap could cause an AC voltage drop that might prevent the circuit from oscillating. In the latter case the added inductance could cause a spurious oscillation at an unintended frequency.

All things considered in your case, I'd use the series coupling approach.

Joe
W3JDR

"Ben Jackson" <ben@ben.com> wrote in message
news:slrneb8a23.1gh6.ben@saturn.home.ben.com...
> I'm trying to figure out the load capacitance of the oscillator pins 6
> and 7 on the SA602A. I've got a 14.85MHz fundamental crystal with a
> specified load capacitance of 13pF running about 1300Hz slow (with
> 27+22p). The datasheet doesn't say much about the oscillator pins.
>
> The best hint I've found is about the SA605:
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> From AN1994 about the SA605:
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> Because the Colpitts configuration is for parallel resonance
> mode, it is important to know, when ordering crystals, that
> the load capacitance of the SA605 is 10pF.
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> That would suggest I'm way, WAY off, and my external load capacitors
> should only amount to 3p!

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> capacitance, but then it doesn't specify C1/C2 values. Then it has
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> that freq made by CTS has a load capacitance of 13p, which would suggest
> that the oscillator is about 8.5p. The 602A has a similar example with
> another unspecified crystal...
>
> --
> Ben Jackson AD7GD
> <ben@ben.com>
> http://www.ben.com/

3690. Re: 2MHz stepup transformer formula ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 00:20:16 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1152663616.663886.100710@p79g2000cwp.googlegroups.com>
Source record: 11291

I've had some experience driving quadrupole ion filters...

I would guess you would do best with a high Q tank circuit driving the ion trap through as short a length of wire as possible. Keep the tank and the wiring very well balanced with respect to stray capacitance to ground, especially. You can use a link to couple RF energy into the tank circuit. The capacitance of the trap is probably enough to resonate the tank coil. You can split the coil into two halves, with the "hot" end of each half going to the ion trap, and the "cold" ends connected together with a bypass capacitor; then you can apply DC across that bypass capacitor, and the DC will be carried directly to the ion trap. I am assuming here that you want to drive your trap in the normal way, with a combination of RF and DC. It is usual to use feedback to maintain an accurate RF voltage. You can add small capacitors, one from each "hot" lead to the trap, back to a rectifier with low input impedance. The capacitor impedance then sets the voltage to current conversion ratio, and will be frequency dependent of course.

If you use a resonant tank circuit with a loaded Q (nearly equal to the unloaded Q) of, say, 250, and you have net capacitance (ion trap plus wiring plus coil plus voltage sampling capacitors) of, say, 32pF, and the operating frequency is 1MHz, then the tank impedance across the trap will be about 250*5k, or 1.25megohms. At 500V RMS, that's only 0.2 watts. It appears that your signal generator can put out 1 watt, so it's quite possible that your signal generator can drive the tank without an amplifier. You can experiment with links (one turn, or a very few turns, over the area of the tank where it is split in two) to see what gives best results. You can vary the coupling by adding a variable capacitor in series with the link to the generator. Proper adjustment will give you a 50 ohm load for the generator, at the tank's resonant frequency. Winding a modest size tank coil with such a high Q at 1MHz is not trivial, but certainly possible.

With such a resonant tank circuit, which is useful both in getting high voltage and in reducing harmonics in the drive, it will be difficult to operate over such a wide frequency range. Do you really need to do that? If you do, I would advise you to add a medium-power amplifier between the signal generator and the step-up transformer, and beware about a lack of harmonic filtering as a result of your broad-band circuit.

Further details about exactly what you are trying to accomplish might be helpful.

Cheers,
Tom

Georg Holderied wrote:
> I need to build a transformer that transforms the output of a signal
> generator (0.5-2 Mhz 0-20Vpp into 50 ohms) into two opposite phases
> at 0-250V.
>
> Load is a few picofarads and a short length of shielded cable.
>
> Where can I find formulas for winding such a transformer ?
>
> Is it preferable to build it as an air or on a ferrite core ?
>
> What ferrite material would I use ?
>
> BTW the signal is used for driving multipole ion traps.
>
> I am an electrical engineer but have not much experience with RF.
>
> George

3691. Re: Toroid or molded inductor in low voltage tank?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 01:35:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12b8kevkvh4qi33@corp.supernews.com>
Source record: 11292

John Hague wrote:
> On Tue, 11 Jul 2006 08:29:05 +0100, Roy Lewallen <w7el@eznec.com> wrote:
>
>> Ben Jackson wrote:
>>> . . .
>>> Anyone have any tips for securing fine-wire toroids in
>>> Ugly/Manhattan construction? :)
>>
>> A dab of hot melt glue or RTV. Or a Nylon screw through the middle. Or
>> a couple of holes in the board and a cable tie. The only thing to
>> avoid is laying it down flat on a solid copper plane.
>>
>> Roy Lewallen, W7EL
>
> Roy
>
> Excuse my ignorance, but what is the problem with laying a toroid down
> on a solid copper plane? I thought the magnetic field was contained
> within the toroid and thus minimised external effects. I have completed
> a couple of projects recently with some of the inductors like that and
> didn't notice any real problem. Mind you, I guess they might have
> performed better if not mounted that way :o)

Two potential problems. One is that the field isn't completely contained. Leakage is greater with more sparsely wound toroids and ones with lower permeability cores. The second is the "one turn effect" - There's a net field equivalent to that of a single turn running circumferentially around the core. A solid plane parallel to this would act as a shorted turn. Both effects would act to lower the Q, and might be the cause of some drift or microphonics if the inductor was in an oscillator tank.

But to be honest, I've never run any experiments to see just how much of a problem it might cause -- it's quite possible you could get away with it in some or even most applications. I'll put it on my list of things to do when time permits -- unless somebody else is willing to take on the job.

Roy Lewallen, W7EL

3692. Re: Using Garage for Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 02:50:06 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <BsZsg.186$%Q6.131@bignews8.bellsouth.net>
Source record: 11293

"Alex" <samalex@gmail.com> wrote in message
news:1151699486.365534.315290@y41g2000cwy.googlegroups.com...

If you are set on the garage, the insulated door will do wonders. I replaced my old wooden door with plenty of holes and spider access, and it was the best thing I ever did lately!! I can work in the garage with a couple of fans running. It can get cold here in western NC, but in fairness I must mention that my garage and shack is downstairs and partially underground.

Another suggestion to consider is one I used in a previous house: a spare closet! I put a desk in the closet with a hutch. There was enough room for all the radios, and when I was thru radio-ing, I could push the chair inside the closet and close the bi-fold doors! No one was the wiser!! People could come visit us in the den and never know there was a fully stocked radio room on the premises! My wife always joked about putting me in the basement, the dog house, or a closet. Now it was TRUE! :)

73

Jerry
>

3693. Class C amps saturating?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 05:58:34 UTC
From: bill.meara@gmail.com
Message-ID: <1152683914.666244.144780@b28g2000cwb.googlegroups.com>
Source record: 11294

I'm reading David Rutledge's excellent "The Electronics of Radio."

In Chapter 10 -- Power Amplifiers, he discusses Class C amps and says, "In addition, if we drive the transistor clear to saturation, using the transistor as a switch, the dissipated power can be greatly reduced, because the saturation voltage is low. This is Class C amplification..."

I'd always throught that in Class C, while you'd operate the device so that it was cutoff during most of the cycle, but not saturated.

Is this just a different definition of Class C?

I checked back with SSDRA and EMRFD, and didn't see anything about driving Class C amps into saturation?

What says the group? Do we saturate in Class C or not?

73 from London
Bill M0HBR N2CQR CU2JL
http://www.gadgeteer.us

3694. Re: Toroid or molded inductor in low voltage tank?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 07:14:13 UTC
From: John Hague <john.hague@philips.com>
Message-ID: <op.tckedzxa4pv9tc@gbrsoupss1dt089.code1.emi.philips.com>
Source record: 11295

On Tue, 11 Jul 2006 15:21:51 +0100, <nospam@nouce.bellatlantic.net> wrote:

> On Tue, 11 Jul 2006 13:02:48 +0100, "John Hague"
> <john.hague@philips.com> wrote:
>
>> On Tue, 11 Jul 2006 08:29:05 +0100, Roy Lewallen <w7el@eznec.com> wrote:
>>
>>> Ben Jackson wrote:
>>>> . . .
>>>> Anyone have any tips for securing fine-wire toroids in
>>>> Ugly/Manhattan construction? :)
>>>
>>> A dab of hot melt glue or RTV. Or a Nylon screw through the middle. Or
>>> a
>>> couple of holes in the board and a cable tie. The only thing to avoid
>>> is laying it down flat on a solid copper plane.
>>>
>>> Roy Lewallen, W7EL
>>
>> Roy
>>
>> Excuse my ignorance, but what is the problem with laying a toroid down
>> on
>> a solid copper plane? I thought the magnetic field was contained within
>> the toroid and thus minimised external effects. I have completed a
>> couple
>> of projects recently with some of the inductors like that and didn't
>> notice any real problem. Mind you, I guess they might have performed
>> better if not mounted that way :o)
>
> Twofold. One is added capacitance across the windings and secondary
> is the proximitry of a conductor to the small field around the wire(s)
> that are not in direct contact with the toroid.
>
> Allison
>
>
>>
>> Best 73
>>
>> John, G4GOY
>

Allison

Thanks for the info. I'll watch how I mount my toroids in future.

Best 73

John, G4GOY

--
Using Opera's revolutionary e-mail client: http://www.opera.com/mail/

3695. Re: Class C amps saturating?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 07:29:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12b996ni52vq167@corp.supernews.com>
Source record: 11296

The Class C transistor amplifiers I design and use most certainly saturate. I believe that's standard practice for solid state amplifiers. I don't think tube type class C amplifiers are or were typically driven to saturation, but I honestly don't know for sure.

The classic definition of class C involves only the fraction of the cycle during which it conducts (< 180 degrees). There's no restriction on how hard it conducts.

Roy Lewallen, W7EL

bill.meara@gmail.com wrote:
> I'm reading David Rutledge's excellent "The Electronics of Radio."
>
> In Chapter 10 -- Power Amplifiers, he discusses Class C amps and says,
> "In addition, if we drive the transistor clear to saturation, using the
> transistor as a switch, the dissipated power can be greatly reduced,
> because the saturation voltage is low. This is Class C
> amplification..."
>
> I'd always throught that in Class C, while you'd operate the device so
> that it was cutoff during most of the cycle, but not saturated.
>
> Is this just a different definition of Class C?
>
> I checked back with SSDRA and EMRFD, and didn't see anything about
> driving Class C amps into saturation?
>
> What says the group? Do we saturate in Class C or not?
>
> 73 from London
> Bill M0HBR N2CQR CU2JL
> http://www.gadgeteer.us
>

3696. Re: Class C amps saturating?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 07:45:23 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrneb9a4j.1t6t.ben@saturn.home.ben.com>
Source record: 11297

On 2006-07-12, Roy Lewallen <w7el@eznec.com> wrote:
> The Class C transistor amplifiers I design and use most certainly
> saturate. I believe that's standard practice for solid state amplifiers.

And as a followup, is the power dissipation in the final controlled
by the duty cycle of the pulses (or number of degrees of conduction
more generally if the input is not a square wave)?

--
Ben Jackson AD7GD
<ben@ben.com>
http://www.ben.com/

3697. Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 10:54:52 UTC
From: erica <erica@auto-system.com>
Message-ID: <1152701692.603004.306280@35g2000cwc.googlegroups.com>
Source record: 11198

This SMD Oven Controller (SMDOC-01) is designed to use with a toaster oven. It provide a low cost solution for making SMD prototypes and samples. The temperature profile is similar to the expensive industrial SMD oven provided. So, the sample quality is as good as the industrial oven can do. It is capable for packages including 0402, BGA, QFP, SOP, SSOP, TSSOP, SOT, etc. It is an indispensable tool for R&D and making samples. It is very suitable for electronic companies, laboratories, universities and hobbyists. SMD Oven Controller (SMDOC-01) is only US$206, including oven (PCB size is large up to 19 x 17cm) is US$283. Voltage 220V, 8A fused.

Features:
1.Small, low price, performance comparable to expensive industrial SMD oven.
2.Capable for any SMD packages. An indispensable tool for R&D, sample making and small batch production.
3.No hand soldering. No painful. No difficult. Save time.
4.Connectable to PC via RS232 for profile setup and temperature monitor. It can also operate independently without PC.
5.Simple to use. LEDs indication for each stage of pre-heat, soak, reflow and cooling. Alarm and power cut off after finished.

Product information : http://www.auto-system.com
Please send me email : erica@auto-system.com for any inquiry or order.

3698. Re: Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 11:26:57 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <505tg.7628$F8.1463@trnddc02>
Source record: 11199

There's a much simpler and cheaper solution for experimenter 'one- off' board soldering. Just solder all the part leads to the board without worrying about solder bridging. After you're done, come back and wick off all the excess solder with solder-wick. This will remove all solder bridging, but will leave a good strong solder joint between the part leads and the board pads. Of course it only works on parts with exposed leads, not BGA's etc.

Joe
W3JDR

"erica" <erica@auto-system.com> wrote in message
news:1152701692.603004.306280@35g2000cwc.googlegroups.com...
> This SMD Oven Controller (SMDOC-01) is designed to use with a toaster
> oven. It provide a low cost solution for making SMD prototypes and
> samples. The temperature profile is similar to the expensive industrial
> SMD oven provided. So, the sample quality is as good as the industrial
> oven can do. It is capable for packages including 0402, BGA, QFP, SOP,
> SSOP, TSSOP, SOT, etc. It is an indispensable tool for R&D and making
> samples. It is very suitable for electronic companies, laboratories,
> universities and hobbyists. SMD Oven Controller (SMDOC-01) is only
> US$206, including oven (PCB size is large up to 19 x 17cm) is US$283.
> Voltage 220V, 8A fused.
>
> Features:
> 1.Small, low price, performance comparable to expensive industrial SMD
> oven.
> 2.Capable for any SMD packages. An indispensable tool for R&D, sample
> making and small batch production.
> 3.No hand soldering. No painful. No difficult. Save time.
> 4.Connectable to PC via RS232 for profile setup and temperature
> monitor. It can also operate independently without PC.
> 5.Simple to use. LEDs indication for each stage of pre-heat, soak,
> reflow and cooling. Alarm and power cut off after finished.
>
>
> Product information : http://www.auto-system.com
> Please send me email : erica@auto-system.com for any inquiry or order.
>

3699. Re: Toroid or molded inductor in low voltage tank?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 11:52:34 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <p5o9b21ef0s67u4fitnncpantfcfqfla2k@4ax.com>
Source record: 11200

On Tue, 11 Jul 2006 18:35:26 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>John Hague wrote:
>> On Tue, 11 Jul 2006 08:29:05 +0100, Roy Lewallen <w7el@eznec.com> wrote:
>>
>>> Ben Jackson wrote:
>>>> . . .
>>>> Anyone have any tips for securing fine-wire toroids in
>>>> Ugly/Manhattan construction? :)
>>>
>>> A dab of hot melt glue or RTV. Or a Nylon screw through the middle. Or
>>> a couple of holes in the board and a cable tie. The only thing to
>>> avoid is laying it down flat on a solid copper plane.
>>>
>>> Roy Lewallen, W7EL
>>
>> Roy
>>
>> Excuse my ignorance, but what is the problem with laying a toroid down
>> on a solid copper plane? I thought the magnetic field was contained
>> within the toroid and thus minimised external effects. I have completed
>> a couple of projects recently with some of the inductors like that and
>> didn't notice any real problem. Mind you, I guess they might have
>> performed better if not mounted that way :o)
>
>Two potential problems. One is that the field isn't completely
>contained. Leakage is greater with more sparsely wound toroids and ones
>with lower permeability cores. The second is the "one turn effect" -
>There's a net field equivalent to that of a single turn running
>circumferentially around the core. A solid plane parallel to this would
>act as a shorted turn. Both effects would act to lower the Q, and might
>be the cause of some drift or microphonics if the inductor was in an
>oscillator tank.
>
>But to be honest, I've never run any experiments to see just how much of
>a problem it might cause -- it's quite possible you could get away with
>it in some or even most applications. I'll put it on my list of things
>to do when time permits -- unless somebody else is willing to take on
>the job.
>
>Roy Lewallen, W7EL

I've not tested for Q degradation but the added capacitance and chance
for movement makes VFOs far more unstable. Microphonics from

movement are part of the problem but if glue is used that goes away and the stability of the glue with temperature is then an issue.

The single turn field while small is likely related to the number of turns and with fewer turns I'd think even a modest distance such as 0.1" it would not be a significant factor.

Allison

3700. Re: Class C amps saturating?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 13:58:36 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1152712716.004638.184560@m73g2000cwd.googlegroups.com>
Source record: 11201

bill.meara@gmail.com wrote:
> I'm reading David Rutledge's excellent "The Electronics of Radio."
>
> In Chapter 10 -- Power Amplifiers, he discusses Class C amps and says,
> "In addition, if we drive the transistor clear to saturation, using the
> transistor as a switch, the dissipated power can be greatly reduced,
> because the saturation voltage is low. This is Class C
> amplification..."
>
> I'd always throught that in Class C, while you'd operate the device so
> that it was cutoff during most of the cycle, but not saturated.
>
> Is this just a different definition of Class C?
>
> I checked back with SSDRA and EMRFD, and didn't see anything about
> driving Class C amps into saturation?
>
> What says the group? Do we saturate in Class C or not?

Saturation is itself a somewhat mushy point. There's a V_sat specified on the datasheets but the actual definition of saturated is entirely application-sensitive. As a practical matter as you add more base current you will go further into saturation (up until you melt the base-emitter junction and then all sorts of wacky things ensue).

Choice of drive level and output level and load impedance in a Class C amplifier certainly will in many cases put the device into saturation.

Tim.

3701. Re: Toroid or molded inductor in low voltage tank?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 14:45:22 UTC
From: Xor <mutex@nowhere.com>
Message-ID: <12ba2o2mhmg92dc@corp.supernews.com>
Source record: 11202

Roy Lewallen wrote:
>
> John Hague wrote:
> > On Tue, 11 Jul 2006 08:29:05 +0100, Roy Lewallen <w7el@eznec.com> wrote:
> >
> >> Ben Jackson wrote:
> >>> . . .
> >>> Anyone have any tips for securing fine-wire toroids in
> >>> Ugly/Manhattan construction? :)
> >>
> >> A dab of hot melt glue or RTV. Or a Nylon screw through the middle. Or
> >> a couple of holes in the board and a cable tie. The only thing to
> >> avoid is laying it down flat on a solid copper plane.
> >>
> >> Roy Lewallen, W7EL
> >
> > Roy
> >
> > Excuse my ignorance, but what is the problem with laying a toroid down
> > on a solid copper plane? I thought the magnetic field was contained
> > within the toroid and thus minimised external effects. I have completed
> > a couple of projects recently with some of the inductors like that and
> > didn't notice any real problem. Mind you, I guess they might have
> > performed better if not mounted that way :o)
>
> Two potential problems. One is that the field isn't completely
> contained. Leakage is greater with more sparsely wound toroids and ones
> with lower permeability cores. The second is the "one turn effect" -
> There's a net field equivalent to that of a single turn running
> circumferentially around the core. A solid plane parallel to this would
> act as a shorted turn. Both effects would act to lower the Q, and might
> be the cause of some drift or microphonics if the inductor was in an
> oscillator tank.
>
> But to be honest, I've never run any experiments to see just how much of
> a problem it might cause -- it's quite possible you could get away with
> it in some or even most applications. I'll put it on my list of things
> to do when time permits -- unless somebody else is willing to take on
> the job.
>
> Roy Lewallen, W7EL

"One turn effect" in magnetic core computer memory?
Miniature toroids single-stitched and woven with wire:

http://www.fortunecity.com/marina/reach/435/coremem.htm
What's the Amidon number of these cores?

Some electric guitar tube amps used perpendicular
point-to-point wiring in 3-dimensions between
terminal strips to minimize inductive and capactive
crosstalk. They are amazing to see.

--
LIGO: World's largest SWR meter or
the world's most expensive grid dip meter?:
http://www.nytimes.com/2006/05/02/science/space/02hole.html

3702. Re: Class C amps saturating?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 15:00:09 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1152716409.640559.299070@35g2000cwc.googlegroups.com>
Source record: 11203

Ben Jackson wrote:
> On 2006-07-12, Roy Lewallen <w7el@eznec.com> wrote:
> > The Class C transistor amplifiers I design and use most certainly
> > saturate. I believe that's standard practice for solid state amplifiers.
>
> And as a followup, is the power dissipation in the final controlled
> by the duty cycle of the pulses (or number of degrees of conduction
> more generally if the input is not a square wave)?

For operation at HF and higher, it's not always that simple.

For anything but the lowest-speed PWM/class C/class D/class E
operations, the transistor switching time (and the influence of the
load on the switching time) can be a most important contributor to
power dissipated in the device.

An indication of the "bare transistor" switching time can be found on
the datasheets as the delay time, rise time, and most importantly
storage time and fall time.

Very closely related if you are operating anywhere near max power
dissipation or max current is the SOA curve.

Tim.

3703. Surplus Sales of Nebraska

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 15:19:19 UTC
From: "ars_wa8mea@netzero.com" <ars_wa8mea@netzero.com>
Message-ID: <1152717559.138675.155040@m79g2000cwm.googlegroups.com>
Source record: 11204

I, like many hams, have gotten a lot of surplus stuff from Fair Radio Sales in Ohio.

Monday, I discovered Surplus Sales of Nebraska.

Nice people! Old school customer service. The web ordering isn't "modern". But they don't make a lot of money at this, I'm sure. So I.T. people are probably out of the question. But your order gets underway in about 48 hours.....

They told me the owner spends all day on the net trying to hunt down surplus stuff he can buy. So if you have anything, I was told to take a photo of it....and send an e-mail to him. His e-mail address is at the bottom of every web page.

Here's the website for Surplus Sales:

http://www.surplussales.com/

73, Bill - WA8MEA
ars_wa8mea@netsero.com
http://HamRadioFun.com

3704. Re: Toroid or molded inductor in low voltage tank?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 15:24:38 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <ib3ab2loc1jbnse1shuhclhuu9pbbnmpuo@4ax.com>
Source record: 11205

On Wed, 12 Jul 2006 14:45:22 -0000, Xor <mutex@nowhere.com> wrote:

>
>"One turn effect" in magnetic core computer memory?
>Miniature toroids single-stitched and woven with wire:
> http://www.fortunecity.com/marina/reach/435/coremem.htm
>What's the Amidon number of these cores?

Different animal. Those cores have a high remnent magnetism
and a very hard BH curve. The initial ui is far higher than common
ferrites used in RF today. Some were nickel based steels in very
thin foils wound as 50-200mil toroids. The idea is you write them
with a lot of current (for a 50mil core around 2-300ma) and read them
by "writing" them with an apposing polarity pulse, the size and
timing of the pulse returned is a 0 or 1 after amplification and
slicing. The key is you always get a pulse during read but it's about
3-5x bigger and delayed in time (25 to 300ns depending on core size,
temperature and material) _if_ the core was written in with the
opposing magnetic polarity. Typical cores such as used in DEC
pdp-8E had a memory cycle time of 1.6uS (read, modify, write) as a
read is destructive and requires a write cycle to restore the data.
That was typical speed for core memory of the day (1970).

If you want to try this for yourself (1bit memory) a nail or better a
peice of hypersil (transformer core material) with a few turns of
wire, compass and a scope will demonstrate it. The test will be to
find how much DC current will magnetize it then find out how much it
takes to reverse the magnetism (compass helps here). Then you add a
few turn sense winding and watch the pulse that results when you
magnetize it with a given polarity, repeatedly. Then reverse the
power and hit it and the resulting pulse will be later in time and
bigger.

>Some electric guitar tube amps used perpendicular
>point-to-point wiring in 3-dimensions between
>terminal strips to minimize inductive and capactive
>crosstalk. They are amazing to see.

Different animal, thats called cordwood construction and its
also for space savings and affords mechanical ruggedness.
Early aerospace systems were built that way for size. Problem
is they are impossible to maintain and heat is problematic for
larger cordwood.

Neither directly relate to the concept of an tuned toroid inductor
in proxmetry to other conductors/metal cases/ inductors.

Allison

3705. Re: Surplus Sales of Nebraska

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 15:25:59 UTC
From: gary <gary@nospamforme.net>
Message-ID: <44B51485.F82FB5A@nospamforme.net>
Source record: 11206

hi bill,

yes, they have a lot of stuff to check out at the website,
they upgraded it a year or two ago, lots of good photos.

I get my tubes from them, go to tube specials,
12by7a and 6146W JAN circa 1985 by GE.

73 gary

3706. Re: Class C amps saturating?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 15:34:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12ba5jt7mjmr5b7@corp.supernews.com>
Source record: 11207

Ben Jackson wrote:
> On 2006-07-12, Roy Lewallen <w7el@eznec.com> wrote:
>> The Class C transistor amplifiers I design and use most certainly
>> saturate. I believe that's standard practice for solid state amplifiers.
>
> And as a followup, is the power dissipation in the final controlled
> by the duty cycle of the pulses (or number of degrees of conduction
> more generally if the input is not a square wave)?

Not really, although it's a factor. What counts more is the transistor voltage when the current is maximum, and the relationship between V and I during switching. This in turn depends on the nature of the output network among other things. If you really want to find out more about the efficiency of a saturating transistor amplifier, look up some of the papers on "class E" operation by Sokal & Sokal and by Raab. They basically took a time-domain approach to find the optimum conditions for maximum efficiency of a saturating class C amplifier. I've never consciously designed a "class E" amplifier, but have gotten more than 85% collector efficiency from saturating Class C amplifiers at the 10 watt input level.

Roy Lewallen, W7EL

3707. Re: Surplus Sales of Nebraska

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 16:53:19 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <6v9ab21u7i8ss7k07fs47k70emppedh703@4ax.com>
Source record: 11208

ORIGINAL MESSAGE:

On 12 Jul 2006 08:19:19 -0700, "ars_wa8mea@netzero.com"
<ars_wa8mea@netzero.com> wrote:

>Nice people! Old school customer service. The web ordering isn't
>"modern". But they don't make a lot of money at this, I'm sure. So
>I.T. people are probably out of the question. But your order gets
>underway in about 48 hours.....

------------ REPLY SEPARATOR ------------

Bull. SS of N is one place I will never buy from again. They do not remove out-of-stock items from their website when sold out, but they continue to take orders for them. In a couple of days, they notify you the item is no longer in stock, thereby wasting your time you could have spent looking elsewhere. This has happened to me several times.

Actual phone conversation:

Me: Can you check stock on part number xxxx?
Them: No.

No explanation, no "sorry", nothing but "no". These are not my kind of people.

Bill, W6WRT

3708. What is a wire antenna's impedance? -followup

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 16:58:43 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <7T9tg.15155$Wh7.1326@trnddc07>
Source record: 11209

Additional response to OP jo9s8as at yahoo.com:

Using an MFJ259B with a #14 AWG (.064 dia) copper wire 19.4 inchs long stuck into the antenna connector, I measured the following...

f = 146.5 MHz
R = 64 ohms, X = 65 ohms
both hands holding the MFJ

f = 146.5
R = 43 ohms, X = 60 ohms
one hand holding the MFJ

Sat the MFJ down on a brick wall about 3.5 feet high and moved away from it.

f = 146.5
R = 34, X = 44

Same location, adjusted for minimum SWR

f = 153 MHz
R = 61, X = 25

This last reading was a bit difficult as the readings changed with my body location.

I could never determine the sign of the reactance for sure and I was never able to adjust the frequency so that the reactance reading was lower than about 25 ohms.

The MFJ enclosure is about 6.75 x 2.375 x 4 inches.

Cheers,
John

3709. Re: Surplus Sales of Nebraska

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 17:41:53 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <e93c91$cu2$1@theodyn.ncf.ca>
Source record: 11210

Bill Turner (noway@nohow.com) writes:
> ORIGINAL MESSAGE:
>
> On 12 Jul 2006 08:19:19 -0700, "ars_wa8mea@netzero.com"
> <ars_wa8mea@netzero.com> wrote:
>
>>Nice people! Old school customer service. The web ordering isn't
>>"modern". But they don't make a lot of money at this, I'm sure. So
>>I.T. people are probably out of the question. But your order gets
>>underway in about 48 hours.....
>
> ------------ REPLY SEPARATOR ------------
>
> Bull. SS of N is one place I will never buy from again. They do not
> remove out-of-stock items from their website when sold out, but they
> continue to take orders for them. In a couple of days, they notify you
> the item is no longer in stock, thereby wasting your time you could
> have spent looking elsewhere. This has happened to me several times.
>
> Actual phone conversation:
>
> Me: Can you check stock on part number xxxx?
> Them: No.
>
> No explanation, no "sorry", nothing but "no". These are not my kind of
> people.
>
> Bill, W6WRT

I find it odd that the original poster felt a need to post about the
company to three different newsgroups (likely bad enough that he
felt the need, made worse by doing multiple posting), especially
given that the company has been around for decades.

I remember when I first saw an ad for the company years ago, and thought
"wow". But when I got a catalog, I felt the prices were outrageous.
Maybe if you want to rebuild a KWM-2 to out of the box standards you're
willing to pay large prices for the exact knob, but as a surplus outlet
I felt there were better prices elsewhere.

Because when you see the word "surplus", you immediately think of
low prices compared to new stock.

Michael VE2BVW

3710. Re: 2SC2397 Datasheet ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 17:55:38 UTC
From: Satoru Uzawa <satoru_u@removeme.berkeley.edu>
Message-ID: <e93d2q$su5$1@agate.berkeley.edu>
Source record: 11211
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Sphero,

The way Japanese read Chinese chracters is done in two ways.
1. Something resembles the original Chinese pronounciation at the time
Like Hitachi's "Hi" part.
2. Ancient Japanese word adopted to a Chinese chracter with same meaning.
Like Hitachi's "Tachi" part. This means "standing", as you mentioned.

Hitachi is the name of the city where Hitachi originated as a repair
facility for the mine there in 1910.

Mazda is actually "Matsuda", which is composed of "Matsu (pine tree)" and
"Ta (field)". "Ta" changes to "Da" when it is attached to some other
character (sorry, forgot how is called in English). "Matsu" and "Ta" are
both from ancient Japanese words.
Alps is named after the English term "Alps".

Hope I'm not confusing you even more!

Regards,
Satoru

> BTW, any Japanese speakers here? The Japanese characters for Hitachi
> appear to be only two syllables. The characters would be pronounced
> "ri4 li4" in Chinese ('sun' or 'day' and 'stand'), maybe "hi ta" in
> Japanese? Is the "chi" just tacked on in English?
>
> Mazda is the opposite-- it's three syllables in Chinese (and probably
> Japanese as well). And Alps (the component maker)is two syllables in
> Japanese.
>
>
> Best regards,
> Spehro Pefhany

3711. Re: Surplus Sales of Nebraska

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 18:26:00 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1152728760.128333.118180@h48g2000cwc.googlegroups.com>
Source record: 11212

Bill Turner wrote:
> Bull. SS of N is one place I will never buy from again. They do not
> remove out-of-stock items from their website when sold out, but they
> continue to take orders for them. In a couple of days, they notify you
> the item is no longer in stock, thereby wasting your time you could
> have spent looking elsewhere. This has happened to me several times.
>
> Actual phone conversation:
>
> Me: Can you check stock on part number xxxx?
> Them: No.
>
> No explanation, no "sorry", nothing but "no". These are not my kind of
> people.

A lot of old-line surplus businesses do not fare well with the expectations of the modern order-it-today-get-it-tomorrow-morning world.

Some other businesses (e.g. Digikey, which was not always a big business, think back to their QST ads 30+ years ago where their only product was - gasp! - a digital keyer) have made the transition remarkably well and are in fact the benchmark of a modern catalog parts house.

I think it is still valuable to have the "not really sorry" surplus places remain in business though. I've dealt with them long enough that even when I don't get a "sorry" I think I understand where they're coming from - and in many cases I also know who to ask for who knows the real story. The part-time help at the order desk is unfortunately not as good a resource as the guy who's been running the business for 30 or 40 or 50 years.

Tim.

3712. Re: SA602A oscillator load capacitance

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 21:30:45 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrnebaqg5.2evu.ben@saturn.home.ben.com>
Source record: 11213

On 2006-07-11, W3JDR <joe@roccis.com> wrote:
> "Ben Jackson" <ben@ben.com> wrote in message
> news:slrneb8a23.1gh6.ben@saturn.home.ben.com...
>> I'm trying to figure out the load capacitance of the oscillator pins 6
>> and 7 on the SA602A.
>>
>> ...suggests...oscillator is about 8.5p.
>
> All things considered in your case, I'd use the series coupling approach.

I like that idea, since the series capacitance reduces the effect of
unknowns on the oscillator side. Using my estimate above and given my
existing caps, I tried a 33p in series and got to 14.849995MHz, which
is a vast improvement.

Thanks!

--
Ben Jackson AD7GD
<ben@ben.com>
http://www.ben.com/

3713. Re: Surplus Sales of Nebraska

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 21:36:47 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12baqrgiggoemad@corp.supernews.com>
Source record: 11214

<ars_wa8mea@netzero.com> wrote in message
news:1152717559.138675.155040@m79g2000cwm.googlegroups.com...
> They told me the owner spends all day on the net trying to hunt down
> surplus stuff he can buy.

I've always been curious... places like All Electronics and MPJA and Hosfelt and ... that one near Dayton ... where did they find all their surplus *before* the Internet? There must have been publications or something that dealt with getting rid of surplus electronics?

3714. Re: Surplus Sales of Nebraska

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 22:27:30 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <44B57734.13CEB624@earthlink.net>
Source record: 11215

Joel Kolstad wrote:
>
> <ars_wa8mea@netzero.com> wrote in message
> news:1152717559.138675.155040@m79g2000cwm.googlegroups.com...
> > They told me the owner spends all day on the net trying to hunt down
> > surplus stuff he can buy.
>
> I've always been curious... places like All Electronics and MPJA and Hosfelt
> and ... that one near Dayton ... where did they find all their surplus
> *before* the Internet? There must have been publications or something that
> dealt with getting rid of surplus electronics?

They were on auctioneer's mailing lists, as well as the US government surplus sale mailing lists. JIT manufacturing and lots of custom parts has reduced the available surplus quite a bit. I watch Mendelson's (in Dayton) change over the years from mostly military into industrial surplus, and the way they treated customers changed as well when the founders died off an their kids took over.

--
Service to my country? Been there, Done that, and I've got my DD214 to prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

3715. Re: Toroid or molded inductor in low voltage tank?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-12 23:39:54 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1152747594.902517.174460@35g2000cwc.googlegroups.com>
Source record: 11216

Well, it's less of a problem than I'd have guessed. It turns out that I was already set up to measure inductance and Q of little toroid coils, since I'm winding some for some filters. These are on T25-6 cores. The one I measured for the results below has 22 turns of AWG28 wire on it, essentially evenly spaced around the core, with a gap of about 45 degrees between the wire ends. That is, the wire occupies about 7/8 of the core. I won't claim high absolute accuracy, but the Q measurement should be well within 10%, and the relative accuracy (from one condition to the next) should be much better than that. In particular, I can guarantee the direction that Q moves as I add shielding. The first measurement is with the toroid inductor standing vertically off a copper ground plane, with the core at the gap in the winding about a millimeter up from the plane. The second measurement adds a piece of copper foil tape stuck to the ground plane, and bent up at right angles to the ground plane so it's immediately adjacent to one side of the coil. The third measurement folds the copper foil over the top of the toroid and down the other side, so the coil is surrounded by copper foil. These are labelled 1, 2 and 3 below.

Inductance Q
1 1.355uH 160
2 1.349uH 158
3 1.335uH 157

The actual drop in inductance is almost certainly a little more than indicated. That's because the copper foil adds capacitance, which would lower the resonant frequency and be seen by my measurement technique as increased apparent inductance. I could resolve that by making a similar measurement with lower resonating capacitance, but I'm not set up to do that right now. Of course, the lowered inductance is because the shield reduces the volume occupied by the magnetic field, so there is less energy stored in it for a given current. But these measurements tell me that even for the low-mu type 6 cores, there is quite a low external field.

Cheers,
Tom

Roy Lewallen wrote:
> John Hague wrote:
> > On Tue, 11 Jul 2006 08:29:05 +0100, Roy Lewallen <w7el@eznec.com> wrote:
> >
> >> Ben Jackson wrote:
> >>> . . .
> >>> Anyone have any tips for securing fine-wire toroids in

> >>> Ugly/Manhattan construction? :)
> >>
> >> A dab of hot melt glue or RTV. Or a Nylon screw through the middle. Or
> >> a couple of holes in the board and a cable tie. The only thing to
> >> avoid is laying it down flat on a solid copper plane.
> >>
> >> Roy Lewallen, W7EL
> >
> > Roy
> >
> > Excuse my ignorance, but what is the problem with laying a toroid down
> > on a solid copper plane? I thought the magnetic field was contained
> > within the toroid and thus minimised external effects. I have completed
> > a couple of projects recently with some of the inductors like that and
> > didn't notice any real problem. Mind you, I guess they might have
> > performed better if not mounted that way :o)
>
> Two potential problems. One is that the field isn't completely
> contained. Leakage is greater with more sparsely wound toroids and ones
> with lower permeability cores. The second is the "one turn effect" -
> There's a net field equivalent to that of a single turn running
> circumferentially around the core. A solid plane parallel to this would
> act as a shorted turn. Both effects would act to lower the Q, and might
> be the cause of some drift or microphonics if the inductor was in an
> oscillator tank.
>
> But to be honest, I've never run any experiments to see just how much of
> a problem it might cause -- it's quite possible you could get away with
> it in some or even most applications. I'll put it on my list of things
> to do when time permits -- unless somebody else is willing to take on
> the job.
>
> Roy Lewallen, W7EL

3716. Re: Part Pinout

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-13 00:39:05 UTC
From: duane <ke8bg@triad.rr.com>
Message-ID: <JCgtg.7128$4c7.2494@tornado.southeast.rr.com>
Source record: 11217

Arlon Nelson wrote:
> I'm in need of the pinout of a 3SK274 Dual Gate Mosfet. It has one short
> lead and 3 long leads.
> I have check my ARRL handbooks and cannot find out which one is
> source,drain,g1 and g2
>
> Thanks for any help
>
> Nels W0TUP
Nells,

The datasheet is available at http://www.datasheetarchive.com

Duane de ke8bg

3717. Re: Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-13 03:34:58 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12bbfr36ah4def3@corp.supernews.com>
Source record: 11218

"erica" <erica@auto-system.com> wrote in message
news:1152701692.603004.306280@35g2000cwc.googlegroups.com...
> Voltage 220V, 8A fused.

^^^^^^^^^^^^ This is something of a show-stopper for those of us in the US...

3718. Re: Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-13 09:54:21 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <NYGdnS1Qx4fVhSvZnZ2dnUVZ8qCdnZ2d@pipex.net>
Source record: 11219

```
>> Voltage 220V, 8A fused.
>
> ^^^^^^^^^^^^ This is something of a show-stopper for those of us in the
> US...
=======================
With 117 V being the normal nominal domestic voltage , I believe many
premises in the US have nominal 234 V outlets as well , hence 220V
wouldn't be a problem.........let alone be a 'show stopper'

Frank GM0CSZ / KN6WH
```

3719. Re: Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-13 10:02:58 UTC
From: Rex <me@hutmail.invalid>
Message-ID: <996cb21j48aqghhigjficd6upqig3q36mq@4ax.com>
Source record: 11220

On Thu, 13 Jul 2006 10:54:21 +0100, Highland Ham
<abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:

>>> Voltage 220V, 8A fused.
>>
>> ^^^^^^^^^^^^ This is something of a show-stopper for those of us in the
>> US...
>=======================
>With 117 V being the normal nominal domestic voltage , I believe many
>premises in the US have nominal 234 V outlets as well , hence 220V
>wouldn't be a problem.........let alone be a 'show stopper'
>
>Frank GM0CSZ / KN6WH

The normal US home has two sockets that provide 220 V -- one for a
kitchen range and one for a clothes dryer. Both are big (like 30+ amp)
connectors. So, yes, it is a problem.

3720. Re: Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-13 10:06:11 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <nWotg.8114$F8.590@trnddc02>
Source record: 11221

Not true at all!

220V outlets are very rare in residences - no need for them as 220V is only used for very high power equipment. The exceptions would be central air conditioners, electric stoves, electric water heaters, but these are typically hard-wired in a junction box. Run-of-the-mill appliances using up to about 20 amps are usually run on 110VAC

Joe
W3JDR

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message news:NYGdnS1Qx4fVhSvZnZ2dnUVZ8qCdnZ2d@pipex.net...
>>> Voltage 220V, 8A fused.
>>
>> ^^^^^^^^^^^^ This is something of a show-stopper for those of us in
>> the US...
> ========================
> With 117 V being the normal nominal domestic voltage , I believe many
> premises in the US have nominal 234 V outlets as well , hence 220V
> wouldn't be a problem.........let alone be a 'show stopper'
>
> Frank GM0CSZ / KN6WH

3721. Re: Class C amps saturating?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-13 10:16:54 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <q4ptg.8115$F8.7275@trnddc02>
Source record: 11222

>What says the group? Do we saturate in Class C or not?

In order to get any semblence of efficiency, the drive waveform should drive the stage from near-cut-off to near-saturation, somewhat like a switch. However, depending on how hard the sinusoidal input signal drives the "Clacc C" stage, the conduction-angle and thus the duty-cycle of the output (before filtering) will increase or decrease, resulting in variable output power in the load.

Joe
W3JDR

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message news:1152712716.004638.184560@m73g2000cwd.googlegroups.com...
> bill.meara@gmail.com wrote:
>> I'm reading David Rutledge's excellent "The Electronics of Radio."
>>
>> In Chapter 10 -- Power Amplifiers, he discusses Class C amps and says,
>> "In addition, if we drive the transistor clear to saturation, using the
>> transistor as a switch, the dissipated power can be greatly reduced,
>> because the saturation voltage is low. This is Class C
>> amplification..."
>>
>> I'd always throught that in Class C, while you'd operate the device so
>> that it was cutoff during most of the cycle, but not saturated.
>>
>> Is this just a different definition of Class C?
>>
>> I checked back with SSDRA and EMRFD, and didn't see anything about
>> driving Class C amps into saturation?
>>
>> What says the group? Do we saturate in Class C or not?
>
> Saturation is itself a somewhat mushy point. There's a V_sat specified
> on the datasheets but the actual definition of saturated is entirely
> application-sensitive. As a practical matter as you add more base
> current you will go further into saturation (up until you melt the
> base-emitter junction and then all sorts of wacky things ensue).
>
> Choice of drive level and output level and load impedance in a Class C
> amplifier certainly will in many cases put the device into saturation.
>
> Tim.
>

3722. Re: Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-13 10:25:30 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <6eqdnZAnw_wIgivZRVnyig@pipex.net>
Source record: 11223

> 220V outlets are very rare in residences - no need for them as 220V is only
> used for very high power equipment. The exceptions would be central air
> conditioners, electric stoves, electric water heaters, but these are
> typically hard-wired in a junction box. Run-of-the-mill appliances using up
> to about 20 amps are usually run on 110VAC
==========
Does the above mean that radio hams with a 1500 W RF (legal limit) power
Amplifier will need an additional dedicated 220-234 V outlet in their
shack ? Or would such an outlet be available anyway in relatively new
houses ,built after say 199x ?
Just 2 questions .

Frank GM0CSZ / KN6WH

3723. Re: Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-13 11:46:08 UTC
From: Rex <me@hutmail.invalid>
Message-ID: <ajccb2lrj3cvij39d6qm78j9g4la64ojdo@4ax.com>
Source record: 11224

On Thu, 13 Jul 2006 11:25:30 +0100, Highland Ham
<abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:

>> 220V outlets are very rare in residences - no need for them as 220V is only
>> used for very high power equipment. The exceptions would be central air
>> conditioners, electric stoves, electric water heaters, but these are
>> typically hard-wired in a junction box. Run-of-the-mill appliances using up
>> to about 20 amps are usually run on 110VAC
>===================================
>Does the above mean that radio hams with a 1500 W RF (legal limit) power
>Amplifier will need an additional dedicated 220-234 V outlet in their
>shack ? Or would such an outlet be available anyway in relatively new
>houses ,built after say 199x ?
>Just 2 questions .
>
>Frank GM0CSZ / KN6WH
>

Yes

No

3724. Re: Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-13 15:41:37 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12bcqdhhh8nij5d@corp.supernews.com>
Source record: 11225

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:NYGdnS1Qx4fVhSvZnZ2dnUVZ8qCdnZ2d@pipex.net...
>>> Voltage 220V, 8A fused.
>> ^^^^^^^^^^^^ This is something of a show-stopper for those of us in the
>> US...
> ========================
> With 117 V being the normal nominal domestic voltage , I believe many
> premises in the US have nominal 234 V outlets as well , hence 220V wouldn't
> be a problem.........let alone be a 'show stopper'

OK, I should have written it's a show-stopper for *many* people in the US.
:-)

3725. Re: Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-13 22:04:26 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e96g1b$f99$1@avnika.corp.mot.com>
Source record: 11226

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> wrote in message
news:12bbfr36ah4def3@corp.supernews.com...
> "erica" <erica@auto-system.com> wrote in message
> news:1152701692.603004.306280@35g2000cwc.googlegroups.com...
> > Voltage 220V, 8A fused.
>
> ^^^^^^^^^^^^ This is something of a show-stopper for those of us in the
> US...
>

ALL us homes have 220 brought to the fuse / breaker box. It is a 220 volt, center tapped transformer on the pole and all three lines are brought to the breaker box. . Each half of this winding supplies the 120, 110, 117, whatever you choose to call it. Half of the circuits in your home come from one of the winding ends (phase) and the center tap is connected to the common; the other half come from the other "phase".. Therefore you have two phases of 120 and they are 180 degrees apart. Some call it single phase, I think it should be called two phase...cuz it is. (:-)

If you really need to get 220 quickly and easily [and do not draw more than than the 15 or 20 amps of your brealers] you can find two outlets on the two phases and get one half of the 220 from each.
I did this for a visiting relative from Germany so he could run his electric shaver. It is still the talk of the relatives...
Since I built my house and did the wiring with Dad's help, I kept a drawing of all the circuits, I knew that I already had two phases in the guest room. A couple of cheap extension cords was all it took, with one blade of a "three prong adaprer" inserted into each hot side of each extension. Guest 220 in 5 minutes!

I'd feel ok drawing 8A this way, but you shouldn't try this at home...I'm a professional. (:-)

Linears should have either
1- both 110 and 220 internal wiring options, or
2- just 220

But 120 is is a real stretch.

73, Steve, K9DCI

3726. Off-Topic question rgarding marketing

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 00:02:16 UTC
From: David <websales@orbitcoms.com>
Message-ID: <caBtg.4493$tE5.4327@news-server.bigpond.net.au>
Source record: 11228

Hi,

I was wondering if anyone here might have some good ideas regarding promotion of our web site.

The company was formed mainly from a technical base and one of the weaknesses is learning how to let others know we are here.

I believe we have an excellent range of wireless solutions that have been designed to provide robust and reliable performance. The initial customers be have serviced to date are happy with our products but we need a larger customer base to survive.

The site was constructed by myself but as I am not particularly experienced with web design it has plenty of room for improvement.

Currently the only advertising I use is per click on yahoo and google.

Thanks in advance for any constructive comments that may help point me in the right direction.

Even some comments on whether the site is appearing correctly in your browser or comments on ease of use, clarity etc. (Still completing photos and datasheets so some pages are acting more as place holders while I complete the information.

--

Kind Regards

David

ORBIT COMMUNICATIONS Pty Ltd - Wireless Solutions that Work
(Telemetry, Control, Monitoring, Security, HVAC ...)
A.C.N. 107 441 869

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PO Box 4474 Lakehaven
NSW 2263, AUSTRALIA
Phone: 61-2-4393-3627
Fax : 61-2-4393-3685
Mobile: 61-413-715-986

3727. Re: Class C amps saturating?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 00:08:40 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <cgBtg.9617$F8.7229@trnddc02>
Source record: 11229

The 'power dissipation' in a Cass C stage is primarily a function of what percentage of the cycle the stage is neither in saturation nor cutoff. A perfectly rectangular output switching waveform of any duty cycle , if it could be achieved, would result in nearly 100% efficiency.

Joe
W3JDR

"Ben Jackson" <ben@ben.com> wrote in message
news:slrneb9a4j.1t6t.ben@saturn.home.ben.com...
> On 2006-07-12, Roy Lewallen <w7el@eznec.com> wrote:
>> The Class C transistor amplifiers I design and use most certainly
>> saturate. I believe that's standard practice for solid state amplifiers.
>
> And as a followup, is the power dissipation in the final controlled
> by the duty cycle of the pulses (or number of degrees of conduction
> more generally if the input is not a square wave)?
>
> --
> Ben Jackson AD7GD
> <ben@ben.com>
> http://www.ben.com/

3728. Re: Surplus Sales of Nebraska

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 01:23:39 UTC
From: Mike Burch <Libertybell7@mchsi.com>
Message-ID: <vmCtg.1078582$xm3.76643@attbi_s21>
Source record: 11230

I agree, I would only shop there if I had surplus dollars and surplus
time. I don't have either. Their stuff is extremely expensive and
there is always an alternative if you look hard enough. Mike K8MB
Apache Junction, AZ

>
> Bull. SS of N is one place I will never buy from again. They do not
> remove out-of-stock items from their website when sold out, but they
> continue to take orders for them. In a couple of days, they notify you
> the item is no longer in stock, thereby wasting your time you could
> have spent looking elsewhere. This has happened to me several times.
>
> Actual phone conversation:
>
> Me: Can you check stock on part number xxxx?
> Them: No.
>
> No explanation, no "sorry", nothing but "no". These are not my kind of
> people.
>
> Bill, W6WRT

3729. Re: Class C amps saturating?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 02:45:55 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <DzDtg.17708$Wh7.10655@trnddc07>
Source record: 11231

W3JDR wrote:
>
> In order to get any semblence of efficiency, the drive waveform should drive
> the stage from near-cut-off to near-saturation, somewhat like a switch.
> However, depending on how hard the sinusoidal input signal drives the "Clacc
> C" stage, the conduction-angle and thus the duty-cycle of the output (before
> filtering) will increase or decrease, resulting in variable output power in
> the load.
>
> Joe
> W3JDR

Who said the drive had to be sinusoidal? If the final can run almost square
wave, why can't the driver?

3730. Re: Class C amps saturating?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 04:23:20 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <FZmdnbpjh56IgCrZnZ2dnUVZ8qqdnZ2d@bt.com>
Source record: 11232

> The 'power dissipation' in a Cass C stage is primarily a function of
what
> percentage of the cycle the stage is neither in saturation nor
cutoff. A
> perfectly rectangular output switching waveform of any duty cycle ,
if it
> could be achieved, would result in nearly 100% efficiency.
>
> Joe
> W3JDR
==========

Unfortunately, it makes a terrible mess of any modulation.

To avoid distortion and non-linearity, saturation can be permitted
only on the extreme peaks of the modulated driving waveform. Class-C
is ruled out. Class-B or Class-AB prevails.

Reg.

3731. Re: Class C amps saturating?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 06:22:07 UTC
From: dplatt@radagast.org
Message-ID: <12bee0fpcoe7p48@corp.supernews.com>
Source record: 11233

In article <FZmdnbpjh56IgCrZnZ2dnUVZ8qqdnZ2d@bt.com>,
Reg Edwards <g4fgq,regp@ZZZbtinternet,com> wrote:

>==========
>
>Unfortunately, it makes a terrible mess of any modulation.
>
>To avoid distortion and non-linearity, saturation can be permitted
>only on the extreme peaks of the modulated driving waveform. Class-C
>is ruled out. Class-B or Class-AB prevails.

My recollection is that Classes B and AB are used for AM and SSB,
while Class C works fine for CW and for FM.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3732. Re: Class C amps saturating?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 09:32:18 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <CwJtg.9654$F8.8969@trnddc02>
Source record: 11234

Yes, exactly. We just assume sinusoidal drive because that's the most common
case

Joe
W3JDR

"John - KD5YI" <groups5munge@verizon.net> wrote in message
news:DzDtg.17708$Wh7.10655@trnddc07...
> W3JDR wrote:
>>
>> In order to get any semblence of efficiency, the drive waveform should
>> drive the stage from near-cut-off to near-saturation, somewhat like a
>> switch. However, depending on how hard the sinusoidal input signal drives
>> the "Clacc C" stage, the conduction-angle and thus the duty-cycle of the
>> output (before filtering) will increase or decrease, resulting in
>> variable output power in the load.
>>
>> Joe
>> W3JDR
>
>
> Who said the drive had to be sinusoidal? If the final can run almost
> square wave, why can't the driver?

3733. Re: Class C amps saturating?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 09:36:18 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <mAJtg.9655$F8.3737@trnddc02>
Source record: 11235

>Unfortunately, it makes a terrible mess of any modulation

Reg,

Well not ANY modulation, just signals with amplitude modulation components. But this is a well-known property of Class C amplifiers, so what's the point?. If we want to talk about Class B or Class A, we should start a new thread.

Joe
W3JDR

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:FZmdnbpjh56IgCrZnZ2dnUVZ8qqdnZ2d@bt.com...
>
>> The 'power dissipation' in a Cass C stage is primarily a function of
> what
>> percentage of the cycle the stage is neither in saturation nor
> cutoff. A
>> perfectly rectangular output switching waveform of any duty cycle ,
> if it
>> could be achieved, would result in nearly 100% efficiency.
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>> Joe
>> W3JDR
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> Unfortunately, it makes a terrible mess of any modulation.
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> To avoid distortion and non-linearity, saturation can be permitted
> only on the extreme peaks of the modulated driving waveform. Class-C
> is ruled out. Class-B or Class-AB prevails.
> ----
> Reg.
>
>

3734. toroid cores?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 09:42:06 UTC
From: nospam@geniegate.com
Message-ID: <Lc1152868412193490xc2a48c@air.tunestar.net>
Source record: 11236

Hi Newsgroup,

Been trying to make a regen radio out of garbage. So far, I seem to have all the parts and it almost seems to work, however, I'm a bit confused about the inductance of toroid cores.

I've tried to use one of those things from the back of a monitor (presumably to prevent RF interference) as one of the coils and another adjustable coil from another device, to no avail. It has no markings and it appears to be a ferrite device in the shape of a ring.

Anyone know an easy way to figure out how many turns to get (presumably 300mh?) from one of these? Can I measure it with a ruler and some how get a formula for the number of turns / mH ? Are these really bad deviced to use? (the thought occurs I must admit, that if it was meant to BLOCK rf, using would be illogical)

Here's the circuit I'm basing it on:

http://www.tricountyi.net/~randerse/regen.htm

If I inject a signal directly into the coil (in place of his amplified RF "front stage") I can pick it up, but no oscillation and lousy tuning. (comes in on pretty much 1/2 the dial) I'm assuming this has something to do with the tank circuit. (I have two air capacitors totalling around 360pf one from a console stereo, the other from some place I can't remember where..)

He's got 25T and 23T specified for a T-50-2 coil. Closest research on these that I can find is that this should produce about 300mh (but I could be wrong! anyone know for sure what the mH is on that?) This seems to make sense from everything I've read so far, but.. I have no way to measure it.

If I end up using an air core, would I keep the ratio of turns for the tickler and injection coil? (where he has 3 and 5 turns spec'd) ? It's my assumption that in these two smaller coils, it's a step up transformer so it'd be a matter of ratios, am I correct in this assumption?

Every bit of the circuit should come from garbage (the MPF102's I had to buy, but thats it) Even the coil wire is from the transformer of a broken microwave, the LM386 chip used for audio (and some resistors) will come from an old modem and the pot is a 500k pot, (from a console) wired in parallel with a ~>10k resistor to give a range between 0 - 10k ohms.

The main point is to build it from garbage, I already have a radio and don't really "need" one, but.. as I once built a tube version of this (far simpler) doing one in solid state appeals to me.

Jamie
--

http://www.geniegate.com Custom web programming
guhzo_42@lnubb.pbz (rot13) User Management Solutions

3735. Re: toroid cores?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 11:15:48 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <r-adnd-qbY164SrZnZ2dnUVZ_radnZ2d@bright.net>
Source record: 11237

Check this page from Amidon Associates. They are a great supplier of
toroids to the ham community!

http://www.amidoncorp.com/aai_ironpowdercores.htm

Looks to me like 25 turns on a T-50-2 core will give about 3 MICRO
Henries according to Amidon's formula...

Scott
N0EDV

Jamie wrote:
> Hi Newsgroup,
>
> Been trying to make a regen radio out of garbage. So far, I seem to have
> all the parts and it almost seems to work, however, I'm a bit confused
> about the inductance of toroid cores.
>
> I've tried to use one of those things from the back of a monitor (presumably
> to prevent RF interference) as one of the coils and another adjustable coil
> from another device, to no avail. It has no markings and it appears to be
> a ferrite device in the shape of a ring.
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> Anyone know an easy way to figure out how many turns to get (presumably 300mh?)
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> for the number of turns / mH ? Are these really bad deviced to use? (the thought
> occurs I must admit, that if it was meant to BLOCK rf, using would be illogical)
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> http://www.tricountyi.net/~randerse/regen.htm
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> two air capacitors totalling around 360pf one from a console stereo, the other from
> some place I can't remember where..)
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> He's got 25T and 23T specified for a T-50-2 coil. Closest research on these that
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> for sure what the mH is on that?) This seems to make sense from everything I've read
> so far, but.. I have no way to measure it.
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> If I end up using an air core, would I keep the ratio of turns for the tickler and
> injection coil? (where he has 3 and 5 turns spec'd) ? It's my assumption that

> in these two smaller coils, it's a step up transformer so it'd be a matter of ratios,
> am I correct in this assumption?
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> Every bit of the circuit should come from garbage (the MPF102's I had to buy, but thats
> it) Even the coil wire is from the transformer of a broken microwave, the LM386 chip used
> for audio (and some resistors) will come from an old modem and the pot is a 500k pot,
> (from a console) wired in parallel with a ~>10k resistor to give a range between 0 - 10k
ohms.
>
> The main point is to build it from garbage, I already have a radio and don't
> really "need" one, but.. as I once built a tube version of this (far simpler)
> doing one in solid state appeals to me.
>
> Jamie

3736. Re: Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 11:24:57 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <kaSdnXVj7qGf4irZRVny2w@pipex.net>
Source record: 11238

> I knew that I already had two phases in the guest room.
> A couple of cheap extension cords was all it took, with one blade of a
> "three prong adaprer" inserted into each hot side of each extension. Guest
> 220 in 5 minutes!
>
> I'd feel ok drawing 8A this way, but you shouldn't try this at home...I'm a
> professional. (:-)
>
> Linears should have either
> 1- both 110 and 220 internal wiring options, or
> 2- just 220
>
> But 120 is is a real stretch.
======================
Steve , Tnx for providing the 'full' picture.
Assuming a 67 percent efficiency (am I too pessimistic?) a legal RF
power amp would need 1.5*1500 = 2250 W (say overall maximum of 2400W)
which at 220 V means 12 Amperes.
So, a shack without 220 -234 V power supply would need a dedicated
supply from the switchboard .

Here in the UK we do have 115V industrial power tools,which need to be
used with a 230/115V (usually portable) safety transformer with the
secondary having an earthed centre tap ,such that in the event of a
'fault' personnel is exposed to a (peak) voltage not exceeding 1.4*58 =
81V which is considered sufficiently low to prevent electrocution.

The nominal domestic supply voltage within EU countries has now been
'normalised' to 230V ,meaning that (within a voltage band) the same
equipment can be used in all the countries.
Before , the UK had 240V and continental countries 220V . This often
meant that for example an (clothing) iron for 220 V had a very limited
life when used in Britain .
The voltage at my place (rural area) is nowadays usually 236-237 V
,whereas earlier it was up to 250 V or sometimes even higher.

Frank GM0CSZ / KN6WH

3737. Re: Class C amps saturating?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 11:32:35 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <yeKdnZyXa8YvHCrZnZ2dnUVZ8s6dnZ2d@bt.com>
Source record: 11239

"W3JDR" wrote
> The 'power dissipation' in a Cass C stage is primarily a function of
what
> percentage of the cycle the stage is neither in saturation nor
cutoff. A
> perfectly rectangular output switching waveform of any duty cycle ,
if it
> could be achieved, would result in nearly 100% efficiency.
>
> Joe
> W3JDR
=======================================
All power amplifiers have a tuned circuit in the plate. It is
essential to reduce output power contained in the harmonics.

In any case, power in the harmonics is wasted power.

With a tuned circuit in the plate it is impossible to achieve a
rectangular voltage output waveform. It is always a sinewaveform.

A rectangular plate current in conjunction with a tuned load always
causes harmonic power to be wasted at the plate.

So one might just as well use a sinusoidal driving waveform, Class-C
or not. It's easier. It also avoids generating and wasting harmonic
power in the driver.

Reg

3738. Re: Surplus Sales of Nebraska

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 11:35:44 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <WvidnTF6brToRSvZnZ2dnUVZ_oOdnZ2d@comcast.com>
Source record: 11227

<ars_wa8mea@netzero.com> wrote in message
news:1152717559.138675.155040@m79g2000cwm.googlegroups.com...
> I, like many hams, have gotten a lot of surplus stuff from Fair Radio
> Sales in Ohio.
>
> Monday, I discovered Surplus Sales of Nebraska.

I purchase polystyrene caps from them.

Speaking of Fair Radio Sales -- I bought a BC-348 from them in 1996 --

3739. Re: toroid cores?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 11:42:47 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1152877367.450775.256530@h48g2000cwc.googlegroups.com>
Source record: 11240

Jamie wrote:

> I've tried to use one of those things from the back of a monitor (presumably
> to prevent RF interference) as one of the coils and another adjustable coil
> from another device, to no avail. It has no markings and it appears to be
> a ferrite device in the shape of a ring.
>
> Anyone know an easy way to figure out how many turns to get (presumably 300mh?)
> from one of these? Can I measure it with a ruler and some how get a formula
> for the number of turns / mH ? Are these really bad deviced to use? (the thought
> occurs I must admit, that if it was meant to BLOCK rf, using would be illogical)

Yes, I would expect they would be really bad ! If you knew the
permeability of the material used then measuring with a ruler and
applying some math (I don't know the formulas) would in theory get you
an iductance calculation. But the materials used for these EMI chokes
generally has too high a permeability to make inductors with convenient
numbers of turns for the HF bands, and generally is quite lossy so the
resulting inductors will have low Q. It is extremely unlikely to work.

Since you don't want to buy any parts, I would recommend once you
figure out the required inductance from the Amidon formulas, just wind
air core coils (well, some sort of low loss former like a piece of
plastic tubing is probably needed) with the same inductance.
Inductance formulas for air core coils are available everywhere in
handbooks and on the web. You might have to play with the number of
turns in the feedback link though, as the coupling between it and the
main coil will not be as tight in an air core coil as in the toroid. I
would start with the same ratio of turns or maybe add a bit to the
feedback coil.

73,
Steve VE3SMA

3740. Re: toroid cores?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 13:51:35 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <ntednRlpxYvWPCrZnZ2dnUVZ_rSdnZ2d@web-ster.com>
Source record: 11241

skavanagh72nospam@yahoo.ca wrote:
> Jamie wrote:
>
>
>>I've tried to use one of those things from the back of a monitor (presumably
>>to prevent RF interference) as one of the coils and another adjustable coil
>>from another device, to no avail. It has no markings and it appears to be
>>a ferrite device in the shape of a ring.
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>>for the number of turns / mH ? Are these really bad deviced to use? (the thought
>>occurs I must admit, that if it was meant to BLOCK rf, using would be illogical)
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> Yes, I would expect they would be really bad ! If you knew the
> permeability of the material used then measuring with a ruler and
> applying some math (I don't know the formulas) would in theory get you
> an iductance calculation. But the materials used for these EMI chokes
> generally has too high a permeability to make inductors with convenient
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> air core coils (well, some sort of low loss former like a piece of
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> handbooks and on the web. You might have to play with the number of
> turns in the feedback link though, as the coupling between it and the
> main coil will not be as tight in an air core coil as in the toroid. I
> would start with the same ratio of turns or maybe add a bit to the
> feedback coil.
>
> 73,
> Steve VE3SMA
>
If it's a broadcast band radio a toilet paper tube will work well. If
ham band then something smaller like a sample-size shampoo bottle.

Does it count as garbage if you buy the stuff so you'll have the
'garbage' when you're done?

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

3741. Re: toroid cores?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 14:05:49 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <309fb21i39n8qlhrrnobbpj5jc1u26pq5s@4ax.com>
Source record: 11242

On Fri, 14 Jul 2006 09:42:06 GMT, nospam@geniegate.com (Jamie) wrote:

>Hi Newsgroup,
>
>Been trying to make a regen radio out of garbage. So far, I seem to have
>all the parts and it almost seems to work, however, I'm a bit confused
>about the inductance of toroid cores.
>
>I've tried to use one of those things from the back of a monitor (presumably
>to prevent RF interference) as one of the coils and another adjustable coil
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>a ferrite device in the shape of a ring.
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>for the number of turns / mH ? Are these really bad deviced to use? (the thought
>occurs I must admit, that if it was meant to BLOCK rf, using would be illogical)
>
>Here's the circuit I'm basing it on:
>
>http://www.tricountyi.net/~randerse/regen.htm
>
>If I inject a signal directly into the coil (in place of his amplified RF "front
>stage") I can pick it up, but no oscillation and lousy tuning. (comes in on pretty
>much 1/2 the dial) I'm assuming this has something to do with the tank circuit. (I have
>two air capacitors totalling around 360pf one from a console stereo, the other from
>some place I can't remember where..)
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>He's got 25T and 23T specified for a T-50-2 coil. Closest research on these that
>I can find is that this should produce about 300mh (but I could be wrong! anyone know
>for sure what the mH is on that?) This seems to make sense from everything I've read
>so far, but.. I have no way to measure it.

23-25 turns (or 50 total) on a T50-2 would be more like 20 uH
(micro henries).

If you using a ferite intended for noise suppression then its likely
43 ot 71 material and not suited for RF tuned circuits.

>If I end up using an air core, would I keep the ratio of turns for the tickler and
>injection coil? (where he has 3 and 5 turns spec'd) ? It's my assumption that
>in these two smaller coils, it's a step up transformer so it'd be a matter of ratios,
>am I correct in this assumption?
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>Every bit of the circuit should come from garbage (the MPF102's I had to buy, but thats

>it) Even the coil wire is from the transformer of a broken microwave, the LM386 chip used
>for audio (and some resistors) will come from an old modem and the pot is a 500k pot,
>(from a console) wired in parallel with a ~>10k resistor to give a range between 0 - 10k
ohms.
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>The main point is to build it from garbage, I already have a radio and don't
>really "need" one, but.. as I once built a tube version of this (far simpler)
>doing one in solid state appeals to me.

Why not wind the coil on a toilet paper cardboard tube, pill bottle,
or peice of PVC pipe scrap?

Allison

>
>Jamie

3742. Re: toroid cores?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 14:32:13 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <f96dnZSS3uxMNyrZnZ2dnUVZ_t-dnZ2d@web-ster.com>
Source record: 11243

Jamie wrote:
> Hi Newsgroup,
>
> Been trying to make a regen radio out of garbage. So far, I seem to have
> all the parts and it almost seems to work, however, I'm a bit confused
> about the inductance of toroid cores.
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> two air capacitors totalling around 360pf one from a console stereo, the other from
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> really "need" one, but.. as I once built a tube version of this (far simpler)
> doing one in solid state appeals to me.
>
> Jamie

There are toroid cores that would work quite well for this, but the characteristics of the core depend heavily on the core material. It can be very difficult to characterize a mystery core.

I suggest you look in the ARRL handbook for the appropriate coil formula (or search the web) and make a single-layer air core coil on an appropriate-sized form.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

3743. Re: toroid cores?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 14:49:48 UTC
From: nospam@geniegate.com
Message-ID: <Lc1152887174193490x12d5270@air.tunestar.net>
Source record: 11244

In <ntednRlpxYvWPCrZnZ2dnUVZ_rSdnZ2d@web-ster.com>,
Tim Wescott <tim@seemywebsite.com> mentions:
>skavanagh72nospam@yahoo.ca wrote:
>> Jamie wrote:
>>
>>
>>>I've tried to use one of those things from the back of a monitor (presumably
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>> 73,
>> Steve VE3SMA
>>
>If it's a broadcast band radio a toilet paper tube will work well. If
>ham band then something smaller like a sample-size shampoo bottle.
>
>Does it count as garbage if you buy the stuff so you'll have the
>'garbage' when you're done?

LOL!

I was sooo tempted to buy 0.05 resistors after burning my fingers trying to extract them from a modem.. :-)

I read some place, it's better to use a larger diameter coil if at all possible, but the formulas I've run across for calculating uH (I always get my milli's and micros confused!) seem to indicate in either case, I'd need the same amount of wire.

Lots of things puzzle me about this, for example in this circuit:

http://www.tricountyi.net/~randerse/regen.htm

I don't see a "grid leak" the way I had used in the tube model.

While this circuit:

http://www.electronics-tutorials.com/receivers/regen-radio-receiver.htm

Seems to have one feeding the gate of the FET. (never was real clear on what it did exactly)

(I can't use the latter circuit as it has more parts and I don't want to introduce a 3rd variable cap.)

Jamie
--
http://www.geniegate.com Custom web programming
guhzo_42@lnubb.pbz (rot13) User Management Solutions

3744. Re: toroid cores?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 15:13:06 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <K7CdnSpNjfn8KCrZRVnyug@bt.com>
Source record: 11245

The inductance of a toroid, in MICRO-henries, is -

L = 0.6283 * Mu * Square(N) * B

where

B = D1 - Squareroot(Square(D1) - Square(D2))

Mu = permeability of core material.
N = number of turns.
D1 = mean diameter of ring in metres.
D2 = diameter of ferrite core material in metres.

If the core is not circular, use the equivalent diameter which has the same cross-sectional area.

To calculate number of turns just rearrange the formula.

To obtain high Q, you MUST use HF grade permeability material.

Permeability can be calculated using the formula by winding some turns on a core and measuring inductance. A very good instrument to use is an Autek RF Analyst-1

But, of course, if you are able to measure inductance there will be no need to calculate permeability. You can calculate the required number of turns immediately.

Reg.

3745. Re: toroid cores?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 15:24:16 UTC
From: nospam@geniegate.com
Message-ID: <Lc1152888594193490x12c5620@air.tunestar.net>
Source record: 11246

In <r-adnd-qbY164SrZnZ2dnUVZ_radnZ2d@bright.net>,
Scott <acepilot@bloomer.net> mentions:
>Check this page from Amidon Associates. They are a great supplier of
>toroids to the ham community!
>
>http://www.amidoncorp.com/aai_ironpowdercores.htm
>
>Looks to me like 25 turns on a T-50-2 core will give about 3 MICRO
>Henries according to Amidon's formula...

Whew! thanks!

My assumption that it was 300 yielded some pretty far out number of turns for air coils, like 72 or something I seem to recall.

Looks more like 7-8 turns on a cylinder 2.5" in diameter? (that seems awful small to me) If the tickler coil is currently three turns, would I just leave it at that? Still, it's nice.. small enough I can probably use the "good wire" for shortwave. :-) (FWIW old microwaves are apparently an excellent source if copper wire, I'm tempted to use some of it for an antenna)

If the capacitance in the tank circuit is ~25-400pF, and I use 3uH then the frequency response will be about: 4.5mhz - 14mhz ? (does that sound right?)

This must be why the others I'd looked at involve pluggable or tapped coils?

(In general, is there an ideal ratio of capacitance to inductance for a given range? IE: could I just add parallel capacitance to lower the frequency or is it better to increase the coil or.. both? I notice as I run through some calculations, I need a LOT more uH to cover a smaller and smaller range of frequencies the lower I get.

He states on his page that it picks up MW, (which is actually what I'm mostly interested in) but.. didn't mention anything about mixed coils.

His circuit involves a "front end RF amp" (for a total of two coils) when using air, do I need to some how shield this second coil? I'm assuming it if it's perpendicular to the main one, thats enough?)

Was hoping to avoid a large air coil because as it is now, the everything except the capacitors (and AF stuff) fit in a tunafish can for shielding. :-/

Still, the whole point is to assemble it from garbage. I might splurge and get some mechanical stuff for the tuner, but.. have to get it working first! (sure am glad I kept that signal injector, it's been really handy for this!)

Jamie
--
http://www.geniegate.com Custom web programming
guhzo_42@lnubb.pbz (rot13) User Management Solutions

3746. Re: toroid cores?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 16:05:42 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <qhPtg.14$Ss2.1@trnddc01>
Source record: 11247

nospam@nouce.bellatlantic.net wrote:
> On Fri, 14 Jul 2006 09:42:06 GMT, nospam@geniegate.com (Jamie) wrote:
>
>
>>Hi Newsgroup,
>>
>>Been trying to make a regen radio out of garbage. So far, I seem to have
>>all the parts and it almost seems to work, however, I'm a bit confused
>>about the inductance of toroid cores.
>>
>>I've tried to use one of those things from the back of a monitor (presumably
>>to prevent RF interference) as one of the coils and another adjustable coil
>
>>from another device, to no avail. It has no markings and it appears to be
>
>>a ferrite device in the shape of a ring.
>>
>>Anyone know an easy way to figure out how many turns to get (presumably 300mh?)
>
>>from one of these? Can I measure it with a ruler and some how get a formula
>
>>for the number of turns / mH ? Are these really bad deviced to use? (the thought
>>occurs I must admit, that if it was meant to BLOCK rf, using would be illogical)
>>
>>Here's the circuit I'm basing it on:
>>
>>http://www.tricountyi.net/~randerse/regen.htm
>>
>>If I inject a signal directly into the coil (in place of his amplified RF "front
>>stage") I can pick it up, but no oscillation and lousy tuning. (comes in on pretty
>>much 1/2 the dial) I'm assuming this has something to do with the tank circuit. (I have
>>two air capacitors totalling around 360pf one from a console stereo, the other from
>>some place I can't remember where..)
>>
>>He's got 25T and 23T specified for a T-50-2 coil. Closest research on these that
>>I can find is that this should produce about 300mh (but I could be wrong! anyone know
>>for sure what the mH is on that?) This seems to make sense from everything I've read
>>so far, but.. I have no way to measure it.
>
>
> 23-25 turns (or 50 total) on a T50-2 would be more like 20 uH
> (micro henries).

Hi, Allison -

I think you erred slightly. It's about 3 uH at 25 turns on a T-50-2. See Scott's post in this thread for a link to data and equation.

Cheers,
John

3747. Re: toroid cores?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 16:41:04 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <o5ifb2tffj3uh580evoae93970a7foqsiu@4ax.com>
Source record: 11148

On Fri, 14 Jul 2006 16:05:42 GMT, John - KD5YI
<groups5munge@verizon.net> wrote:

>nospam@nouce.bellatlantic.net wrote:
>> On Fri, 14 Jul 2006 09:42:06 GMT, nospam@geniegate.com (Jamie) wrote:
>>
>>
>>>Hi Newsgroup,
>>>
>>>Been trying to make a regen radio out of garbage. So far, I seem to have
>>>all the parts and it almost seems to work, however, I'm a bit confused
>>>about the inductance of toroid cores.
>>>
>>>I've tried to use one of those things from the back of a monitor (presumably
>>>to prevent RF interference) as one of the coils and another adjustable coil
>>
>>>from another device, to no avail. It has no markings and it appears to be
>>
>>>a ferrite device in the shape of a ring.
>>>
>>>Anyone know an easy way to figure out how many turns to get (presumably 300mh?)
>>
>>>from one of these? Can I measure it with a ruler and some how get a formula
>>
>>>for the number of turns / mH ? Are these really bad deviced to use? (the thought
>>>occurs I must admit, that if it was meant to BLOCK rf, using would be illogical)
>>>
>>>Here's the circuit I'm basing it on:
>>>
>>>http://www.tricountyi.net/~randerse/regen.htm
>>>
>>>If I inject a signal directly into the coil (in place of his amplified RF "front
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>>>much 1/2 the dial) I'm assuming this has something to do with the tank circuit. (I have
>>>two air capacitors totalling around 360pf one from a console stereo, the other from
>>>some place I can't remember where..)
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>>>He's got 25T and 23T specified for a T-50-2 coil. Closest research on these that
>>>I can find is that this should produce about 300mh (but I could be wrong! anyone know
>>>for sure what the mH is on that?) This seems to make sense from everything I've read
>>>so far, but.. I have no way to measure it.
>>
>>
>> 23-25 turns (or 50 total) on a T50-2 would be more like 20 uH

>> (micro henries).
>
>
>Hi, Allison -
>
>I think you erred slightly. It's about 3 uH at 25 turns on a T-50-2. See
>Scott's post in this thread for a link to data and equation.

For 23-25 yes, but I also postulated that was a tapped coil of 50T
total. then I'm closer. But it was an eyeball guess as I didn't
calculate it. I was only off by ~7 rather than 10,000. ;)

Allison
>
>Cheers,
>John

3748. FS: PL-259 silver plated contact & body, Teflon insulation $1.67 each.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 19:07:03 UTC
From: AAA RF Products <sales@aaarfproducts.com>
Message-ID: <zXRtg.12069$6w.4108@fed1read11>
Source record: 11149
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.cb,sci.electronics.components

For Sale: Finest quality PL-259's silver plated contact & body, Teflon insulation, nickel plated coupling nut. Unlimited quantity available.

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100 to 499----$1.50 each

500+----------$1.40 each

Immediate shipment, FOB: San Clemente, CA

No minimum order.

No handling charges.

Please email sales@AAARFProducts.com

or call 949 481 3154 (San Clemente, CA, USA)

See our catalog @ www.aaarfproducts.com

3749. Mains Was: Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 21:22:20 UTC
From: "Steve N." <stuevue.nouskuowuicuz@moutouroula.com>
Message-ID: <e991uc$n7n$1@avnika.corp.mot.com>
Source record: 11150

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:kaSdnXVj7qGf4irZRVny2w@pipex.net...
> > I knew that I already had two phases in the guest room.
> > A couple of cheap extension cords was all it took, with one blade of a
> > "three prong adaprer" inserted into each hot side of each extension.
Guest
> > 220 in 5 minutes!
> >
> > I'd feel ok drawing 8A this way, but you shouldn't try this at
home...I'm a
> > professional. (:-)
> >
> > Linears should have either
> > 1- both 110 and 220 internal wiring options, or
> > 2- just 220
> >
> > But 120 is is a real stretch.
> ======================
> Steve , Tnx for providing the 'full' picture.
> Assuming a 67 percent efficiency (am I too pessimistic?) a legal RF
> power amp would need 1.5*1500 = 2250 W (say overall maximum of 2400W)
> which at 220 V means 12 Amperes.
> So, a shack without 220 -234 V power supply would need a dedicated
> supply from the switchboard .
>
> Here in the UK we do have 115V industrial power tools,which need to be
> used with a 230/115V (usually portable) safety transformer with the
> secondary having an earthed centre tap ,such that in the event of a
> 'fault' personnel is exposed to a (peak) voltage not exceeding 1.4*58 =
> 81V which is considered sufficiently low to prevent electrocution.
>
> The nominal domestic supply voltage within EU countries has now been
> 'normalised' to 230V ,meaning that (within a voltage band) the same
> equipment can be used in all the countries.
> Before , the UK had 240V and continental countries 220V . This often
> meant that for example an (clothing) iron for 220 V had a very limited
> life when used in Britain .
> The voltage at my place (rural area) is nowadays usually 236-237 V
> ,whereas earlier it was up to 250 V or sometimes even higher.
>
> Frank GM0CSZ / KN6WH

In the cell phone base business, everything (almost) runs off battery
systems.

There were two cases where Development Engineers not knowing about our mains system, where developing products never before run off the mains.
In one, the presence of "both" 120 and 240 was causing some spike absorbers, designed for 120 systems, to pop from the 240.

The other was a small base station which had its power input connections designed by Mechanical engineers. It came to my test group without the power cord connected to the black (protorype) "barrier terminal strip". One of the Develpoment Engineers called another for the connections and made them. It was plugged in, but wouldn't work. Several Engineers started checking and discuvered that the serial port on the control laptop had been fried. Several of us put our noses to the connector and could smell the burned components on the unit. We also noticed that the heat sink wasn't getting warm. I and several Engineers put our hands on the case to test this.
Note: In the US, we have a third wire in all outlets which, though it is the same as the common or neutral (basically also ground or no potential) side, it is used to connect to any exposed metal parts. The purpose it to divert any hahazzardous shorts to ground and blow a breaker or fuse rather than harming someone. We were focused on finding the cause. Several of us worked trying to analyxe the failure and found the serial interface of the unit has fried as well as the lap top serial port.
Findings:
The HOT of the 120 (instead of the safety ground connection) was connected to the chassis. This placed the outside of the (as yet unpainted) housing at 120 VAC relative to all other grounded equipment in the room!
I was one of several who put his nose up to that hole to smell burnt comopnents. I was one who felt the unit for heat build up.

It hit me half way home. Needledd to say, I gave the Mechanical and Electrical Engineers a lecture on mains principles.

73, Steve, K9DCI

3750. Re: Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-14 23:05:42 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <44B82329.9F41DD33@earthlink.net>
Source record: 11151

"Steve N." wrote:
>
> If you really need to get 220 quickly and easily [and do not draw more than
> than the 15 or 20 amps of your brealers] you can find two outlets on the
> two phases and get one half of the 220 from each.
> I did this for a visiting relative from Germany so he could run his electric
> shaver. It is still the talk of the relatives...
> Since I built my house and did the wiring with Dad's help, I kept a drawing
> of all the circuits, I knew that I already had two phases in the guest room.
> A couple of cheap extension cords was all it took, with one blade of a
> "three prong adaprer" inserted into each hot side of each extension. Guest
> 220 in 5 minutes!

Using two outlets without some logic to make sure both plugs are
connected is a very dangerous setup. The simplest setup is three
relays, two to detect the 120 VAC on each cord that together energize
the 240 VAC outlet.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

3751. Re: Mains Was: Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-15 01:30:57 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <lzXtg.1768$A8.1767@trnddc02>
Source record: 11152

>The other was a small base station which had its power input connections
>designed by Mechanical engineers.

I wouldn't blame the mechanical engineers. I'd blame the engineering manager
who let mechanical engineers design an electrical interface, and then
apparently didn't design-review it.

Joe
W3JDR

"Steve N." <stuevue.nouskuowuicuz@moutouroula.com> wrote in message
news:e991uc$n7n$1@avnika.corp.mot.com...
>
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>> 81V which is considered sufficiently low to prevent electrocution.

>>
>> The nominal domestic supply voltage within EU countries has now been
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>> ,whereas earlier it was up to 250 V or sometimes even higher.
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>> Frank GM0CSZ / KN6WH
>
>
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> There were two cases where Development Engineers not knowing about our
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> system, where developing products never before run off the mains.
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>
> The other was a small base station which had its power input connections
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> burned components on the unit. We also noticed that the heat sink wasn't
> getting warm. I and several Engineers put our hands on the case to test
> this.
> Note: In the US, we have a third wire in all outlets which, though it is
> the same as the common or neutral (basically also ground or no potential)
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> at 120 VAC relative to all other grounded equipment in the room!
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> comopnents. I was one who felt the unit for heat build up.
>
> It hit me half way home. Needledd to say, I gave the Mechanical and
> Electrical Engineers a lecture on mains principles.
>
> 73, Steve, K9DCI
>
>

3752. SolderSmoke #27: HI8 trip, Books, Ether, Quantums, Xtal Osc Design and build

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-15 08:54:38 UTC
From: bill.meara@gmail.com
Message-ID: <1152953678.181115.294510@75g2000cwc.googlegroups.com>
Source record: 11153
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,sci.electronics.basics

SolderSmoke!
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http://www.ourmedia.org/node/247756

Topics discussed in SolderSmoke #27:

-- Computer woes
-- Bill's visit to the Dominican Republic
-- Building Xtal oscillator with kid
-- Book Reviews:
"The Art of Electronics"
"The Electronics of Radio"
-- Ether and Quantum Mechanincs, Tao of Physics
-- SolderSmoke Mailbag: Nigel in Dover, Mike WA6AWA, Matt KC8COM

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London, England meet regularly on the ECHOLINK system
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RSS feed, so Mike (software wizard that he is) has
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Here's the homepage for our show. All our programs are available here. There is also a blog and links to some of the sites and documents we've been discussing: http://www.ourmedia.org/user/36170

We hope you enjoy the program. Please send us feedback.

73 from London
Bill M0HBR N2CQR CU2JL
http://www.gadgeteer.us

3753. Re: Mains Was: Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-15 22:06:05 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <5amib2thgqnfmg6dsmtbcol3t0m0v418q9@4ax.com>
Source record: 11154

On Fri, 14 Jul 2006 16:22:20 -0500, "Steve N."
<stuevue.nouskuowuicuz@moutouroula.com> wrote:

>The HOT of the 120 (instead of the safety ground connection) was connected
>to the chassis. This placed the outside of the (as yet unpainted) housing
>at 120 VAC relative to all other grounded equipment in the room!
>I was one of several who put his nose up to that hole to smell burnt
>comopnents. I was one who felt the unit for heat build up.

If you get an electric shock in your nose, I would suggest that you do
not drive a car for a few hours.

I was building a power supply and fired it up for the first time and
was sniffing for any hot components. I then actually hit the hot side
of the power transformer primary terminal (220 V over here in those
days). It was a nasty shock and when driving the car soon after, I
really had to concentrate to keep the car in the middle of the
lane:-).

Paul OH3LWR

3754. ** FLEA at MIT ** Sunday July 16th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-15 22:31:05 UTC
From: w1gsl@mit.edu
Message-ID: <44b96ca9$0$560$b45e6eb0@senator-bedfellow.mit.edu>
Source record: 11155
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

This comming Sunday...

+++ Now even more Buyers Parking !!!
Thanks to Shire we have use of their new parking lot
across Albany St from the SWAPFEST !!!

!! ** More Buyers PARKING is available ** for details see
http://web.mit.edu/w1gsl/Public/flyer

*** !!!! In our Traditional GARAGE and the adjacent lot !!!! ****
so come rain or shine or super heat the Flea is on !!!

********* $1 buyers discount with hardcopy of this notice ********

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FLEA all SUMMER at MIT
Sunday July 16th 2006
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
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Buyers admission is $5 (you get $1 off if
you're lucky enough to have a copy of our ad)
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The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
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SEASON PASS + Advance Seller Discount

A sellers discount season pass is available which
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Prepaid vendors.. Season Pass or monthly,

will be admitted FIRST.
Separate lines will form prior to gate opening
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!! RAIN or SHINE !! Have no fear of rain, a covered
well illuminated tailgate area is available for all
sellers (6'8" clearance).

Talk-in: 145.23- (PL 88.5) W1BOS/R and
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Must be received by April 16th

Advance $17 First space
$12 Additional Spaces
Must be received by the 5th of the month.

Gate Admission $20 First Space
$15 Additional Spaces
Admission is after the prepaid vendors

Early Bird Buyer -Admission after the prepaid vendor line is admitted. ~ 7:15AM
** You may not sell. **
$15 per person at the gate.

****************************** cut here ******************************

FLEA at MIT 2006 Advance Space Application

____April ____May ____June ____ July ____Aug ___Sept ____Oct
@ $17 for the first each month + $12 each additional
____ Season Pass @$99 _____ Additional Season Spaces @$70

Name _____ Call _____ $ Included_____

Address _____ Phone _____ Make Check to
The MIT Radio Society
City _____ State _____ Zip _____ PO Box 397082
Cambridge MA 02139
E-mail _____

****
Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754
****

3755. Re: Mains Was: Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-16 09:12:15 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <c8aFEaHvLguEFAKx@ifwtech.co.uk>
Source record: 11156

Paul Keinanen wrote:
>I was building a power supply and fired it up for the first time and
>was sniffing for any hot components. I then actually hit the hot side
>of the power transformer primary terminal (220 V over here in those
>days). It was a nasty shock

Well don't DO that!

(But I'm a fine one to talk: my bad habit is to sniff the soldering iron
to see if it's hot :-)

--
73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

3756. Re: toroid cores?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-16 13:06:47 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <ffmdnZoz0bZ0pCfZnZ2dnUVZ_oudnZ2d@bright.net>
Source record: 11157

Well, I'm not sure about a lot of the questions you asked, so I would
suggest waiting to hear from others for ideas or, in true hamming
spirit, give it a go and see what happens :)

I wish you good luck...it sounds like an interesting project!

Scott
N0EDV

Jamie wrote:

> In <r-adnd-qbY164SrZnZ2dnUVZ_radnZ2d@bright.net>,
> Scott <acepilot@bloomer.net> mentions:
>
>>Check this page from Amidon Associates. They are a great supplier of
>>toroids to the ham community!
>>
>>http://www.amidoncorp.com/aai_ironpowdercores.htm
>>
>>Looks to me like 25 turns on a T-50-2 core will give about 3 MICRO
>>Henries according to Amidon's formula...
>
>
> Whew! thanks!
>
> My assumption that it was 300 yielded some pretty far out number of turns
> for air coils, like 72 or something I seem to recall.
>
> Looks more like 7-8 turns on a cylinder 2.5" in diameter? (that seems
> awful small to me) If the tickler coil is currently three turns, would I
> just leave it at that? Still, it's nice.. small enough I can probably use
> the "good wire" for shortwave. :-) (FWIW old microwaves are apparently an
> excellent source if copper wire, I'm tempted to use some of it for an
> antenna)
>
> If the capacitance in the tank circuit is ~25-400pF, and I use 3uH then
> the frequency response will be about: 4.5mhz - 14mhz ? (does that sound
> right?)
>
> This must be why the others I'd looked at involve pluggable or tapped coils?
>
> (In general, is there an ideal ratio of capacitance to inductance for a given
> range? IE: could I just add parallel capacitance to lower the frequency
> or is it better to increase the coil or.. both? I notice as I run through
> some calculations, I need a LOT more uH to cover a smaller and smaller range

> of frequencies the lower I get.
>
> He states on his page that it picks up MW, (which is actually what I'm mostly
> interested in) but.. didn't mention anything about mixed coils.
>
> His circuit involves a "front end RF amp" (for a total of two coils) when
> using air, do I need to some how shield this second coil? I'm assuming it
> if it's perpendicular to the main one, thats enough?)
>
> Was hoping to avoid a large air coil because as it is now, the everything
> except the capacitors (and AF stuff) fit in a tunafish can for shielding. :-/
>
> Still, the whole point is to assemble it from garbage. I might splurge and
> get some mechanical stuff for the tuner, but.. have to get it working first!
> (sure am glad I kept that signal injector, it's been really handy for this!)
>
> Jamie

3757. Re: ** FLEA at MIT ** Sunday July 16th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-16 13:24:29 UTC
From: Roger <anon@woogurtroll.net>
Message-ID: <5a41t.24s.19.1@news.alt.net>
Source record: 11158
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

A collection of *Non Ham Radio* Junk, attended by CBers
and white trash.

3758. Re: YAESU FT-817 FT-857 FT-897 KEYPAD

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-16 13:34:54 UTC
From: Dexxsterlab <dexxster@email.com>
Message-ID: <44ba407e$0$30141$4fafbaef@reader4.news.tin.it>
Source record: 11159
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

A keypad for your Yaesu FT-8x7 transceiver

http://www.dexxsterlab.com/kp8x7/kp8x7e.pdf

http://www.qsl.net/it9xxs

3759. Re: ** FLEA at MIT ** Sunday July 16th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-16 14:00:27 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <8pKdnXu4Cczy2yfZnZ2dnUVZ8smdnZ2d@pipex.net>
Source record: 11160
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Roger wrote:
> A collection of *Non Ham Radio* Junk, attended by CBers
> and white trash.
==========
What's your problem ? You might even meet a few ham radio operators.
As far as CBers are concerned ....live and let live.

Frank GM0CSZ / KN6WH

3760. Re: Mains Was: Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-16 14:02:38 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <44BA46E2.8D9A447@earthlink.net>
Source record: 11161

Ian White GM3SEK wrote:
>
> (But I'm a fine one to talk: my bad habit is to sniff the soldering iron
> to see if it's hot :-)

At least you stopped using your tongue to test it! ;-)

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

3761. Re: Mains Was: Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-16 16:04:28 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <8PS9IMRMOmuEFANF@ifwtech.co.uk>
Source record: 11162

Michael A. Terrell wrote:
>Ian White GM3SEK wrote:
>>
>> (But I'm a fine one to talk: my bad habit is to sniff the soldering iron
>> to see if it's hot :-)
>
>
> At least you stopped using your tongue to test it! ;-)
>
No, you've got it all wrong - you use your tongue to test if the
soldering iron is COLD.

--
73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

3762. Re: ** FLEA at MIT ** Sunday July 16th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-16 17:03:52 UTC
From: Roger <anon@woogurtroll.net>
Message-ID: <5agt9.ihp.19.1@news.alt.net>
Source record: 11163
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:8pKdnXu4Cczy2yfZnZ2dnUVZ8smdnZ2d@pipex.net...
> Roger wrote:
>> A collection of *Non Ham Radio* Junk, attended by CBers
>> and white trash.
> ============================
> What's your problem ? You might even meet a few ham radio operators.
> As far as CBers are concerned ....live and let live.
>
> Frank GM0CSZ / KN6WH

Only problem is when people like you make idiotic
statements like you just did. Get a reality check.

3763. [SPAM] Some people refuse to learn from their errors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-16 18:25:33 UTC
From: JeffM <jeffm_@email.com>
Message-ID: <1153074333.126707.117090@35g2000cwc.googlegroups.com>
Source record: 11164
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.cb,sci.electronics.components

was: FS: PL-259 silver plated contact & body, Teflon insulation $1.67
each.

AAA RF Products wrote:
>[SPAM SPAM SPAM SPAM]

http://groups.google.com/group/sci.electronics.components/browse_frm/thread/e3786ad39814b5f6/9db691e887340175?q=a-lot-of-ill-will+zzz+SPAM+qq+your-inappropriate-attempts-at-advertising+scumbag

3764. Re: FS: PL-259 silver plated contact & body, Teflon insulation $1.67 each.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-17 02:03:43 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1153101822.957736.32090@m79g2000cwm.googlegroups.com>
Source record: 11165
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.cb,sci.electronics.components

AAA RF Products wrote:
> For Sale: Finest quality PL-259's silver plated contact & body, Teflon
> insulation, nickel plated coupling nut. Unlimited quantity available.
>
> 1 to 99 ------ $1.67 each
>
> 100 to 499----$1.50 each
>
> 500+----------$1.40 each
>
> Immediate shipment, FOB: San Clemente, CA
>
> No minimum order.
>
> No handling charges.
>
> Please email sales@AAARFProducts.com
>
> or call 949 481 3154 (San Clemente, CA, USA)
>
> See our catalog @ www.aaarfproducts.com
spam perhaps but at least it is better than most of the posting these
days

3765. Re: FS: PL-259 silver plated contact & body, Teflon insulation $1.67 each.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-17 02:31:13 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <44BAF650.3BAC3CCE@earthlink.net>
Source record: 11166
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.cb,sci.electronics.components

an_old_friend wrote:
>
> AAA RF Products wrote:
> > For Sale: Finest quality PL-259's silver plated contact & body, Teflon
> > insulation, nickel plated coupling nut. Unlimited quantity available.
> >
> > 1 to 99 ------ $1.67 each
> >
> > 100 to 499----$1.50 each
> >
> > 500+----------$1.40 each
> >
> > Immediate shipment, FOB: San Clemente, CA
> >
> > No minimum order.
> >
> > No handling charges.
> >
> > Please email sales@AAARFProducts.com
> >
> > or call 949 481 3154 (San Clemente, CA, USA)
> >
> > See our catalog @ www.aaarfproducts.com
> spam perhaps but at least it is better than most of the posting these
> days

Look at the crappy no name coax and super cheap connectors on their
website before you decide anything. BTW, they have a very bad
attitude. One of their salesmen was on one of the sci.electronics
groups telling people off.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

3766. Re: FS: PL-259 silver plated contact & body, Teflon insulation $1.67 each.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-17 02:47:04 UTC
From: "kb9rqz@hotmail.com" <kb9rqz@hotmail.com>
Message-ID: <1153104424.497450.62710@m73g2000cwd.googlegroups.com>
Source record: 11167
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.cb,sci.electronics.components

Michael A. Terrell wrote:
> an_old_friend wrote:
> >
> > AAA RF Products wrote:
> > > For Sale: Finest quality PL-259's silver plated contact & body, Teflon
> > > insulation, nickel plated coupling nut. Unlimited quantity available.
> > >
> > > 1 to 99 ------ $1.67 each
> > >
> > > 100 to 499----$1.50 each
> > >
> > > 500+----------$1.40 each
> > >
> > > Immediate shipment, FOB: San Clemente, CA
> > >
> > > No minimum order.
> > >
> > > No handling charges.
> > >
> > > Please email sales@AAARFProducts.com
> > >
> > > or call 949 481 3154 (San Clemente, CA, USA)
> > >
> > > See our catalog @ www.aaarfproducts.com
> > spam perhaps but at least it is better than most of the posting these
> > days
>
>
> Look at the crappy no name coax and super cheap connectors on their
> website before you decide anything. BTW, they have a very bad
> attitude. One of their salesmen was on one of the sci.electronics
> groups telling people off.
why should I I just did not care for the action of another in trying to
jam a post that yea is spam is at least ontopic instead all the posters
trying to make issues out of people sexlife

his product can be totaltrash but total trashis better than a post
that consists entily of "you are faggot" as many post here do

you don't like his product don't buy it
>
>
> --
> Service to my country? Been there, Done that, and I've got my DD214 to

> prove it.
> Member of DAV #85.
>
> Michael A. Terrell
> Central Florida

3767. Re: toroid cores?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-17 04:22:34 UTC
From: nospam@geniegate.com
Message-ID: <Lc1153108342193490xbc4728@air.tunestar.net>
Source record: 11168

In <ffmdnZoz0bZ0pCfZnZ2dnUVZ_oudnZ2d@bright.net>,
Scott <acepilot@bloomer.net> mentions:
>Well, I'm not sure about a lot of the questions you asked, so I would
>suggest waiting to hear from others for ideas or, in true hamming
>spirit, give it a go and see what happens :)
>
>I wish you good luck...it sounds like an interesting project!

Thanks.

Looks like I may have fried the FET. :-(

No matter what I did, I simply could not get feedback. I hooked an LM368 audio amp pretty much directly to the RF signal generator and I could vaguely hear it, so... I'm thinking the reason it was working the way it did (with the "station" comming in stronger as I tuned it) was simply the LM386 acting like a detector in a TRF radio :-/ (The thing that confused me was, if I held an AM radio really close to the coil, I DID get some interference, but I couldn't hear a squeal in the speaker of my radio.

I put it away for now, I do have another FET I could f^Htry, but.. I don't want to damage it.

I was thinking about removing the pot entirely and using a rotating "inner coil" serve in it's place:

+v ------> (tickler coil) ---> [D|G|S] ---> audio out

(Basically using both sides of the FET)

Hooking the tank circuit up to the gate, just as before but eliminate the parts for controlling the tickler, sort of like this:

<()> with < > being the tank coil and the () being a coil inside the <>'s in such a way you could turn it, controlling the tickler by changing it's angle.

I've seen old regen radios that appear to do something like this, but constructing a coil that can be turned (w/out changing the tank and input coil's value) look tricky. A plastic ink pen could be the shaft for turning it, but keeping it in the center w/out wobbling..

As the parts MUST come from garbage, precise values are hard to get.

To remove them is a good thing. :-)

Not today though....

Jamie
--
http://www.geniegate.com Custom web programming
guhzo_42@lnubb.pbz (rot13) User Management Solutions

3768. Re: FS: PL-259 silver plated contact & body, Teflon insulation $1.67 each.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-17 06:08:16 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <44BB2933.D6C61A01@earthlink.net>
Source record: 11169
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.cb,sci.electronics.components

"kb9rqz@hotmail.com" wrote:
>
> why should I I just did not care for the action of another in trying to
> jam a post that yea is spam is at least ontopic instead all the posters
> trying to make issues out of people sexlife
>
> his product can be totaltrash but total trashis better than a post
> that consists entily of "you are faggot" as many post here do
>
> you don't like his product don't buy it

I've thrown away better wire and connectors, but you can use whatever
garbage you want to.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

3769. Re: FS: PL-259 silver plated contact & body, Teflon insulation $1.67 each.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-17 12:30:27 UTC
From: an old freind <kb9rqz_ars@hotmail.com>
Message-ID: <1153139427.894267.305350@s13g2000cwa.googlegroups.com>
Source record: 11170
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.cb,sci.electronics.components

Michael A. Terrell wrote:
> "kb9rqz@hotmail.com" wrote:
> >
> > why should I I just did not care for the action of another in trying to
> > jam a post that yea is spam is at least ontopic instead all the posters
> > trying to make issues out of people sexlife

> > you don't like his product don't buy it
>
>
> I've thrown away better wire and connectors, but you can use whatever
> garbage you want to.
grow up

3770. Re: Mains Was: Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-17 13:41:23 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <44bb9383$0$23381$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 11171

The tongue is good to test a 9V battery _ I can tell if they are good.
Havent done it on 240V tho.
Worst Ive got is 240V off a cartridge fuse

Richard

Ian White GM3SEK wrote:
> Michael A. Terrell wrote:
>
>> Ian White GM3SEK wrote:
>>
>>>
>>> (But I'm a fine one to talk: my bad habit is to sniff the soldering iron
>>> to see if it's hot :-)
>>
>>
>>
>> At least you stopped using your tongue to test it! ;-)
>>
> No, you've got it all wrong - you use your tongue to test if the
> soldering iron is COLD.
>
>

3771. Re: FS: PL-259 silver plated contact & body, Teflon insulation $1.67 each.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-17 14:00:28 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <44BB97DE.10B7D27E@earthlink.net>
Source record: 11172
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.cb,sci.electronics.components

an old freind wrote:
>
> grow up

Grow up? Its you that appears to have never grown up. You seem to
have almost no grasp of the English language, or the concept of not
supporting spammers.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

3772. Re: FS: PL-259 silver plated contact & body, Teflon insulation $1.67 each.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-17 14:12:42 UTC
From: an old friend <kb9rqz-MCM@hotmail.com>
Message-ID: <1153145562.073368.220120@m73g2000cwd.googlegroups.com>
Source record: 11173
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.cb

Michael A. Terrell wrote:
> an old freind wrote:
> >
> > grow up
>
>
> Grow up?
yes grow up
> Its you that appears to have never grown up. You seem to
> have almost no grasp of the English language, or the concept of not
> supporting spammers.
disagreing with you is not a lack of aturity

nor is is a sign of any lack of language skills

I frankly don't see it as as pam (and BTW I am sure the original poste
thanks you for the attentionyou are helping his prodcut to)

spam is preferable to sexual inuendo which has become the NGs sock in
trade

I would rather see an ad for something that might be usefull in the
gruop than what what we see

as far as I am concerned to be spam it is has to e non related to the
NG

that you disagree or have personal issues with the poster is your
proble

OTOH I welcome the thread and even your as a rcahnce to talk about
somthing related to radio

>
>
> --
> Service to my country? Been there, Done that, and I've got my DD214 to
> prove it.
as have I

3773. Re: Mains Was: Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-17 17:40:10 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <e9gi1q$bo0$9@puck.litech.org>
Source record: 11174

Michael A. Terrell <mike.terrell@earthlink.net> wrote:
> Ian White GM3SEK wrote:
>>
>> (But I'm a fine one to talk: my bad habit is to sniff the soldering iron
>> to see if it's hot :-)

> At least you stopped using your tongue to test it! ;-)

You folks are in good company: one of my friends, down in VK-land,
shook some excess solder off the iron tip -- and then decided to wear
pants from then on.

--
About a deceased operator:
I'm still more than a bit surprised that he was able to operate
the weapon in such a fashion that it would fire. This is grossly
inconsistent with _my_ experience of his abilities.

3774. Re: Mains Was: Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-17 17:46:41 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <e9gie1$bo0$10@puck.litech.org>
Source record: 11175

Michael A. Terrell <mike.terrell@earthlink.net> wrote:
> Ian White GM3SEK wrote:
>>
>> (But I'm a fine one to talk: my bad habit is to sniff the soldering iron
>> to see if it's hot :-)

> At least you stopped using your tongue to test it! ;-)

You folks are in good company: one of my friends, down in VK-land,
shook some excess solder off the iron tip -- and then decided that if
he was going to solder things, he'd wear pants, thanks very much.

--
About a deceased operator:
I'm still more than a bit surprised that he was able to operate
the weapon in such a fashion that it would fire. This is grossly
inconsistent with _my_ experience of his abilities.

3775. Re: Mains Was: Low cost SMD Oven for making SMD samples and Prototypes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-17 18:04:06 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <44BBD0F6.325DBA3E@earthlink.net>
Source record: 11176

Ian White GM3SEK wrote:
>
> Michael A. Terrell wrote:
> >Ian White GM3SEK wrote:
> >>
> >> (But I'm a fine one to talk: my bad habit is to sniff the soldering iron
> >> to see if it's hot :-)
> > >
> > >
> > > At least you stopped using your tongue to test it! ;-)
> > >
> > No, you've got it all wrong - you use your tongue to test if the
> > soldering iron is COLD.

I was in someone else's shop one day and saw something falling off
the edge of the bench in my peripheral vision, and caught a hot
soldering iron. Luckily I had my tool box with me so I grabbed some
pure silicone grease and smeared it over the burns. I lost a layer of
dead skin a few days later, but it didn't dry out enough to crack and
bleed, which would have taken a lot longer to heal.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

3776. Length & number of radials

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-18 17:11:11 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <T86dnTlxoaeOiiDZRVny1A@bt.com>
Source record: 11177

If you are considering a new vertical antenna, instead of guesswork
and copying somebody else's un-thought-out efforts, download program
RADIAL_3 from website below.

The program assists with choosing an economic length and number of
shallow-buried ground radials. It takes a new look at how radials work
by considering them to be lossy, single-wire transmission lines,
open-circuit at the other end.

RADIAL_3 is a self contained file, 55 kilibytes. Easy to use. No
training needed. Download in a few seconds and run immediately.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

3777. Re: What is a wire antenna's impedance? -followup

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-18 21:09:38 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1153256978.081184.264550@p79g2000cwp.googlegroups.com>
Source record: 11178

John - KD5YI wrote:
> Additional response to OP jo9s8as at yahoo.com:
>
> Using an MFJ259B with a #14 AWG (.064 dia) copper wire 19.4 inchs long stuck
> into the antenna connector, I measured the following...
>

Andy comments,
John, your results would be more consistent, and more meaningful,
if you had some sort of ground plane in your experiments.

A wire, by itself, with nothing else, is like trying to light a lamp
with
only one prong plugged into the socket......

The radiating element, which you are measuring, has to have a
counterpoise (ground) to establish the Efield against and an Hfield
around.
In your setup, the housing of the MFJ, and your hand, and probly
other stuff, is the counterpoise, and the results are inconsistent.
I suspect that if you took a measurement, and started to pee on the
ground, the reading would change (grin).......Try it. But keep the
power low :>))))

So, while your experiments may give you an idea of what the
resonant frequency and impedance of a piece of wire is, unless you
are able to take consistent, repeatable measurements, you can be
sure that something is not being accounted for..... My suggestion
is that you need a good counterpoise...... Maybe buy a sheet of
corrugated tin from Home Depot, mount the connector in the middle,
with the MFJ on one side and the antenna wire on the other.... You'll
find, I am certain, that your readings will be more consistent.....

This is not a bad ground plane for 2 meters --- I have used one
with good results......

It ain't magic, but there isn't any such thing as a unipole
radiator....

Good luck,

Andy W4OAH

3778. Re: What is a wire antenna's impedance? -followup

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-18 21:47:10 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12bqlmvsdbhisb2@corp.supernews.com>
Source record: 11179

"AndyS" <andysharpe@juno.com> wrote in message
news:1153256978.081184.264550@p79g2000cwp.googlegroups.com...
> The radiating element, which you are measuring, has to have a
> counterpoise (ground) to establish the Efield against and an Hfield
> around.

I believe that -- at least from a mathematical perspective -- "infinity" is a perfectly good counterpoise. (Just as isolated conductors have capacitance to infinity and inductors have "partial inductance" whereby a return path at infinity is assumed.)

As a practical matter, of course the user's hands and other objects in the environment will affect the measurement, but suggesting that "one must always have a well-defined counterpoise" would tend to discourage one from studying antennas that are less sensitive to counterpoises than those that are, and this endeavor is quite valuable for the design of miniature antennas. After all, there are millions of commercial devices in operation every day for which the counterpoise is ill-defined.

3779. Newbie Question: PC Based Oscilloscopes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-18 22:14:05 UTC
From: Timothy@tholtom.freeserve.co.uk
Message-ID: <1153260845.004678.264980@p79g2000cwp.googlegroups.com>
Source record: 11180

I haven't touched RF test and measurement equipment for about 20 years. Back then I used a standard 50MHz dual trace scope. I want to get back into homebrewing, and was wondering whether anyone could advise me on buying PC based 'scopes. Do they have the same "look and feel" as a dedicated 'scope?

There appear to be many such PC based scopes (e.g. Vellman), I was wondering what homebrewers would advise, given the "average" budget (not 10,000 Dollars + !!). Something with a pretty good Spectrum Analyser built in?

Or would I be better off going to Ebay and buying an old dual trace scope for 100 Euros or so?

Advice anyone?

3780. Re: What is a wire antenna's impedance? -followup

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-18 22:41:39 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1153262499.873796.22260@h48g2000cwc.googlegroups.com>
Source record: 11181

Joel Kolstad wrote:
> "AndyS" <andysharpe@juno.com> wrote in message
> news:1153256978.081184.264550@p79g2000cwp.googlegroups.com...
> > The radiating element, which you are measuring, has to have a
> > counterpoise (ground) to establish the Efield against and an Hfield
> > around.
>
> I believe that -- at least from a mathematical perspective -- "infinity" is a
> perfectly good counterpoise. (Just as isolated conductors have capacitance to
> infinity and inductors have "partial inductance" whereby a return path at
> infinity is assumed.)
>
> As a practical matter, of course the user's hands and other objects in the
> environment will affect the measurement, but suggesting that "one must always
> have a well-defined counterpoise" would tend to discourage one from studying
> antennas that are less sensitive to counterpoises than those that are, and
> this endeavor is quite valuable for the design of miniature antennas. After
> all, there are millions of commercial devices in operation every day for which
> the counterpoise is ill-defined.

Andy comments:
Yes... well... maybe..

In order to propagate, the Poynting vector has to have an Efield and
an
H field. The E field is between the "wire" and it's
counterpoise....specified
in V/M .... that is the voltage between the two divided by the
distance
between them..... As an aside, the orientation of the Efield is the
polarization of the antenna --- vertical, circular, horizontal,
elliptical, etc....

Now, if the counterpoise was at infinity, the Efield must always be
zero,
since any voltage divided by infinity (to give V/M) will be zero.
Hence there
can be no propagation..... Like connecting up to one terminal of a
battery..

All antennae, even the very inefficient ones used in "commercial
devices",
have a hot side and a ground. If the ground is well defined, as in a
patch
antenna, the field and radiation characteristics are well defined. If

the
counterpoise is simply a ground track on the PC board, it is fairly
well
defined, but the radiation is, well, squirrelly. Fortunately, a
matching
circuit assures that power will be radiated, even if the field is not
pretty.

Loop antenna, which do not work against a ground plane, use one of
the two feed points as a counterpoise. Such antennas are easier to
visualize using H fields, tho, as before, one MUST have and E and an
H field for it to actually work.... The Efields of a loop exist
between
sections of the loop as a function of the current flow thru the loop,
and
don't give much of an intuitive feeling..... but I digress...

If you know of an antenna that has no counterpoise for the "hot"
side to
work against, please post some information about it..... However, in
my
experience, it would be like having a magnet with a North pole and no
South pole ---- ain't no such thing..... Yet, I'd be glad to learn
if you
would care to teach.....

Andy W4OAH

PS And I would be very interested if Roy LeWallen would step in here
with an opinion. He has done more antenna stuff than I have,
and
may be able to explain it better..... I know he hangs around
this
group since I have seen his posts . :>))))))

3781. Re: Newbie Question: PC Based Oscilloscopes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-18 22:53:23 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1153263203.500013.191710@m73g2000cwd.googlegroups.com>
Source record: 11182

Timothy@tholtom.freeserve.co.uk wrote:
> I haven't touched RF test and measurement equipment for about 20 years.
> Back then I used a standard 50MHz dual trace scope. I want to get
> back into homebrewing, and was wondering whether anyone could advise me
> on buying PC based 'scopes. Do they have the same "look and feel" as a
> dedicated 'scope?
>
> There appear to be many such PC based scopes (e.g. Vellman), I was
> wondering what homebrewers would advise, given the "average" budget
> (not 10,000 Dollars + !!). Something with a pretty good Spectrum
> Analyser built in?
>
> Or would I be better off going to Ebay and buying an old dual trace
> scope for 100 Euros or so?
>
> Advice anyone?

Andy writes:

I've used a couple of the systems that plug into the PC and use
software
loaded into it. It is mainly an A/D converter with several channels,
and
the software gives the user the versatility to establish timing, etc...
I MUCH MUCH MUCH prefer the old fashioned analog scopes, tho, since
I can fiddle with it and don't have to worry about aliasing, sample
rates, etc.
I suppose the latter software programs have all the user friendly stuff
built in, but, personaly, if I didn't write the program myself, I don't
know
where I would get into trouble applying it. I don't like to used
"canned"
"one program does all" stuff..... (unless I wrote it :>)))).

One really cheap system I used was, I think , BSOFT. I don't know
if
they are stillin business, but they sold a board that plugged into a PC
(desk size) and only cost 50 - 100 bucks. Worked up to several Mhz.
But that was 15 years ago -- everything is much faster now -- but you
have to pay for it.....

As I think about it, a big advantage for a PC scope is that the
measurements
are on a file somewhere, and if you have programming ability, you can
write an FFT, or a graph program, or, well, hell, almost anything

you
can think of ---- providing you can access the data file.... That
could be
a lot of fun.........

Good luck. But 50 mhz scopes are faily cheap now......

Andy in Eureka, Texas

3782. Re: What is a wire antenna's impedance? -followup

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-19 03:46:09 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <5Whvg.5832$Lw.1536@trnddc07>
Source record: 11183

AndyS wrote:
> Joel Kolstad wrote:
>
>>"AndyS" <andysharpe@juno.com> wrote in message
>>news:1153256978.081184.264550@p79g2000cwp.googlegroups.com...
>>
>>> The radiating element, which you are measuring, has to have a
>>>counterpoise (ground) to establish the Efield against and an Hfield
>>>around.
>>
>>I believe that -- at least from a mathematical perspective -- "infinity" is a
>>perfectly good counterpoise. (Just as isolated conductors have capacitance to
>>infinity and inductors have "partial inductance" whereby a return path at
>>infinity is assumed.)
>>
>>As a practical matter, of course the user's hands and other objects in the
>>environment will affect the measurement, but suggesting that "one must always
>>have a well-defined counterpoise" would tend to discourage one from studying
>>antennas that are less sensitive to counterpoises than those that are, and
>>this endeavor is quite valuable for the design of miniature antennas. After
>>all, there are millions of commercial devices in operation every day for which
>>the counterpoise is ill-defined.
>
>
> Andy comments:
> Yes... well... maybe..
>
> In order to propagate, the Poynting vector has to have an Efield and
> an
> H field. The E field is between the "wire" and it's
> counterpoise....specified
> in V/M .... that is the voltage between the two divided by the
> distance
> between them..... As an aside, the orientation of the Efield is the
> polarization of the antenna --- vertical, circular, horizontal,
> elliptical, etc....
>
> Now, if the counterpoise was at infinity, the Efield must always be
> zero,
> since any voltage divided by infinity (to give V/M) will be zero.
> Hence there
> can be no propagation..... Like connecting up to one terminal of a
> battery..
>

> All antennae, even the very inefficient ones used in "commercial
> devices",
> have a hot side and a ground. If the ground is well defined, as in a
> patch
> antenna, the field and radiation characteristics are well defined. If
> the
> counterpoise is simply a ground track on the PC board, it is fairly
> well
> defined, but the radiation is, well, squirrelly. Fortunately, a
> matching
> circuit assures that power will be radiated, even if the field is not
> pretty.
>
> Loop antenna, which do not work against a ground plane, use one of
> the two feed points as a counterpoise. Such antennas are easier to
> visualize using H fields, tho, as before, one MUST have and E and an
> H field for it to actually work.... The Efields of a loop exist
> between
> sections of the loop as a function of the current flow thru the loop,
> and
> don't give much of an intuitive feeling..... but I digress...
>
> If you know of an antenna that has no counterpoise for the "hot"
> side to
> work against, please post some information about it..... However, in
> my
> experience, it would be like having a magnet with a North pole and no
> South pole ---- ain't no such thing..... Yet, I'd be glad to learn
> if you
> would care to teach.....
>
> Andy W4OAH
>
> PS And I would be very interested if Roy LeWallen would step in here
> with an opinion. He has done more antenna stuff than I have,
> and
> may be able to explain it better..... I know he hangs around
> this
> group since I have seen his posts . :>))))))
>

Where is the counterpoise on a handheld transceiver? I believe it is the
body of the transceiver, the hand, arm, and body of the operator, and the earth.

The data in this thread was in response to an earlier thread of the same
subject. That's why I added "-followup" to the subject for this thread.
Please read that thread originally posted on 7/7/2006 at 2:29PM. The
following will make more sense if you read that original thread.

If you assume the MFJ is the body of a handheld transmitter, which it is,
then these results show how a quarter wave whip reacts to a handheld

transceiver having a metal enclosure. The counterpoise for a handheld is its metal chassis but usually separated from the operators hand by a plastic case.

In the original thread, there was posted links that are now broken (7/9/2006, 11:37AM). As I recall one of the items appeared to be a whip on a camera. I think the other one was a whip on a radio. So, I tried to make some measurements to show how much variation there can be with wire antennas and to underscore the fact that there is no way anyone can predict what a wire antenna's impedance will be on the objects the OP referred to under the myriad of conditions possible.

Cheers,
John

3783. could VFO frequency be below IF ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-19 07:54:44 UTC
From: aadu.adok@gmail.com
Message-ID: <1153295684.841238.155880@i3g2000cwc.googlegroups.com>
Source record: 11184

hi,

I'm experimenting with my superhet. My IF is 8mhz (cause I have 8 mhz crystals for IF filter). I first experimented on 40m. VFO was 15mhz. At design time I'm using 3 meters long wire as an "antenna" (and I'm sitting in my basement). I heard different european stations (EA5FKX, RW6XE, UR4GI etc) which are several thousand km-s away. Pretty amazing for such "antenna"!

So I decided to go for 20m band. I had an option to set my VFO either to 6mhz or 22mhz. I first went with 6mhz. But for my disappointment I heard nothing but the band noise.

So I'm confused now - is it because the short "antenna" or am I wrong thinking that VFO 6mhz + IF 8mhz should give me 14mhz?

any ideas?

3784. Re: could VFO frequency be below IF ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-19 08:39:49 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <e9kr4lkef1@news.onet.pl>
Source record: 11185

Yes.
It was often used in two band trx - with 9MHz IF and 5-5,5MHz VFO.
result was 80m and 20m without VFO switching.

MAc

3785. Re: What is a wire antenna's impedance? -followup

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-19 10:00:50 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1153303250.437820.161760@75g2000cwc.googlegroups.com>
Source record: 11186

John - KD5YI wrote:
> Where is the counterpoise on a handheld transceiver? I believe it is the
> body of the transceiver, the hand, arm, and body of the operator, and the earth.
>
****** Yes. If the case is conductive. Even if the case is metal ,
and not
connected to the internal "ground" , it becomes part of the
counterpoise
by capacitance. Of course, the hand is conductive, etc.....

So, I tried to make
> some measurements to show how much variation there can be with wire antennas
> and to underscore the fact that there is no way anyone can predict what a
> wire antenna's impedance will be on the objects the OP referred to under the
> myriad of conditions possible.
>
\
**** And you did that very effectively. I didn't realize that you were
trying
to show the significant variations, and thought you were wondering why
the readings were so different. Sorry,.... I just didn't get your
intent....

I would have liked to see what the piece of wire did with a nice ground
plane, tho, to see what the design baseline would have been.... In
other words,
a piece of wire looks like, say 32 ohms over a ground plane, but when
all the variables such as shape, no ground plane, people, nearby
objects,
etc come into play, it goes from hell to high water.....
I'm glad to see someone actually doing the experiments, rather than
just quoting a bunch of " E to the J Beta pitchforks" and letting it
go at that..... :>)))))

Andy W4OAH

> Cheers,
> John

3786. Re: What is a wire antenna's impedance? -followup

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-19 10:29:48 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <--2dnUFXZrQalCPZRVnytA@pipex.net>
Source record: 11187

> My suggestion
> is that you need a good counterpoise..... Maybe buy a sheet of
> corrugated tin from Home Depot, mount the connector in the middle,
> with the MFJ on one side and the antenna wire on the other.... You'll
> find, I am certain, that your readings will be more consistent.....
>
> This is not a bad ground plane for 2 meters --- I have used one
> with good results.....
==========
Alternatively you could use a ground plane of chicken wire mesh ,a bit
easier to handle than a sheet of metal.

Frank GM0CSZ / KN6WH

3787. Re: What is a wire antenna's impedance? -followup

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-19 13:05:21 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1153314321.570078.313180@b28g2000cwb.googlegroups.com>
Source record: 11188

Highland Ham wrote:
> ==========
> Alternatively you could use a ground plane of chicken wire mesh ,a bit
> easier to handle than a sheet of metal.
>
> Frank GM0CSZ / KN6WH

Andy comments:
That's a good idea. I always seem to have some tin laying around
and
no chicken wire, but it would work well. Also hardware cloth -- that
stuff
with the little squares that is used a lot on rabbit cage bottoms.....

In fact, they would both be good for corner reflectors, with a PVC
frame...
Or a large bowtie dipole to get broadband at VHF........ hmmmmmmmm.

Thanks Frank, you have ALMOST inspired me to start another
project.......... maybe tomorrow :>)))))

Andy W4OAH

3788. Re: could VFO frequency be below IF ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-19 13:39:25 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1153316365.225113.152100@m73g2000cwd.googlegroups.com>
Source record: 11189

aadu.adok@gmail.com wrote:
> So I decided to go for 20m band. I had an option to set my VFO either
> to 6mhz or 22mhz. I first went with 6mhz. But for my disappointment I
> heard nothing but the band noise.
>
> So I'm confused now - is it because the short "antenna" or am I wrong
> thinking that VFO 6mhz + IF 8mhz should give me 14mhz?
>
> any ideas?

Andy writes:

Sometimes 20m is deader than a doornail. Nothing.... Other times,
the band is hopping..... Try it again, maybe at dawn or dusk.....
If your system is working properly, you probly just caught 20m at
the wrong time. ..... Kind of like catching the refrigerator in the
middle
of a defrost cycle when you put your beer in to get it cold
..... you just gotta wait .... :>))))

I would also suggest that you get a mixer chart and get familiar
with
how to choose LO and IF frequencies for minimum spurious responses.
There is a mixer spur graph in Ref Data for Radio Engineers, and maybe
in the ARRL handbook.. Also , Minickts labs puts out spur response
charts for their popular mixers such as the SBL-1 and MD108 and it
shows which of the spurs are worst and allows you to adjust your
mixing frequencies accordingly.
The selection of a good frequency scheme is the STARTING point for
a receiver design. I know you are using stuff that you have on hand,
as all of us have done, but if you get familiar with frequency
management
you will be able to account for the signals you hear but don't know
why.....
It's usually due to spurious mixer responses....

Here's a couple rules of thumb, if you have NO OTHER WAY to get the
info you neet.

1) If the LO is either 9/10 of the received freq, (or 1.1 times
the
received freq for top side injection,), most spurs are low
response.

2) If the LO is near .25 , .50 or .75 the channel freq,
spurs are really bad.

3) The image response is equal to the desired ---- use front end
filtering.
(assuming you don't use an image regect mixer)

4) The "half-IF" response 2LO+/-2RF = IF , is really bad,
always.....
Use front end filtering to get it down also...

Example: RF 7mhz LO 15 mhz Half IF is 11 mhz Image is
23 mhz

Those are just off the top of my head. The best deal is to pull out a
mixer
chart. Personally, I wrote a little BASIC program to go thru all the
combinations
up to the 10th harmonic and print out all the responses that occur in a

bandpass I could specify... it's easy to do and gives you exact
numbers......r
.... but the mixer graph can get you in the ball park quickly.......

Andy W4OAH

3789. Re: Newbie Question: PC Based Oscilloscopes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-19 15:37:33 UTC
From: Arthur <Arthur@nothing.com>
Message-ID: <12bskdt13nm3p2f@corp.supernews.com>
Source record: 11190

Timothy@tholtom.freeserve.co.uk wrote:
> I haven't touched RF test and measurement equipment for about 20 years.
> Back then I used a standard 50MHz dual trace scope. I want to get
> back into homebrewing, and was wondering whether anyone could advise me
> on buying PC based 'scopes. Do they have the same "look and feel" as a
> dedicated 'scope?
>
> There appear to be many such PC based scopes (e.g. Vellman), I was
> wondering what homebrewers would advise, given the "average" budget
> (not 10,000 Dollars + !!). Something with a pretty good Spectrum
> Analyser built in?
>
> Or would I be better off going to Ebay and buying an old dual trace
> scope for 100 Euros or so?
>
> Advice anyone?

You might want to check how much RF your PC is leaking first.

Also check to see if the software can be run directly off a CD
without installing anything on your HD. My PC has enough
to do already. I prefer a dedicated time-based oscilloscope.
RF spectrum analyzers are expensive cupholders, nice to have
but ... well, if someone gave one to me for free I wouldn't complain.

3790. Re: could VFO frequency be below IF ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-19 15:44:47 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <inksb2ps986uasfch1nk1go9o7e11ab70c@4ax.com>
Source record: 11191

ORIGINAL MESSAGE:

On 19 Jul 2006 00:54:44 -0700, aadu.adok@gmail.com wrote:

>So I decided to go for 20m band. I had an option to set my VFO either
>to 6mhz or 22mhz. I first went with 6mhz. But for my disappointment I
>heard nothing but the band noise.

------------ REPLY SEPARATOR ------------

That frequency combination will work fine. I once homebrewed a 40 meter SSB rig using a 9 MHz crystal IF filter and a 2 MHz oscillator and it worked fine. As a rule, the lower the oscillator frequency, the more stable it will be. Your 6 MHz will be far more stable than 22 MHz.

Bill, W6WRT

3791. Re: could VFO frequency be below IF ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-19 16:52:13 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <mYOdnRN2Msql_iPZnZ2dnUVZ_rmdnZ2d@web-ster.com>
Source record: 11192

aadu.adok@gmail.com wrote:

> hi,
>
> I'm experimenting with my superhet. My IF is 8mhz (cause I have 8 mhz
> crystals for IF filter). I first experimented on 40m. VFO was 15mhz. At
> design time I'm using 3 meters long wire as an "antenna" (and I'm
> sitting in my basement). I heard different european stations (EA5FKX,
> RW6XE, UR4GI etc) which are several thousand km-s away. Pretty amazing
> for such "antenna"!
>
> So I decided to go for 20m band. I had an option to set my VFO either
> to 6mhz or 22mhz. I first went with 6mhz. But for my disappointment I
> heard nothing but the band noise.
>
> So I'm confused now - is it because the short "antenna" or am I wrong
> thinking that VFO 6mhz + IF 8mhz should give me 14mhz?
>
> any ideas?
>

What everyone else said, plus:

Yes, a mixer should work on both sum and difference frequencies, so an LO that's lower than the IF is just fine for receiving a good strong signal.

You leave yourself open to more spurious reception problems. When folks are talking about 'spurs' and 'mixer charts' they mean you need to watch out for funky combinations of harmonics of LO and RF signals mixing down to your IF -- having the LO frequency higher than the RF frequency tends to reduce this problem. You can do this by hand by assuming that you'll be mixing 6, 12, 18, 24, etc., with 14, 28, 42, etc., and seeing if any of the combinations boils down to an IF of 8. If they do you could have spurious mixing problems, particularly if they're not high harmonics.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

3792. Re: What is a wire antenna's impedance? -followup

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-19 18:14:18 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <12bstjoj1act014@corp.supernews.com>
Source record: 11193

Hi Andy,

"AndyS" <andysharpe@juno.com> wrote in message
news:1153262499.873796.22260@h48g2000cwc.googlegroups.com...
> Now, if the counterpoise was at infinity, the Efield must always be
> zero,
> since any voltage divided by infinity (to give V/M) will be zero.

If I take a charged sphere with 1V applied, the E field falls off as 1/R all the way out to infinity; it is only there that it's actually zero, yes?

> If you know of an antenna that has no counterpoise for the "hot"
> side to
> work against, please post some information about it......

How about a half-wave antenna (end-fed zepp)? Assuming it's being fed by coax, would you suggest the counterpoise is the ring making up the shield of the coax right where the coax stops and the antenna starts?

I would like to hear from someone like Roy as well, since I certainly am well outside of any areas of significant experience here.

---Joel

3793. Re: Newbie Question: PC Based Oscilloscopes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-19 18:26:36 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <12bsuaqddr37ma9@corp.supernews.com>
Source record: 11194

"AndyS" <andysharpe@juno.com> wrote in message
news:1153263203.500013.191710@m73g2000cwd.googlegroups.com...
> I MUCH MUCH MUCH prefer the old fashioned analog scopes, tho, since
> I can fiddle with it and don't have to worry about aliasing, sample
> rates, etc.

A *good* digitial scope will contain an anti-alias filter and sufficient smarts that you genereally shouldn't have to worry about these issues -- if you were to take a new Tektronix or Agilent DSO (or at least the "mid-grade" or higher "trim levels" -- the ones that show properly shaded waveforms to indicate how much time signals spend at various levels), I'm willing to bet you'd be just as happy as with your old analog scope.

Not that there's anything wrong with the old analog scopes. :-)

One of the main problems with inexpensive PC-based oscilloscopes is the fact that the specs are often considerably "low end" but often not presented in a way that makes this apparent. I honestly believe that some people think that hooking an analog signal directly to the input of, say, a 100Msps ADC somehow makes a "100MHz scope." :-(

Here's a nice comparison from cleverscope -- people who do seem to know what they're doing -- that compares various PC-based scopes:
http://www.cleverscope.com/resources/Cleverscope%20Comparison%20chart.pdf

---Joel Kolstad

3794. Re: Newbie Question: PC Based Oscilloscopes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-19 19:25:09 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <dd1tb21q742ge7gufi7smahk1ojm8740g1@4ax.com>
Source record: 11195

ORIGINAL MESSAGE:

On 18 Jul 2006 15:53:23 -0700, "AndyS" <andysharpe@juno.com> wrote:

> I MUCH MUCH MUCH prefer the old fashioned analog scopes, tho, since
>I can fiddle with it and don't have to worry about aliasing, sample
>rates, etc.

------------ REPLY SEPARATOR ------------

Analog scopes are good when the human eye can perceive the trace adequately. Digital scopes are best with waveforms that are either too slow or too fast (and non-repetitive).

Each has its place.

Bill, W6WRT
retired test technician, Tektronix 400-series portable digital scopes

3795. Re: toroid cores?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-19 19:37:08 UTC
From: "Gregory D. MELLOTT" <melken@tds.net>
Message-ID: <ERvvg.7$NX2.0@newsreading01.news.tds.net>
Source record: 11196

Jamie wrote:

> In <ffmdnZoz0bZ0pCfZnZ2dnUVZ_oudnZ2d@bright.net>,
> Scott <acepilot@bloomer.net> mentions:
>>Well, I'm not sure about a lot of the questions you asked, so I would
>>suggest waiting to hear from others for ideas or, in true hamming
>>spirit, give it a go and see what happens :)
>>
>>I wish you good luck...it sounds like an interesting project!
>
> Thanks.
>
> Looks like I may have fried the FET. :-(
>
> No matter what I did, I simply could not get feedback. I hooked an LM368 audio
> amp pretty much directly to the RF signal generator and I could vaguely hear it,
> so... I'm thinking the reason it was working the way it did (with the "station"
> comming in stronger as I tuned it) was simply the LM386 acting like a detector
> in a TRF radio :-/ (The thing that confused me was, if I held an AM radio really
> close to the coil, I DID get some interference, but I couldn't hear a squeal in
> the speaker of my radio.
>
> I put it away for now, I do have another FET I could f^Htry, but.. I don't want
to
> damage it.
>
> I was thinking about removing the pot entirely and using a rotating "inner coil"
> serve in it's place:
>
> +v ------> (tickler coil) ---> [D|G|S] ---> audio out
>
> (Basically using both sides of the FET)
>
> Hooking the tank circuit up to the gate, just as before but eliminate the
> parts for controlling the tickler, sort of like this:
>
> <()> with < > being the tank coil and the () being a coil inside the <>'s
> in such a way you could turn it, controlling the tickler by changing
> it's angle.
>
> I've seen old regen radios that appear to do something like this, but
constructing
> a coil that can be turned (w/out changing the tank and input coil's value) look
> tricky. A plastic ink pen could be the shaft for turning it, but keeping it

> in the center w/out wobbling..
>
> As the parts MUST come from garbage, precise values are hard to get.
>
> To remove them is a good thing. :-)
>
> Not today though....
>
> Jamie

Hi,

My luck (quite some time ago) with FETs was not nice either. Someone may have to correct my, yet the only way I think one can get away with fiddling with the things the way most people construct, might be to use zener diodes between the gate and source and drain. Once its all together and apparently functioning one probably could remove them then with less worry about then getting a little static jolt and ruining the junction. Tubes are a lot more forgiving.

Sincerely,

Gregory D. MELLOTT

3796. Re: toroid cores?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-19 19:40:21 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <e9m1r4$2q0$1@puck.litech.org>
Source record: 11197

Gregory D. MELLOTT <melken@tds.net> wrote:

> My luck (quite some time ago) with FETs was not nice either. Someone may have to
> correct my, yet the only way I think one can get away with fiddling with the
> things the way most people construct, might be to use zener diodes between the
> gate and source and drain. Once its all together and apparently functioning one
> probably could remove them then with less worry about then getting a little
> static jolt and ruining the junction. Tubes are a lot more forgiving.

With tube stuff, touching the wrong thing will kill you.
With sand stuff, touching the wrong thing will kill it.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

3797. Re: What is a wire antenna's impedance? -followup

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-19 19:42:06 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <kf-dnUFp8PNkFyPZnZ2dnUVZ8qednZ2d@pipex.net>
Source record: 11098

> How about a half-wave antenna (end-fed zepp)? Assuming it's being fed by
> coax, would you suggest the counterpoise is the ring making up the shield of
> the coax right where the coax stops and the antenna starts?
==========
End fed Zepp antennas I have come across are fed with a balanced feeder.

Frank GM0CSZ / KN6WH

3798. Re: What is a wire antenna's impedance? -followup

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-19 23:12:38 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1153350758.355083.197900@h48g2000cwc.googlegroups.com>
Source record: 11099

Joel Kolstad wrote:
>
> If I take a charged sphere with 1V applied, the E field falls off as 1/R all
> the way out to infinity; it is only there that it's actually zero, yes?
>

***** One volt with respect to what other point ??

The RF generator
which drives the antenna has TWO terminals. If one terminal is
connected
to the wire, or the sphere, the OTHER terminal must be connected to
something else for the antenna to radiate. Hence, one terminal is
connected
to one side of the antenna, balanced or unbalanced, and the other
terminal is connected to either the other side of a balanced antenna,
or
some other structure such as a ground plane or counterpoise......
Remember, all RF generators are TWO terminal devices, and the
voltage is the voltage between the two terminals, not between one
terminal and some other point located on Mars.......
This potential difference sets up an Electric field, and the attendant
electron motion sets up an H field, and thus an energy wave
propagates.......

>
> How about a half-wave antenna (end-fed zepp)? Assuming it's being fed by
> coax, would you suggest the counterpoise is the ring making up the shield of
> the coax right where the coax stops and the antenna starts?
>
***** End fed Zepps radiate from the feedline as well as the driven
element,
and usually open wire line and not coax is used as a feed. I've
never
seen a coax fed Zepp, tho I think it would probably work OK with
the
proper matching at the transmitter.... The coax shield is part of
the
radiating system, as you can verify with an EZNEC simulation and
looking at the pattern... The Zepp is just a version of a dipole.
The ARRL handbook tells all about the difficulty of matching
the Zepp as a result of feedline radiation.....

***** Dipoles have one half of the antenna connected to one terminal
of the RF generator and the other hald of the antenna connected to the

other terminal.... If link coupling is used, neither part of the
antenna is
connected to the generator, but to a transformer, which then becomes
the
"new" generator output..... I have never seen any system at all,
in any
book, that uses a one terminal RF source, ----- there ain't no such
animal.
It's like a one terminal car battery..... saves connectors but won't
start the car...
:>)))))))))

--- and I have used the coax as half of a radiating dipole simply by
looping it thru some ferrite at a quarter wave from the feed point.
A wire is half the dipole and the coax feedline is the other half.....
It
ain't rocket surgery to use the coax outer shield as a radiating
structure....
If the dipole is mounted vertically, you have what can be advertised as

a "no ground plane" vertical.....---- the radiating portion of the
feedline
forms half the dipole.....

***** Perhaps we are merely disagreeing on semantics. That's OK....
My stuff works --- your stuff works..... Maybe we just look at things
differently..... I suspect it's too late for either of us to want
to change
our understanding of how the world works... :>))))))

Andy W4OAH

> I would like to hear from someone like Roy as well, since I certainly am
> well outside of any areas of significant experience here.
>
> ---Joel

***** Yeah.... Where's Al Gore now that we need him ??? :>)))))))

3799. Re: What is a wire antenna's impedance? -followup

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-20 00:15:03 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <ucitb2l1iufh027fneuqrra4augjj8397h@4ax.com>
Source record: 11100

On 19 Jul 2006 16:12:38 -0700, "AndyS" <andysharpe@juno.com> wrote:

>
>Joel Kolstad wrote:
>>
>> If I take a charged sphere with 1V applied, the E field falls off as 1/R all
>> the way out to infinity; it is only there that it's actually zero, yes?
>>
>
>***** One volt with respect to what other point ??
>
> The RF generator
>which drives the antenna has TWO terminals. If one terminal is
>connected
>to the wire, or the sphere, the OTHER terminal must be connected to
>something else for the antenna to radiate. Hence, one terminal is
>connected
>to one side of the antenna, balanced or unbalanced, and the other
>terminal is connected to either the other side of a balanced antenna,
>or
>some other structure such as a ground plane or counterpoise......
>Remember, all RF generators are TWO terminal devices, and the
>voltage is the voltage between the two terminals, not between one
>terminal and some other point located on Mars.......
>This potential difference sets up an Electric field, and the attendant
>electron motion sets up an H field, and thus an energy wave
>propagates.......
>
>>
>> How about a half-wave antenna (end-fed zepp)? Assuming it's being fed by
>> coax, would you suggest the counterpoise is the ring making up the shield of
>> the coax right where the coax stops and the antenna starts?
>>
>***** End fed Zepps radiate from the feedline as well as the driven
>element,
> and usually open wire line and not coax is used as a feed. I've
>never
> seen a coax fed Zepp, tho I think it would probably work OK with
>the
> proper matching at the transmitter.... The coax shield is part of
>the

The coax or balanced line is not the radiating system the though it
may interact some it's the matching network from the low (under
600ohm) to high (>3000ohm) impedence at end of the halfwave

antenna.

Coax can be used but since one end is mismatched from it's
characteristic impedence it could be lossy. Usually it's not as the
matching section is small (~1/4 wave). In practice it works very
well and there are antennas like Spertof (sp??) and other coaxial
fed antennas are very succcessful.

Allison

> radiating system, as you can verify with an EZNEC simulation and
> looking at the pattern... The Zepp is just a version of a dipole.
> The ARRL handbook tells all about the difficulty of matching
> the Zepp as a result of feedline radiation.....
>
>***** Dipoles have one half of the antenna connected to one terminal
>of the RF generator and the other hald of the antenna connected to the
>other terminal.... If link coupling is used, neither part of the
>antenna is
>connected to the generator, but to a transformer, which then becomes
>the
>"new" generator output..... I have never seen any system at all,
>in any
>book, that uses a one terminal RF source, ----- there ain't no such
>animal.
>It's like a one terminal car battery..... saves connectors but won't
>start the car...
>:>)))))))))
>
>--- and I have used the coax as half of a radiating dipole simply by
>looping it thru some ferrite at a quarter wave from the feed point.
>A wire is half the dipole and the coax feedline is the other half.....
>It
>ain't rocket surgery to use the coax outer shield as a radiating
>structure....
>If the dipole is mounted vertically, you have what can be advertised as
>
>a "no ground plane" vertical.....---- the radiating portion of the
>feedline
>forms half the dipole.....
>
>
>***** Perhaps we are merely disagreeing on semantics. That's OK....
>My stuff works --- your stuff works..... Maybe we just look at things
>differently..... I suspect it's too late for either of us to want
>to change
>our understanding of how the world works... :>)))))))
>
> Andy W4OAH
>
>

>> I would like to hear from someone like Roy as well, since I certainly am
>> well outside of any areas of significant experience here.
>>
>> ---Joel
>
>
>***** Yeah.... Where's Al Gore now that we need him ??? :>)))))))

3800. Re: could VFO frequency be below IF ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-20 02:45:35 UTC
From: tim gorman <tgorman2@cox.net>
Message-ID: <gjtm9e.mtk.ln@tg6124.ab0wr.net>
Source record: 11101

aadu.adok@gmail.com wrote:

>
>
> hi,
>
> I'm experimenting with my superhet. My IF is 8mhz (cause I have 8 mhz
> crystals for IF filter). I first experimented on 40m. VFO was 15mhz. At
> design time I'm using 3 meters long wire as an "antenna" (and I'm
> sitting in my basement). I heard different european stations (EA5FKX,
> RW6XE, UR4GI etc) which are several thousand km-s away. Pretty amazing
> for such "antenna"!
>
> So I decided to go for 20m band. I had an option to set my VFO either
> to 6mhz or 22mhz. I first went with 6mhz. But for my disappointment I
> heard nothing but the band noise.
>
> So I'm confused now - is it because the short "antenna" or am I wrong
> thinking that VFO 6mhz + IF 8mhz should give me 14mhz?
>
> any ideas?

The frequency schemes should work fine. Be sure you don't have a high pass filter somewhere between your vfo and your mixer. I don't know what kind of mixer you are using but if it is an active mixer then there could easily be some kind of filter involved. That's why I like diode ring mixers with resistive pads between the vfo and the mixer - it gives you a good termination for both the mixer and the vfo and there isn't nearly as much to worry about.

tim ab0wr

3801. Re: toroid cores?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-20 10:54:30 UTC
From: nospam@geniegate.com
Message-ID: <Lc1153392560281290xff5804@air.tunestar.net>
Source record: 11102

In <ERvvg.7$NX2.0@newsreading01.news.tds.net>,
"Gregory D. MELLOTT" <melken@tds.net> mentions:
> My luck (quite some time ago) with FETs was not nice either. Someone may have to
>correct my, yet the only way I think one can get away with fiddling with the
>things the way most people construct, might be to use zener diodes between the
>gate and source and drain.

Some day... I'm going to mess about wit zener diodes... I tried to always
keep myself grounded, pinching the leads together with a hemostat, but..
maybe the soldering iron did it, yea, uh huh. :-)

> Once its all together and apparently functioning one
>probably could remove them then with less worry about then getting a little
>static jolt and ruining the junction. Tubes are a lot more forgiving.

I hear ya about tubes being more forgiving, much more fun, too.

Just wish they didn't have such weird power requirements.

Jamie
--
http://www.geniegate.com Custom web programming
guhzo_42@lnubb.pbz (rot13) User Management Solutions

3802. Re: toroid cores?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-20 11:07:38 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <neSdnZUrjOBm_iLZnZ2dnUVZ_qSdnZ2d@bright.net>
Source record: 11103

Actually, maybe the soldering DID do it. Are you using an iron with a three prong cord? The third prong ties the soldering iron tip to ground (assuming that, if so, you are plugging that into a GROUNDED three prong outlet and not using one of those three prong to two prong adapters). Also, this is assuming you are in the United States...not sure about other countries outlet wiring.

Scott

Jamie wrote:

> Some day... I'm going to mess about wit zener diodes... I tried to always
> keep myself grounded, pinching the leads together with a hemostat, but..
> maybe the soldering iron did it, yea, uh huh. :-)
>

> Jamie

3803. Re: Newbie Question: PC Based Oscilloscopes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-20 16:08:37 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1153411717.246672.73210@75g2000cwc.googlegroups.com>
Source record: 11104

Joel Kolstad wrote:),

I'm willing to bet
> you'd be just as happy as with your old analog scope.
>

Andy comments:
I admit that I haven't used a digital scope since I retired 5 yrs ago, but , in my opinion, they have TOO DAMN MANY buttons !!!!

It was frustrating to have to use a new digital scope that I was unfamiliar with whenever I had to visit a different lab and give a hand.... Took longer to figure out the scope than to solve the problem......

"You might can teach an old dog new tricks, but only if
he wants to learn them" :>))))

..... from The World According to JungleAndy (W4OAH)

:

3804. Re: toroid cores?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-20 17:46:50 UTC
From: Brian <kb9bvn@earthlink.net>
Message-ID: <ekPvg.7368$vO.7364@newsread4.news.pas.earthlink.net>
Source record: 11105

Jamie,

Go to http://www.kitsandparts.com and use the toroid calculator he has there.

Another thing you can try is wrapping 25 or 30 turns and then measuring it with an LC meter in the L mode of course. AADE sells a fantastic LC meter kit for about $100 - I built one a few years ago and I use it every week when digging in the junk box looking for caps and coils.

Good luck with your regen, have fun.

73 de KB9BVN

--
==========
Radio Amateurs - Fill your junk box, from my junkbox!
http://www.hamradparts.com
73 de KB9BVN
==========

"Jamie" <nospam@geniegate.com> wrote in message
news:Lc1152868412193490xc2a48c@air.tunestar.net...
> Hi Newsgroup,
>
> Been trying to make a regen radio out of garbage. So far, I seem to have
> all the parts and it almost seems to work, however, I'm a bit confused
> about the inductance of toroid cores.
>
> I've tried to use one of those things from the back of a monitor
(presumably
> to prevent RF interference) as one of the coils and another adjustable
coil
> from another device, to no avail. It has no markings and it appears to be
> a ferrite device in the shape of a ring.
>
> Anyone know an easy way to figure out how many turns to get (presumably
300mh?)
> from one of these? Can I measure it with a ruler and some how get a
formula
> for the number of turns / mH ? Are these really bad deviced to use? (the
thought
> occurs I must admit, that if it was meant to BLOCK rf, using would be
illogical)
>
> Here's the circuit I'm basing it on:

>
> http://www.tricountyi.net/~randerse/regen.htm
>
> If I inject a signal directly into the coil (in place of his amplified RF
"front
> stage") I can pick it up, but no oscillation and lousy tuning. (comes in
on pretty
> much 1/2 the dial) I'm assuming this has something to do with the tank
circuit. (I have
> two air capacitors totalling around 360pf one from a console stereo, the
other from
> some place I can't remember where..)
>
> He's got 25T and 23T specified for a T-50-2 coil. Closest research on
these that
> I can find is that this should produce about 300mh (but I could be wrong!
anyone know
> for sure what the mH is on that?) This seems to make sense from everything
I've read
> so far, but.. I have no way to measure it.
>
> If I end up using an air core, would I keep the ratio of turns for the
tickler and
> injection coil? (where he has 3 and 5 turns spec'd) ? It's my assumption
that
> in these two smaller coils, it's a step up transformer so it'd be a matter
of ratios,
> am I correct in this assumption?
>
> Every bit of the circuit should come from garbage (the MPF102's I had to
buy, but thats
> it) Even the coil wire is from the transformer of a broken microwave, the
LM386 chip used
> for audio (and some resistors) will come from an old modem and the pot is
a 500k pot,
> (from a console) wired in parallel with a ~>10k resistor to give a range
between 0 - 10k ohms.
>
> The main point is to build it from garbage, I already have a radio and
don't
> really "need" one, but.. as I once built a tube version of this (far
simpler)
> doing one in solid state appeals to me.
>
> Jamie
> --
> http://www.geniegate.com Custom web programming
> guhzo_42@lnubb.pbz (rot13) User Management Solutions

3805. Re: toroid cores?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-20 18:03:49 UTC
From: Brian <kb9bvn@earthlink.net>
Message-ID: <9APvg.2393$157.1604@newsread3.news.pas.earthlink.net>
Source record: 11106

25 Turns of #28 on a T50-2 is about 3.2 uH not 300 mH

23 Turns of #28 on a T50-2 is about 2.6 uH

T50-2 has a AL of about 49

uH = (AL * TurnsSQR) / 10000

So...

(49 * 625) / 10000 = 3.065 uH (25 turns) for 2 - 30 Mhz

(49 * 529)/ 10000 = 2.592 uH (23 Turns) for 2-30Mhz

--
==========
Radio Amateurs - Fill your junk box, from my junkbox!
http://www.hamradparts.com
73 de KB9BVN
==========

"Jamie" <nospam@geniegate.com> wrote in message
news:Lc1152868412193490xc2a48c@air.tunestar.net...
> Hi Newsgroup,
>
> Been trying to make a regen radio out of garbage. So far, I seem to have
> all the parts and it almost seems to work, however, I'm a bit confused
> about the inductance of toroid cores.
>
> I've tried to use one of those things from the back of a monitor
(presumably
> to prevent RF interference) as one of the coils and another adjustable
coil
> from another device, to no avail. It has no markings and it appears to be
> a ferrite device in the shape of a ring.
>
> Anyone know an easy way to figure out how many turns to get (presumably
300mh?)
> from one of these? Can I measure it with a ruler and some how get a
formula
> for the number of turns / mH ? Are these really bad deviced to use? (the
thought
> occurs I must admit, that if it was meant to BLOCK rf, using would be
illogical)
>
> Here's the circuit I'm basing it on:
>

> http://www.tricountyi.net/~randerse/regen.htm
>
> If I inject a signal directly into the coil (in place of his amplified RF
"front
> stage") I can pick it up, but no oscillation and lousy tuning. (comes in
on pretty
> much 1/2 the dial) I'm assuming this has something to do with the tank
circuit. (I have
> two air capacitors totalling around 360pf one from a console stereo, the
other from
> some place I can't remember where..)
>
> He's got 25T and 23T specified for a T-50-2 coil. Closest research on
these that
> I can find is that this should produce about 300mh (but I could be wrong!
anyone know
> for sure what the mH is on that?) This seems to make sense from everything
I've read
> so far, but.. I have no way to measure it.
>
> If I end up using an air core, would I keep the ratio of turns for the
tickler and
> injection coil? (where he has 3 and 5 turns spec'd) ? It's my assumption
that
> in these two smaller coils, it's a step up transformer so it'd be a matter
of ratios,
> am I correct in this assumption?
>
> Every bit of the circuit should come from garbage (the MPF102's I had to
buy, but thats
> it) Even the coil wire is from the transformer of a broken microwave, the
LM386 chip used
> for audio (and some resistors) will come from an old modem and the pot is
a 500k pot,
> (from a console) wired in parallel with a ~>10k resistor to give a range
between 0 - 10k ohms.
>
> The main point is to build it from garbage, I already have a radio and
don't
> really "need" one, but.. as I once built a tube version of this (far
simpler)
> doing one in solid state appeals to me.
>
> Jamie
> --
> http://www.geniegate.com Custom web programming
> guhzo_42@lnubb.pbz (rot13) User Management Solutions

3806. Microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-21 12:42:50 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1153485770.076247.315190@s13g2000cwa.googlegroups.com>
Source record: 11107

Andy writes:

I have been thinking about building a high voltage power supply
for a big amp, and am toying with the idea of using a couple of
microwave oven transformers, which I have on hand.

I plan to use two, with the primaries connected in parallel but
opposing, so that each one will supply voltage, half-wave, to a
diode ring. By doing this, I can have each core grounded like it
is used in the ovens....

So, has anyone else done this and run into any problems that
I may not have forseen ?

Thanks,
Andy

3807. Re: Microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-21 14:25:24 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1153491924.564858.218020@s13g2000cwa.googlegroups.com>
Source record: 11108

AndyS wrote:
> Andy writes:
>
> I have been thinking about building a high voltage power supply
> for a big amp, and am toying with the idea of using a couple of
> microwave oven transformers, which I have on hand.
>
> I plan to use two, with the primaries connected in parallel but
> opposing, so that each one will supply voltage, half-wave, to a
> diode ring. By doing this, I can have each core grounded like it
> is used in the ovens....
>
> So, has anyone else done this and run into any problems that
> I may not have forseen ?
>
> Thanks,
> Andy

Drew VK3XU had an article in AR magazine recently about this - he used 2 of them, the primaries in series, the secondaries in //. He removed the magnetic shunts. With effectively half supply on each one, they didnt go into saturation but maintained full output voltag. He lifted the ground wire of the secondaries to frame - this was supposed to be a big no no, but his experiments showed there was no breakdown to earth, he then used a bridge rectifier on the resultant // secondaries...got good results,.....

Andrew VK3BFA.

3808. Re: toroid cores?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-21 19:35:15 UTC
From: Kirk <kirkmcloren@yahoo.com>
Message-ID: <1153510515.846211.284510@m73g2000cwd.googlegroups.com>
Source record: 11109

I soldered fets with a max V gate to source of 10 volts with no prob.
The trick is to wrap the leads together with some bare 30 guage and
then after soldering remove the 30 guage.
Use a grounded iron and set the pcb on a sheet of aluminum foil with
470k - 1 meg to ground
the resistor is to save you if you touch something leaky and the foil
at the same time - like a bad scope or something.
Kirk
KC7THL
>
> Hi,
>
> My luck (quite some time ago) with FETs was not nice either. Someone may have to
> correct my, yet the only way I think one can get away with fiddling with the
> things the way most people construct, might be to use zener diodes between the
> gate and source and drain. Once its all together and apparently functioning one
> probably could remove them then with less worry about then getting a little
> static jolt and ruining the junction. Tubes are a lot more forgiving.
>
> Sincerely,
>
> Gregory D. MELLOTT

3809. Re: Microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-21 23:50:52 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <oqmdnVYbt8nP9VzZnZ2dnUVZ_qqdnZ2d@web-ster.com>
Source record: 11110

AndyS wrote:
> Andy writes:
>
> I have been thinking about building a high voltage power supply
> for a big amp, and am toying with the idea of using a couple of
> microwave oven transformers, which I have on hand.
>
> I plan to use two, with the primaries connected in parallel but
> opposing, so that each one will supply voltage, half-wave, to a
> diode ring. By doing this, I can have each core grounded like it
> is used in the ovens....
>
> So, has anyone else done this and run into any problems that
> I may not have forseen ?
>
Using 1/2 wave rectification on each one will result in big DC currents
in the coils. These DC currents will saturate your cores like nothing else.

If you wanted to do this and be safe you'd want to rewind the primaries
after insulating the core with some appropriate high-dielectric strength
material like Kapton.

If you're in the US you may want to consider using the primaries in
series, and running off of 220V.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

3810. Re: Microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-22 00:29:19 UTC
From: Spammenotplease <soaponarope@yahoo.com>
Message-ID: <e9rrgv$o6p$1@skeeter.ucdavis.edu>
Source record: 11111

There's a yahoo rfamplifiers group on the web, we've talked about this subject a few times and a copy of the text is available in our files section.

Join us if you'd like to talk about hv supplies and rf amplifiers:

http://groups.yahoo.com/group/rfamplifiers/

cheers,
skipp

: AndyS <andysharpe@juno.com> wrote:
: Andy writes:

: I have been thinking about building a high voltage power supply
: for a big amp, and am toying with the idea of using a couple of
: microwave oven transformers, which I have on hand.

: I plan to use two, with the primaries connected in parallel but
: opposing, so that each one will supply voltage, half-wave, to a
: diode ring. By doing this, I can have each core grounded like it
: is used in the ovens....

: So, has anyone else done this and run into any problems that
: I may not have forseen ?

: Thanks,
: Andy

3811. Re: Microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-22 03:45:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12c37rlje2qau9b@corp.supernews.com>
Source record: 11112

Go to http://groups.google.com and do an advanced search for "microwave oven transformer" in rec.radio.amateur.*. You'll get a couple of pages of hits, representing at least a couple of hundred postings on the topic, many of them from this newsgroup.

Roy Lewallen, W7EL

AndyS wrote:
> Andy writes:
>
> I have been thinking about building a high voltage power supply
> for a big amp, and am toying with the idea of using a couple of
> microwave oven transformers, which I have on hand.
>
> I plan to use two, with the primaries connected in parallel but
> opposing, so that each one will supply voltage, half-wave, to a
> diode ring. By doing this, I can have each core grounded like it
> is used in the ovens....
>
> So, has anyone else done this and run into any problems that
> I may not have forseen ?
>
> Thanks,
> Andy
>

3812. Input circuit for grounded grid amplifier with 2x 813

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-22 15:39:03 UTC
From: df9gr@darc.de
Message-ID: <1153582743.878289.81760@p79g2000cwp.googlegroups.com>
Source record: 11113

Hello,
I got a pretty old amplifier with 2x 813 tubes in grounded grid. I runs nicely with 700 to 850 watts from 80 to 10m. I already did some modifications (vacuum relays, fan control, 9 band operation (80-10m) and now I am looking for some ideas for an input circuit. I meassured the input impedance of the tubes with about 120 to 130 Ohms which gives a bad SWR on a 50 Ohm output stage of a modern transceiver. I also tried a 1:4 UNUN. Results where slightly better but the SWR is still to high. As I want to avoid to use of an external tuner I am looking for someone out there who has build an input circuit (e.g. 1 collins pi-filter for every band) and can give me some advice how to calculate or build.
tnx vy73 Rene DF9GR

3813. Re: Microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-22 16:24:42 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <ejswg.4281$Oz3.1348@trnddc02>
Source record: 11114

Tim Wescott wrote:

> Using 1/2 wave rectification on each one will result in big DC currents
> in the coils. These DC currents will saturate your cores like nothing
> else.

Hey, Tim -

IIRC, there is only one diode attached to the transformer in my microwave.
That would mean it is half-wave rectified as it comes from the factory. Yes?

Cheers,
John

3814. Re: What is a wire antenna's impedance? -followup

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-22 16:46:42 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <SDswg.4402$Oz3.2677@trnddc02>
Source record: 11115

AndyS wrote:
> John - KD5YI wrote:
>
>>Where is the counterpoise on a handheld transceiver? I believe it is the
>>body of the transceiver, the hand, arm, and body of the operator, and the earth.
>>
>
> ****** Yes. If the case is conductive. Even if the case is metal ,
> and not
> connected to the internal "ground" , it becomes part of the
> counterpoise
> by capacitance. Of course, the hand is conductive, etc.....
>
>
> So, I tried to make
>
>>some measurements to show how much variation there can be with wire antennas
>>and to underscore the fact that there is no way anyone can predict what a
>>wire antenna's impedance will be on the objects the OP referred to under the
>>myriad of conditions possible.
>>
>
> \
> **** And you did that very effectively. I didn't realize that you were
> trying
> to show the significant variations, and thought you were wondering why
> the readings were so different. Sorry,.... I just didn't get your
> intent....
>
> I would have liked to see what the piece of wire did with a nice ground
> plane, tho, to see what the design baseline would have been.... In
> other words,
> a piece of wire looks like, say 32 ohms over a ground plane, but when
> all the variables such as shape, no ground plane, people, nearby
> objects,
> etc come into play, it goes from hell to high water.....
> I'm glad to see someone actually doing the experiments, rather than
> just quoting a bunch of " E to the J Beta pitchforks" and letting it
> go at that....... :>)))))
>
> Andy W4OAH

Thanks for your comments, Andy. I agree with you on experiments. There are
times, however, I would rather experiment using EZNEC than with the MFJ. It

all depends on circumstances. One method can be faster than the other depending on the goal.

In fact, it has been between 105 and 108 degrees here for the last week or two, putting a crimp in outside activities. I would rather stay inside and model my unusual thoughts than to try them outside. On the other hand, I don't know how to model an MFJ enclosure, my hand, my body, and such in EZNEC. So, that is when I measure.

Also, there are times when both methods are warranted. Like, measure to determine if your model is correct. Or, model to determine if your test set-up is correct.

Each method has its advantages and disadvantages. I just hope I have the knowledge to choose the appropriate method when it comes time to do the work.

73,
John

3815. Re: Input circuit for grounded grid amplifier with 2x 813

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-22 17:48:55 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <k1p4c2le1vjv398fgagsc9q5n3hcebs2oa@4ax.com>
Source record: 11116

ORIGINAL MESSAGE:

On 22 Jul 2006 08:39:03 -0700, df9gr@darc.de wrote:

>Hello,
>I got a pretty old amplifier with 2x 813 tubes in grounded grid. I runs
>nicely with 700 to 850 watts from 80 to 10m. I already did some
>modifications (vacuum relays, fan control, 9 band operation (80-10m)
>and now I am looking for some ideas for an input circuit. I meassured
>the input impedance of the tubes with about 120 to 130 Ohms which gives
>a bad SWR on a 50 Ohm output stage of a modern transceiver. I also
>tried a 1:4 UNUN. Results where slightly better but the SWR is still to
>high. As I want to avoid to use of an external tuner I am looking for
>someone out there who has build an input circuit (e.g. 1 collins
>pi-filter for every band) and can give me some advice how to calculate
>or build.
>tnx vy73 Rene DF9GR

------------ REPLY SEPARATOR ------------

Try an LDG autotuner:

http://www.ldgelectronics.com/at-100amp.html

This particular model is made for homebrewers to include in their
amps.

Bill, W6WRT

3816. Wellbrook ALA 100 with Rotator - Construction Details

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-22 20:34:39 UTC
From: Guy Atkins <dxnospam@guyatkins.com>
Message-ID: <b8WdnT7uBI5nFI_ZnZ2dnUVZ_rGdnZ2d@comcast.com>
Source record: 11117
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.shortwave

Those with an interest in building a Wellbrook ALA 100 setup for use on an antenna rotator may want to check out my most recent blog entry (July 22nd). I have pictures and construction details that describe the way I approached the project.

I believe the ALA 100 is the most flexible and useful Wellbrook model for the do-it-yourselfer. You can construct the loop in whatever manner suits your abilities and requirements.

My use of the ALA 100 is primarily for DXing foreign medium wave signals, with a secondary use of hearing third-world broadcasters on the tropical bands. I've heard of some amateur radio operators using Wellbrook antennas for a receive-only solution, too.

73,

Guy Atkins
Puyallup, WA USA
blog: www.sdr-1000.blogspot.com

3817. Re: Microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-22 21:36:35 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <KoGdnQrndbjKB1_ZnZ2dnUVZ_tCdnZ2d@web-ster.com>
Source record: 11118

John - KD5YI wrote:

> Tim Wescott wrote:
>
>> Using 1/2 wave rectification on each one will result in big DC
>> currents in the coils. These DC currents will saturate your cores
>> like nothing else.
>
>
>
>
> Hey, Tim -
>
> IIRC, there is only one diode attached to the transformer in my
> microwave. That would mean it is half-wave rectified as it comes from
> the factory. Yes?
>
> Cheers,
> John

Yes, come to think of it -- yes. Perhaps the core is sized to take it.

I guess the next question is how much harder can you push the system if
you _aren't_ putting DC on the core?

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

3818. Re: Input circuit for grounded grid amplifier with 2x 813

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-22 22:20:57 UTC
From: "Roger (K8RI)" <Roger'sInvalidAddress@charter.net>
Message-ID: <lh85c29vdkia8iv661s2s348fs9bd5m90p@4ax.com>
Source record: 11119

On 22 Jul 2006 08:39:03 -0700, df9gr@darc.de wrote:

>Hello,
>I got a pretty old amplifier with 2x 813 tubes in grounded grid. I runs
>nicely with 700 to 850 watts from 80 to 10m. I already did some
>modifications (vacuum relays, fan control, 9 band operation (80-10m)
>and now I am looking for some ideas for an input circuit. I meassured
>the input impedance of the tubes with about 120 to 130 Ohms which gives
>a bad SWR on a 50 Ohm output stage of a modern transceiver. I also
>tried a 1:4 UNUN. Results where slightly better but the SWR is still to
>high. As I want to avoid to use of an external tuner I am looking for
>someone out there who has build an input circuit (e.g. 1 collins
>pi-filter for every band) and can give me some advice how to calculate
>or build.

If resistive I always figured anything under 3:1 was good.
I've fed a pair of 813s in GG at close to the legal limit with a
fairly modern transceiver with good results, but I never checked to
see what I had for an input impedance. I guess that was one of those
cases where ignorance is bliss <:-)) I didn't know it was high so I
didn't worry about it.

For input impedance matching, look at a schematic of the Henry 2K4.
They use a separate matching network plugged into an octal socket for
each band. The ratios are different, but the design could easily be
modified and the layout is easy to experiment with. I don't have the
manual handy, but as I recall it's just an adjustable transformer with
a tap.

I think you'll be able to find the whole manual at BAMA

Good Luck es 73

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com (Get valid address from

>tnx vy73 Rene DF9GR
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com

3819. Re: Microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-22 23:36:25 UTC
From: Chris Jones <lugnut808@nospam.yahoo.com>
Message-ID: <12c5a2nom86qf6@corp.supernews.com>
Source record: 11120

Tim Wescott wrote:

> John - KD5YI wrote:
>
>> Tim Wescott wrote:
>>
>>> Using 1/2 wave rectification on each one will result in big DC
>>> currents in the coils. These DC currents will saturate your cores
>>> like nothing else.
>>
>>
>>
>>
>> Hey, Tim -
>>
>> IIRC, there is only one diode attached to the transformer in my
>> microwave. That would mean it is half-wave rectified as it comes from
>> the factory. Yes?
>>
>> Cheers,
>> John
>
> Yes, come to think of it -- yes. Perhaps the core is sized to take it.
>
> I guess the next question is how much harder can you push the system if
> you _aren't_ putting DC on the core?
>

Do they not put a capacitor in series with the transformer secondary, and
then connect this combination to a diode in parallel with the magnetron?
In this way the capacitor would prevent DC in the transformer.

Chris

3820. Re: Wellbrook ALA 100 with Rotator - Construction Details

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-23 03:41:41 UTC
From: miso@sushi.com
Message-ID: <1153626101.333721.76850@m79g2000cwm.googlegroups.com>
Source record: 11121
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.shortwave

Guy Atkins wrote:
> Those with an interest in building a Wellbrook ALA 100 setup for use on an
> antenna rotator may want to check out my most recent blog entry (July 22nd).
> I have pictures and construction details that describe the way I approached
> the project.
>
> I believe the ALA 100 is the most flexible and useful Wellbrook model for
> the do-it-yourselfer. You can construct the loop in whatever manner suits
> your abilities and requirements.
>
> My use of the ALA 100 is primarily for DXing foreign medium wave signals,
> with a secondary use of hearing third-world broadcasters on the tropical
> bands. I've heard of some amateur radio operators using Wellbrook antennas
> for a receive-only solution, too.
>
> 73,
>
> Guy Atkins
> Puyallup, WA USA
> blog: www.sdr-1000.blogspot.com

Ah, so your loops are concentric. I ran my parallel. Did you discuss
this with Andy?

3821. Push-pull CP640 amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-23 03:43:49 UTC
From: Mike Lucas <w5chr@bellsouth.net>
Message-ID: <UhCwg.12972$Ur.9202@bignews7.bellsouth.net>
Source record: 11122

I'm looking for example circuits of a strong P-P RF amplifier using CP-640 fet's.
I have four matched parts, and would like to improve over the single-ended amp's second order intermod. Any suggestions or links?

Mike W5CHR
Memphis, Tn.

3822. Re: Microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-23 04:48:17 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1153630097.294626.313050@i42g2000cwa.googlegroups.com>
Source record: 11123

John - KD5YI wrote:
> Tim Wescott wrote:
>
> > Using 1/2 wave rectification on each one will result in big DC currents
> > in the coils. These DC currents will saturate your cores like nothing
> > else.
>
>
>
> Hey, Tim -
>
> IIRC, there is only one diode attached to the transformer in my microwave.
> That would mean it is half-wave rectified as it comes from the factory. Yes?
>
> Cheers,
> John

No. Its actually a full wave voltage doubler - the tube itself is used
as a diode.
And there not, strictly speaking, "proper" power transformers - a
saturable reactor would be a better description. They use this to
current limit the things cheaply - notice the big "Boing" when they
switch, noticeable on a low duty defrost cycle.

73 de VK3BFA.

PS - as a self employed electronics technician, working alone, I refuse
to work on the things in my business - too many people been lethally
zapped by them, and no one nearby to give CPR......

3823. Re: Wellbrook ALA 100 with Rotator - Construction Details

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-23 05:09:58 UTC
From: Guy Atkins <dxnospam@guyatkins.com>
Message-ID: <P-WdnQ4Fc_9ZmV7ZnZ2dnUVZ_o6dnZ2d@comcast.com>
Source record: 11124
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.shortwave

I did mention the spiral configuration to him, but he didn't comment on it.
The construction seemed to be easier, so it's the only style I considered
from the start.

Guy

<miso@sushi.com> wrote in message
news:1153626101.333721.76850@m79g2000cwm.googlegroups.com...
>
> Ah, so your loops are concentric. I ran my parallel. Did you discuss
> this with Andy?
>

3824. GE commercial controllers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-23 05:30:07 UTC
From: Allan Butler <ka0ies@hotmail.com>
Message-ID: <1153632045_23@64triton.net>
Source record: 11125

There is a company that makes a controller for some of the commercial
GE radios that have been around for several years. They allow control by
computer or at a distance of about 100 feet from the control head using a
standard computer microphone. Does anyone know the name of the company.

I am interested in finding them and one or two of the radios so that I can
play around a little bit.

Thanks in advance.

Yes I have done a search in Google.

-----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

3825. Re: Wellbrook ALA 100 with Rotator - Construction Details

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-23 06:27:19 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1153636039.570195.170200@p79g2000cwp.googlegroups.com>
Source record: 11126
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.shortwave

GA,

Nice design and execution of the Wellbrook ALA 100 Loop Antenna
as a portable and point-able (rotate) Antenna.

A Close-Up Look : The Wellbrook ALA 100 Antenna with Rotor
http://www.sdr-1000.blogspot.com/
The most flexible Wellbrook Antenna for the Radio Antenna Experimenter.

~ RHF
.
.
. .

Guy Atkins wrote:
> Those with an interest in building a Wellbrook ALA 100 setup for use on an
> antenna rotator may want to check out my most recent blog entry (July 22nd).
> I have pictures and construction details that describe the way I approached
> the project.
>
> I believe the ALA 100 is the most flexible and useful Wellbrook model for
> the do-it-yourselfer. You can construct the loop in whatever manner suits
> your abilities and requirements.
>
> My use of the ALA 100 is primarily for DXing foreign medium wave signals,
> with a secondary use of hearing third-world broadcasters on the tropical
> bands. I've heard of some amateur radio operators using Wellbrook antennas
> for a receive-only solution, too.
>
> 73,
>
> Guy Atkins
> Puyallup, WA USA
> blog: www.sdr-1000.blogspot.com

3826. Re: Microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-23 15:33:11 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <XEMwg.10206$2u4.338@trnddc06>
Source record: 11127

Andrew VK3BFA wrote:
> John - KD5YI wrote:
>
>>Tim Wescott wrote:
>>
>>
>>>Using 1/2 wave rectification on each one will result in big DC currents
>>>in the coils. These DC currents will saturate your cores like nothing
>>>else.
>>
>>
>>
>>Hey, Tim -
>>
>>IIRC, there is only one diode attached to the transformer in my microwave.
>>That would mean it is half-wave rectified as it comes from the factory. Yes?
>>
>>Cheers,
>>John
>
>
> No. Its actually a full wave voltage doubler - the tube itself is used
> as a diode.

Ah! Right you are, Andrew. I had forgotten about that. That makes Tim
Wescott correct, too, about DC in the winding.

Good catch.

John

3827. Re: Microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-23 18:25:50 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <NMSdndl9pbe8II7ZnZ2dnUVZ_oidnZ2d@web-ster.com>
Source record: 11128

Andrew VK3BFA wrote:

> John - KD5YI wrote:
>
>>Tim Wescott wrote:
>>
>>
>>>Using 1/2 wave rectification on each one will result in big DC currents
>>>in the coils. These DC currents will saturate your cores like nothing
>>>else.
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>>IIRC, there is only one diode attached to the transformer in my microwave.
>>That would mean it is half-wave rectified as it comes from the factory. Yes?
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>>Cheers,
>>John
>
>
> No. Its actually a full wave voltage doubler - the tube itself is used
> as a diode.
> And there not, strictly speaking, "proper" power transformers - a
> saturable reactor would be a better description. They use this to
> current limit the things cheaply - notice the big "Boing" when they
> switch, noticeable on a low duty defrost cycle.
>
I read an article years ago on using them for powering linear amps --
the first thing you were supposed to do was knock the shunt out of the
core. Apparently this is usually quite easy unless it's spot welded, in
which case it's quite hard.

> 73 de VK3BFA.
>
> PS - as a self employed electronics technician, working alone, I refuse
> to work on the things in my business - too many people been lethally
> zapped by them, and no one nearby to give CPR......
>
This could be wise -- once you broach the case on one of those things
you're into voltages that will deal instant death. But that's the case
for just about any tube linear amplifier.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

3828. Re: Wellbrook ALA 100 with Rotator - Construction Details

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-23 18:49:03 UTC
From: Telamon <telamon_spamshield@pacbell.net.is.invalid>
Message-ID: <telamon_spamshield-A7782B.11490223072006@newsclstr02.news.prodigy.com>
Source record: 11129
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.shortwave
Body handling: HTML body converted to readable text

In article ,
"Guy Atkins" wrote:

> I did mention the spiral configuration to him, but he didn't comment on it.
> The construction seemed to be easier, so it's the only style I considered
> from the start.
>
> Guy
>
> wrote in message
> news:1153626101.333721.76850@m79g2000cwm.googlegroups.com...
> >
> > Ah, so your loops are concentric. I ran my parallel. Did you discuss
> > this with Andy?
> >

Spiral concentric or coil will change the pattern but since the antenna
is so electrically small it won't make much difference unless you want
to use the nulls. I would expect that a coil wound would be best. I you
are concerned about using a null in the antenna pattern then go one turn.

--
Telamon
Ventura, California

3829. Re: Class C amps saturating?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-24 02:00:23 UTC
From: w8ji@akorn.net
Message-ID: <1153706423.121439.219690@m73g2000cwd.googlegroups.com>
Source record: 11130

Reg Edwards wrote:
> ====================================
> All power amplifiers have a tuned circuit in the plate. It is
> essential to reduce output power contained in the harmonics.
>
> In any case, power in the harmonics is wasted power.
>
> With a tuned circuit in the plate it is impossible to achieve a
> rectangular voltage output waveform. It is always a sinewaveform.
>
> A rectangular plate current in conjunction with a tuned load always
> causes harmonic power to be wasted at the plate.
>
> So one might just as well use a sinusoidal driving waveform, Class-C
> or not. It's easier. It also avoids generating and wasting harmonic
> power in the driver.

Not true.

A network with an inductive input will allow a square waveform at the device output but not waste significant energy in harmonics. I've done that in designs.

In the 1950's RCA had an AM BC transmitter that drove a tube with a near square wave, and had a near square wave. The RCA transmitter used a low-mu triode that had parallel tuned circuits in the grid and anode set at the third harmonic. It had conventional networks feeding the grid and to the antenna from the plate resonantor. That transmitter made over 95% anode efficiency.

73 Tom

3830. Re: Surplus Sales of Nebraska

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-24 02:03:04 UTC
From: w8ji@akorn.net
Message-ID: <1153706584.859740.182040@h48g2000cwc.googlegroups.com>
Source record: 11131

ars_wa8mea@netzero.com wrote:
> I, like many hams, have gotten a lot of surplus stuff from Fair Radio
> Sales in Ohio.
>
> Monday, I discovered Surplus Sales of Nebraska.
>
> Nice people! Old school customer service. The web ordering isn't
> "modern". But they don't make a lot of money at this, I'm sure. So
> I.T. people are probably out of the question. But your order gets
> underway in about 48 hours.....
>
> They told me the owner spends all day on the net trying to hunt down
> surplus stuff he can buy. So if you have anything, I was told to take
> a photo of it....and send an e-mail to him. His e-mail address is at
> the bottom of every web page.
>
> Here's the website for Surplus Sales:
>
> http://www.surplussales.com/
>
> 73, Bill - WA8MEA
> ars_wa8mea@netsero.com
> http://HamRadioFun.com

That's a good place to go if you don't mind paying more than new cost
for some components.

Fair Radio has great prices, Surplus Sales gets top dollar. Watch the
price before you buy!

3831. Re: Class C amps saturating?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-24 02:13:04 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <ea1abg$hd3$1@theodyn.ncf.ca>
Source record: 11132

(w8ji@akorn.net) writes:
> Reg Edwards wrote:
>> ====================================
>> All power amplifiers have a tuned circuit in the plate. It is
>> essential to reduce output power contained in the harmonics.
>>
>> In any case, power in the harmonics is wasted power.
>>
>> With a tuned circuit in the plate it is impossible to achieve a
>> rectangular voltage output waveform. It is always a sinewaveform.
>>
>> A rectangular plate current in conjunction with a tuned load always
>> causes harmonic power to be wasted at the plate.
>>
>> So one might just as well use a sinusoidal driving waveform, Class-C
>> or not. It's easier. It also avoids generating and wasting harmonic
>> power in the driver.
>
>
> Not true.
>
> A network with an inductive input will allow a square waveform at the
> device output but not waste significant energy in harmonics. I've done
> that in designs.
>
And the point is that the Class-C only conducts on a portion of
that sinewave anyway, requiring that tuned circuit in the output
as a "flywheel" in order for there to be a sinewave at the output.
The "harmonics" are a byproduct of that non-linear conduction
at the input. And of course, that's why an amplifier could easily
become a multiplier simply by tuning the output to a harmonic of
the input signal.

Michael VE2BVW

3832. Biasing of Dual Gate Fets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-25 05:32:40 UTC
From: David <websales@orbitcoms.com>
Message-ID: <Y1ixg.272$rP1.237@news-server.bigpond.net.au>
Source record: 11133

Hi,

Pretty fundamental I know but can someone please explain the steps for setting up bias for a Dual Gate MOSFET.

I know I could place a pot on the gate and source for each circuit and play with values but I would like a method that enables me to calculate the values.

The main issue is how to determine values for Rs and Gate 2 Voltage.

I am using BF998 and want to have a "play" at 5V and 8V supply.

The formulae for Id is Id = Idss(1-Vgs/Vp) ^ 2
But Idss is stated as 2-18mA
Vp Gate 1 is given as a range from 1-2V
Vp gate 2 is given as range from 0.5 to 1.5V

If I apply say 4V to G1 and 0V to G2, how do I calculate the voltage at the source to determine Vgs ?

Any help much appreciated.

Regards

David

3833. Re: Class C amps saturating?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-25 12:01:32 UTC
From: w8ji@akorn.net
Message-ID: <1153828892.606330.180690@h48g2000cwc.googlegroups.com>
Source record: 11134

Michael Black wrote:
> (w8ji@akorn.net) writes:
> > Reg Edwards wrote:
> >> ====================================
> >> All power amplifiers have a tuned circuit in the plate. It is
> >> essential to reduce output power contained in the harmonics.
> >>
> >> In any case, power in the harmonics is wasted power.
> >>
> >> With a tuned circuit in the plate it is impossible to achieve a
> >> rectangular voltage output waveform. It is always a sinewaveform.
> >>
> >> A rectangular plate current in conjunction with a tuned load always
> >> causes harmonic power to be wasted at the plate.
> >>
> >> So one might just as well use a sinusoidal driving waveform, Class-C
> >> or not. It's easier. It also avoids generating and wasting harmonic
> >> power in the driver.
> >
> >
> > Not true.
> >
> > A network with an inductive input will allow a square waveform at the
> > device output but not waste significant energy in harmonics. I've done
> > that in designs.
> >
> And the point is that the Class-C only conducts on a portion of
> that sinewave anyway, requiring that tuned circuit in the output
> as a "flywheel" in order for there to be a sinewave at the output.

The point is Reg said a square wave would decrease efficiency and a
sine wave was just as good, but that really isn't true at all.

73 Tom

3834. Re: Biasing of Dual Gate Fets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-25 12:22:50 UTC
From: dkelly42@cox.net
Message-ID: <1153830170.254671.314310@b28g2000cwb.googlegroups.com>
Source record: 11135

Hi David,

Some will ask what you are designing before they can give you an
answer.

FYI

http://users.easystreet.com/w7zoi/lna50.htm

Don

David wrote:
> Hi,
>
> Pretty fundamental I know but can someone please explain the steps for
> setting up bias for a Dual Gate MOSFET.
>

3835. Re: Microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-25 12:28:48 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1153830528.794122.46920@s13g2000cwa.googlegroups.com>
Source record: 11136

Tim Wescott wrote:
> Andrew VK3BFA wrote:
>
> > John - KD5YI wrote:
> >
> >>Tim Wescott wrote:
> >>
> >>
> >>>>>Using 1/2 wave rectification on each one will result in big DC currents
> >>>>>in the coils. These DC currents will saturate your cores like nothing
> >>>>>else.
> >>
> >>
> >>
> >>Hey, Tim -
> >>
> >>IIRC, there is only one diode attached to the transformer in my microwave.
> >>That would mean it is half-wave rectified as it comes from the factory. Yes?
> >>
> >>Cheers,
> >>John
> >
> >
> > No. Its actually a full wave voltage doubler - the tube itself is used
> > as a diode.
> > And there not, strictly speaking, "proper" power transformers - a
> > saturable reactor would be a better description. They use this to
> > current limit the things cheaply - notice the big "Boing" when they
> > switch, noticeable on a low duty defrost cycle.
> >
> I read an article years ago on using them for powering linear amps --
> the first thing you were supposed to do was knock the shunt out of the
> core. Apparently this is usually quite easy unless it's spot welded, in
> which case it's quite hard.
>
> > 73 de VK3BFA.
> >
> > PS - as a self employed electronics technician, working alone, I refuse
> > to work on the things in my business - too many people been lethally
> > zapped by them, and no one nearby to give CPR......
> >
> This could be wise -- once you broach the case on one of those things
> you're into voltages that will deal instant death. But that's the case
> for just about any tube linear amplifier.

>
> --
>
> Tim Wescott
> Wescott Design Services
> http://www.wescottdesign.com
>
> Posting from Google? See http://cfaj.freeshell.org/google/
>
> "Applied Control Theory for Embedded Systems" came out in April.
> See details at http://www.wescottdesign.com/actfes/actfes.html

This could be wise -- once you broach the case on one of those things
you're into voltages that will deal instant death. But that's the
case
for just about any tube linear amplifier.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Never thought about it that way Tim - but your quite right. Theres a
familiarity with HV linear power supplies that I just dont have with
uwave ovens - the linear supplies seem more "ordered" if that makes any
sense -(it probably doesnt......possibly I am just seeking
ajustification for not repairing them - their usually dirty stinking
beasts... and they can throw some INCREDIBLE , mind boggling
intermittents at ya...)

Andrew VK3BFA.

3836. Re: Biasing of Dual Gate Fets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-25 13:07:11 UTC
From: David <websales@orbitcoms.com>
Message-ID: <3loxg.560$rP1.18@news-server.bigpond.net.au>
Source record: 11137

Don,

Thanks for the link to Wes's experiments with MOSFETS.

It still does not explain how to calculate the current or anything about datasheet specs.

I understand some may be curious about what I might build. Typically it will be MOSFET amplifiers. My interest at present is the basic fundamental calcualtions that should be applied to determine Gate voltage and Source resistance for a self-biased Dual Gate MOSFET.

If the calculations are the ones in my previous post then I need to know whether I use min or max values of IDss and Vp etc in the calculations.

There must be some straight forward calculation steps for biasing a Dual gate MOSFET. I can find literally hundreds of articles for BJTs but cannot find much on Dual Gate MOSFET bias.

I can see from the datasheets for example that best noise figure is when ID = 10mA. But cannot see how I calculate source resistance and Gate bias to end up with required VGS and ID. I don't want to pull out pots and play with VG2 and Rs combinations to find out what values set up the appropriate current.

Regards

David

> Hi David,
>
> Some will ask what you are designing before they can give you an
> answer.
>
> FYI
>
> http://users.easystreet.com/w7zoi/lna50.htm
>
> Don
>
>
>
> David wrote:
>> Hi,
>>
>> Pretty fundamental I know but can someone please explain the steps for
>> setting up bias for a Dual Gate MOSFET.

>>
>

3837. Re: Microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-25 14:08:47 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <m4-dnSOs3uJtuFvZnZ2dnUVZ8qudnZ2d@pipex.net>
Source record: 11138

> Never thought about it that way Tim - but your quite right. Theres a
> familiarity with HV linear power supplies that I just dont have with
> uwave ovens - the linear supplies seem more "ordered" if that makes any
> sense -(it probably doesnt......possibly I am just seeking
> ajustification for not repairing them - their usually dirty stinking
> beasts... and they can throw some INCREDIBLE , mind boggling
> intermittents at ya...)
++++++++++++++++++++++++++
But there are some interesting and useful components to be taken before
the remains are moved to the waste dump or perhaps recycling centre.

Frank GM0CSZ / KN6WH

3838. Re: Microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-25 14:26:29 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1153837589.337241.48310@m79g2000cwm.googlegroups.com>
Source record: 11139

Highland Ham wrote:> ++++++++++++++++++++++++++
> But there are some interesting and useful components to be taken before
> the remains are moved to the waste dump or perhaps recycling centre.
>
> Frank GM0CSZ / KN6WH

Andy writes:

Absolutely. The electronicc components can be used for a HV
transformer,
spare HV caps, and the timer is useful as a general purpose timer for a
lawn
sprinkler or oven reminder....for when your daughter is learning to
cook..

The cabinet can be rigged with rubber bands and used to trap small
animals in the garden

The line cord can be used for many projects, or as a useful
strangulation
tool for serial killers...

There's gold in them thar microwave ovens !!!!!!

Andy W4OAH in Eureka

(the organically grown marijuana capital of Texas)

3839. Re: Biasing of Dual Gate Fets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-25 16:06:20 UTC
From: tim gorman <tgorman2@cox.net>
Message-ID: <tci5ae.1k6.ln@tg6124.ab0wr.net>
Source record: 11140

David wrote:

>
>
> Hi,
>
> Pretty fundamental I know but can someone please explain the steps for
> setting up bias for a Dual Gate MOSFET.
>
> I know I could place a pot on the gate and source for each circuit and
> play with values but I would like a method that enables me to calculate
> the values.
>
> The main issue is how to determine values for Rs and Gate 2 Voltage.
>
> I am using BF998 and want to have a "play" at 5V and 8V supply.
>
> The formulae for Id is Id = Idss(1-Vgs/Vp) ^ 2
> But Idss is stated as 2-18mA
> Vp Gate 1 is given as a range from 1-2V
> Vp gate 2 is given as range from 0.5 to 1.5V
>
> If I apply say 4V to G1 and 0V to G2, how do I calculate the voltage at
> the source to determine Vgs ?
>
> Any help much appreciated.
>
> Regards
>
> David

One way of doing this is to get the datasheet for the FET you are using. There should be a graph that shows the operating characteristic curves. The x-axis will be Vds and the Y-axis will be the drain current Id. The characteristic curves will be for various levels of Vgs. Pick an operating point based on the type of amplifier you want. Let's suppose it will be Class A. Assume the FET has a power supply voltage of 40v and an Idss of 10ma. Let's say that you pick a point in the middle of the operating curves that gives an Id of 6ma and a Vds of 20v in order to get the maximum swing out of the amplifer. Looking at the characteristic curves shows that this will require a Vgs of about -1v. Now you have everything you need.

If Vgs needs to be -1v and Id is 6ma (assume Id and Is will be the same) you need a resistor of Vd/Id (R = V/I) or about 166 ohms.

The gate resistor you see in FET amps is not really there for biasing but more to set the input impedance of the amplifier. As long as the leakage current from the gate to the source is small, Vgs is set by the bias resistor in the source lead.

tim ab0wr

3840. Two Terminal Networks - Antenna Traps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-25 21:21:43 UTC
From: kl7r <kl7r@yahoo.com>
Message-ID: <1153862503.112228.132210@m79g2000cwm.googlegroups.com>
Source record: 11141

An Antenna trap is a parallel LC circuit that has one input
and one output terminal. You can make a resonant trap
with series LC that also has one in and one out..

Is it possible to make a two terminal network lowpass filter?

Something like a sharp rolloff RF choke?

Thanks
KL7R

3841. VXO tuning range vs load capacitance

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-25 22:08:51 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrnecd5jk.18fm.ben@saturn.home.ben.com>
Source record: 11142

I built two versions of a Colpitts VCO using red LEDs as varicaps.
Version one had too much load capacitance and the center frequency was
a few kHz below nominal. However, it had a fairly wide tuning range as
the LED was varied about 10p it would tune around 1kHz. A second version
had exactly the right base load capacitance (it oscillated within a few
Hz of 25MHz on powerup), but the tuning range using almost an identical
setup is much narrower.

Is this strong attraction to the natural Crystal frequency normal?

--
Ben Jackson AD7GD
<ben@ben.com>
http://www.ben.com/

3842. Re: Two Terminal Networks - Antenna Traps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-25 22:30:05 UTC
From: jgboyles@aol.com
Message-ID: <1153866604.586363.51520@m73g2000cwd.googlegroups.com>
Source record: 11143

kl7r wrote:
> An Antenna trap is a parallel LC circuit that has one input
> and one output terminal. You can make a resonant trap
> with series LC that also has one in and one out..
>
> Is it possible to make a two terminal network lowpass filter?
>
> Something like a sharp rolloff RF choke?
>
> Thanks
> KL7R

You must remember that parallel and series resonant circuits in
antennas are not really two terminal networks. There has to be ground,
common, earth or whatever and it is common to both the input and
output.
A lowpass filter is realized by a single inductor whose impedance
increases, with increasing frequency. Highpass with a capacitor-the
sharpness of the rolloff is dependent on the Q of the passive devices.
That is it in a nutshell.
There are other factors that enter into this if the devices are used
in antennas. There are several hundred posts to chose from on the
antenna forum.

73 Gary N4AST

3843. Re: VXO tuning range vs load capacitance

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-25 22:54:54 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <KJCdnYUKr-ymPFvZnZ2dnUVZ_oqdnZ2d@web-ster.com>
Source record: 11144

Ben Jackson wrote:
> I built two versions of a Colpitts VCO using red LEDs as varicaps.
> Version one had too much load capacitance and the center frequency was
> a few kHz below nominal. However, it had a fairly wide tuning range as
> the LED was varied about 10p it would tune around 1kHz. A second version
> had exactly the right base load capacitance (it oscillated within a few
> Hz of 25MHz on powerup), but the tuning range using almost an identical
> setup is much narrower.
>
> Is this strong attraction to the natural Crystal frequency normal?
>
If you're using a load capacitance you're not using the crystal's
natural resonance frequency -- that occurs at the series resonant frequency.

Were you using the same crystal for both circuits? The same LED?

I would try this out with a trimmer and parallel cap that mirrored the
expected range of the varicap, _then_ I'd add the extra variable of an
unknown varicap.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

3844. Re: VXO tuning range vs load capacitance

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-25 23:08:10 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrnecd92r.1dhs.ben@saturn.home.ben.com>
Source record: 11145

On 2006-07-25, Tim Wescott <tim@seemywebsite.com> wrote:
> If you're using a load capacitance you're not using the crystal's
> natural resonance frequency -- that occurs at the series resonant frequency.

Point taken. It's a crystal cut for a parallel resonance with a specified
load capacitance (18p, I think).

> Were you using the same crystal for both circuits? The same LED?

Not physically the same parts, but identical parts purchased at the
same time.

> I would try this out with a trimmer and parallel cap that mirrored the
> expected range of the varicap, _then_ I'd add the extra variable of an
> unknown varicap.

That's an obvious idea I had totally overlooked!

--
Ben Jackson AD7GD
<ben@ben.com>
http://www.ben.com/

3845. Re: Biasing of Dual Gate Fets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-26 00:33:50 UTC
From: David <websales@orbitcoms.com>
Message-ID: <OLyxg.715$rP1.458@news-server.bigpond.net.au>
Source record: 11146

Tim,

Thanks for the info.

So, say I wanted to set the bias up at 10mA.

I find the Vd/Id curve on the datasheet.

If I have say a 8V power supply and decide to use a choke in the drain.
This gives me Vd of around 8V. The curve indicates that VGs1 should be
0V and VGs2 = 4V.

This means Rs would be 8/10mA = 800R.

Where I am now confused is that VGS voltages are the Gate to source
voltage. If the source voltage is 8V from the example above then to get
VGS2 of 4V then the bias on VG2 would need to be 12V ?
Also if VGs1 = 0V then the actual voltage on G1 should be 4V ?

Is this correct or am I misinterpreting something here ?

Thanks.

Regards

David

tim gorman wrote:
> David wrote:
>
>>
>> Hi,
>>
>> Pretty fundamental I know but can someone please explain the steps for
>> setting up bias for a Dual Gate MOSFET.
>>
>> I know I could place a pot on the gate and source for each circuit and
>> play with values but I would like a method that enables me to calculate
>> the values.
>>
>> The main issue is how to determine values for Rs and Gate 2 Voltage.
>>
>> I am using BF998 and want to have a "play" at 5V and 8V supply.
>>
>> The formulae for Id is Id = Idss(1-Vgs/Vp) ^ 2
>> But Idss is stated as 2-18mA
>> Vp Gate 1 is given as a range from 1-2V
>> Vp gate 2 is given as range from 0.5 to 1.5V

>>
>> If I apply say 4V to G1 and 0V to G2, how do I calculate the voltage at
>> the source to determine Vgs ?
>>
>> Any help much appreciated.
>>
>> Regards
>>
>> David
>
>
> One way of doing this is to get the datasheet for the FET you are using.
> There should be a graph that shows the operating characteristic curves. The
> x-axis will be Vds and the Y-axis will be the drain current Id. The
> characteristic curves will be for various levels of Vgs. Pick an operating
> point based on the type of amplifier you want. Let's suppose it will be
> Class A. Assume the FET has a power supply voltage of 40v and an Idss of
> 10ma. Let's say that you pick a point in the middle of the operating curves
> that gives an Id of 6ma and a Vds of 20v in order to get the maximum swing
> out of the amplifer. Looking at the characteristic curves shows that this
> will require a Vgs of about -1v. Now you have everything you need.
>
> If Vgs needs to be -1v and Id is 6ma (assume Id and Is will be the same) you
> need a resistor of Vd/Id (R = V/I) or about 166 ohms.
>
> The gate resistor you see in FET amps is not really there for biasing but
> more to set the input impedance of the amplifier. As long as the leakage
> current from the gate to the source is small, Vgs is set by the bias
> resistor in the source lead.
>
> tim ab0wr
>
>

3846. Re: Biasing of Dual Gate Fets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-26 08:52:35 UTC
From: David <websales@orbitcoms.com>
Message-ID: <n3Gxg.962$rP1.670@news-server.bigpond.net.au>
Source record: 11147

OK, I think I got it.

Let's say I want Vdd = 8V. Say I have an RF chock in the Drain then Vds
is almost 8V.

Say I want 5mA bias current.

I look at the Vds vs Id and find that VG1-s = -0.2V for this condition.
(So actual VDs is 7.8V)

Next I use a source resistor of VG1-s/ Id = 40 Ohms
As VG1 = VG1-s + VG1 - IDxRS the Gate voltage applied is 0V.

The graph on the datasheet mentions that this is the output when VG2-s
is 4V.

So now I calculate VG2 = VG2-s + ID x RS = 4.2V

I suppose that I can make Rs smaller to the point where VG1-s is 0V on
the graph.(Occurs at 10mA for BF998).

If I want higher Q point I then add positive bias to V1. I also
understand I can get around 10dB attenuation by lowering VG2-s from 4.2V
towards 0V but need to make it negative if I want to switch the signal
off altogether (If I was to use the FET as say a ASK or OOK modulator).

Thanks

tim gorman wrote:
> David wrote:
>
>>
>> Hi,
>>
>> Pretty fundamental I know but can someone please explain the steps for
>> setting up bias for a Dual Gate MOSFET.
>>
>> I know I could place a pot on the gate and source for each circuit and
>> play with values but I would like a method that enables me to calculate
>> the values.
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>> The main issue is how to determine values for Rs and Gate 2 Voltage.
>>
>> I am using BF998 and want to have a "play" at 5V and 8V supply.
>>
>> The formulae for Id is Id = Idss(1-Vgs/Vp) ^ 2
>> But Idss is stated as 2-18mA

>> Vp Gate 1 is given as a range from 1-2V
>> Vp gate 2 is given as range from 0.5 to 1.5V
>>
>> If I apply say 4V to G1 and 0V to G2, how do I calculate the voltage at
>> the source to determine Vgs ?
>>
>> Any help much appreciated.
>>
>> Regards
>>
>> David
>
>
> One way of doing this is to get the datasheet for the FET you are using.
> There should be a graph that shows the operating characteristic curves. The
> x-axis will be Vds and the Y-axis will be the drain current Id. The
> characteristic curves will be for various levels of Vgs. Pick an operating
> point based on the type of amplifier you want. Let's suppose it will be
> Class A. Assume the FET has a power supply voltage of 40v and an Idss of
> 10ma. Let's say that you pick a point in the middle of the operating curves
> that gives an Id of 6ma and a Vds of 20v in order to get the maximum swing
> out of the amplifer. Looking at the characteristic curves shows that this
> will require a Vgs of about -1v. Now you have everything you need.
>
> If Vgs needs to be -1v and Id is 6ma (assume Id and Is will be the same) you
> need a resistor of Vd/Id (R = V/I) or about 166 ohms.
>
> The gate resistor you see in FET amps is not really there for biasing but
> more to set the input impedance of the amplifier. As long as the leakage
> current from the gate to the source is small, Vgs is set by the bias
> resistor in the source lead.
>
> tim ab0wr
>
>

3847. FA:More tubes/diodes:5Z3, 45, 811; more coming

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-26 12:56:38 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <aEJxg.473867$Fs1.277167@bgtnsc05-news.ops.worldnet.att.net>
Source record: 11048
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Will be listing many tubes in the next week or two, so check often: tnx
for looking heytubeguy
NOTE: all tubes warantteed for 30 days:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

3848. Buy and Sell your Tube Gear!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-26 16:33:29 UTC
From: "Jeff James, W2NBC" <w2nbc@optonline.net>
Message-ID: <tPMxg.18$%Z1.11@fe09.lga>
Source record: 11049

You never know what you'll find..

http://www.dealamerica.com/deal/cgi-bin/ads/bcads.cgi

FREE ads Dedicated to Vintage Amateur Radio...

3849. Re: Biasing of Dual Gate Fets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-26 22:12:30 UTC
From: tim gorman <tgorman2@cox.net>
Message-ID: <g7s8ae.vne.ln@tg6124.ab0wr.net>
Source record: 11050

David wrote:

>
>
> Tim,
>
>
> Thanks for the info.
>
> So, say I wanted to set the bias up at 10mA.
>
> I find the Vd/Id curve on the datasheet.
>
> If I have say a 8V power supply and decide to use a choke in the drain.
> This gives me Vd of around 8V. The curve indicates that VGs1 should be
> 0V and VGs2 = 4V.
>
> This means Rs would be 8/10mA = 800R.
>
> Where I am now confused is that VGS voltages are the Gate to source
> voltage. If the source voltage is 8V from the example above then to get
> VGS2 of 4V then the bias on VG2 would need to be 12V ?
> Also if VGs1 = 0V then the actual voltage on G1 should be 4V ?
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> Is this correct or am I misinterpreting something here ?
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> Thanks.
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> Regards
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>> David wrote:
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>>> play with values but I would like a method that enables me to calculate
>>> the values.

>>>
>>> The main issue is how to determine values for Rs and Gate 2 Voltage.
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>>> I am using BF998 and want to have a "play" at 5V and 8V supply.
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>>> The formulae for Id is Id = Idss(1-Vgs/Vp) ^ 2
>>> But Idss is stated as 2-18mA
>>> Vp Gate 1 is given as a range from 1-2V
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>>> If I apply say 4V to G1 and 0V to G2, how do I calculate the voltage at
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>>> Any help much appreciated.
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>> One way of doing this is to get the datasheet for the FET you are using.
>> There should be a graph that shows the operating characteristic curves.
>> The x-axis will be Vds and the Y-axis will be the drain current Id. The
>> characteristic curves will be for various levels of Vgs. Pick an
>> operating point based on the type of amplifier you want. Let's suppose it
>> will be Class A. Assume the FET has a power supply voltage of 40v and an
>> Idss of 10ma. Let's say that you pick a point in the middle of the
>> operating curves that gives an Id of 6ma and a Vds of 20v in order to get
>> the maximum swing out of the amplifer. Looking at the characteristic
>> curves shows that this will require a Vgs of about -1v. Now you have
>> everything you need.
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>> If Vgs needs to be -1v and Id is 6ma (assume Id and Is will be the same)
>> you
>> need a resistor of Vd/Id (R = V/I) or about 166 ohms.
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>> The gate resistor you see in FET amps is not really there for biasing but
>> more to set the input impedance of the amplifier. As long as the leakage
>> current from the gate to the source is small, Vgs is set by the bias
>> resistor in the source lead.
>>
>> tim ab0wr
>>
>>

I'm sorry, I should have picked up on the fact that you are using a
dual-gate mosfet.

A dual-gate mosfet is a lot like 2 fet's in series. Gate2 is usually used
with an external bias to set the dynamic range of the device. The signal is
usually associated with Gate1. You can apply a fixed bias to Gate2 or tie

in something like an AGC signal to vary the device amplification.

For this type of device you probably would be better off looking at the graph of the Transfer Characteristics. The graph will show the change in Id for changes in Vgs1 with Vgs2 at a fixed value.

For your device I would probably run Vgs2 at 3v to 4v. Looking at the transfer graph, you would want Vgs2 to be around 0.1v to get in the middle of the linear curve. That would put your standing Id at about 9-11 mA.

This would make your source resistor 0.1v/10mA = 10R.

Remember that you'll want to breadboard the circuit and try this out before actually including it in a production unit. Use a fixed voltage divider to get the 4v for Vgs2 and a source resistor of 10R and see how the circuit works. You can always change the source resistor to get what you need.

tim ab0wr

3850. Re: Biasing of Dual Gate Fets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-27 01:44:34 UTC
From: David <websales@orbitcoms.com>
Message-ID: <6UUxg.1359$rP1.1347@news-server.bigpond.net.au>
Source record: 11051

Tim,

Say we look at VG1s = 0.1V as per your example.

The graph for BF998 shows that if VG2s = 4V and VDs = 8V then ID approx = 12.5mA

This would mean that unless I applied a negative voltage on the source I would need to apply 0.1V forward bias to G1 and 4V to G2 ?
As Rs is creating a negative self bias voltage ?

If I set the bias point lower - say 5mA then VG1s is approx. -0.2V according to the graph.

I can achieve this by using a resistor in the source of 0.2/5mA (40 Ohms) and then set VG1 = 0 (so that VG1s = -0.2V) and then 4.2V on G2 so that VG2s = 4V.

Is this correct ?

The transfer characteristic curve shows that for say 10mA. If VG2s = 4V then gm = around 24mS and if VG2s is reduced to 0V the gm reduces to about 7mS.

Thanks

regards

David

tim gorman wrote:
> David wrote:
>
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>> Tim,
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>> Thanks for the info.
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>> This gives me Vd of around 8V. The curve indicates that VGs1 should be
>> 0V and VGs2 = 4V.
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>> This means Rs would be 8/10mA = 800R.

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>> Where I am now confused is that VGS voltages are the Gate to source
>> voltage. If the source voltage is 8V from the example above then to get
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>>>> the source to determine Vgs ?
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>>>> Any help much appreciated.
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>>>> David
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>>> One way of doing this is to get the datasheet for the FET you are using.
>>> There should be a graph that shows the operating characteristic curves.
>>> The x-axis will be Vds and the Y-axis will be the drain current Id. The
>>> characteristic curves will be for various levels of Vgs. Pick an
>>> operating point based on the type of amplifier you want. Let's suppose it
>>> will be Class A. Assume the FET has a power supply voltage of 40v and an

>>> Idss of 10ma. Let's say that you pick a point in the middle of the
>>> operating curves that gives an Id of 6ma and a Vds of 20v in order to get
>>> the maximum swing out of the amplifer. Looking at the characteristic
>>> curves shows that this will require a Vgs of about -1v. Now you have
>>> everything you need.
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>>> If Vgs needs to be -1v and Id is 6ma (assume Id and Is will be the same)
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>>> need a resistor of Vd/Id (R = V/I) or about 166 ohms.
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>>> The gate resistor you see in FET amps is not really there for biasing but
>>> more to set the input impedance of the amplifier. As long as the leakage
>>> current from the gate to the source is small, Vgs is set by the bias
>>> resistor in the source lead.
>>>
>>> tim ab0wr
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>>>
>
> I'm sorry, I should have picked up on the fact that you are using a
> dual-gate mosfet.
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> A dual-gate mosfet is a lot like 2 fet's in series. Gate2 is usually used
> with an external bias to set the dynamic range of the device. The signal is
> usually associated with Gate1. You can apply a fixed bias to Gate2 or tie
> in something like an AGC signal to vary the device amplification.
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> For this type of device you probably would be better off looking at the
> graph of the Transfer Characteristics. The graph will show the change in Id
> for changes in Vgs1 with Vgs2 at a fixed value.
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> For your device I would probably run Vgs2 at 3v to 4v. Looking at the
> transfer graph, you would want Vgs2 to be around 0.1v to get in the middle
> of the linear curve. That would put your standing Id at about 9-11 mA.
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> This would make your source resistor 0.1v/10mA = 10R.
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> Remember that you'll want to breadboard the circuit and try this out before
> actually including it in a production unit. Use a fixed voltage divider to
> get the 4v for Vgs2 and a source resistor of 10R and see how the circuit
> works. You can always change the source resistor to get what you need.
>
> tim ab0wr

3851. Re: Biasing of Dual Gate Fets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-27 20:15:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12ci7nbnemih4f3@corp.supernews.com>
Source record: 11052

The problem with using FETs of all kinds is the wide part-to-part variation. Look at the specs for the BF998 - many of the critical specs show only a maximum or minimum, but not both, or just a typical value. You can be way off if you simply use a "typical" set of curves. If you want to do an analytical design with a part with non-specifications like this is to use a curve tracer to generate curves for the individual part, then use those curves for your design. Pull another part of the same part number from your drawer, and you'll need a different design. This exercise is useful for educational purposes, but it isn't a technique you can use to design something that can be easily duplicated.

That's probably why you don't see a lot of FETs being used in commercial products, except in applications where there's a lot of feedback to stabilize the operating point, such as source followers, or when simply nothing else will do. Even then, the manufacturer has probably paid the vendor to select parts with a much narrower, and well specified, range of characteristic values. That's been my experience in designing commercial electronic test equipment.

Roy Lewallen, W7EL

David wrote:
> Tim,
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> Say we look at VG1s = 0.1V as per your example.
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> The graph for BF998 shows that if VG2s = 4V and VDs = 8V then ID approx
> = 12.5mA
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> This would mean that unless I applied a negative voltage on the source I
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> As Rs is creating a negative self bias voltage ?
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> If I set the bias point lower - say 5mA then VG1s is approx. -0.2V
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> Ohms) and then set VG1 = 0 (so that VG1s = -0.2V) and then 4.2V on G2
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> Is this correct ?
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> The transfer characteristic curve shows that for say 10mA. If VG2s = 4V
> then gm = around 24mS and if VG2s is reduced to 0V the gm reduces to
> about 7mS.

>
> Thanks
>
> regards
>
> David

3852. Re: Biasing of Dual Gate Fets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-27 21:43:23 UTC
From: tim gorman <tgorman2@cox.net>
Message-ID: <tsebae.mtk.ln@tg6124.ab0wr.net>
Source record: 11053

What you say makes sense. Breadboard up a circuit and see what your idle point winds up being. That's really the only way you will find out for sure.

tim ab0wr

David wrote:

>
>
> Tim,
>
> Say we look at VG1s = 0.1V as per your example.
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> The graph for BF998 shows that if VG2s = 4V and VDs = 8V then ID approx
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>> the circuit works. You can always change the source resistor to get what
>> you need.
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>> tim ab0wr

3853. ARRL Maryland State Convention this Saturday, July 29, in Hagerstown, MD

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-27 23:59:26 UTC
From: VOA SWLer <Reply_Here@bogus.com>
Message-ID: <CfidnSxfq6DQzlTZnZ2dnUVZ_qednZ2d@comcast.com>
Source record: 11054

ARRL Maryland State Convention this Saturday, July 29, in Hagerstown, MD.

For info, click on:
<http://www.w3cwc.org/MDC2006.htm>

3854. Re: Biasing of Dual Gate Fets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-28 06:08:01 UTC
From: David <websales@orbitcoms.com>
Message-ID: <5Rhyg.2124$rP1.1519@news-server.bigpond.net.au>
Source record: 11055

Roy,

So if I had an adjustment on VG2 for each circuit and adjust for
required Drain current on each product ?

What's the consensus regarding Common Base BJT as LNA ?

Thanks

Regards

David

Roy Lewallen wrote:
> The problem with using FETs of all kinds is the wide part-to-part
> variation. Look at the specs for the BF998 - many of the critical specs
> show only a maximum or minimum, but not both, or just a typical value.
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>> Thanks
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>> regards
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>> David

3855. Re: Biasing of Dual Gate Fets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-28 12:17:08 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <4oujc293a1fkefh5q8qrlrgj0ivvbslkni@4ax.com>
Source record: 11056

On Fri, 28 Jul 2006 06:08:01 GMT, David <websales@orbitcoms.com>
wrote:

>Roy,
>
>So if I had an adjustment on VG2 for each circuit and adjust for
>required Drain current on each product ?

Or pick a set of bogy values and accept there will be a range of
operating current.

I've found DGmosFET perfomance is not greatly impacted by
variations in Idss and Gm for practical circuits.

>What's the consensus regarding Common Base BJT as LNA ?

Hard matching the input at any decent current, at 4-5ma the input R
is around 5 ohms. Easily overloaded as a result of usually being used
at low current to make the match easier. It's feature is fair
stability and the device is working at at it's alpha cutoff frequency.
The latter was more important 30 years ago when UHF transistors
were harder to get. Noise performance was dependent on device
but even in 1972 I could get TIMX10s down to around 1.5DB at
450mhz.

Allison

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>Thanks
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>Regards
>
>David
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>Roy Lewallen wrote:
>> The problem with using FETs of all kinds is the wide part-to-part
>> variation. Look at the specs for the BF998 - many of the critical specs
>> show only a maximum or minimum, but not both, or just a typical value.
>> You can be way off if you simply use a "typical" set of curves. If you
>> want to do an analytical design with a part with non-specifications like
>> this is to use a curve tracer to generate curves for the individual
>> part, then use those curves for your design. Pull another part of the
>> same part number from your drawer, and you'll need a different design.
>> This exercise is useful for educational purposes, but it isn't a
>> technique you can use to design something that can be easily duplicated.

>>
>> That's probably why you don't see a lot of FETs being used in commercial
>> products, except in applications where there's a lot of feedback to
>> stabilize the operating point, such as source followers, or when simply
>> nothing else will do. Even then, the manufacturer has probably paid the
>> vendor to select parts with a much narrower, and well specified, range
>> of characteristic values. That's been my experience in designing
>> commercial electronic test equipment.
>>
>> Roy Lewallen, W7EL
>>
>> David wrote:
>>> Tim,
>>>
>>> Say we look at VG1s = 0.1V as per your example.
>>>
>>> The graph for BF998 shows that if VG2s = 4V and VDs = 8V then ID
>>> approx = 12.5mA
>>>
>>> This would mean that unless I applied a negative voltage on the source
>>> I would need to apply 0.1V forward bias to G1 and 4V to G2 ?
>>> As Rs is creating a negative self bias voltage ?
>>>
>>> If I set the bias point lower - say 5mA then VG1s is approx. -0.2V
>>> according to the graph.
>>>
>>> I can achieve this by using a resistor in the source of 0.2/5mA (40
>>> Ohms) and then set VG1 = 0 (so that VG1s = -0.2V) and then 4.2V on G2
>>> so that VG2s = 4V.
>>>
>>> Is this correct ?
>>>
>>> The transfer characteristic curve shows that for say 10mA. If VG2s =
>>> 4V then gm = around 24mS and if VG2s is reduced to 0V the gm reduces
>>> to about 7mS.
>>>
>>> Thanks
>>>
>>> regards
>>>
>>> David

3856. RFID Transmitters,RFID and Environmental Issues, Wal-Mart and RFID: A Case Study

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-28 19:47:05 UTC
From: bandbroad@gmail.com
Message-ID: <1154116025.469795.180480@s13g2000cwa.googlegroups.com>
Source record: 11057

RFID Technology and Architecture, RFID Standards,RFID Applications,
RFID Security, Impact of RFID Tags on Recycling, Environmental
Challenges of RFID, RFID Tags: Advantages and Limitations,

http://flying-rugs.com/rfid-tutorial/

3857. Re: RFID Transmitters,RFID and Environmental Issues, Wal-Mart and RFID: A Case Study

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-28 21:59:35 UTC
From: Roger <GetValidAddress@my.com>
Message-ID: <k12lc2p2gcis5h1jdepe0vajkvoo153kb0@4ax.com>
Source record: 11058

On 28 Jul 2006 12:47:05 -0700, bandbroad@gmail.com wrote:

>
>RFID Technology and Architecture, RFID Standards,RFID Applications,
>RFID Security, Impact of RFID Tags on Recycling, Environmental
>Challenges of RFID, RFID Tags: Advantages and Limitations,
>
>http://flying-rugs.com/rfid-tutorial/

Imagine a WalWart store going in across the block from a ham station
running EME on 2.4 Gig. I wonder what a strong discrete carrier would
do the integrity of the RFID system. They would certainly need to be
far better than the end user WiFi stuff being sold.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com

3858. Re: Biasing of Dual Gate Fets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-29 07:00:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12cm1s6lhvu076b@corp.supernews.com>
Source record: 11059

Sorry, I have almost no experience in using dual-gate MOSFETS, for the reasons I mentioned. Beginning somewhere around the mid-80s, when manufacturing became highly automated, my employers strongly discouraged designs which included any adjustments. Besides the labor required to make the adjustment, the variable component lowered the product's reliability, so we'd often design in a lot of parts to get around having any tweaks. But individual adjustment is still a viable option for some products. What I don't know is whether you'd get satisfactory performance with widely differing devices all running at the same drain current. That would depend on your design and application.

If you're considering making a product, I'd certainly do some modeling with extreme component parameters to see what happens. And you might consider some sort of device selection and/or incoming inspection or sorting to make sure you don't get any truly extreme parts. One thing to be careful about is that when a part is so poorly specified, other companies might be buying large numbers of selected parts. That leaves you with the leftovers. I've seen some really strange distributions resulting from this -- parts with extreme characteristics on both ends, but nothing anywhere near the "typical" values. It used to be common with zeners, until they got better at making -- 10% tolerance zeners would all be between 5 and 10% from nominal, in both directions, with none closer than 5%. Those had been selected out and sold as 5% tolerance parts.

Just a few of the things I've picked up in 30 or so years as a design engineer.

Roy Lewallen, W7EL

David wrote:
> Roy,
>
> So if I had an adjustment on VG2 for each circuit and adjust for
> required Drain current on each product ?
>
> What's the consensus regarding Common Base BJT as LNA ?
>
> Thanks
>
> Regards
>
> David

3859. Help Tek 495P Spectrum Analyzer Manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-29 20:48:47 UTC
From: "Gian, I7SWX" <i7swx@yahoo.com>
Message-ID: <1154206127.225648.219230@h48g2000cwc.googlegroups.com>
Source record: 11062

Hi all,

I have a Tek 495P S.A serial group B020000 with option 39.

I am looking for the user manual and if possible also the programming manual.

I have the 495P Service Manuals 1 & 2 for serial B031000. Hope these are more or less OK.

It is appreciated if the manuals can be in electronic form to download or on a CD.

Thanks for your help

Gian
I7SWX

3860. Re: Microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-29 21:53:41 UTC
From: Straydog <asd@panix.com>
Message-ID: <Pine.NEB.4.63.0607291744320.28978@panix1.panix.com>
Source record: 11063

On Fri, 21 Jul 2006, AndyS wrote:

> Andy writes:
>
> I have been thinking about building a high voltage power supply
> for a big amp, and am toying with the idea of using a couple of
> microwave oven transformers, which I have on hand.
>
> I plan to use two, with the primaries connected in parallel but
> opposing, so that each one will supply voltage, half-wave, to a
> diode ring. By doing this, I can have each core grounded like it
> is used in the ovens....
>
> So, has anyone else done this and run into any problems that
> I may not have forseen ?
>
> Thanks,
> Andy

I'm in the process of building a pair of 813s (GG) with microwave oven transformers. I have two of them, slightly different size and about 4% difference in secondary voltage for 115 primary. Both ovens had nameplate current specs of 15 amps, max, but the transformers look like intermittent duty. From the schematics on both ovens, the transformers had one side of HV sec grounded, so I'm going to use each transformer for half of each cycle into its own diode string. Then, a bunch of electrolytics in series with voltage divider/bleeders on each cap. I've actually had the half wave version going, putting out 1500 vdc onto the plates of the 813s, and the transformer I used did not hum at all (I had a variac on the primary and cranked up from zero and back down to zero). I don't know about the "magnetic shunt" that some of the other posters are talking about.

The schematics both showed the magnetron as in a circuit where it looked like the tube was conducting only on one half of each cycle (no diode rectifier, no filter caps). The filament circuit (filament winding was separate, and apparently only a few volts and maybe tenish or so amps judigin by the wire gauge). Stampings on one of the transformers makes it look like it has max 2.6 kv output, so I'll need to keep primary voltage lower to keep rectified DC output around 2400 v for the 813s.

3861. Re: Class C amps saturating?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-30 00:32:47 UTC
From: WSQT <wsqtradio@ziplip.com>
Message-ID: <1154219566.980885.120930@m79g2000cwm.googlegroups.com>
Source record: 11064

This is what is meant by "Class F." A Class F amplifier has traps tuned to various harmonics to allow the use of a longer conduction angle and/or square wave drive with high efficiency and excellent modulation characteristics.

There is also Class E-with a SERIES tank that is an open circuit instead of a short to harmonics. These are run somewhat detuned so as to cause the circuit voltage to fall to zero at switchon and switchoff with square wave drive. 90% efficiency not uncommon with both E and F. I

There are still other such tunings such as "inverse F," where EVEN harmonics are blocked but odd shorted. This can be as simple as a push-pull circuit with no center tap in the output tank if the interelectrode capacitance is low enough at the lower harmonics, as it often is for an AM broadcast or a 160M ham amplifier. For higher frequencies this design requires parallel resonating the interelectrode capacitance at one or more even harmonics abd becomes pretty much a fixed-frequency affair as a result.

Inverse F(odd) is again capable of 90% plus efficiency.

All of these amps work by blocking the high harmonic current that flows when a square wave pulse of 180 degrees angle is fed to a normal tank circuit, which is essentially a short to harmonics. this allows the active device to turn on and off with essentially no extra resistance(from the device) beyond full-on in series with the load, for all of the conduction angle.

The resulting tunings effectively square off either voltage or current waveforms depending on the partucular tuning used. In other words, current or voltage in the tank is NOT a sine wave, but the portion that is trasferred to the load must be a sine wave or else filtered. In fact, Class F may have been invented when someone put a harmonic trap in a plate circuit to stop a nettlesome harmonic current from flowing and then being coupled out. That is in some old RAH editions as a desperate measure for stoppign harmonic TVI, but also allows more amp efficiency if part of the design.

Straight Class C is in fact also capable of 90% efficiency, but only with a very narrow conduction angle so the plate current pluse flows only when tank voltage is already very low. This requires high back bias, high drive-and a larger than normal tube or transistor. The "power density" sucks, and in fact Class B is capable of more power for a given maximum current and voltage, assuming the heat can be tolerated. Class E and F amps can match Class B power densities with

early(narrow-angle) Class C efficiency.

For a tube low power density means higher filament power, giving
back some of that efficiency. Going to flourescent lights in the
station may save as much electricity cheaper in that case.

> A network with an inductive input will allow a square waveform at the
> device output but not waste significant energy in harmonics. I've done
> that in designs.
>
> In the 1950's RCA had an AM BC transmitter that drove a tube with a
> near square wave, and had a near square wave. The RCA transmitter used
> a low-mu triode that had parallel tuned circuits in the grid and anode
> set at the third harmonic. It had conventional networks feeding the
> grid and to the antenna from the plate resonantor. That transmitter
> made over 95% anode efficiency.
>
> 73 Tom

3862. Re: Biasing of Dual Gate Fets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-30 01:06:09 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12co1gbjlifdvee@corp.supernews.com>
Source record: 11065

Ah, but that's a model for just one BF998. The one you pull out of the drawer might bear very little resemblance to it.

Roy Lewallen, W7EL

jack wrote:
> FWIW, I found the following SPICE model for the BF998 on the web -- note
> that the two MOSFETs VMAX are dissimilar, a lot of the entries are for
> parasitic elements:
> . . .

3863. ARRL takes on EBay this October

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-30 01:15:31 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <lb-dnduMCJORwlbZnZ2dnUVZ_oOdnZ2d@comcast.com>
Source record: 11060

from the ARRL newsletter:

==>FIRST ARRL ONLINE AUCTION PLANNED FOR OCTOBER

The ARRL may be giving eBay and the other auction sites a little competition in the Amateur Radio arena this fall when the first ARRL Online Auction gets under way. Auction proceeds will help to support the League's educational services and programs. The event now is in the planning stages, says ARRL Business Services Manager Deb Jahnke, K1DAJ.

"We will soon embark on an exciting new venture," Jahnke said in providing the broad strokes of the online auction to ARRL Headquarters staff members. Jahnke and her Business Services team will organize and manage the event, which is planned for late October -- the exact dates haven't been set yet -- and she promises it will be lots of fun.

"This will not be just another boring auction, because we plan to include many unique and special items related to Amateur Radio," she said. "We are hoping to offer items that will interest our audience, ranging from DXpedition vacation rentals to restored Collins 75A4s." Jahnke says this inaugural online auction will be limited to 100 items.

The auction will be open to all -- ARRL members and otherwise. Bidders just need online access to take part. "With an online auction, we can reach potential bidders across the nation and around the world," Jahnke pointed out.

Jahnke says she anticipates that the online auction will be open for about two weeks, and participants will need to register in advance. At this stage, she says, the auction planners are seeking additional ideas but no auction booty as yet. Contact Jahnke via e-mail <djahnke@arrl.org>.

3864. Re: Biasing of Dual Gate Fets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-30 07:21:15 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <X-ednZAhluNbKVbZnZ2dnUVZ_oSdnZ2d@comcast.com>
Source record: 11061

FWIW, I found the following SPICE model for the BF998 on the web -- note that the two MOSFETs VMAX are dissimilar, a lot of the entries are for parasitic elements:

```
* BF998 SPICE MODEL OCTOBER 1993 PHILIPS SEMICONDUCTORS
* ENVELOPE SOT143
* 1.: SOURCE; 2.: DRAIN; 3.: GATE 2; 4.: GATE 1;
.SUBCKT BF998 1 2 3 4
L10 1 10 0.12N
L20 2 20 0.12N
L30 3 30 0.12N
L40 4 40 0.12N
L11 10 11 1.20N
L21 20 21 1.20N
L31 30 31 1.20N
L41 40 41 1.20N
C13 10 30 0.085P
C14 10 40 0.085P
C21 10 20 0.017P
C23 20 30 0.085P
C24 20 40 0.005P
D11 42 11 ZENER
D12 42 41 ZENER
D21 32 11 ZENER
D22 32 31 ZENER
RS 10 12 100
MOS1 61 41 11 12 GATE1 L=1.1E-6 W=1150E-6
MOS2 21 31 61 12 GATE2 L=2.0E-6 W=1150E-6

.MODEL ZENER D BV=10 CJO=1.2E-12 RS=10

.MODEL GATE1
+ NMOS LEVEL=3 UO=600 VTO=-0.250 NFS=300E9 TOX=42E-9
+ NSUB=3E15 VMAX=140E3 RS=2.0 RD=2.0 XJ=200E-9 THETA=0.11
+ ETA=0.06 KAPPA=2 LD=0.1E-6
+ CGSO=0.3E-9 CGDO=0.3E-9 CBD=0.5E-12 CBS=0.5E-12

.MODEL GATE2
+ NMOS LEVEL=3 UO=600 VTO=-0.250 NFS=300E9 TOX=42E-9
+ NSUB=3E15 VMAX=100E3 RS=2.0 RD=2.0 XJ=200E-9 THETA=0.11
+ ETA=0.06 KAPPA=2 LD=0.1E-6
+ CGSO=0.3E-9 CGDO=0.3E-9 CBD=0.5E-12 CBS=0.5E-12

.ENDS BF998
```

3865. Re: Input circuit for grounded grid amplifier with 2x 813

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-30 08:48:55 UTC
From: DF9GR <df9gr@darc.de>
Message-ID: <1154249335.521769.76750@i3g2000cwc.googlegroups.com>
Source record: 11066

Hi Bill,
thanks for the idea. I didn´t knew that there is something available.
I will check if I have the space available but I am afraid I have not.
vy73 Rene DF9GR

Bill Turner a écrit :

> ORIGINAL MESSAGE:
>
> On 22 Jul 2006 08:39:03 -0700, df9gr@darc.de wrote:
>
>
> >Hello,
> >I got a pretty old amplifier with 2x 813 tubes in grounded grid. I runs
> >nicely with 700 to 850 watts from 80 to 10m. I already did some
> >modifications (vacuum relays, fan control, 9 band operation (80-10m)
> >and now I am looking for some ideas for an input circuit. I meassured
> >the input impedance of the tubes with about 120 to 130 Ohms which gives
> >a bad SWR on a 50 Ohm output stage of a modern transceiver. I also
> >tried a 1:4 UNUN. Results where slightly better but the SWR is still to
> >high. As I want to avoid to use of an external tuner I am looking for
> >someone out there who has build an input circuit (e.g. 1 collins
> >pi-filter for every band) and can give me some advice how to calculate
> >or build.
> >tnx vy73 Rene DF9GR
>
> ------------ REPLY SEPARATOR ------------
>
> Try an LDG autotuner:
>
> http://www.ldgelectronics.com/at-100amp.html
>
> This particular model is made for homebrewers to include in their
> amps.
>
> Bill, W6WRT

3866. Re: Input circuit for grounded grid amplifier with 2x 813

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-30 08:58:22 UTC
From: DF9GR <df9gr@darc.de>
Message-ID: <1154249902.525957.187330@m79g2000cwm.googlegroups.com>
Source record: 11067

Hello Roger,

thanks for information. I found the schematics of the 2K3 at BAMA (no
2K4) and I am currently downloading it. I will have a look on their
solution.

vy73 Rene DF9GR

Roger (K8RI) a écrit :

> On 22 Jul 2006 08:39:03 -0700, df9gr@darc.de wrote:
>
> >Hello,
> >I got a pretty old amplifier with 2x 813 tubes in grounded grid. I runs
> >nicely with 700 to 850 watts from 80 to 10m. I already did some
> >modifications (vacuum relays, fan control, 9 band operation (80-10m)
> >and now I am looking for some ideas for an input circuit. I meassured
> >the input impedance of the tubes with about 120 to 130 Ohms which gives
> >a bad SWR on a 50 Ohm output stage of a modern transceiver. I also
> >tried a 1:4 UNUN. Results where slightly better but the SWR is still to
> >high. As I want to avoid to use of an external tuner I am looking for
> >someone out there who has build an input circuit (e.g. 1 collins
> >pi-filter for every band) and can give me some advice how to calculate
> >or build.
>
> If resistive I always figured anything under 3:1 was good.
> I've fed a pair of 813s in GG at close to the legal limit with a
> fairly modern transceiver with good results, but I never checked to
> see what I had for an input impedance. I guess that was one of those
> cases where ignorance is bliss <:-)) I didn't know it was high so I
> didn't worry about it.
>
> For input impedance matching, look at a schematic of the Henry 2K4.
> They use a separate matching network plugged into an octal socket for
> each band. The ratios are different, but the design could easily be
> modified and the layout is easy to experiment with. I don't have the
> manual handy, but as I recall it's just an adjustable transformer with
> a tap.
>
> I think you'll be able to find the whole manual at BAMA
>
> Good Luck es 73
>
> Roger Halstead (K8RI & ARRL life member)
> (N833R, S# CD-2 Worlds oldest Debonair)

> www.rogerhalstead.com (Get valid address from
>
> >tnx vy73 Rene DF9GR
> Roger Halstead (K8RI & ARRL life member)
> (N833R, S# CD-2 Worlds oldest Debonair)
> www.rogerhalstead.com

3867. Re: Help Tek 495P Spectrum Analyzer Manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-30 12:42:11 UTC
From: elspxvwcyr@yahoo.com
Message-ID: <1154263331.591697.59970@h48g2000cwc.googlegroups.com>
Source record: 11068

Try Vintage Manuals, <http://www.w7fg.com>. I recently ordered a manual
for my B&K function generator and was very pleased with the service.

3868. Re: Biasing of Dual Gate Fets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-30 16:34:39 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <zc5zg.1109151$xm3.327105@attbi_s21>
Source record: 11069

In ancient times I set up a VHF amplifier test circuit with a dual-gate 3NXXX and measured gain and IM distortion vs bias parameters, DC feedback and negative RF feedback. I was able to compare many samples and found that I could get adequate (for my purposes) uniformity for a dozen samples in a particular application. The tradeoff is reduced gain to get "improved" uniformity. Trying to get max results from a single stage is not as good as two or three cascaded more modest stages. The cost of this approach is of course not minimal. The first stage dominates total noise figure.

Bill W0IYH

"David" <websales@orbitcoms.com> wrote in message
news:n3Gxg.962$rP1.670@news-server.bigpond.net.au...
> OK, I think I got it.
>
> Let's say I want Vdd = 8V. Say I have an RF chock in the Drain then Vds is
> almost 8V.
>
> Say I want 5mA bias current.
>
> I look at the Vds vs Id and find that VG1-s = -0.2V for this condition.
> (So actual VDs is 7.8V)
>
> Next I use a source resistor of VG1-s/ Id = 40 Ohms
> As VG1 = VG1-s + VG1 - IDxRS the Gate voltage applied is 0V.
>
> The graph on the datasheet mentions that this is the output when VG2-s is
> 4V.
>
> So now I calculate VG2 = VG2-s + ID x RS = 4.2V
>
> I suppose that I can make Rs smaller to the point where VG1-s is 0V on the
> graph.(Occurs at 10mA for BF998).
>
> If I want higher Q point I then add positive bias to V1. I also understand
> I can get around 10dB attenuation by lowering VG2-s from 4.2V
> towards 0V but need to make it negative if I want to switch the signal off
> altogether (If I was to use the FET as say a ASK or OOK modulator).
>
> Thanks
>
>
>
> tim gorman wrote:
>> David wrote:

>>
>>>
>>> Hi,
>>>
>>> Pretty fundamental I know but can someone please explain the steps for
>>> setting up bias for a Dual Gate MOSFET.
>>>
>>> I know I could place a pot on the gate and source for each circuit and
>>> play with values but I would like a method that enables me to calculate
>>> the values.
>>>
>>> The main issue is how to determine values for Rs and Gate 2 Voltage.
>>>
>>> I am using BF998 and want to have a "play" at 5V and 8V supply.
>>>
>>> The formulae for Id is Id = Idss(1-Vgs/Vp) ^ 2
>>> But Idss is stated as 2-18mA
>>> Vp Gate 1 is given as a range from 1-2V
>>> Vp gate 2 is given as range from 0.5 to 1.5V
>>>
>>> If I apply say 4V to G1 and 0V to G2, how do I calculate the voltage at
>>> the source to determine Vgs ?
>>>
>>> Any help much appreciated.
>>>
>>> Regards
>>>
>>> David
>>
>>
>> One way of doing this is to get the datasheet for the FET you are using.
>> There should be a graph that shows the operating characteristic curves.
>> The
>> x-axis will be Vds and the Y-axis will be the drain current Id. The
>> characteristic curves will be for various levels of Vgs. Pick an
>> operating
>> point based on the type of amplifier you want. Let's suppose it will be
>> Class A. Assume the FET has a power supply voltage of 40v and an Idss of
>> 10ma. Let's say that you pick a point in the middle of the operating
>> curves
>> that gives an Id of 6ma and a Vds of 20v in order to get the maximum
>> swing
>> out of the amplifer. Looking at the characteristic curves shows that this
>> will require a Vgs of about -1v. Now you have everything you need. If Vgs
>> needs to be -1v and Id is 6ma (assume Id and Is will be the same) you
>> need a resistor of Vd/Id (R = V/I) or about 166 ohms. The gate resistor
>> you see in FET amps is not really there for biasing but
>> more to set the input impedance of the amplifier. As long as the leakage
>> current from the gate to the source is small, Vgs is set by the bias
>> resistor in the source lead.

>>
>> tim ab0wr
>>

3869. Re: RFID Transmitters,RFID and Environmental Issues, Wal-Mart and RFID: A Case Study

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-30 17:03:49 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <1fppc25412oflaivage7ls7v1r1vn56bum@4ax.com>
Source record: 11070

ORIGINAL MESSAGE:

On Fri, 28 Jul 2006 17:59:35 -0400, Roger <GetValidAddress@my.com>
wrote:

>
>Imagine a WalWart store going in across the block from a ham station
>running EME on 2.4 Gig. I wonder what a strong discrete carrier would
>do the integrity of the RFID system.

------------ REPLY SEPARATOR ------------

I imagine it would get you a visit from the FCC. Does the phrase
"deliberate interference" have any meaning to you?

We hams have enough bad PR problems without jerks like you getting on
the evening news.

Bill, W6WRT

3870. Re: RFID Transmitters,RFID and Environmental Issues, Wal-Mart and RFID: A Case Study

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-30 18:32:33 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-CFC923.10322730072006@netnews.worldnet.att.net>
Source record: 11071

In article <1fppc25412oflaivage7ls7v1r1vn56bum@4ax.com>,
Bill Turner <noway@nohow.com> wrote:

> ORIGINAL MESSAGE:
>
> On Fri, 28 Jul 2006 17:59:35 -0400, Roger <GetValidAddress@my.com>
> wrote:
>
> >
> >Imagine a WalWart store going in across the block from a ham station
> >running EME on 2.4 Gig. I wonder what a strong discrete carrier would
> >do the integrity of the RFID system.
>
> ------------ REPLY SEPARATOR ------------
>
> I imagine it would get you a visit from the FCC. Does the phrase
> "deliberate interference" have any meaning to you?
>
> We hams have enough bad PR problems without jerks like you getting on
> the evening news.
>
> Bill, W6WRT

Except the Ham Station is a "Licensed Radio Service", which has Priority over any unlicensed system for the purposes of "Interference Problems", on ANY Frequency. Mr. WalWart wouldn't get two steps with the local FCC as his is an unlicensed or Part15 operation, and is specifically subject to, and must "accept" interference from a Licensed Radio Service, and must not cause interference to any Licensed Radio Service using the same frequency.

Me been there, Inspected that, shut down the unlicensed operation had the "Big Shot" complain to HQ..... got him NOWHERE....

3871. Re: Biasing of Dual Gate Fets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-30 19:28:30 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <qt0qc2dhp6gqqos1c6f545k6c65lsbtk85@4ax.com>
Source record: 11072

On Sat, 29 Jul 2006 00:00:12 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>Sorry, I have almost no experience in using dual-gate MOSFETS, for the
>reasons I mentioned. Beginning somewhere around the mid-80s, when
>manufacturing became highly automated, my employers strongly discouraged
>designs which included any adjustments. Besides the labor required to
>make the adjustment, the variable component lowered the product's
>reliability, so we'd often design in a lot of parts to get around having
>any tweaks. But individual adjustment is still a viable option for some
>products. What I don't know is whether you'd get satisfactory
>performance with widely differing devices all running at the same drain
>current. That would depend on your design and application.
>
>If you're considering making a product, I'd certainly do some modeling
>with extreme component parameters to see what happens. And you might
>consider some sort of device selection and/or incoming inspection or
>sorting to make sure you don't get any truly extreme parts. One thing to
>be careful about is that when a part is so poorly specified, other
>companies might be buying large numbers of selected parts. That leaves
>you with the leftovers. I've seen some really strange distributions
>resulting from this -- parts with extreme characteristics on both ends,
>but nothing anywhere near the "typical" values. It used to be common
>with zeners, until they got better at making -- 10% tolerance zeners
>would all be between 5 and 10% from nominal, in both directions, with
>none closer than 5%. Those had been selected out and sold as 5%
>tolerance parts.
>
>Just a few of the things I've picked up in 30 or so years as a design
>engineer.
>
>Roy Lewallen, W7EL

Roy,

There are a large number of VHF and HF radios both past and present
that use the DGmosfets in place like the RF amp sometimes a balanced
mixer. A recent example is the TenTec 526 (6n2) 6 and 2 meter radio
as the RF amp. Another current example is the TT 1208 transverter
also as RF amp. If your not pushing the device for max gain or
ultimate IP3 possible they perform well and offer low noise for their
power needs. Neither require pots or other tweaking (other than
tuneable circuits). Can other deivces be used to do better, yes.
But, engineering is always about understanding and compromize.

I'd never use DGfets for something like a scope amp or other instrumentation where DC operating point or balance is a requirement. I have use them as a high impedence (1mohm) AGC'd input for high input senstivity frequency counters. Another place where I've used them is IF amps, they are just far easier to AGC than CA3020 or MC1350 and quieter.

My favorite line from years back.

Good, Fast, Cheap, Pick any two.

Allison

3872. Re: RFID Transmitters,RFID and Environmental Issues, Wal-Mart and RFID: A Case Study

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-31 03:31:14 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <e7uqc2t3qt2hcndai80h9ijgqub6t3p96k@4ax.com>
Source record: 11073

ORIGINAL MESSAGE:

On Sun, 30 Jul 2006 18:32:33 GMT, Me <Me@shadow.orgs> wrote:

>Except the Ham Station is a "Licensed Radio Service", which has Priority
>over any unlicensed system for the purposes of "Interference Problems",
>on ANY Frequency. Mr. WalWart wouldn't get two steps with the local FCC
>as his is an unlicensed or Part15 operation, and is specifically subject
>to, and must "accept" interference from a Licensed Radio Service, and
>must not cause interference to any Licensed Radio Service using the same
>frequency.
>
>Me been there, Inspected that, shut down the unlicensed operation
> had the "Big Shot" complain to HQ..... got him NOWHERE....

---------- REPLY SEPARATOR ----------

Oh, you poor child.

One does not f**k with WalMart when it comes to interfering with their
inventory and checkout system.

We'll come visit you as often as we can. :-)

Bill, W6WRT

3873. Re: RFID Transmitters,RFID and Environmental Issues, Wal-Mart and RFID: A Case Study

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-31 18:10:08 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-28EC38.10095731072006@netnews.worldnet.att.net>
Source record: 11075

In article <e7uqc2t3qt2hcndai80h9ijgqub6t3p96k@4ax.com>,
Bill Turner <noway@nohow.com> wrote:

> ORIGINAL MESSAGE:
>
> On Sun, 30 Jul 2006 18:32:33 GMT, Me <Me@shadow.orgs> wrote:
>
>
> >Except the Ham Station is a "Licensed Radio Service", which has Priority
> >over any unlicensed system for the purposes of "Interference Problems",
> >on ANY Frequency. Mr. WalWart wouldn't get two steps with the local FCC
> >as his is an unlicensed or Part15 operation, and is specifically subject
> >to, and must "accept" interference from a Licensed Radio Service, and
> >must not cause interference to any Licensed Radio Service using the same
> >frequency.
> >
> >Me been there, Inspected that, shut down the unlicensed operation
> > had the "Big Shot" complain to HQ..... got him NOWHERE....
>
> ------------ REPLY SEPARATOR ------------
>
> Oh, you poor child.
>
> One does not f**k with WalMart when it comes to interfering with their
> inventory and checkout system.
>
> We'll come visit you as often as we can. :-)
>
> Bill, W6WRT

WallMart has to comply with the FCC Rules and Regulations, just like
every other company in the USA. RFID or whatever makes no difference.
If you think otherwise, show where the FCC has done other than
enforce it's Rules on commercial, noncommercial, or unlicensed
operations. RFID is an unlicensed or Part15 Service, and therefor
MUST comply with the requirments of Part15, if it is used inside
the USA. As the rules stand today, this means that the RFID System
MUST accept interference from ANY Licensed Radio Service, and MUST
NOT cause unreasonable interference with ANY Licensed Radio Service.
If such an interference complaint from a Licensed Radio Service
Station was received by the FCC and it was subsquently investigated, the
Investigating Engineer or Inspector would, site the Part15 Rules
to the interfering source, work with them to eliminate the interference

and if not successful, require the interfering source to cease operation untill such time that the interference was eliminated during operation, at the Licensed Radio Service Station. It wouldn't matter if it was US Steel, WallMart, or IBM, the rules and enforcement would be the same. Rules are rules, and the Rule of Law is what stands here in the USA, and it applies to everyone, equally, Big Shot of little guy.....

Me if you can afford the airfare, come on down.....

3874. Re: RFID Transmitters,RFID and Environmental Issues, Wal-Mart and RFID: A Case Study

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-31 18:48:18 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <Sfszg.6543$oa1.3517@news02.roc.ny>
Source record: 11076

Roger wrote:
> On 28 Jul 2006 12:47:05 -0700, bandbroad@gmail.com wrote:
>
>
>>RFID Technology and Architecture, RFID Standards,RFID Applications,
>>RFID Security, Impact of RFID Tags on Recycling, Environmental
>>Challenges of RFID, RFID Tags: Advantages and Limitations,
>>
>>http://flying-rugs.com/rfid-tutorial/
>
>
> Imagine a WalWart store going in across the block from a ham station
> running EME on 2.4 Gig. I wonder what a strong discrete carrier would
> do the integrity of the RFID system. They would certainly need to be
> far better than the end user WiFi stuff being sold.

Well, if the moon wasn't up they could get you for intentional interference.

Now if you had a 2.4 GHz propagation beacon...

3875. Re: Help Tek 495P Spectrum Analyzer Manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-31 21:04:25 UTC
From: "Gian, I7SWX" <i7swx@yahoo.com>
Message-ID: <1154379865.255593.211250@i3g2000cwc.googlegroups.com>
Source record: 11077

elspxvwcyr@yahoo.com wrote:
> Try Vintage Manuals, <http://www.w7fg.com>. I recently ordered a manual
> for my B&K function generator and was very pleased with the service.

Thanks for your follow-up. I know W7FG service. I bought 3 manuals from
him a few years ago. Yews, good service.

I checked but he does not have anything on 495P

73
Gian
I7SWX

3876. Re: RFID Transmitters,RFID and Environmental Issues, Wal-Mart and RFID: A Case Study

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-31 21:24:23 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <xzuzg.15083$qH5.10222@fe05.lga>
Source record: 11078

"Me" <Me@shadow.orgs> wrote in message news:Me-

> would be the same. Rules are rules, and the Rule of Law is what stands
> here in the USA, and it applies to everyone, equally, Big Shot of little
> guy........

You haven't been paying much attention to what has been going on with BPL,
have you?

..

3877. FA: BOOKS: BY Orr, ARRL, + MORE PARTS COMING

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-31 22:02:20 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <M5vzg.520419$Fs1.90371@bgtnsc05-news.ops.worldnet.att.net>
Source record: 11079
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Have listed several books by ARRL and 2 by Wm Orr + more small parts to
be added

ALSO NOTE: MOSTLY NOS PARTS for EF Johnson transmitters, National,
Millen, Miller parts are coming as well.

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking, heytubeguy

3878. Re: Help Tek 495P Spectrum Analyzer Manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-07-31 22:26:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12ct0t458b1m934@corp.supernews.com>
Source record: 11080

Try Deane Kidd, W7TYR. A google search of
"Deane Kidd" manuals
will bring you contact information.

Roy Lewallen, W7EL

Gian, I7SWX wrote:
> elspxvwcyr@yahoo.com wrote:
>> Try Vintage Manuals, <http://www.w7fg.com>. I recently ordered a manual
>> for my B&K function generator and was very pleased with the service.
>
> Thanks for your follow-up. I know W7FG service. I bought 3 manuals from
> him a few years ago. Yews, good service.
>
> I checked but he does not have anything on 495P
>
> 73
> Gian
> I7SWX
>

3879. Re: Biasing of Dual Gate Fets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-01 00:48:35 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <gNidnXTDRqogZlDZnZ2dnUVZ_t6dnZ2d@comcast.com>
Source record: 11074

Doesn't say much about their quality control if the devices are that
dissimilar.

FWIW, I have developed a semiconductor and tube curve tracer for use within
Multisim -- create the component in Multisim, plug it into the curve tracer,
run the test and compare with the manufacturer's charts.

I have also built a tube curve tracer -- same will apply for
semiconductors -- even published an article on it. With this i can compare
the characteristics of the device vis a vis mfr data sheet AND the
simulation in EWB.

Jack

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:12co1gbjlifdvee@corp.supernews.com...
> Ah, but that's a model for just one BF998. The one you pull out of the
> drawer might bear very little resemblance to it.
>
> Roy Lewallen, W7EL
>
> jack wrote:
> > FWIW, I found the following SPICE model for the BF998 on the web -- note
> > that the two MOSFETs VMAX are dissimilar, a lot of the entries are for
> > parasitic elements:
> > . . .

3880. Microstrip dimension

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-01 01:16:08 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <u-2dnZSHv_PENIPZnZ2dnUVZ_sudnZ2d@bright.net>
Source record: 11081

Question: Does anybody know how to calculate the width of a 50 Ohm microstrip line on Arlon PTFE circuit board (Type GX-0065-45-11). It is 0.0065" thick, double sided and has a k=2.45. Looking at my chart, it looks like I leave the bottom as complete copper groundplane and take off all copper around stripline on the top side of the board and leave the stripline as 0.0195" wide? That doesn't sound very wide!!

Scott
N0EDV

3881. Re: Microstrip dimension

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-01 01:48:09 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <392dnQR_kepFL1PZnZ2dnUVZ_rednZ2d@web-ster.com>
Source record: 11082

Scott wrote:

> Question: Does anybody know how to calculate the width of a 50 Ohm
> microstrip line on Arlon PTFE circuit board (Type GX-0065-45-11). It is
> 0.0065" thick, double sided and has a k=2.45. Looking at my chart, it
> looks like I leave the bottom as complete copper groundplane and take
> off all copper around stripline on the top side of the board and leave
> the stripline as 0.0195" wide? That doesn't sound very wide!!
>
> Scott
> N0EDV

.0065 is paper thin, possibly less.

1/16 inch is 0.063 -- did you slip a digit?

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

3882. Re: RFID Transmitters,RFID and Environmental Issues, Wal-Mart and RFID: A Case Study

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-01 04:01:19 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <jfjtc21uo5lfeoprspck5pg6ba9ut66neq@4ax.com>
Source record: 11083

ORIGINAL MESSAGE:

On Mon, 31 Jul 2006 18:10:08 GMT, Me <Me@shadow.orgs> wrote:

>WallMart has to comply with the FCC Rules and Regulations, just like
>every other company in the USA.

---------- REPLY SEPARATOR ----------

Ok Pollyana, let me spell it out for you:

1. You will begin transmitting a carrier on the RFID frequency as you previously stated.

2. WalMart will have their golf and drinking buddies in the FCC track you down. If necessary, WalMart will have a few senators and representatives nudge the FCC a little. In this case, "nudge" means "jump", as in "how high?".

3. The folks at the FCC will determine that you are causing deliberate interference, a very serious violation in their opinion.

4. Your license will be yanked.

5. You will take a second and third job to pay for lawyers to fight the bastards. You can't possibly earn enough so you go in debt to them as well.

6. You will lose anyway and now you will be in debt up to your ears.

7. You will find that being in debt to lawyers is especially not fun.

8. You will wish you had never heard of RFID.

9. You will wish you had listened to Uncle Bill when you had the chance.

And that's the truth.

Bill, W6WRT

3883. Re: Microstrip dimension

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-01 04:34:58 UTC
From: laura halliday <marsgal42@hotmail.com>
Message-ID: <1154406898.059387.167330@75g2000cwc.googlegroups.com>
Source record: 11084

Scott wrote:

> Question: Does anybody know how to calculate the width of a 50 Ohm
> microstrip line on Arlon PTFE circuit board (Type GX-0065-45-11). It is
> 0.0065" thick, double sided and has a k=2.45. Looking at my chart, it
> looks like I leave the bottom as complete copper groundplane and take
> off all copper around stripline on the top side of the board and leave
> the stripline as 0.0195" wide? That doesn't sound very wide!!
>
> Scott
> N0EDV

It isn't very wide at all.

I've built stuff on 15 mil 5880, twice as thick as your
paper-thin material. And it was still a handful.

What are you building? Why so thin?

Laura Halliday VE7LDH "That's a totally illegal,
Grid: CN89mg madcap scheme. I like it!"
ICBM: 49 16.05 N 122 56.92 W - H. Pearce

3884. Re: Microstrip dimension

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-01 11:08:36 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <V8adnfm6PNWpq1LZnZ2dnUVZ_oGdnZ2d@bright.net>
Source record: 11085

Nope...the stuff I have IS paper thin. Very flexible. Bought it to use on upper UHF and into the microwaves. I didn't measure it with a micrometer, but I will do that later and report back...

Scott

Tim Wescott wrote:

> Scott wrote:
>
>> Question: Does anybody know how to calculate the width of a 50 Ohm
>> microstrip line on Arlon PTFE circuit board (Type GX-0065-45-11). It
>> is 0.0065" thick, double sided and has a k=2.45. Looking at my chart,
>> it looks like I leave the bottom as complete copper groundplane and
>> take off all copper around stripline on the top side of the board and
>> leave the stripline as 0.0195" wide? That doesn't sound very wide!!
>>
>> Scott
>> N0EDV
>
>
> .0065 is paper thin, possibly less.
>
> 1/16 inch is 0.063 -- did you slip a digit?
>

3885. Re: Microstrip dimension

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-01 11:21:30 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1154431290.193684.98340@m73g2000cwd.googlegroups.com>
Source record: 11086

Scott wrote:
> Question: Does anybody know how to calculate the width of a 50 Ohm
> microstrip line

Scott:

There are lots of computer programs around that will do the calculation
for you. MWI.EXE is one....see
http://www.rogerscorporation.com/mwu/mwi_java/mwiform.htm for download.
You may also find the WA1MBA email list useful for questions like this
(see www.wa1mba.org)

73,
Steve VE3SMA

3886. Re: Microstrip dimension

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-01 11:23:34 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <Tv-dnUDutvcrpFLZnZ2dnUVZ_sWdnZ2d@bright.net>
Source record: 11087

The reason I bought it was that there was a whole bunch of it available at the Central States VHF Society conference this past weekend. They did have some slightly thicker stuff and maybe I should've bought some of that as well. Oh well, I'm stuck with this, so I'll have to try to use it...it's for a homebrew 902 beacon using a few MAR-4 devices. I will have to measure the lead width on these devices, but they might just be about the same as my calculated stripline width of 0.0195". This would be a good thing, but I agree, it may be a bit challenging to make a strip that narrow on the board (a magnifying lens and a very sharp scalpel!)....

Scott

laura halliday wrote:

> Scott wrote:
>
>
>>Question: Does anybody know how to calculate the width of a 50 Ohm
>>microstrip line on Arlon PTFE circuit board (Type GX-0065-45-11). It is
>>0.0065" thick, double sided and has a k=2.45. Looking at my chart, it
>>looks like I leave the bottom as complete copper groundplane and take
>>off all copper around stripline on the top side of the board and leave
>>the stripline as 0.0195" wide? That doesn't sound very wide!!
>>
>>Scott
>>N0EDV
>
>
> It isn't very wide at all.
>
> I've built stuff on 15 mil 5880, twice as thick as your
> paper-thin material. And it was still a handful.
>
> What are you building? Why so thin?
>
> Laura Halliday VE7LDH "That's a totally illegal,
> Grid: CN89mg madcap scheme. I like it!"
> ICBM: 49 16.05 N 122 56.92 W - H. Pearce
>

3887. Re: Microstrip dimension

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-01 11:24:39 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <Tv-dnUPutvdrpFLZnZ2dnUVZ_sWdnZ2d@bright.net>
Source record: 11088

Thanks for the tip! I'll check them out...

Scott

skavanagh72nospam@yahoo.ca wrote:

> Scott wrote:
>
>>Question: Does anybody know how to calculate the width of a 50 Ohm
>>microstrip line
>
>
> Scott:
>
> There are lots of computer programs around that will do the calculation
> for you. MWI.EXE is one....see
> http://www.rogerscorporation.com/mwu/mwi_java/mwiform.htm for download.
> You may also find the WA1MBA email list useful for questions like this
> (see www.wa1mba.org)
>
> 73,
> Steve VE3SMA
>

3888. Re: Class C amps saturating?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-01 11:43:41 UTC
From: w8ji@akorn.net
Message-ID: <1154432621.871215.91970@p79g2000cwp.googlegroups.com>
Source record: 11089

WSQT wrote:
> This is what is meant by "Class F." A Class F amplifier has traps
> tuned to various harmonics to allow the use of a longer conduction
> angle and/or square wave drive with high efficiency and excellent
> modulation characteristics.

Class F, class X, class Y.

They are all recent "names" hung on what are really just class C amplifiers.

I can do the exactly the same thing without a so called "trap" so long as the output device sees a high impedance at the third harmonic or better yet at all off harmonics.

That isn't a trap anyway, it is a resonator. The function is to provide a high impedance at the third harmonic so the waveform slope is steep. It allows the output device to go through the transitional state where it is dissipating maximum power very fast. The goal is NOT to allow a longer conduction angle. The goal is to have the output device either on or off and spend less time in the high dissipation area where device resistance is neither very low or very high.

The ideal duty cycle is 50%, with half time totally off and half time in saturation.

This is why a very low mu trode with tons of negative bias worked so well for RCA. The grid and anode 3rd harmonic resonators allowed the grid and anode to see a very high impedance at the third harmonic, and this sped the transition time up.

73 Tom

3889. Re: Class C amps saturating?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-01 13:49:02 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <tYydnb6H5JKWwVLZRVnygw@bt.com>
Source record: 11090

Tom says,

> The ideal duty cycle is 50%, with half time totally off and half
time
> in saturation.

==========
But 50% off and 50% on corresponds to Class-B bias conditions.

This is inconsistent with "tons of negative bias".

All that's required is a plate load which allows a square-wave plate voltage waveform during the "on" period of the operating cycle. (A very wide bandpass filter circuit configuration sounds appropriate).

Subject to this condition, a less than 50-50% operating cycle probably does provide, somwhere, maximum efficiency.

I like your lumping together of Class-C, F, X, Y amplifiers.

Reg.

3890. Re: Microstrip dimension

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-01 15:23:06 UTC
From: laura halliday <marsgal42@hotmail.com>
Message-ID: <1154445786.277532.32920@b28g2000cwb.googlegroups.com>
Source record: 11091

Scott wrote:
> The reason I bought it was that there was a whole bunch of it available
> at the Central States VHF Society conference this past weekend. They
> did have some slightly thicker stuff and maybe I should've bought some
> of that as well. Oh well, I'm stuck with this, so I'll have to try to
> use it...it's for a homebrew 902 beacon using a few MAR-4 devices. I
> will have to measure the lead width on these devices, but they might
> just be about the same as my calculated stripline width of 0.0195".
> This would be a good thing, but I agree, it may be a bit challenging to
> make a strip that narrow on the board (a magnifying lens and a very
> sharp scalpel!)....

I know you already have the material, but for such a
low frequency and non-critical application I'd use plain
old 1/16" G-10 pc board. YMMV.

Mini-Circuits have an excellent on-line catalogue
(http://www.minicircuits.com), and the lead width
of a MAR-4 is indeed .02 inches. This seems small,
but I'm at work and all my MMICs are at home... :-)

Laura Halliday VE7LDH "That's a totally illegal,
Grid: CN89mg madcap scheme. I like it!"
ICBM: 49 16.05 N 122 56.92 W - H. Pearce

3891. Re: Microstrip dimension

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-01 17:47:01 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12cv4so30fv7d14@corp.supernews.com>
Source record: 11092

If the dielectric material is 6.5 mils thick and the copper is very thin, the width needs to be 18.7 mils. If the substrate material is 0.0065 inches thick and the copper is "one ounce" (1.4 mils thick), the width needs to be 17.3 mils. If the total thickness is 6.5 mils, and that thickness includes top and bottom layers of "one ounce" copper (leaving 3.7 mils of dielectric), the thickness needs to be 9.5 mils.

Good luck!

Roy Lewallen, W7EL

Scott wrote:
> Question: Does anybody know how to calculate the width of a 50 Ohm
> microstrip line on Arlon PTFE circuit board (Type GX-0065-45-11). It is
> 0.0065" thick, double sided and has a k=2.45. Looking at my chart, it
> looks like I leave the bottom as complete copper groundplane and take
> off all copper around stripline on the top side of the board and leave
> the stripline as 0.0195" wide? That doesn't sound very wide!!
>
> Scott
> N0EDV

3892. Re: RFID Transmitters,RFID and Environmental Issues, Wal-Mart and RFID: A Case Study

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-01 18:31:25 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-FB95B0.10311201082006@netnews.worldnet.att.net>
Source record: 11093

In article <jfjtc21uo5lfeoprspck5pg6ba9ut66neq@4ax.com>,
Bill Turner <noway@nohow.com> wrote:

> ------------ REPLY SEPARATOR ------------
>
> Ok Pollyana, let me spell it out for you:
>
> 1. You will begin transmitting a carrier on the RFID frequency as you
> previously stated.
>
> 2. WalMart will have their golf and drinking buddies in the FCC track
> you down. If necessary, WalMart will have a few senators and
> representatives nudge the FCC a little. In this case, "nudge" means
> "jump", as in "how high?".
>
> 3. The folks at the FCC will determine that you are causing deliberate
> interference, a very serious violation in their opinion.
>
> 4. Your license will be yanked.
>
> 5. You will take a second and third job to pay for lawyers to fight
> the bastards. You can't possibly earn enough so you go in debt to them
> as well.
>
> 6. You will lose anyway and now you will be in debt up to your ears.
>
> 7. You will find that being in debt to lawyers is especially not fun.
>
> 8. You will wish you had never heard of RFID.
>
> 9. You will wish you had listened to Uncle Bill when you had the
> chance.
>
> And that's the truth.
>
> Bill, W6WRT

None of the above, could even happen, UNLESS the CongressCritters
passed a Statute and it was signed by the President, to have the FCC
CHANGE it's Rules on Part15 Devices, which by the way would take a MAJOR
amount of time, as all these Rule Changes would be subject to NPRM
Requirements of Part2 and the Federal CFR Publication Process.

Your senerio is BULLSHIT, and you wouldn't know the "Truth" if it
bit you on your Prompus ASS.

Ok SmartGuy, can you SHOW anywhere in FCC Records or Documents, where
the Commission acted in violation of it's own PUBLISHED Rules, in ANY
way similar to your above, BULLSHIT Senerio?

No? Really, Hmmmm, wonder why that is?
Must be your just full of it........

and just for your information, Field Operations doesn't work that way...
Investigations don't happen, like your dillusional senerio.....
Any good Communications Lawyer would blow the FCC out of the water,
should they act contrary to there own PUBLISHED Rules, in any Federal
District Court in the Land, should it ever get that far, and the FCC
Legal Counsel knows that, and would never allow the Commission to get
themselves in that situation, in the first place.......

Where do you come up with this stuff..... Nightmares R US......

Me

3893. Re: RFID Transmitters,RFID and Environmental Issues, Wal-Mart and RFID: A Case Study

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-01 19:14:02 UTC
From: dplatt@radagast.org
Message-ID: <12cv9vqf2bs32d6@corp.supernews.com>
Source record: 11094

In article <Me-FB95B0.10311201082006@netnews.worldnet.att.net>,
Me <Me@shadow.orgs> wrote:

#snip#

>In article <jfjtc21uo5lfeoprspck5pg6ba9ut66neq@4ax.com>,
> Bill Turner <noway@nohow.com> wrote:

#snip# rather scary scenario

>> ------------ REPLY SEPARATOR ------------
>>
>> Ok Pollyana, let me spell it out for you:
>>
>> 1. You will begin transmitting a carrier on the RFID frequency as you
>> previously stated.
>>
>> 2. WalMart will have their golf and drinking buddies in the FCC track
>> you down. If necessary, WalMart will have a few senators and
>> representatives nudge the FCC a little. In this case, "nudge" means
>> "jump", as in "how high?".
>>
>> 3. The folks at the FCC will determine that you are causing deliberate
>> interference, a very serious violation in their opinion.

>None of the above, could even happen, UNLESS the CongressCritters
>passed a Statute and it was signed by the President, to have the FCC
>CHANGE it's Rules on Part15 Devices, which by the way would take a MAJOR
>amount of time, as all these Rule Changes would be subject to NPRM
>Requirements of Part2 and the Federal CFR Publication Process.
>
>Your senerio is BULLSHIT, and you wouldn't know the "Truth" if it
>bit you on your Prompus ASS.
>
>Ok SmartGuy, can you SHOW anywhere in FCC Records or Documents, where
>the Commission acted in violation of it's own PUBLISHED Rules, in ANY
>way similar to your above, BULLSHIT Senerio?

Well, I read through the ARRL's FCC Rulebook last night, looking at
their definitions concerning interference and use of frequencies. The
FCC Part 97 regulations never use the word "deliberate" with regard to
interference at all! They use the words "willfully or maliciously",
which are similar but not quite the same.

I think Bill's scenario (which assumes a significant amount of political collusion) is somewhat overblown, at least to the extent that I can't see any evidence in the records that any case such as he suggests has ever actually been prosecuted by the FCC.

On the other hand, this fact doesn't mean that an amateur operation who deliberately set out to knock out Wal-Mart's Part 15 system would not be subject to (legitimate) discipline under the current FCC rules.

As I see it, there are several issues here. One issue is that of "who has authorization to use these frequencies, under what conditions, for what purposes, with what protections?".

On that basis, the use of (e.g.) certain 2.4-gig frequencies by an amateur radio operator, for legitimate amateur-radio communications purposes "within the rules", certainly trumps any Part 15 applications.

The ham is not, however, allowed to just run wild on the airways. The ham must comply with the FCC rules. Among the rules which appear relevant in this case:

97.101 (d) No amateur operator shall willfully or maliciously interfere with or cause interference to any radio communication or signal.

This is clearly a question of intent, not of effect. If your intent in transmitting is to interfere with "any radio communication" - if you're transmitting only for the purpose of jamming someone - then you're breaking the rules and can be disciplined. On the other hand, if the interference is a side effect of your otherwise-legitimate transmissions on a band for which you have primary privileges, and the interfered-with party is a Part 15 user who "must accept any interference", then as far as I can see you're not obligated to either shut down or take action to mitigate the interference.

97.313 (a) An amateur station must use the minimum transmitter power necessary to carry out the desired communications.

Simply blasting away with 1500 watts to reach somebody across town wouldn't be reasonable. On the other hand, 1500 watts in an EME setup would probably be reasonable, as long as the antenna system and beam shape don't expose anyone to excessively high levels of RF.

So, I think it's likely to come down to the ham's being able to show that his/her transmissions are part of a legitimate process of communication with one or more other hams (i.e. that they are not _intended_ to cause interference) and are otherwise in compliance with the FCC regs and good amateur-radio and engineering practices. If this is the case, the FCC is unlikely to be able to show good cause to take action against the ham.

On the other hand, if a ham is simply keying up and transmitting a high-power carrier, for no reason tied to any actual legitimate amateur-radio purpose (communication, technical study,

experimentation, etc.), then the question of the ham's intent in doing so would arise, and the ham might be charged with "wilfully or maliciously" interfering with other radio communications.

Now, the FCC *could* choose to invoke 97.27, which allows them to modify a station grant and place restrictions on it (e.g. limits on operating hours, frequencies, modes, transmitter power). Such modification-of-grant rules seem to have been put into place back in the early years of television, in order to enable the FCC to restrict some TVI-causing ham stations during prime television-watching hours. The rule requires that the FCC determine :

(1) That such action will promote the public interest, convenience, and necessity; or
(2) That such action will promote fuller compliance with the provisions of the Communications Act of 1934, as amended, or of any treaty ratified by the United States.

The FCC has to make determination, issue a modification order in writing, and give the ham 30 days to protest the modification, before the terms of the modification can take effect.

It'd be interesting to see whether the FCC were willing to go on record (in public and in writing) in an assertion that unclogging Wal-Mart's Part 15 RFID system was necessary to promote the *public* interest, convenience, and/or necessity.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

3894. Re: RFID Transmitters,RFID and Environmental Issues, Wal-Mart and RFID: A Case Study

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-01 21:46:39 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <6aivc2l4of4irkt8isuvluv9ju1kiv0eta@4ax.com>
Source record: 11095

ORIGINAL MESSAGE:

On Tue, 01 Aug 2006 18:31:25 GMT, Me <Me@shadow.orgs> wrote:

>Ok SmartGuy, can you SHOW anywhere in FCC Records or Documents, where
>the Commission acted in violation of it's own PUBLISHED Rules, in ANY
>way similar to your above, BULLSHIT Senerio?
>

---------- REPLY SEPARATOR ----------

Certainly I can. And you can too if you like.

For example, try getting the FCC to shut down a 500 KV power transmission line because it's interfering with your ham radio communications. This has been tried and the FCC's response is "That would not be in the public interest". This actually happened.

A clear violation of the rules, but he who makes the rules can also violate the rules.

And the word is spelled "scenario", DumbGuy.

Bill, W6WRT

3895. Re: Microstrip dimension

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-01 22:33:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12cvlm29e7g9c49@corp.supernews.com>
Source record: 11096

Correction:

The last sentence should end ". . . the width needs to be 9.5 mils."

Roy Lewallen, W7EL

Roy Lewallen wrote:
> If the dielectric material is 6.5 mils thick and the copper is very
> thin, the width needs to be 18.7 mils. If the substrate material is
> 0.0065 inches thick and the copper is "one ounce" (1.4 mils thick), the
> width needs to be 17.3 mils. If the total thickness is 6.5 mils, and
> that thickness includes top and bottom layers of "one ounce" copper
> (leaving 3.7 mils of dielectric), the thickness needs to be 9.5 mils.

3896. Schematic drawing software?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-02 03:16:20 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <m060d2dc269hohcatln7vist6krd6mjdiu@4ax.com>
Source record: 11097

Some years ago I used Visio at work for schematic drawing, but I no longer have access to it. Can someone recommend a program to use at home for creating schematic drawings? I don't care if it is payware as long as the price is reasonable. I found a couple with Google which were several hundred bucks, a bit much for my needs.

Do recent Visio releases still have schematic drawing capability? I went to the Microsoft website and they advertise all kinds of drawing capabilities, but not schematics.

Thanks in advance,

Bill, W6WRT

3897. Re: Schematic drawing software?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-02 07:26:49 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <44D05382.5231D483@earthlink.net>
Source record: 10998

Bill Turner wrote:
>
> Some years ago I used Visio at work for schematic drawing, but I no
> longer have access to it. Can someone recommend a program to use at
> home for creating schematic drawings? I don't care if it is payware as
> long as the price is reasonable. I found a couple with Google which
> were several hundred bucks, a bit much for my needs.
>
> Do recent Visio releases still have schematic drawing capability? I
> went to the Microsoft website and they advertise all kinds of drawing
> capabilities, but not schematics.
>
> Thanks in advance,
>
> Bill, W6WRT

Switchercad III is free spice software with schematic capture.
<http://www.linear.com/company/software.jsp>

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

3898. Re: Schematic drawing software?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-02 12:54:02 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <44d0a06a$0$1483$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 10999

Try Kicad
Its a capable OSS program that will run on Linux or Windows
(I use it on Linux - havent tried M$)
has a project manager to allow PCB drafting from the schematic

Richard

Michael A. Terrell wrote:
> Bill Turner wrote:
>
>>Some years ago I used Visio at work for schematic drawing, but I no
>>longer have access to it. Can someone recommend a program to use at
>>home for creating schematic drawings? I don't care if it is payware as
>>long as the price is reasonable. I found a couple with Google which
>>were several hundred bucks, a bit much for my needs.
>>
>>Do recent Visio releases still have schematic drawing capability? I
>>went to the Microsoft website and they advertise all kinds of drawing
>>capabilities, but not schematics.
>>
>>Thanks in advance,
>>
>>Bill, W6WRT
>
>
>
> Switchercad III is free spice software with schematic capture.
> <http://www.linear.com/company/software.jsp>
>
>

3899. Re: Schematic drawing software?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-02 14:38:06 UTC
From: Larry Gagnon <lggagnon@fakeuniserve.com>
Message-ID: <pan.2006.08.02.14.38.06.357827@fakeuniserve.com>
Source record: 11000

http://www.expresspcb.com/

3900. Re: RFID Transmitters,RFID and Environmental Issues, Wal-Mart and RFID: A Case Study

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-02 17:32:42 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-AB41C4.09322502082006@netnews.worldnet.att.net>
Source record: 11001

In article <6aivc2l4of4irkt8isuvluv9ju1kiv0eta@4ax.com>,
Bill Turner <noway@nohow.com> wrote:

> Certainly I can. And you can too if you like.
>
> For example, try getting the FCC to shut down a 500 KV power
> transmission line because it's interfering with your ham radio
> communications. This has been tried and the FCC's response is "That
> would not be in the public interest". This actually happened.
>
> A clear violation of the rules, but he who makes the rules can also
> violate the rules.
>
> And the word is spelled "scenario", DumbGuy.
>
> Bill, W6WRT

Well lets look at the case sited. 500KV Powerline is not in and of it
self a Licensed User. Their emmissions come under Part15, and what
"Proof" was submitted to the FCC that the PowerLine was the cause?
Power Companies, in general, are required to maintain their systems
so as to eliminate emissions, when they interfere with Licensed Radio
Services. They are required to replace insulators that are bearking
down and flashing over causing radiated emissions. These type of
issues are handled by the FCC every day, and I have PERSONALLY dealt
with this type of regulatory issue, many times, just like the neighbors
Fish Tank Heater causing Pink Noise from 10Khz on up to 25Mhz. There are
Case Files where the Commission has levied fines to Power Companies for
not replacing failed Insulators that caused MF/HF Interference. One of
the best ones, I remember, was a regional Power Company was issued a
$10K Notice of Forfiture for repeated failure to eliminate interference
from a line that passed a USCG MF/HF CommSta, after repeated Notices of
Violation. The CEO was named in the Notice, Personally, and he was given
10 days to reply, and if he didn't the Federal Marshal would be knocking
on his door, with a Warrent, signed by the local US District Attorny.
That got the CEO's attention and the insulators were repaired in
quick time. No more interference. USCG Base Commanders bloodpressure
returned to normal, and his mumbled threat to shoot every bad insulator,
was completly forgotten.
Billyboy, you seem to have issues with Federal Regulators that go far
beyond the scope of this news group. They have medication, that is
helpful in such situations. Have you looked into this for your Health?

Me

3901. Re: Schematic drawing software?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-02 17:36:58 UTC
From: Bruce in Alaska <bruceg@btpost.net>
Message-ID: <bruceg-089474.09364302082006@netnews.worldnet.att.net>
Source record: 11002

In article <m060d2dc269hohcatln7vist6krd6mjdiu@4ax.com>,
Bill Turner <noway@nohow.com> wrote:

> Some years ago I used Visio at work for schematic drawing, but I no
> longer have access to it. Can someone recommend a program to use at
> home for creating schematic drawings? I don't care if it is payware as
> long as the price is reasonable. I found a couple with Google which
> were several hundred bucks, a bit much for my needs.
>
> Do recent Visio releases still have schematic drawing capability? I
> went to the Microsoft website and they advertise all kinds of drawing
> capabilities, but not schematics.
>
> Thanks in advance,
>
> Bill, W6WRT

Any good CADD program can do that. If it is the symbols your looking
for, most of the good CADD outfits have libraries of Electronic,
Electric, Mechanical, and Structural Symbols, or you can build your own
library of symbols.

Bruce in alaska AL7AQ
--
add a <2> before @

3902. Re: RFID Transmitters,RFID and Environmental Issues, Wal-Mart and RFID: A Case Study

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-02 19:38:22 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <9eu1d2tv5al6jj81scl4fmkakjn3krq2uk@4ax.com>
Source record: 11003

On Wed, 02 Aug 2006 17:32:42 GMT, Me <Me@shadow.orgs> wrote:

>Well lets look at the case sited.

You dunnit again. Are you grammar impaired? The word is "cited". How
can you be a jailhouse lawyer if you can't speeka da Inglish?

<snip>

>500KV Powerline is not in and of it
>self a Licensed User. Blah, blah, blah, etc, etc, ad nauseam.

<snip>

Like most jailhouse lawyers, you do not realize what is possible and
what is not. The FCC makes the rules, the FCC can break the rules.
They would of course call it "interpreting" the rules.

<snip>

>Billyboy, you seem to have issues with Federal Regulators that go far
>beyond the scope of this news group. They have medication, that is
>helpful in such situations. Have you looked into this for your Health?

Yes I have. Jim Beam is my favorite medication and makes annoying
little ankle-biters like yourself easily tolerable. I'm sure you are
aware of it because your original post about what a great idea it
would be to jam WalMart showed signs of over-medication.

<snip>

>
>Me

Did you create that sig all by yourself? Perhaps you called in a
consulting firm?

Bill, W6WRT
who did create his own sig after only a few weeks

3903. Re: RFID Transmitters,RFID and Environmental Issues, Wal-Mart and RFID: A Case Study

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-02 20:12:24 UTC
From: Brian <kb9bvn@earthlink.net>
Message-ID: <IG7Ag.8900$157.6832@newsread3.news.pas.earthlink.net>
Source record: 11004

This is the most idiotic ranting I have seen in weeks.

Oh yeah...top posting rules

"Bill Turner" <noway@nohow.com> wrote in message
news:jfjtc21uo5lfeoprspck5pg6ba9ut66neq@4ax.com...
> ORIGINAL MESSAGE:
>
> On Mon, 31 Jul 2006 18:10:08 GMT, Me <Me@shadow.orgs> wrote:
>
>
> >WallMart has to comply with the FCC Rules and Regulations, just like
> >every other company in the USA.
>
> ------------ REPLY SEPARATOR ------------
>
> Ok Pollyana, let me spell it out for you:
>
> 1. You will begin transmitting a carrier on the RFID frequency as you
> previously stated.
>
> 2. WalMart will have their golf and drinking buddies in the FCC track
> you down. If necessary, WalMart will have a few senators and
> representatives nudge the FCC a little. In this case, "nudge" means
> "jump", as in "how high?".
>
> 3. The folks at the FCC will determine that you are causing deliberate
> interference, a very serious violation in their opinion.
>
> 4. Your license will be yanked.
>
> 5. You will take a second and third job to pay for lawyers to fight
> the bastards. You can't possibly earn enough so you go in debt to them
> as well.
>
> 6. You will lose anyway and now you will be in debt up to your ears.
>
> 7. You will find that being in debt to lawyers is especially not fun.
>
> 8. You will wish you had never heard of RFID.
>
> 9. You will wish you had listened to Uncle Bill when you had the
> chance.

>
> And that's the truth.
>
> Bill, W6WRT
>
>
>
>

3904. FA:Antique Radio dials,parts +

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-02 20:32:06 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <aZ7Ag.207596$mF2.122174@bgtnsc04-news.ops.worldnet.att.net>
Source record: 11005

Check out the NIB Millen Radio dial + others by Bud and Gordon too AND
NOS parts by Millen + B&W Mini Coils in original boxes:

AT: http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

MANY more NOS parts coming from EF JOHNSON, MILLEN, MILLER, ETC. check
back often.
Tnx for looking : heytubeguy

3905. Re: Microstrip dimension

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-03 00:21:37 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <5YOdnW48ZtcP3EzZnZ2dnUVZ_sidnZ2d@bright.net>
Source record: 11006

Thanks Roy, I will take a micrometer to it and figure out which it will end up being. Either way, It'sa gonna be small!

Scott
N0EDV

Roy Lewallen wrote:

> If the dielectric material is 6.5 mils thick and the copper is very
> thin, the width needs to be 18.7 mils. If the substrate material is
> 0.0065 inches thick and the copper is "one ounce" (1.4 mils thick), the
> width needs to be 17.3 mils. If the total thickness is 6.5 mils, and
> that thickness includes top and bottom layers of "one ounce" copper
> (leaving 3.7 mils of dielectric), the thickness needs to be 9.5 mils.
>
> Good luck!
>
> Roy Lewallen, W7EL
>
> Scott wrote:
>
>> Question: Does anybody know how to calculate the width of a 50 Ohm
>> microstrip line on Arlon PTFE circuit board (Type GX-0065-45-11). It
>> is 0.0065" thick, double sided and has a k=2.45. Looking at my chart,
>> it looks like I leave the bottom as complete copper groundplane and
>> take off all copper around stripline on the top side of the board and
>> leave the stripline as 0.0195" wide? That doesn't sound very wide!!
>>
>> Scott
>> N0EDV

3906. Re: RFID Transmitters,RFID and Environmental Issues, Wal-Mart and RFID: A Case Study

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-03 02:00:11 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <e3m2d29830afqjul2egn8e7nkibv23k4dq@4ax.com>
Source record: 11007

On Wed, 02 Aug 2006 20:12:24 GMT, "Brian" <kb9bvn@earthlink.net>
wrote:

>This is the most idiotic ranting I have seen in weeks.

You need to get out more, Brian. There's lots more idiotic stuff
around than this.
>
>
>Oh yeah...top posting rules

That, for example.

Mr Bill

3907. Re: RFID Transmitters,RFID and Environmental Issues, Wal-Mart and RFID: A Case Study

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-03 17:55:23 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-A016B7.09553003082006@netnews.worldnet.att.net>
Source record: 11008

In article <9eu1d2tv5al6jj81scl4fmkakjn3krq2uk@4ax.com>,
Bill Turner <noway@nohow.com> wrote:

> Yes I have. Jim Beam is my favorite medication and makes annoying
> little ankle-biters like yourself easily tolerable. I'm sure you are
> aware of it because your original post about what a great idea it
> would be to jam WalMart showed signs of over-medication.

Seems to be a classic case of PUI..... (Posting under the Influence)...

Me

3908. Coupling capacitor magnitudes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-03 22:23:31 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrned4tr3.3go.ben@saturn.home.ben.com>
Source record: 11009

Most of the time I see RF stages coupled with .1u caps, which are
basically transparent at RF. Sometimes I see very small values
used, like 3-10p.

A couple examples are in:

http://www.amqrp.org/kits/38spcl/schematic.html

C17 (near the middle top, connecting U2 to a tank) and then the output
of that tank to U4A (unmarked, but also 5p).

It's clearly important to the circuit (empirically) but I don't understand
what they're doing. I can sort of see C20 (the unmarked second one) acting
as a high-pass RC filter.

--
Ben Jackson AD7GD
<ben@ben.com>
http://www.ben.com/

3909. Re: Coupling capacitor magnitudes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-03 23:31:14 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1154647874.050585.296620@75g2000cwc.googlegroups.com>
Source record: 11010

Ben Jackson wrote:
> It's clearly important to the circuit (empirically) but I don't understand
> what they're doing. I can sort of see C20 (the unmarked second one) acting
> as a high-pass RC filter.
>
> --
> Ben Jackson AD7GD
> <ben@ben.com>
> http://www.ben.com/

Andy writes:

Well, it could be that his transmitter oscillated, and he just tacked

a 220 pf to ground for C20 to make it stop.......

Putting a cap to ground on the output of an op amp is something
I have always avoided, EXCEPT when it made things work... :>)))))

Andy W4OAH

3910. Re: Coupling capacitor magnitudes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-03 23:52:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12d531571iu3j65@corp.supernews.com>
Source record: 11011

Those small capacitors effect an impedance transformation into and out
of the tank. They also reduce the shunt R seen by the tank, which
increases its loaded Q and therefore selectivity.

Roy Lewallen, W7EL

Ben Jackson wrote:
> Most of the time I see RF stages coupled with .1u caps, which are
> basically transparent at RF. Sometimes I see very small values
> used, like 3-10p.
>
> A couple examples are in:
>
> http://www.amqrp.org/kits/38spcl/schematic.html
>
> C17 (near the middle top, connecting U2 to a tank) and then the output
> of that tank to U4A (unmarked, but also 5p).
>
> It's clearly important to the circuit (empirically) but I don't understand
> what they're doing. I can sort of see C20 (the unmarked second one) acting
> as a high-pass RC filter.
>

3911. Re: Schematic drawing software?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-04 06:44:57 UTC
From: Will <echocomms@hotmail.com>
Message-ID: <1154673897.567296.228700@m79g2000cwm.googlegroups.com>
Source record: 11012

Michael A. Terrell wrote:
> Service to my country? Been there, Done that, and I've got my DD214 to
> prove it.
> Member of DAV #85.
>
> Michael A. Terrell
> Central Florida

Thank you Mike.

Will

DAV 22 Alhambra CA Memorial Honor Detail
Memorial Honor Detail, Riverside National Cemerty, CA.
Armorer, RNC.

3912. Re: Schematic drawing software?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-04 09:50:35 UTC
From: Mike <nomtrxspam@comcast.net>
Message-ID: <pt56d21e4btujo7epir9s2p5pm5tiefuq6@4ax.com>
Source record: 11013

On Tue, 01 Aug 2006 20:16:20 -0700, Bill Turner <noway@nohow.com>
wrote:

>Some years ago I used Visio at work for schematic drawing, but I no
>longer have access to it. Can someone recommend a program to use at
>home for creating schematic drawings? I don't care if it is payware as
>long as the price is reasonable. I found a couple with Google which
>were several hundred bucks, a bit much for my needs.
>
>Do recent Visio releases still have schematic drawing capability? I
>went to the Microsoft website and they advertise all kinds of drawing
>capabilities, but not schematics.
>
>Thanks in advance,
>
>Bill, W6WRT

Here's an open source prog that works pretty well.
http://tinycad.sourceforge.net/
It makes nice schematics and is pretty easy to use.
Mike

Sir Julian Huxley - Humanist, atheist and science popularizer, Professor
of Zoology, President of UNESCO 25 yrs ago in a radio interview
"I suppose that the reason that we lept at the origin (of the species)
was because the idea of God interfered with our sexual mores."

3913. Re: Coupling capacitor magnitudes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-04 13:37:08 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <sdi6d251va6uf336tlsjobjqp0dr0to36b@4ax.com>
Source record: 11014

On Thu, 03 Aug 2006 17:23:31 -0500, Ben Jackson <ben@ben.com> wrote:

>Most of the time I see RF stages coupled with .1u caps, which are
>basically transparent at RF. Sometimes I see very small values
>used, like 3-10p.

Depends on the frequency and the impedences.

>A couple examples are in:
>
> http://www.amqrp.org/kits/38spcl/schematic.html
>
>C17 (near the middle top, connecting U2 to a tank) and then the output
>of that tank to U4A (unmarked, but also 5p).
>
>It's clearly important to the circuit (empirically) but I don't understand
>what they're doing.

It's part of the matching network, the upper cap is the 5p and the
lower is 100p. Also by making the value small the amount of RF
coupled is lower (capacitive attenuator) along with tuning L2.
It is a simple circuit but has a more complex analysis.

For example U2 on recieve is a product detector and the desired
output from pin 4 is audio. On transmit it's used as a mixer to get
the VXO and BFO to produce a ~10mhz rf signal at pin 4. So making
the path for RF use a smaller value to keep any audio out of the path
is part of the circuit "tricks".

Since the design makes many of the parts serve dual duty
the analysis is often less than obvious.

>I can sort of see C20 (the unmarked second one) acting
>as a high-pass RC filter.

It's doing two jobs, DC blocking and a somewhat high pass coupling.
However the impedence at that point is fairly high so coupling values
can be smaller. The device there is not an opamp but a inverter
(digital logic) from a CMOS IC pressed into service as an amplifier
so there are some things done arount it to make behave are as needed
to make it work.

Allison
KB!GmX

3914. Re: Schematic drawing software?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-04 17:49:20 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <DMLAg.37$eB7.10@fe07.lga>
Source record: 11015

Take a peek at gEDA

http://www.geda.seul.org

Schematic drawing, PCB layout, modeling, the whole shot. And it's free

..

3915. Re: Coupling capacitor magnitudes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-04 19:22:41 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1154719360.972760.27360@b28g2000cwb.googlegroups.com>
Source record: 11016

com/
>
> Andy writes:
>
> Well, it could be that his transmitter oscillated, and he just tacked
>
> a 220 pf to ground for C20 to make it stop.......
>
> Putting a cap to ground on the output of an op amp is something
> I have always avoided, EXCEPT when it made things work... :>)))))
>
> Andy W4OAH

Oops !!! I was looking at C21 instead of C20......

.... never mind .... :>))))))

Andy

3916. Re: Coupling capacitor magnitudes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-04 22:12:55 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <HDPAg.83$qw5.81@trnddc06>
Source record: 11017

Ben,

The series C17 coupling cap is working against the net reactance of the C19-TC2-L2 circuit to form a resonant impedance matching network. Although it's not obvious, the tank network is tuned on the inductive side of resonance in order to produce exactly enough net inductive reactance to resonate C17. At this setting, C17 and the net inductive reactance of the C19-TC2-L2 network form a series resonant circuit. Because the whole network is resonant, the junction of C17 and the C19-TC2-L2 network is a higher impedance point than the pin 8 output of U2. Assuming lossless components, energy must be conserved, and so the signal voltage at this high impedance point is higher than at pin 8 - yes, voltage gain in a passive network! The unmarked coupling cap feeding into U4A is probably just a large value "DC block", since the U4A stage design will have a fairly high input impedance and so will not substantially load the tuned impedance step-up network.

Most people think that couping caps are just used to drop signal voltage sort of like inserting a resistor, but if designed carefully as part of a resonant interface as I described, they transfer energy with little or no power loss, and can actually produce voltage gain. This is a very important RF design concept that many folks don't understand.

Joe
W3JDR

"Ben Jackson" <ben@ben.com> wrote in message
news:slrned4tr3.3go.ben@saturn.home.ben.com...
> Most of the time I see RF stages coupled with .1u caps, which are
> basically transparent at RF. Sometimes I see very small values
> used, like 3-10p.
>
> A couple examples are in:
>
> http://www.amqrp.org/kits/38spcl/schematic.html
>
> C17 (near the middle top, connecting U2 to a tank) and then the output
> of that tank to U4A (unmarked, but also 5p).
>
> It's clearly important to the circuit (empirically) but I don't understand
> what they're doing. I can sort of see C20 (the unmarked second one)
acting
> as a high-pass RC filter.
>
> --
> Ben Jackson AD7GD

> <ben@ben.com>
> http://www.ben.com/

3917. Re: Coupling capacitor magnitudes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-04 22:42:57 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrned7jbh.tau.ben@saturn.home.ben.com>
Source record: 11018

On 2006-08-04, W3JDR <joe@roccis.com> wrote:
> unmarked coupling cap feeding into U4A is probably just a large value "DC
> block", since the U4A stage design will have a fairly high input impedance
> and so will not substantially load the tuned impedance step-up network.

That was my assumption, however when I replicated that part of the
circuit, I found that when U4 was at 8V, the signal picked up a LOT
of phase noise. I'm assuming that the 10k feedback resistor that
biases the inverter for linear operation was back-driving the tank.
Or perhaps it's the fact that in the inverting amplifier configuration
the XC of C20 is required to set the gain at a reasonable ~3x instead
of essentially infinite. In that case I should have been able to
use a .1u + 3k R for the same effect.

Anyway, I've found this tiny bit of circuitry to be very informative!

--
Ben Jackson AD7GD
<ben@ben.com>
http://www.ben.com/

3918. Maryland-DC QSO Party - Aug 12 & 13

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-05 01:15:32 UTC
From: VOA SWLer <Reply_Here@bogus.com>
Message-ID: <UPCdnSAiOZ-ubE7ZnZ2dnUVZ_rKdnZ2d@comcast.com>
Source record: 11019
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.homebrew, rec.radio.amateur.misc,rec.radio.swap

For information about the Maryland-DC QSO Party, click on
<http://www.w3cwc.org/funcontest.htm>.

Hope to work you during the contest.

73!

3919. SolderSmoke #28: SPRAT, QRSS, QST $50 RIG, Class C saturation? A Logo for SolderSmoke

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-05 06:03:20 UTC
From: bill.meara@gmail.com
Message-ID: <1154757800.512447.58910@i3g2000cwc.googlegroups.com>
Source record: 11020
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,sci.electronics.basics

SolderSmoke!
A SHOW FOR ELECTRONICS HOMEBREWERS!

http://www.ourmedia.org/node/250909

Topics discussed in SolderSmoke #28:

-- SPRAT Cermaic Oscilator article
-- Tin whiskers and lead free solder
-- QST's $50 rig design challenge
-- Class C amps: Saturation required?
-- Solder Smoke's LOGO DESIGN challenge
-- FB QSO on 20 DSB with SM4FQW
-- Slow Speed QRP (QRSS)
-- WebShots, YouTube
-- MAILBAG: K8WDE, KA6VKP, WB8ICN, VK2KYP
KK7CC

Listen at: http://www.ourmedia.org/node/250909

Background:
Tired of listening to Led Zepplin or NPR on your I-Pod? Wouldn't you like to be able to carry with you the kinds of ham radio conversations that you listen to while in your radio shack?
Mike, KL7R, in Juneau, Alaska, and Bill, M0HBR, in London, England meet regularly on the ECHOLINK system to discuss their homebrew radio projects. We are making them available as PODCASTS.

NEW RSS FEED: You can subscribe to the program, have them downloaded to your MP-3 player, and listen to them at your convenience. To subscribe, just cut and paste this URL into your I-poder (or similar) software. We've been having trouble with our Ourmedia RSS feed, so Mike (software wizard that he is) has homebrewed his own RSS feed. In order to subscribe to SolderSmoke, point your podcast software to:

http://kl7r.ham-radio.ch/soldersmoke.rss

If you don't have an MP3 player you can just go to the site below and listen to the latest program (and earlier editions) using the audio software on your

computer.

http://www.ourmedia.org/node/250909

Here's the homepage for our show. All our programs are available here. There is also a blog and links to some of the sites and documents we've been discussing: http://www.ourmedia.org/user/36170

We hope you enjoy the program. Please send us feedback.

73 from London
Bill M0HBR N2CQR CU2JL
http://www.gadgeteer.us

3920. Re: Help Tek 495P Spectrum Analyzer Manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-05 11:26:56 UTC
From: "Gian, I7SWX" <i7swx@yahoo.com>
Message-ID: <1154777216.320532.137170@p79g2000cwp.googlegroups.com>
Source record: 11021

Hi Roy,

thanks for the tip. I will look for him

I would like to thanks all those that replied to my e-mail address.

I have found all the manuals on a CD and are on the way to me.

73

Gian
I7SWX

Roy Lewallen wrote:
> Try Deane Kidd, W7TYR. A google search of
> "Deane Kidd" manuals
> will bring you contact information.
>
> Roy Lewallen, W7EL
>
> Gian, I7SWX wrote:
> > elspxvwcyr@yahoo.com wrote:
> >> Try Vintage Manuals, <http://www.w7fg.com>. I recently ordered a manual
> >> for my B&K function generator and was very pleased with the service.
> >
> > Thanks for your follow-up. I know W7FG service. I bought 3 manuals from
> > him a few years ago. Yews, good service.
> >
> > I checked but he does not have anything on 495P
> >
> > 73
> > Gian
> > I7SWX
> >

3921. Help (again) Tek Manuals TR503 & DM501

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-05 13:25:09 UTC
From: "Gian, I7SWX" <i7swx@yahoo.com>
Message-ID: <1154784308.324121.142390@i42g2000cwa.googlegroups.com>
Source record: 11022

Hi all,

I am looking for some more Tektronix manuals. A local friend was
supposed to get these for me but his friend sold the gear and manuals
long time ago.

TR 503 Tracking Generator used associated with Spectrum Analyzer TEK
496, I will use it with the 495P.

DM501 Digital Multi-meter. I have a short circuit somewhere internally
so I need mainly the circuit diagrams.

Thanks for helping me.

Best 73

Gian
I7SWX
W1-I7SWX
F5VGU
CE3-I7SWX

3922. Re: Help (again) Tek Manuals TR503 & DM501

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-05 18:24:26 UTC
From: Mario Bros <non_ci_pensare@tin.it>
Message-ID: <44d4e24f$0$30236$4fafbaef@reader1.news.tin.it>
Source record: 11023

http://cgi.ebay.com/TEK-TEKTRONIX-TR-503-TR503-TR-503-OP-SERVICE-MANUAL_W0QQitemZ760886210
4QQihZ017QQcategoryZ40123QQcmdZViewItem

Non so se pu&#65533; esserti d'aiuto-

Rocco

"Gian, I7SWX" <i7swx@yahoo.com> ha scritto nel messaggio
news:1154784308.324121.142390@i42g2000cwa.googlegroups.com...
> Hi all,
>
> I am looking for some more Tektronix manuals. A local friend was
> supposed to get these for me but his friend sold the gear and manuals
> long time ago.
>
> TR 503 Tracking Generator used associated with Spectrum Analyzer TEK
> 496, I will use it with the 495P.
>
> DM501 Digital Multi-meter. I have a short circuit somewhere internally
> so I need mainly the circuit diagrams.
>
> Thanks for helping me.
>
> Best 73
>
> Gian
> I7SWX
> W1-I7SWX
> F5VGU
> CE3-I7SWX
>

3923. Re: Help (again) Tek Manuals TR503 & DM501

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-06 09:46:58 UTC
From: "Gian, I7SWX" <i7swx@yahoo.com>
Message-ID: <1154857618.407407.117710@m73g2000cwd.googlegroups.com>
Source record: 11024

Grazie Rocco,

li ho trovati

73

Gian

Mario Bros wrote:
> http://cgi.ebay.com/TEK-TEKTRONIX-TR-503-TR503-TR-503-OP-SERVICE-MANUAL_W0QQitemZ7608862104QQihZ017QQcategoryZ40123QQcmdZViewItem
>
> Non so se può esserti d'aiuto-
>
> Rocco
>
>
>
> "Gian, I7SWX" <i7swx@yahoo.com> ha scritto nel messaggio
> news:1154784308.324121.142390@i42g2000cwa.googlegroups.com...
> > Hi all,
> >
> > I am looking for some more Tektronix manuals. A local friend was
> > supposed to get these for me but his friend sold the gear and manuals
> > long time ago.
> >
> > TR 503 Tracking Generator used associated with Spectrum Analyzer TEK
> > 496, I will use it with the 495P.
> >
> > DM501 Digital Multi-meter. I have a short circuit somewhere internally
> > so I need mainly the circuit diagrams.
> >
> > Thanks for helping me.
> >
> > Best 73
> >
> > Gian
> > I7SWX
> > W1-I7SWX
> > F5VGU
> > CE3-I7SWX
> >

3924. Re: Help (again) Tek Manuals TR503 & DM501

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-06 09:48:40 UTC
From: "Gian, I7SWX" <i7swx@yahoo.com>
Message-ID: <1154857720.584372.229600@p79g2000cwp.googlegroups.com>
Source record: 11025

Hi all,

this request of mine found the most rapid replies.

I have found the manuals.

Thanks for the support

and best 73

Gian
I7SWX

3925. Mega promos dans notre sex shop

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-06 11:53:47 UTC
From: Cathy@noosempty.net
Message-ID: <44d5d84a$0$831$ba4acef3@news.orange.fr>
Source record: 11026
Body handling: HTML body converted to readable text

[No readable article body recovered]

3926. jeunes filles 18 ans perverses

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-06 11:53:51 UTC
From: priscilla@canaweb.ca
Message-ID: <44d5d84e$0$827$ba4acef3@news.orange.fr>
Source record: 11027
Body handling: HTML body converted to readable text

[No readable article body recovered]

3927. TELECHARGEZ DES VIDEOS X LIBREMENT

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-06 11:53:51 UTC
From: Cindy@amplend.com
Message-ID: <44d5d84f$0$895$ba4acef3@news.orange.fr>
Source record: 11028
Body handling: HTML body converted to readable text

[No readable article body recovered]

3928. Re: Help (again) Tek Manuals TR503 & DM501

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-06 22:16:53 UTC
From: carlo <tek_scope_dude@nospam.com>
Message-ID: <44D66A54.3FCB9259@nospam.com>
Source record: 11029

hi,

Lots of tek help here

http://groups.yahoo.com/group/TekScopes/

regards,

carlo

3929. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-07 02:01:27 UTC
From: me <me@me.com>
Message-ID: <44d69eec@quokka.wn.com.au>
Source record: 11030
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

Kev wrote:

Kev a tanker wanker ,,,, do tell more Kev Deck or ER ?

> news wrote:
>
>> yes thanks glenn. I would like a copy of the circuit.
>>
>> email james_about@hotmail.com with the info please.
>>
>> Any thing you need also. I keep a fairly extensive collection of radio
>> software and circuits.
>>
>> And gidday to Kev ....tanker wanker. private joke.
>>
>>
>
> :)
>
>
> Kev

3930. Ferroxcube RF Chokes - Free if you pay for shipping

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-07 03:58:08 UTC
From: Mick The Cat <moseshosesNOSPAM@yahoo.com>
Message-ID: <kTyBg.4605$9T3.2515@newssvr25.news.prodigy.net>
Source record: 11032

I have 4-5 boxes of unused surplus Philips Ferroxcube 4BI (or 4B1) Ferrite RF Chokes. These are basically just a multi-aperture core with a piece of 24 Awg Bus wire threaded through it. They work quite well for supplying DC bias for low to medium power RF devices in the VHF and UHF frequency ranges. Each box supposedly contains 1000 pcs. but there's probably a few missing. (I'm not going to sit here all day and count them!) I figured one of you guys might be able to find a use for these. They're yours if you pay for shipping costs from 91732 (near Los Angeles.)
Here's pictures:
http://home.att.net/~rodger.e/fxcb01.jpg
http://home.att.net/~rodger.e/fxcb02.jpg

Please email me at
moseshosesNOSPAM@yahoo.com
(remove NOSPAM from the address)

Thanks and 73's
Roger E.

3931. Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-07 05:44:55 UTC
From: brizzy bastard <NOTROLLSjamesinbrisbane@hotmail.com>
Message-ID: <44d6d365$0$11970$afc38c87@news.optusnet.com.au>
Source record: 11031
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

A cheap tracking device can be purchased through one of the following pages.
http://tech-software.net/index.php?module=pagemaster&PAGE_user_op=view_page&PAGE_id=5&MMN_position=7:7
http://www.silcom.com/~pelican2/PicoDopp/PICODOPP.htm
I really don't think tracking devices have to be expensive but if you don't like paying for a good one, then I can provide a very simple 555ic timer circuit you can use that will cost about $10 to make.
Here is the circuit of a very simple but workable tracking device that I once used to track a signal to tandy's store in the toowong towers in Brisbane. Once you learn how to use it, you can track to a square metre. A hand held radio is the best choice of radio to use with the tracker. This shop blocked ch 7 for 3 days until I had some free time to go and see where it was coming from. The same shop did it again some time later and the culprit lost his job at that location thanks to a night time worker that was on the ball. The signal was a radio on the shelf connected to power with a small antenna and a clip lead over the mic insert to hold it on tx.
http://www.k1ttt.net/technote/doppler.html
http://au.geocities.com/vk4jzz/side.jpg

"me" <me@me.com> wrote in message news:44d69eec@quokka.wn.com.au...
> Kev wrote:
>
> Kev a tanker wanker ,,,, do tell more Kev Deck or ER ?
>
>
> > news wrote:
> >
> >> yes thanks glenn. I would like a copy of the circuit.
> >>
> >> email james_about@hotmail.com with the info please.
> >>
> >> Any thing you need also. I keep a fairly extensive collection of radio
> >> software and circuits.
> >>
> >> And gidday to Kev ....tanker wanker. private joke.
> >>
> >>
> >
> > :)
> >
> >
> > Kev

3932. Re: Help (again) Tek Manuals TR503 & DM501

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-07 15:32:09 UTC
From: "Gian, I7SWX" <i7swx@yahoo.com>
Message-ID: <1154964729.351994.208120@h48g2000cwc.googlegroups.com>
Source record: 11033

Yes, Carlo ... lots of Tek there and I posted my requests ... but .....
the only support I got is from this group.....

73

Gian
I7SWX

carlo wrote:
> hi,
>
> Lots of tek help here
>
> http://groups.yahoo.com/group/TekScopes/
>
> regards,
>
> carlo

3933. FS: Surplus Commercial Amateur Service Manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-08 01:10:38 UTC
From: Norm VE3CZI <ve3czi@arrl.net>
Message-ID: <lwRBg.63490$Uy1.32881@read1.cgocable.net>
Source record: 11034
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Have a quantity of Radio Communications Service Manuals, both Commercial &
Amateur that I have rescued from the Dumpster. Most ot them are in Like New
Condition.

Please check my site: www.rodemi.com for what is available. I am updating
the site as time allows.
I recently retired from the Commercial 2-way radio business and have a
"goal" to clean up the Garage & Basement.

Thanks for looking....Norm VE3CZI
Email me Directly: <insert Call Sign> at rac.ca....<call sign> is ve3czi

3934. SolderSmoke 29: PC board boxes, Feynman video, Octopus 'scope aid, THE MOODY BLUES

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-08 05:48:32 UTC
From: bill.meara@gmail.com
Message-ID: <1155016112.420939.39070@m79g2000cwm.googlegroups.com>
Source record: 11035
Cross-posted to:
rec.radio.amateur.homebrew,sci.astro.amateur,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,sci.electronics.basics

SolderSmoke!
A SHOW FOR ELECTRONICS HOMEBREWERS!

We've moved SolderSmoke to a new web site host (please
let us know what you think of the new host):

http://www.soldersmoke.com

Topics discussed in SolderSmoke #29:

-- A PC board box for Bill's FET final
-- Richard Feynman video clip
-- Mike's amazing Octopus oscilloscope aid
-- Another plea for graphics help (SS logo)
-- Overcoming podcast tech difficulties
-- FIRST EVER SolderSmoke EM wave poetry:
from The Moody Blues
-- SolderSmoke Mailbag: Tony Fishpool and the GQRP
club

Listen and download at: http://www.soldersmoke.com

Background:
Tired of listening to Led Zepplin or NPR on your
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73 from London
Bill M0HBR N2CQR CU2JL
http://www.gadgeteer.us

3935. FS: Very rare National MB-40-L

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-08 19:23:15 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <54phd2lbkbe87gg62fg0ihn0vg432mljkg@4ax.com>
Source record: 11036

I'm not getting any younger and it's time to clean out the stuff
that's not going to get used anytime soon.

This is a National multi-band tank circuit that tunes 80-10 meters
with one turn of the shaft, without a bandswitch. Ideal for tuning
the input of that big linear, incorporating into a low-power antenna
tuner or whatever.

I believe these were originally rated for 10 watts, but I think it
should handle more than that from the looks of it.

Photo at: http://www.k6mhe.com/n7ws/MB-40-L.jpg

Asking $50 and I'll pay the shipping in CONUS.

Email n7ws@yahoo.com

73,

Wes

3936. FS: National R175A Plate Choke

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-08 20:20:16 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <c5shd2h7uciib4pa8hlm6scirsssa8m324@4ax.com>
Source record: 11037
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I have two new, unused, National R175A plate chokes (radio frequency chokes) for sale.

These are ideal for high-power tube type amplifiers. They are wound in sections on ceramic forms to avoid resonances in the amateur bands.

Photo at: http://www.k6mhe.com/n7ws/R175A.jpg

Asking $25 each, or $40 the pair, shipped CONUS.

email n7ws@yahoo.com

73,

Wes

3937. FS: B & W 850A Plate tank assembly.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-08 21:18:56 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <0kvhd2d061s887s9s0s84fqrtbfb0jd4l8@4ax.com>
Source record: 11038
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

For sale one B&W (Barker and Willimson) 10-80 meter plate
inductor/bandswitch assembly.

This is the big one for that BIG amp you want to build. This item is
used but as new. Shiny silver, perfect ceramic and no arcing on the
contacts.

Photo at: http://www.k6mhe.com/n7ws/850A.jpg

Asking $200 shipped to CONUS.

email:n7ws@yahoo.com

73,

Wes

3938. Recommend transistors for PA at UHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-09 07:13:39 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <23cef$44d98b23$d871df4e$24178@PRIMUS.CA>
Source record: 11039

Can anyone recommend power transistors for 25W PA, for 450MHz and 900MHz.

Thanks

JJ

3939. Re: Recommend transistors for PA at UHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-09 11:07:43 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <kdCdnVxDbZucX0TZnZ2dnUVZ_qWdnZ2d@bright.net>
Source record: 11040

Are you building an amplifier from scratch? If so, I recommend using "brick" RF modules. They are so simple...just mount them on a heatsink, wire up a couple of voltages, feed them with the proper input RF level (usually in the 1-200 mW range) and take the output from the module and run it through a low pass filter to the antenna. See http://www.rfparts.com/module.html for available modules and frequency ranges. They have many modules for the range you seek. Most modules listed have data sheets at that site as well.

Scott
N0EDV

JJ wrote:

> Can anyone recommend power transistors for 25W PA, for 450MHz and 900MHz.
>
> Thanks
>
> JJ

3940. Re: Class C amps saturating?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-09 18:58:15 UTC
From: w8ji@akorn.net
Message-ID: <1155149895.659721.253550@m79g2000cwm.googlegroups.com>
Source record: 11041

Reg Edwards wrote:
> But 50% off and 50% on corresponds to Class-B bias conditions.
>
> This is inconsistent with "tons of negative bias".

You are right. That was a mistake. It can't be a 50% duty cycle when
the PA has very high bias.

But the waveform can be very square and the efficiency up near 100%.

73 Tom

3941. Looking for Drake W-4

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-10 01:14:56 UTC
From: Rick Mintz <Rmintz@Rochester.rr.com>
Message-ID: <kMvCg.30292$1Z5.1909@twister.nyroc.rr.com>
Source record: 11042

Hi Gang,

I am looking for a Drake W-4 wattmeter, either complete or just the meter portion. Needed to complete an amplifier project.

Rick W1TY

Please reply direct.

Email: Rmintz@Rochester.rr.com

3942. Re: Recommend transistors for PA at UHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-10 01:51:18 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <57f24$44da9116$d871df4e$12132@PRIMUS.CA>
Source record: 11043

Scott <acepilot@bloomer.net> wrote in
news:kdCdnVxDbZucX0TZnZ2dnUVZ_qWdnZ2d@bright.net:

> Are you building an amplifier from scratch? If so, I recommend using
> "brick" RF modules. They are so simple...just mount them on a
> heatsink, wire up a couple of voltages, feed them with the proper
> input RF level (usually in the 1-200 mW range) and take the output
> from the module and run it through a low pass filter to the antenna.
> See http://www.rfparts.com/module.html for available modules and
> frequency ranges. They have many modules for the range you seek.
> Most modules listed have data sheets at that site as well.
>
> Scott
> N0EDV

Thats a possible solution.
But sincethis is homebrew, does anyone sell a power transistor or IC that
goes to 450MHz/900MHz?

JJ

3943. Re: Recommend transistors for PA at UHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-10 03:26:20 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <tIednabrbq_AOkfZnZ2dnUVZ_tidnZ2d@bright.net>
Source record: 11044

Absolutely! RF Parts Company (the one I originally gave you) sell
discrete transistors as well as tons of parts. I don't know why you
wouldn't want to use an RF modules as all the impedance matching is
already done for you for the most part...the device input is 50 Ohms and
so is the output. Very minimal designing needed to make a functional amp...

http://www.rfparts.com

Scott
N0EDV

JJ wrote:

>
> Thats a possible solution.
> But sincethis is homebrew, does anyone sell a power transistor or IC that
> goes to 450MHz/900MHz?
>
> JJ

3944. Re: Recommend transistors for PA at UHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-10 11:22:33 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <r4GdnUehK-pni0bZnZ2dnUVZ_tadnZ2d@bright.net>
Source record: 11045

Just a quick note to add to my previous replies....

http://www.rfparts.com carries a boatload of transistors, a few examples
such as:

RD30HUF1, 520 Mhz, 12.5V, Power out 30W $24.70
RD60HUF, 520 MHz, 12.5V, Power out 45W $29.20
RD45HMF1, 900 MHz, 12.5V, Power out 30W $32.90

Here's a list of many others:

http://www.rfparts.com/transistorspecs.html

Scott

JJ wrote:

> Scott <acepilot@bloomer.net> wrote in
> news:kdCdnVxDbZucX0TZnZ2dnUVZ_qWdnZ2d@bright.net:
>
>
>>Are you building an amplifier from scratch? If so, I recommend using
>>"brick" RF modules. They are so simple...just mount them on a
>>heatsink, wire up a couple of voltages, feed them with the proper
>>input RF level (usually in the 1-200 mW range) and take the output
>>from the module and run it through a low pass filter to the antenna.
>>See http://www.rfparts.com/module.html for available modules and
>>frequency ranges. They have many modules for the range you seek.
>>Most modules listed have data sheets at that site as well.
>>
>>Scott
>>N0EDV
>
>
> Thats a possible solution.
> But sincethis is homebrew, does anyone sell a power transistor or IC that
> goes to 450MHz/900MHz?
>
> JJ

3945. Re: Recommend transistors for PA at UHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-10 15:55:34 UTC
From: laura halliday <marsgal42@hotmail.com>
Message-ID: <1155225334.567304.309660@75g2000cwc.googlegroups.com>
Source record: 11046

JJ wrote:

> Thats a possible solution.
> But sincethis is homebrew, does anyone sell a power transistor or IC that
> goes to 450MHz/900MHz?

If you know exactly what you're doing, you can design and
build a UHF amplifier from discrete components. If you know
exactly what you're doing you can make it stable and linear.
But if you knew exactly what you were doing you wouldn't
need to ask USENET which transistors to use.

Everybody else uses bricks. They work.

Laura Halliday VE7LDH "Que les nuages soient notre
Grid: CN89mg pied a terre..."
ICBM: 49 16.05 N 122 56.92 W - Hospital/Shafte

3946. Re: Recommend transistors for PA at UHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-10 17:12:49 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12dmq8i96suo13f@corp.supernews.com>
Source record: 11047

"laura halliday" <marsgal42@hotmail.com> wrote in message
news:1155225334.567304.309660@75g2000cwc.googlegroups.com...
> If you know exactly what you're doing, you can design and
> build a UHF amplifier from discrete components. If you know
> exactly what you're doing you can make it stable and linear.
> But if you knew exactly what you were doing you wouldn't
> need to ask USENET which transistors to use.

You don't give the guy much credit for wanting to learn, do you?

I agree that someone asking for the transistor number itself isn't likely to be ready to *use* it for the intended purpose, but everyone has to start somewhere, and looking at the data sheet for parts you've insured are actually available certainly isn't the worst spot for someone wanting to build their own PA. Additionally, the problem becomes simpler if the OP doesn't need much linearity because he's only interested in FM.

> Everybody else uses bricks. They work.

I've blown up plenty of bricks due to improper termination... :-)

3947. Re: Recommend transistors for PA at UHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-10 19:08:12 UTC
From: novatech@eskimo.com
Message-ID: <ebg06shsl1@eskinews.eskimo.com>
Source record: 10948

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> writes:

>You don't give the guy much credit for wanting to learn, do you?

>I agree that someone asking for the transistor number itself isn't likely to
>be ready to *use* it for the intended purpose, but everyone has to start
>somewhere, and looking at the data sheet for parts you've insured are actually
>available certainly isn't the worst spot for someone wanting to build their
>own PA. Additionally, the problem becomes simpler if the OP doesn't need much
>linearity because he's only interested in FM.

>> Everybody else uses bricks. They work.

>I've blown up plenty of bricks due to improper termination... :-)

The old Motorola data books (bipolar and mos) used to have a bunch of app
notes showing reference designs for various frequency ranges. Perhaps one
can scrounge those, or find them on the web.
--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997
206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

3948. Re: Recommend transistors for PA at UHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-10 19:24:46 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <E5idnVFQBa1rGkbZnZ2dnUVZ_vednZ2d@web-ster.com>
Source record: 10949

Steven Swift wrote:

> "Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> writes:
>
>
>>You don't give the guy much credit for wanting to learn, do you?
>
>
>>I agree that someone asking for the transistor number itself isn't likely to
>>be ready to *use* it for the intended purpose, but everyone has to start
>>somewhere, and looking at the data sheet for parts you've insured are actually
>>available certainly isn't the worst spot for someone wanting to build their
>>own PA. Additionally, the problem becomes simpler if the OP doesn't need much
>>linearity because he's only interested in FM.
>
>
>>>Everybody else uses bricks. They work.
>
>
>>I've blown up plenty of bricks due to improper termination... :-)
>
>
> The old Motorola data books (bipolar and mos) used to have a bunch of app
> notes showing reference designs for various frequency ranges. Perhaps one
> can scrounge those, or find them on the web.

I glanced at one of the latest Freescale data sheets. It gave the test
circuit's microstrip dimensions, but not, alas, a board layout. None
the less, those dimensions should get you part way there.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

3949. FS: Yaesu FT221-R

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-11 01:53:04 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <cgond2hccsdhmipe1t72f3ol47d8s1ridl@4ax.com>
Source record: 10950
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Nice older 2-meter multimode. CW, USB, LSB, AM and FM transceiver.
Min. 10W output. I've used this rig with external amps to run meteor
and tropo scatter and EME.

Been keeping it to get back on EME but health issues are preventing
the construction of new antenna.

Asking $225 including shipping to CONUS.

email:n7ws@yahoo.com

Thanks and 73,

Wes

3950. Re: Recommend transistors for PA at UHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-11 04:24:56 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <446ef$44dc0698$d871df4e$7464@PRIMUS.CA>
Source record: 10951

>
> If you know exactly what you're doing, you can design and
> build a UHF amplifier from discrete components. If you know
> exactly what you're doing you can make it stable and linear.
> But if you knew exactly what you were doing you wouldn't
> need to ask USENET which transistors to use.
>
> Everybody else uses bricks. They work.
>
> Laura Halliday VE7LDH "Que les nuages soient notre
> Grid: CN89mg pied a terre..."
> ICBM: 49 16.05 N 122 56.92 W - Hospital/Shafte
Ms Halliday,

I've worked with microwave transistors, striplines, Smith Charts,S-
parameters,etc back in the 90's. I don't exactly see a whole lot of
transistors still made for power applications at these frequencies.
We weren't allowed to use bricks in those days. It was sort of like using
a calculator to do basic arithmetic in school.

I shudder at the price of those old obsolete transistors.

JJ

3951. AM Stereo/FM Stereo Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-11 07:40:30 UTC
From: ungvichian <ungvichian@thaimail.com>
Message-ID: <1155282030.742256.202800@m73g2000cwd.googlegroups.com>
Source record: 10952

I would like to be able to build, from scratch, an radio receiver for AM Stereo and FM Stereo. I only have a rough idea of what I need (I DO need a C-QUAM for example, a MC13028), and I have next to no experience with electronics (just an electronics lab class, and some education on computer-programmed boards, during university), so I have no idea where to start (although I would be able to solder the thing together once I knew what I had to do). I do know, however, what I want in my theoretical receiver: a small size that I can carry around, 2 speakers for stereo output, knob tuning like a regular analog dial radio (i.e., with a small arrow on a horizontal dial pointing out the frequency), and possibly the ability to run off batteries or mains (220V 50Hz) as well as a jack for outputting to headphones (or a computer for airchecking purposes ;)). And of course, no old-fashioned tech like tubes ;).

I know Chris Cuff has been known to make them, but who knows where he's been these last few years? (Okay, he did have a few reviews at Amazon as late as last year... and I just emailed him a few hours ago, but who knows if he still checks his inbox?) Besides, I've seen his radios at sites on AM Stereo, and the tuning he uses doesn't exactly lend well to sensitive tuning (with the frequencies written right on the knob).

Come on, help me out here.

3952. Re: Recommend transistors for PA at UHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-11 11:02:03 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <2I6dnXIXV80x_kHZnZ2dnUVZ_v2dnZ2d@bright.net>
Source record: 10953

I think that was her implicit point. A brick is simpler and probably
less costly than building a discrete amplifier. Plus, we're past the
90s now and bricks seem to be the way things are going. I'm not even
sure if any of the major manufacturers are using discretes anymore (on
6M and up, that is). Maybe Ten Tec is...but all of the VHF and up stuff
I've bought in the last 10 years or so is brick based.

Scott

JJ wrote:

>>If you know exactly what you're doing, you can design and
>>build a UHF amplifier from discrete components. If you know
>>exactly what you're doing you can make it stable and linear.
>>But if you knew exactly what you were doing you wouldn't
>>need to ask USENET which transistors to use.
>>
>>Everybody else uses bricks. They work.
>>
>>Laura Halliday VE7LDH "Que les nuages soient notre
>>Grid: CN89mg pied a terre..."
>>ICBM: 49 16.05 N 122 56.92 W - Hospital/Shafte
>
> Ms Halliday,
>
> I've worked with microwave transistors, striplines, Smith Charts,S-
> parameters,etc back in the 90's. I don't exactly see a whole lot of
> transistors still made for power applications at these frequencies.
> We weren't allowed to use bricks in those days. It was sort of like using
> a calculator to do basic arithmetic in school.
>
> I shudder at the price of those old obsolete transistors.
>
> JJ

3953. search for schematic plan

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-11 13:27:50 UTC
From: gianluca <9a6nfg@hamradio.hr>
Message-ID: <ebi0kg$l45$1@ss408.t-com.hr>
Source record: 10954

hy to all i need to find the schematic plan for an old rtx 70cm band , the name is :KF-430 from the ST COMMUNICATION , i think it is old 30 year quartz rtx for 70 cm band , if some one hawe a schematic plan I will be thank and buy it , 73 DE 9A6NFG !

3954. Re: AM Stereo/FM Stereo Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-11 20:22:23 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12dppnvbu94o6b2@corp.supernews.com>
Source record: 10955

"ungvichian" <ungvichian@thaimail.com> wrote in message
news:1155282030.742256.202800@m73g2000cwd.googlegroups.com...
>I would like to be able to build, from scratch, an radio receiver for
> AM Stereo and FM Stereo. I only have a rough idea of what I need (I DO
> need a C-QUAM for example, a MC13028), and I have next to no experience
> with electronics (just an electronics lab class, and some education on
> computer-programmed boards, during university), so I have no idea where
> to start (although I would be able to solder the thing together once I
> knew what I had to do). I do know, however, what I want in my
> theoretical receiver: a small size that I can carry around, 2 speakers
> for stereo output, knob tuning like a regular analog dial radio (i.e.,
> with a small arrow on a horizontal dial pointing out the frequency),
> and possibly the ability to run off batteries or mains (220V 50Hz) as
> well as a jack for outputting to headphones (or a computer for
> airchecking purposes ;)). And of course, no old-fashioned tech like
> tubes ;).

There's a pretty daunting undertaking for someone with your background. Are you looking just to *buid* such a receiver or do you want to learn how to *design* such things and understand exactly how they're working?

What's your budget look like?

You might want to start with something like http://www.esssales.com/elenco/radio-kit.html and then start hacking the IFs to go to your stereo decoders.

> I know Chris Cuff has been known to make them, but who knows where he's
> been these last few years? (Okay, he did have a few reviews at Amazon
> as late as last year... and I just emailed him a few hours ago, but who
> knows if he still checks his inbox?)

My impression has been that (1) Chris has probably just gotten busy with the rest of his life over the past few years and (2) he's probably gotten everything he ever wanted to out of C-QUAM. He was still selling PCBs on eBay a few months ago -- I seem to recall reading that he said the response was so great he was going to get more PCBs made (his initial auction was for clearing out the last boards he had).

> Besides, I've seen his radios at
> sites on AM Stereo, and the tuning he uses doesn't exactly lend well to
> sensitive tuning (with the frequencies written right on the knob).

I think you're confusing "sensitivity" with "precision." If you're looking for precision tuning, unless you want to spend a lot of money, you should just get a PLL-tuner radio. As for sensitivity, as with FM stereo, AM stereo was

really intended to work only when large signals (well, SNRs) were present, and therefore Chris's add-on boards never needed to worry about sensitivity too much.

I think you're pursuing a worthwhile project here (you'll learn a lot in the process), but if you're looking to do something a little more up-to-date you might consider doing an AM/FM stereo with a low-power DSP for the stereo decoding. No MC13028 ICs, no FM decoders, etc. -- just digitize at IF and do the rest digitally. You might buy a cheap commercial AM/FM stereo like the old Sony SRF-42 (shows up on eBay regularly, and usually the prices are sane) and then compare the performance of the DSP-based implementation with the analog implementation. (The cool thing about decoding C-QUAM in analog is that you have to build an analog divider -- definitely not the kind of circuit you see every day!)

---Joel Kolstad

3955. Re: Recommend transistors for PA at UHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-12 02:02:26 UTC
From: novatech@eskimo.com
Message-ID: <ebjcriigs1@eskinews.eskimo.com>
Source record: 10956

Scott <acepilot@bloomer.net> writes:

>> I shudder at the price of those old obsolete transistors.
>>
>> JJ

What about these:

http://novatech-instr.com/Ebay_Images/mrf511.jpg

Plus I have a bunch more from a retired Fluke RF designer's junk box.

They went pretty cheap on Ebay.
--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997
206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

3956. Re: Recommend transistors for PA at UHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-12 11:41:00 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <t9mdnTty05bQI0DZnZ2dnUVZ_tmdnZ2d@bright.net>
Source record: 10957

I didn't even see this type listed at RF Parts...the original poster was looking for something that would put out 25 or 30 Watts (if I recall). What is the MRF511 capable of? Looking at the leads, it looks more like a low level amplifier...

Scott

Steven Swift wrote:

>
>
> What about these:
>
> http://novatech-instr.com/Ebay_Images/mrf511.jpg
>
> Plus I have a bunch more from a retired Fluke RF designer's junk box.
>
> They went pretty cheap on Ebay.

3957. Voltage Calibration

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-12 21:00:45 UTC
From: joegeller@gmail.com
Message-ID: <1155416445.535052.122950@p79g2000cwp.googlegroups.com>
Source record: 10958

Some time back, there was a discussion of voltage references. The post is now in the public domain forever, so I feel a need to reply. Unfortunately I only saw it recently so I wasn't able to comment at the time. There is an incorrect statement regarding one of our products.

Early in the development of our most inexpensive transfer standard we did loan a board to an amateur. He compared it to his Fluke 731B and observed a change in reference voltage with temperature. He now offers his "spread sheet" in public asserting in this forum that our reference boards do not perform as advertised: >>"If you can duplicate his temperature you will do pretty good but probably not quite as good as he advertises."

Our inexpensive "SVR" boards are essentially high quality support boards for the AD587 reference chips. The specs. (including temperature coefficient) are largely determined by the specs. of the reference chip itself. Then it is important not to further degrade that tempco when adding trim resistors. Also, for the purposes of a trimmed transfer standard there should be a sufficient trim vernier to trim to a desired resolution without losing precision.

Early in the development of this board, we used AD587JN or LN reference chips with a temperature coefficient of 20 ppm / c (JN) or 10 ppm / c (LN). For a 10 Volt chip, 1 part per million (1 ppm) is one millionth of 10 V or 10 uV. Therefore an AD587 KN based reference can move by up to 100 uV per degree Centigrade and still be perfectly "within specification" (10 ppm over 1 degree c is 10 * 10 uV or 100 uV).

We now use the AD587 LN grade reference chip rated at 5 ppm / c. We have also improved the tempcos of the trim resistors, now using precision IRC 0.1% metal film resistors (for the reduced tempco, not the precision and note that the tempco of the trim resistors is not 1:1 because of the OpAmp circuit in the reference chip).

It should also be noted that most reference chips change reference voltage with time; usually this appears in a specification sheet as ppm / 1,000 hours. For example the AD587 series is spec'd at 15 ppm in the first 1,000 hours of operation. This is one of the reasons that we advertise this product as a transfer reference.

Our inexpensive "SVR" boards http://www.gellerlabs.com/SVR%20M.html are rated at 5 ppm / c and do that well or better. The previous post suggesting that our products do not meet advertised specification was an incorrect statement. We set the reference on our calibration bench to a resolution of 10 uV and record the temperature. We conservatively advertise a lower "transfer accuracy: Calibration data will be reported

to 10 uV resolution (.0001%). The last digit of resolution will only be useful in the short term at the reported temperature and power supply voltage (15V). Under these conditions, it is possible to obtain short term transfer accuracy of better than +/- .0005% absolute. The AD587 can move 15 ppm during the first 1,000 hours. The temperature coefficient is 5 ppm / C or better as limited by the AD587LN."

The previous poster's assertion that this specification is not obtainable is without merit and incorrect. We have never compared our SVR boards to a Fluke 731 that initially cost $5,000 and has now enhanced stability with typically 10 to 30 years of run time. Our boards can however be very useful to check the absolute voltage as a transfer standard with minimal attention paid to ambient temperature and good test practices.

Joe Geller, K02Y
you can contact me by email at joegeller at gellerlabs.com

3958. Re: Voltage Calibration

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-12 21:10:21 UTC
From: Joe Geller <joegeller@gmail.com>
Message-ID: <1155417021.028999.251950@m73g2000cwd.googlegroups.com>
Source record: 10959

ahhh typos : "Early in the development of this board, we used AD587JN
or LN reference"
should read AD587 JN (20 ppm / c) or KN (10 ppm / c). -Joe, KO2Y

joegeller@gmail.com wrote:
> Some time back, there was a discussion of voltage references. The post
> is now in the public domain forever, so I feel a need to reply.
> Unfortunately I only saw it recently so I wasn't able to comment at the
> time. There is an incorrect statement regarding one of our products.
>
> Early in the development of our most inexpensive transfer standard we
> did loan a board to an amateur. He compared it to his Fluke 731B and
> observed a change in reference voltage with temperature. He now offers
> his "spread sheet" in public asserting in this forum that our reference
> boards do not perform as advertised: >>"If you can duplicate his
> temperature you will do pretty good but probably not quite as good as
> he advertises."
>
> Our inexpensive "SVR" boards are essentially high quality support
> boards for the AD587 reference chips. The specs. (including
> temperature coefficient) are largely determined by the specs. of the
> reference chip itself. Then it is important not to further degrade
> that tempco when adding trim resistors. Also, for the purposes of a
> trimmed transfer standard there should be a sufficient trim vernier to
> trim to a desired resolution without losing precision.
>
> Early in the development of this board, we used AD587JN or LN reference
> chips with a temperature coefficient of 20 ppm / c (JN) or 10 ppm / c
> (LN). For a 10 Volt chip, 1 part per million (1 ppm) is one millionth
> of 10 V or 10 uV. Therefore an AD587 KN based reference can move by up
> to 100 uV per degree Centigrade and still be perfectly "within
> specification" (10 ppm over 1 degree c is 10 * 10 uV or 100 uV).
>
> We now use the AD587 LN grade reference chip rated at 5 ppm / c. We
> have also improved the tempcos of the trim resistors, now using
> precision IRC 0.1% metal film resistors (for the reduced tempco, not
> the precision and note that the tempco of the trim resistors is not 1:1
> because of the OpAmp circuit in the reference chip).
>
> It should also be noted that most reference chips change reference
> voltage with time; usually this appears in a specification sheet as ppm
> / 1,000 hours. For example the AD587 series is spec'd at 15 ppm in the
> first 1,000 hours of operation. This is one of the reasons that we
> advertise this product as a transfer reference.

>
> Our inexpensive "SVR" boards http://www.gellerlabs.com/SVR%20M.html are
> rated at 5 ppm / c and do that well or better. The previous post
> suggesting that our products do not meet advertised specification was
> an incorrect statement. We set the reference on our calibration bench
> to a resolution of 10 uV and record the temperature. We conservatively
> advertise a lower "transfer accuracy: Calibration data will be reported
> to 10 uV resolution (.0001%). The last digit of resolution will only
> be useful in the short term at the reported temperature and power
> supply voltage (15V). Under these conditions, it is possible to obtain
> short term transfer accuracy of better than +/- .0005% absolute. The
> AD587 can move 15 ppm during the first 1,000 hours. The temperature
> coefficient is 5 ppm / C or better as limited by the AD587LN."
>
> The previous poster's assertion that this specification is not
> obtainable is without merit and incorrect. We have never compared our
> SVR boards to a Fluke 731 that initially cost $5,000 and has now
> enhanced stability with typically 10 to 30 years of run time. Our
> boards can however be very useful to check the absolute voltage as a
> transfer standard with minimal attention paid to ambient temperature
> and good test practices.
>
> Joe Geller, K02Y
> you can contact me by email at joegeller at gellerlabs.com

3959. Re: Recommend transistors for PA at UHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-13 06:28:10 UTC
From: JJ <JJ@nowhere.com>
Message-ID: <55f08$44dec67a$d871df4e$32615@PRIMUS.CA>
Source record: 10960

> Steven Swift wrote:
>
>
>>
>>
>> What about these:
>>
>> http://novatech-instr.com/Ebay_Images/mrf511.jpg
>>
>> Plus I have a bunch more from a retired Fluke RF designer's junk box.
>>
>> They went pretty cheap on Ebay

Interesting find.

The latest transistors are LDMOS for UHF to lower GHz and FET GaAs PHEMT
for cell phones.

JJ

3960. FA:NOS MILLEN, NATIONAL,+MORE STUFF

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-13 12:17:51 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <OLEDg.243521$mF2.176548@bgtnsc04-news.ops.worldnet.att.net>
Source record: 10961

Have listed NIB dials, tubes, parts, with other stuff too AND I will have more dial NIB from Millen, + coils from Miller,+EF JOHNSON:check back often. I WILL HAVE TWO beautiful NIB EDDYSTONE DIALS very soon.

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx, 73 heytubeguy

3961. WTB: 12V TIMER RELAY

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-14 01:18:20 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <wbQDg.607740$Fs1.4455@bgtnsc05-news.ops.worldnet.att.net>
Source record: 10962

Need a 12v NO timer relay from 45-180 sec delay. Advise of condx and price.

tnx heytubeguy

3962. cease and desist

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-14 18:51:05 UTC
From: Mark@kb9rqz.com
Message-ID: <tfh1e214ag9trq5cs2l65pjp5io8k5ghvn@4ax.com>
Source record: 10963
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

On Mon, 14 Aug 2006 17:34:02 GMT, ray@austin.com (ray...i need to pay
my bill and it works) wrote:
cease and desist
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

3963. Re: cease and desist

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-14 19:34:00 UTC
From: Mark Morgan <konstans@homomale.com>
Message-ID: <44e0c300$0$11663$88260bb3@free.teranews.com>
Source record: 10964
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

<Mark@kb9rqz.com> wrote in message
news:tfh1e214ag9trq5cs2l65pjp5io8k5ghvn@4ax.com...
> On Mon, 14 Aug 2006 17:34:02 GMT, ray@austin.com (ray...i need to pay
> my bill and it works) wrote:
> cease and desist
> http://kb9rqz.blogspot.com/
>
> --
> Posted via a free Usenet account from http://www.teranews.com
>
they try to bust my shemale wife four empersniating a women

--
Posted via a free Usenet account from http://www.teranews.com

3964. Re: cease and desist

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-14 19:42:03 UTC
From: Mark@kb9rqz.com
Message-ID: <ofk1e2dqk5jlk87fmanlgml1fqjqthkahe@4ax.com>
Source record: 10965
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

On Mon, 14 Aug 2006 15:34:00 -0400, "Mark Morgan"
<konstans@homomale.com> wrote:

cease and desist
id theft is a crime
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

3965. Re: Biasing of Dual Gate Fets

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-14 21:25:52 UTC
From: david@slack.com
Message-ID: <12e1qj0sjg1rb6e@corp.supernews.com>
Source record: 10966

In article <qt0qc2dhp6gqqos1c6f545k6c65lsbtk85@4ax.com>,
<nospam@nouce.bellatlantic.net> wrote:
>I'd never use DGfets for something like a scope amp or other
>instrumentation where DC operating point or balance is a
>requirement.

Interestingly enough, in Jim Williams's book "The Art and Science of
Analog Circuit Design", there's a chapter by Steve Roach of Tektronix,
which shows the use of a BF996 consumer-grade dual gate FET in a 1GHz
oscilloscope preamp.

http://books.google.com/books?vid=ISBN0750670622&id=HejS_Zk8JZIC&pg=PA65&lpg=PA63&sig=fAsb
oEQKyYXcNVGMx8v3yDD4at4

3966. Re: Please help *PLEASE PUT ME ON YOUR GAY RESTROOM ASS BLUMPKIN PROVIDER LIST*

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 00:11:38 UTC
From: Biggus Dickus <cockasimian@apeshallnotfunkape.com>
Message-ID: <42f76$44e11136$d1cc587d$11957@snip.allthenewsgroups.com>
Source record: 10967
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

"ray...i need to suck your cock and it works" <ray@austin.com> wrote in
message news:452207781406@news-server.austin.rr.com...
>
>
> It Will Work. If you do as I have done!
> Just Do It! follow the 4 steps.
> $6.00 BLOWJOBS to $15,000.00 BLUMPKIN SESSIONS in 30 days!

Blow me you cheap hammie hamfest dealer bum
bastard cockblowing bearded smelly cum-schlurp !

------ > PFFFHHBLTTTTT!!!!!!!!!!!!

3967. cease and desist

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 01:56:47 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1155607007.048706.302580@b28g2000cwb.googlegroups.com>
Source record: 10968
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Biggus Dickus wrote:
cease and desist

3968. What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 08:39:34 UTC
From: Paul Hinman <paul.hinman@shaw.ca>
Message-ID: <aLfEg.400583$Mn5.137675@pd7tw3no>
Source record: 10969
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I frequently see postings in the ham radio related newsgroups for items currently being offered on E-Bay.

All to often I that items will be shipped only to the lower 48 states, leaving hams in Hawaii, Alaska, and Canada out of the picture. What is the problem. In Canada we are well served by FEDEX and the United States Postal Service. Amateur radio equipment crosses the border with out any problem. I realize that Hawaii and Alaska may be a bit far from the "lower 48" but the same delivery services are available even though surface transportation may be a little bit slow. In the US you also have UPS, the folks in Brown which we Canadians prefer not to use because the often make the border crossing more difficult than it needs to be and we don't like getting stuck with brokerage fees.

So why the discrimination, if the buyer knows that delivery may take a little longer and is prepared to accept the fact then it becomes a non problem. If the seller is intimidated by the prospect of complicated paperwork, he needn't be. Please leave it up to the buyer to decide whether he wants to bib or not.

I can not speak for shipments to Europe, Africa, India, China, or the South Pacific but for fellow Americans, or friendly northern neighbours, I think that people should be prepared to deal with us.

Thanx for letting get this off my chest and I realize that I have cross posted this to four different newsgroups but I wanted to get to a broad audience.

Paul

--
Paul S. Hinman - VE6LDS
long West 113 deg 27 min 20 sec
lat North 53 deg 27 min 3 sec
Maidenhead Locator DO33gk

3969. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 10:55:12 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <ebs90v$j90$1@news2.kornet.net>
Source record: 10970
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

"Paul Hinman" <paul.hinman@shaw.ca> wrote in message
news:aLfEg.400583$Mn5.137675@pd7tw3no...
I frequently see postings in the ham radio related newsgroups for items
currently being offered on E-Bay.

All to often I that items will be shipped only to the lower 48 states,
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I realize that Hawaii and Alaska may be a bit far from the "lower 48" but
the same delivery services are available even though surface transportation
may be a little bit slow. In the US you also have UPS, the folks in Brown
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crossing more difficult than it needs to be and we don't like getting stuck
with brokerage fees.

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little longer and is prepared to accept the fact then it becomes a non
problem. If the seller is intimidated by the prospect of complicated
paperwork, he needn't be. Please leave it up to the buyer to decide whether
he wants to bib or not.

I can not speak for shipments to Europe, Africa, India, China, or the South
Pacific but for fellow Americans, or friendly northern neighbours, I think
that people should be prepared to deal with us.

Thanx for letting get this off my chest and I realize that I have cross
posted this to four different newsgroups but I wanted to get to a broad
audience.

Paul

Don't feel too bad, Paul. You'll often notice in the same listings that
(even if they ship solely by USPS) they will not ship to US military APO/FPO
addresses, either. We get left out in the cold even more often than any of
the above named locations. So much for supporting the troops as it were.--
Say no to institutionalized interference.Just say NO to HD/IBOC!

3970. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 11:23:44 UTC
From: Pete <zs5actRemovethis@mweb.co.za>
Message-ID: <ebsat4$sl4$1@ctb-nnrp2.saix.net>
Source record: 10971
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

USPS Air to South Africa takes 4 days from California. Customs is handled by them and it is extremely easy to use. Great service.

Americocentric sellers maybe?

--
Pete . .
ZS5ACT

Top poster & proud of it!
------ Reply Separator ------

"Brenda Ann" <brendad@shinbiro.com> wrote in message
news:ebs90v$j90$1@news2.kornet.net...
>
>
> "Paul Hinman" <paul.hinman@shaw.ca> wrote in message
> news:aLfEg.400583$Mn5.137675@pd7tw3no...
> I frequently see postings in the ham radio related newsgroups for items
> currently being offered on E-Bay.
>
> All to often I that items will be shipped only to the lower 48 states,
> leaving hams in Hawaii, Alaska, and Canada out of the picture. What is
> the problem. In Canada we are well served by FEDEX and the United States
> Postal Service. Amateur radio equipment crosses the border with out any
> problem. I realize that Hawaii and Alaska may be a bit far from the
> "lower 48" but the same delivery services are available even though
> surface transportation may be a little bit slow. In the US you also have
> UPS, the folks in Brown which we Canadians prefer not to use because the
> often make the border crossing more difficult than it needs to be and we
> don't like getting stuck with brokerage fees.
>
> So why the discrimination, if the buyer knows that delivery may take a
> little longer and is prepared to accept the fact then it becomes a non
> problem. If the seller is intimidated by the prospect of complicated
> paperwork, he needn't be. Please leave it up to the buyer to decide
> whether he wants to bib or not.
>
> I can not speak for shipments to Europe, Africa, India, China, or the
> South Pacific but for fellow Americans, or friendly northern neighbours, I
> think that people should be prepared to deal with us.
>
> Thanx for letting get this off my chest and I realize that I have cross
> posted this to four different newsgroups but I wanted to get to a broad

> audience.
>
> Paul
>
>
> Don't feel too bad, Paul. You'll often notice in the same listings that
> (even if they ship solely by USPS) they will not ship to US military
> APO/FPO addresses, either. We get left out in the cold even more often
> than any of the above named locations. So much for supporting the troops
> as it were.-- Say no to institutionalized interference.Just say NO to
> HD/IBOC!
>

3971. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 11:33:14 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <26b3e2h9n7hbtdo1gpdrcvilh4og1br6kc@4ax.com>
Source record: 10972

Hi,

There is an occasional problem importing items here to the UK
from the States. Although the current GBP to US Dollar exchange
rate makes prices quite attractive, the postage often charged
doesn't. Recently I was quoted $64 on a single $19 integrated
circuit. The reason for this being that the supplier would only
send items overseas by what amounts to a courier services and not
by the good old US Mail. I think this is because they are tied in
to contracts with certain companies to handle their outgoings and
cannot deviate from them. Perhaps it is also this that limits some
of them to the lower 48. The postal service on the other hand may
absorb part of the cost in delivering items to Hawaii and the like
whereas the private companies may not.

Cheers - Joe

3972. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 11:36:29 UTC
From: Dave <W1MCE@comcast.net>
Message-ID: <YY2dnUDz-J8mLHzZnZ2dnUVZ_ridnZ2d@comcast.com>
Source record: 10973
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Hmmm???

Hawaii is too hot?

Canada is too big?

Alaska is just right!!

But this doesn't respond to the hypothesis.

/s/ DD

Paul Hinman wrote:
> I frequently see postings in the ham radio related newsgroups for items
> currently being offered on E-Bay.
>
> All to often I that items will be shipped only to the lower 48 states,
> leaving hams in Hawaii, Alaska, and Canada out of the picture. What is
> the problem. In Canada we are well served by FEDEX and the United
> States Postal Service. Amateur radio equipment crosses the border with
> out any problem. I realize that Hawaii and Alaska may be a bit far from
> the "lower 48" but the same delivery services are available even though
> surface transportation may be a little bit slow. In the US you also
> have UPS, the folks in Brown which we Canadians prefer not to use
> because the often make the border crossing more difficult than it needs
> to be and we don't like getting stuck with brokerage fees.
>
> So why the discrimination, if the buyer knows that delivery may take a
> little longer and is prepared to accept the fact then it becomes a non
> problem. If the seller is intimidated by the prospect of complicated
> paperwork, he needn't be. Please leave it up to the buyer to decide
> whether he wants to bib or not.
>
> I can not speak for shipments to Europe, Africa, India, China, or the
> South Pacific but for fellow Americans, or friendly northern neighbours,
> I think that people should be prepared to deal with us.
>
> Thanx for letting get this off my chest and I realize that I have cross
> posted this to four different newsgroups but I wanted to get to a broad
> audience.
>
> Paul
>

3973. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 11:51:05 UTC
From: gsm@mendelson.com
Message-ID: <slrnee3d6g.dmj.gsm@cable.mendelson.com>
Source record: 10974
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Brenda Ann wrote:
> Don't feel too bad, Paul. You'll often notice in the same listings that
> (even if they ship solely by USPS) they will not ship to US military APO/FPO
> addresses, either. We get left out in the cold even more often than any of
> the above named locations. So much for supporting the troops as it were.--

That's because shipping to an an APO/FPO is no longer a service provided by the U.S. government. At one time mail to an APO/FPO was delivered to a U.S. millitary post office that then shipped it using U.S. milltary transport, There was a good chance that the mail would actually arrive and it would be undamaged. Now APO/FPO mail is sent via the regular postal system, but the U.S. government picks up the tab.

Now, the chance of the mail arriving is much less as it stands out.

As for Paul's comments, they really don't hold any water. Small sellers don't ship outside the continental U.S. because they don't want the risk.

If an item is lost, stolen, damaged, or takes a month or two to get delivered, they can't afford to replace it, or "eat" the loss. Paul even has more problems because Canadian customs may hold an item to determine its value, or if it can be legally imported as long as they wish. They can also assess the value for sales and other taxes.

Obviously he never has had any experience clearing an item through customs. If he had he would have praised the low fees, speedy processing and general reliablity of the courier services.

Considering the general quality of things sold on eBay, the sellers are actually doing you a favor. While many of the sellers will attempt to keep you satisfied, if you have to wait a month for something to arrive and in Paul's case pay GST (general sales tax), import duty and customs clearing fees, then have to send it back, he would loose a lot.

Besides paying for shipping both ways, he would have to pay customs clearing fees at the U.S. border and prove that the item he is sending back was actually being returned to the U.S. as a defective purchase and not scamming the customs people by claiming it was.

This means that some items both of you either have to keep or pay for and never get no matter what it costs. Where do you draw the line? $100, $200, $500? If it costs $100 to ship a radio to you and $100 to send it back, it does not make much sense.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 Fax ONLY: 972-2-648-1443 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

3974. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 12:15:13 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <ebsdn1lis1@news2.kornet.net>
Source record: 10975
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

```
--
Say no to institutionalized interference.
Just say NO to HD/IBOC!
"Geoffrey S. Mendelson" <gsm@mendelson.com> wrote in message
news:slrnee3d6g.dmj.gsm@cable.mendelson.com...
> Brenda Ann wrote:
>> Don't feel too bad, Paul. You'll often notice in the same listings that
>> (even if they ship solely by USPS) they will not ship to US military
>> APO/FPO
>> addresses, either. We get left out in the cold even more often than any
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>> the above named locations. So much for supporting the troops as it
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> by the U.S. government. At one time mail to an APO/FPO was delivered to
> a U.S. millitary post office that then shipped it using U.S. milltary
> transport, There was a good chance that the mail would actually arrive
> and it would be undamaged. Now APO/FPO mail is sent via the regular
> postal system, but the U.S. government picks up the tab.
>
> Now, the chance of the mail arriving is much less as it stands out.

Been here six years, and have NEVER had anything shipped to me USPS that
hasn't gotten here, and if it was properly packed, it has always gotten here
in one piece. I pay for Priority Mail shipping, which now is only a dollar
or two more than Parcel, and I get it here in a week to 10 days.

And actually, the USPS takes our mail as far as San Francisco via regular
channels, and from there it's shipped commercial air (just like any other
air mail) to our local APO hub, and then to the mail rooms.
```

3975. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 15:11:47 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <wKqdnTFi8rG8eXzZRVnygw@pipex.net>
Source record: 10976

With personal contacts in the USA it is often best to get the goods
(small bits and pieces)sent to a US address first , from where people
will then send it abroad.
The referred US$64 transportation cost will then be largely reduced.

Frank GM0CSZ / KN6WH

++++++++++++++++++++++++++

> There is an occasional problem importing items here to the UK
> from the States. Although the current GBP to US Dollar exchange
> rate makes prices quite attractive, the postage often charged
> doesn't. Recently I was quoted $64 on a single $19 integrated
> circuit. The reason for this being that the supplier would only
> send items overseas by what amounts to a courier services and not
> by the good old US Mail. I think this is because they are tied in
> to contracts with certain companies to handle their outgoings and
> cannot deviate from them. Perhaps it is also this that limits some
> of them to the lower 48. The postal service on the other hand may
> absorb part of the cost in delivering items to Hawaii and the like
> whereas the private companies may not.
>
>
> Cheers - Joe

3976. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 15:24:51 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns98205595D4674doldridgsprintca@64.59.135.159>
Source record: 10977
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

gsm@mendelson.com (Geoffrey S. Mendelson) wrote in
news:slrnee3d6g.dmj.gsm@cable.mendelson.com:

> Brenda Ann wrote:
>> Don't feel too bad, Paul. You'll often notice in the same listings
>> that (even if they ship solely by USPS) they will not ship to US
>> military APO/FPO addresses, either. We get left out in the cold even
>> more often than any of the above named locations. So much for
>> supporting the troops as it were.--
>
> That's because shipping to an an APO/FPO is no longer a service
> provided by the U.S. government. At one time mail to an APO/FPO was
> delivered to a U.S. millitary post office that then shipped it using
> U.S. milltary transport, There was a good chance that the mail would
> actually arrive and it would be undamaged. Now APO/FPO mail is sent
> via the regular postal system, but the U.S. government picks up the
> tab.
>
> Now, the chance of the mail arriving is much less as it stands out.
>
> As for Paul's comments, they really don't hold any water. Small
> sellers don't ship outside the continental U.S. because they don't
> want the risk.
>
> If an item is lost, stolen, damaged, or takes a month or two to get
> delivered, they can't afford to replace it, or "eat" the loss. Paul
> even has more problems because Canadian customs may hold an item to
> determine its value, or if it can be legally imported as long as they
> wish. They can also assess the value for sales and other taxes.

The only possible problem is loss or damage. USPS air delivers in a few
days and for a reasonable border fee, most of which is sales tax at this
end. If the customs declaration is made out properly, stating that the
contents are amateur radio equipment and if the eBay auction price is
stated as the value, there is rarely any problem unless the merchandise
is misrepresented in the first place. There is no duty on amateur
equipment entering Canada from ANYWHERE, just sales taxes.

--
Dave Oldridge+
ICQ 1800667

3977. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 19:10:32 UTC
From: k8vf_mark@centurytel.net
Message-ID: <1155669032.050001.312410@h48g2000cwc.googlegroups.com>
Source record: 10978
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

>
> The only possible problem is loss or damage. USPS air delivers in a few
> days and for a reasonable border fee, most of which is sales tax at this

The issue is cost, I believe.

For some reason sellers dont want to pay the cost to the last two
states, EVEN IF THE BUYER IS FRONTING THE FEES> DOnt know why.

I have shipped to Hawaii several times with no issues at all other than
time.

I have had no problems with Canada, other than time. Sometimes it
takes an inordinate amount of time . But you can accept that if BOTH
parties are good communicators.
>
Keep in touch with your seller or buyer, dont just fail to respond. It
makes them nervous, folks.

Mark
K8VF
Michigan

3978. HQ170 vs HQ180

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 19:13:08 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1155669187.953317.313480@m73g2000cwd.googlegroups.com>
Source record: 10979

Andy writes:

I have lusted after an HQ180 for 50 years. And now I
might go out and buy one with my next Social Security
check....

So, how many here have experience with the 180 ??
I understand the 170 is more stable and a better receiver...
Anyone care to comment on this....???

I don't ham much anymore, but if I get a Hammarlund
I want to know what I might have to modify to get it working
well.... Anyone with experience in stabilizing/rebuilding/repair
on these Hammarlund models might like to talk about their
experiences, and I would like to listen...

73s from Andy in Eureka, Texas W4OAH

3979. Re: Please help *PLEASE PUT ME ON YOUR GAY RESTROOM ASS BLUMPKIN PROVIDER LIST*

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 19:17:23 UTC
From: Mark The Moron Morgan <konstans@homomale.com>
Message-ID: <44e2109d$0$21047$88260bb3@free.teranews.com>
Source record: 10980
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

"Biggus Dickus" <cockasimian@apeshallnotfunkape.com> wrote in message
news:42f76$44e11136$d1cc587d$11957@snip.allthenewsgroups.com...
>
> "ray...i need to suck your cock and it works" <ray@austin.com> wrote in
> message news:452207781406@news-server.austin.rr.com...
>>
>>
>> It Will Work. If you do as I have done!
>> Just Do It! follow the 4 steps.
>> $6.00 BLOWJOBS to $15,000.00 BLUMPKIN SESSIONS in 30 days!
>
> Blow me you cheap hammie hamfest dealer bum
> bastard cockblowing bearded smelly cum-schlurp !
>
> ------ > PFFFHHBLTTTTT!!!!!!!!!!!!
>
>
teh art of the blumpkin is amlost a los art know my der old papa tawt me teh
blump

with the punce gotcha he wonders why I simple don't bother to ty
impoving my spelling
do u hav anyting cognet two say?

--
Posted via a free Usenet account from http://www.teranews.com

3980. cease and desist your harrassment

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 19:19:58 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1155669598.874592.234230@75g2000cwc.googlegroups.com>
Source record: 10981
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Mark The Moron Morgan wrote:
cease and desist your harrassment

3981. Re: HQ170 vs HQ180

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 20:54:59 UTC
From: Bob <bobZstein@sbcglobal.net>
Message-ID: <DwqEg.8367$kO3.8301@newssvr12.news.prodigy.com>
Source record: 10982

AndyS wrote:
> Andy writes:
>
> I have lusted after an HQ180 for 50 years. And now I
> might go out and buy one with my next Social Security
> check....
>
> So, how many here have experience with the 180 ??
> I understand the 170 is more stable and a better receiver...
> Anyone care to comment on this....???
>
> I don't ham much anymore, but if I get a Hammarlund
> I want to know what I might have to modify to get it working
> well.... Anyone with experience in stabilizing/rebuilding/repair
> on these Hammarlund models might like to talk about their
> experiences, and I would like to listen...
>
> 73s from Andy in Eureka, Texas W4OAH
>
I had an HQ170 in the late 50s. It drifted a quite a bit and also suffered from tunable hum. At the time, I lived in an apartment in New York on West 34th Street and Hammarlund was in a building directly across the street. The company I was with did some work for Hammarlund, so I knew several of the engineers. They were aware of the problem with the HQ170 L.O. So they decided to offer a mod kit, but did not want to go through the hassle of writing detailed instructions. They figured an experienced ham should be able to modify the circuit from the "before and after" schematics.

Since I had been a ham since 1939 and was a graduate engineer to boot, they gave me the kit of parts and told me to let them know if just the parts kit and schematics would suffice. I got it done, but it took about a dozen phone calls to their project engineer. Needless to say, they abandond the idea of selling such a kit.

I assume that the later production runs of the receiver incorporated the changes, but I do not know for certain.

Bob, w6nbi

3982. New Picture Gallery Additions on Elecraft Site

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 21:02:27 UTC
From: "Eric Swartz - WA6HHQ, Elecraft" <eric@elecraft.com>
Message-ID: <ebtcgi02tgt@enews4.newsguy.com>
Source record: 10984

We have just updated our Elecraft Picture Gallery with a super group of new customer pictures.

The pictures include custom machined paddles for the KX1 by WB9LPU, homebrew SO2R control boxes, SOTA mountain toping, FYBO KX1 Pics and K2 based DXpeditions to VK9X, VK9C, St. Martin, Key West, 8R1 and a host of other locations. Also check out our two featured pictures, including one of the newly discovered 'Cafe K2' in Sweeden. :-)

They reached via the 'Picture Gallery' link on the upper right side of the main page at http://www.elecraft.com

Special thanks to picture submitters: DL2KCD, DF4KV, DL3KMS, DL3ALX, DL7KCM, DL8BAG, SM7KJH, WB9LPU, DL1JET, K1EV, 6Y5/KN5G, 8R1ZUM (K7ZUM), DG2KAL, OE3ZK, DG8KAD (and bird), KD0RC, DL7JF, F5VJC (GM3SKN), KF6C, K1JD, KI4DGH, KT5X , K7TQ, KA3IXF, HB9AFI, N6IZ, N8XE, NY9H, PA3VBT, T32QS (N6TQS), W1TF, W6IZT, WA5KPA, WA7CS, SM5CBC, WH7N, W0YG (VK9CG, VK9XG) and DL2DE.

Great stuff guys! Thanks again for sending these pictures in to us.

73, Eric WA6HHQ
http://www.elecraft.com
Hands On Ham Radio

3983. New Picture Gallery Additions on Elecraft Site

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 21:04:01 UTC
From: "Eric Swartz - WA6HHQ, Elecraft" <eric@elecraft.com>
Message-ID: <ebtcjg12tgt@enews4.newsguy.com>
Source record: 10983

We have just updated our Elecraft Picture Gallery with a super group of new customer pictures.

The pictures include custom machined paddles for the KX1 by WB9LPU, homebrew SO2R control boxes, SOTA mountain toping, FYBO KX1 Pics and K2 based DXpeditions to VK9X, VK9C, St. Martin, Key West, 8R1 and a host of other locations. Also check out our two featured pictures, including one of the newly discovered 'Cafe K2' in Sweeden. :-)

They reached via the 'Picture Gallery' link on the upper right side of the main page at http://www.elecraft.com

Special thanks to picture submitters: DL2KCD, DF4KV, DL3KMS, DL3ALX, DL7KCM, DL8BAG, SM7KJH, WB9LPU, DL1JET, K1EV, 6Y5/KN5G, 8R1ZUM (K7ZUM), DG2KAL, OE3ZK, DG8KAD (and bird), KD0RC, DL7JF, F5VJC (GM3SKN), KF6C, K1JD, KI4DGH, KT5X , K7TQ, KA3IXF, HB9AFI, N6IZ, N8XE, NY9H, PA3VBT, T32QS (N6TQS), W1TF, W6IZT, WA5KPA, WA7CS, SM5CBC, WH7N, W0YG (VK9CG, VK9XG) and DL2DE.

Great stuff guys! Thanks again for sending these pictures in to us.

73, Eric WA6HHQ

3984. Re: cease and desist

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 22:16:29 UTC
From: Mark The Moron Morgan <konstans@homomale.com>
Message-ID: <44e23a97$0$21028$88260bb3@free.teranews.com>
Source record: 10985
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

"an old friend" <kb9rqz@yahoo.com> wrote in message
news:1155607007.048706.302580@b28g2000cwb.googlegroups.com...
>
> Biggus Dickus wrote:
> cease and desist
crease where i shit

--
Posted via a free Usenet account from http://www.teranews.com

3985. Re: cease and desist

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 22:31:42 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <1155681102.743274.169300@74g2000cwt.googlegroups.com>
Source record: 10986
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Mark The Moron Morgan wrote:
cease and desist your harrassment

3986. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 22:42:35 UTC
From: Paul Hinman <paul.hinman@shaw.ca>
Message-ID: <v5sEg.404571$Mn5.160849@pd7tw3no>
Source record: 10987
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Geoffrey S. Mendelson wrote:

>Brenda Ann wrote:
>
>
>>Don't feel too bad, Paul. You'll often notice in the same listings that
>>(even if they ship solely by USPS) they will not ship to US military APO/FPO
>>addresses, either. We get left out in the cold even more often than any of
>>the above named locations. So much for supporting the troops as it were.--
>>
>>
>
>That's because shipping to an an APO/FPO is no longer a service provided
>by the U.S. government. At one time mail to an APO/FPO was delivered to
>a U.S. millitary post office that then shipped it using U.S. milltary
>transport, There was a good chance that the mail would actually arrive
>and it would be undamaged. Now APO/FPO mail is sent via the regular
>postal system, but the U.S. government picks up the tab.
>
>Now, the chance of the mail arriving is much less as it stands out.
>
>As for Paul's comments, they really don't hold any water. Small sellers
>don't ship outside the continental U.S. because they don't want the risk.
>
>If an item is lost, stolen, damaged, or takes a month or two to get delivered,
>they can't afford to replace it, or "eat" the loss. Paul even has more problems
>because Canadian customs may hold an item to determine its value, or if it
>can be legally imported as long as they wish. They can also assess the
>value for sales and other taxes.
>
>Obviously he never has had any experience clearing an item through customs.
>If he had he would have praised the low fees, speedy processing and general
>reliablity of the courier services.
>
>Considering the general quality of things sold on eBay, the sellers are
>actually doing you a favor. While many of the sellers will attempt to
>keep you satisfied, if you have to wait a month for something to arrive
>and in Paul's case pay GST (general sales tax), import duty and customs
>clearing fees, then have to send it back, he would loose a lot.
>
>Besides paying for shipping both ways, he would have to pay customs clearing
>fees at the U.S. border and prove that the item he is sending back was
>actually being returned to the U.S. as a defective purchase and not scamming

>the customs people by claiming it was.
>
>This means that some items both of you either have to keep or pay for
>and never get no matter what it costs. Where do you draw the line?
>$100, $200, $500? If it costs $100 to ship a radio to you and $100 to
>send it back, it does not make much sense.
>
>
>Geoff.
>
>
>
I recently recieved three packages, one from the US via FEDEX GROUND,
another from the US via USPS, and another from Canada via Canada Post.
They all arrived in less than a week, and I paid no customs. There are
no customs duties for ham radio equipment.

Paul

--
Paul S. Hinman - VE6LDS
long West 113 deg 27 min 20 sec
lat North 53 deg 27 min 3 sec
Maidenhead Locator DO33gk

3987. Add money to your Paypal account with OPRAH TS5Vi

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-15 22:52:43 UTC
From: NSI <af.irani@afyhpami.com>
Message-ID: <JUyEg.57516$vj1.6722@bignews5.bellsouth.net>
Source record: 10995

Read this message until the end, and you will find out how the money flows in easy !!!!.
Follow the steps and it WILL work. Trust me !!!!!.

It's NOT illegal and it is NOT a scam !!!!!.

PROVEN ON OPRAH! Reported in the Wall Street Journal!!!!

The only thing you need is : - E-MAIL ACCOUNT
- PREMIER (FREE) or BUSINESS PAYPAL ACCOUNT
- $6 on this account (The only investment)
- 30 minutes of your time

There is no limit on how much money you can recieve, and you haven't got anything to lose with this Business program. I will explain how it works !!!!!.

Follow these 4 easy steps and it WILL work !!!!!.

STEP 1 : SIGN UP FOR A FREE PAYPAL ACCOUNT !!!!!.

Paypal is a free and safe way to pay and receive money on the Internet.
Creating a account is as easy as creating a MSN account.
Copy and paste the next line in your Internet browser and sign up.
HTTP://WWW.PAYPAL.COM

Be sure to sign up for a FREE Premier or Business account and not for a Personal account. You cannot receive CREDITCARD payments with a Personal account and we can't have that. Do we !!!!!.

STEP 2 : SENT $6 TO YOUR PAYPAL ACCOUNT

This is your only investment to receive the money with ease.

With your Paypal account, send $1 to each e-mailadres listed below.
!!!!! IMPORTANT !!!!! Be sure to use this SUBJECT : *PLEASE PUT ME ON YOUR EMAIL LIST* when you send the money.

1) martine@pilote.net
2) dexxatol@netcourrier.com
3) armygirl8568@hotmail.com
4) comjii@starband.net
5) sinnek@bellsouth.net
6) nsi@nelasat.com

STEP 3 : PUT YOUR E-MAIL ADDRESS ON THE BOTTOM OF THE LIST

After you have send $1 to each e-mail address, put your e-mail address on the 6th place.
Remove e-mail address number 1, and move each e-mail address 1 step up the ladder.
!!!!! IMPORTANT !!!!! BE SURE THAT THE E-MAIL ADDRESS YOU USE IS THE SAME AS YOU USED TO SIGN UP AT PAYPAL.

Remember that this is LEGAL. You are creating a service : an e-mail servicelist.

STEP 4 : UPLOAD OR COPY THIS MESSAGE TO NEWSGROUPS, FORUMS ETC AND EMAIL IT TO ALL YOUR FRIENDS!

There are 32,000 newsgroups. Upload or copy this message to at least 200 newsgroups or forums etc, but ..... remember that the more your upload the more people will see your message and the MORE MONEY WILL FLOW IN.

How to upload to newsgroups and forums? :

After you have followed step 1,2,3 and 4, save this message (and copy so you can use it again).
Use your Internet browser and Outlook Express or another newsreader and try to find FORUMS, NEWSGROUPS,
BULLETIN BOARDS, DISCUSSION GROUPS, CHAT SITES and ONLINE COMMUNITIES. Use GOOGLE or use a NEWSERVER.
Use every option to post this message. Download PostXpert to send 1 message to more NEWSGROUPS at the
same time.

!!!!! REMEMBER !!!!! The more you post this message the more MONEY WILL FLOW IN.

Why does this Business program work so well !!!!!.

Lets asume that from the 200 (or more) messages that you have posted, only 5 people respond, you will have your
$6 back that you have invested. Those 5 people will each send at least 200 messages with your e-mailadres on
number 4. That's 6 x 6 x $1 = $36. The next 25 people will also send 200 messages with your adres on number 3. That's 36 x 6 x $1 = $216. The next 216 people also send 200 messages with your name on number 2. That's 216 x 6
x $1 = $1296!. Those 1296 people again also send 200 messages with your name on number 1. That will give us a total of 1296 x 6 x $1 = $7,776.

Now the last tier! 7776 x 6 x $1 = $46,656!!!!!!

This is only a EXAMPLE with 6 reactions. You WILL get MORE responses than that.

Remember that most newsservers will leave the posted messages on there servers for about 2 weeks. If you will post your message again, it WILL again start from the beginning. So you can repeat this over and over again.

Everyday MILLIONS of people are ONLINE and reading these messages, JUST LIKE YOU RIGHT NOW. I also was sceptical in the beginning and have read a lot of these messages. I also thought that it was bullshit.
Until I thought : What the hell!, only $6. What's $6 and a couple of minutes of my time to solve my money problems.

!!!!! REMEMBER !!!!! Follow every step, and IT WILL WORK, TRUST ME. !!!!!

!!!!! BEST WISHES AND GOOD LUCK !!!!!

w)O>+;)<9UVS;F>qaGL<Uq#v`V6(F]- rM;$g+!4IIQ*827?H4

3988. Cease and desist breathing, Markie

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-16 00:11:02 UTC
From: kb9rqz_child_molester@yahoo.com
Message-ID: <1155687062.084385.29180@i42g2000cwa.googlegroups.com>
Source record: 10988
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

an old fraud wrote:
> Mark The Moron Morgan wrote:
> cease and desist your harrassment

STFU, spammer.

3989. Re: Cease and desist

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-16 00:13:03 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1155687181.832750.241820@p79g2000cwp.googlegroups.com>
Source record: 10989
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

kb9rqz_child_moles...@yahoo.com wrote:
cease and desist

3990. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-16 00:16:31 UTC
From: Joseph Fenn <jfenn@lava.net>
Message-ID: <Pine.BSI.4.61.0608151414090.10409@malasada.lava.net>
Source record: 10990
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Tue, 15 Aug 2006, Paul Hinman wrote:

> I frequently see postings in the ham radio related newsgroups for items
> currently being offered on E-Bay.
>
> All to often I that items will be shipped only to the lower 48 states,
> leaving hams in Hawaii, Alaska, and Canada out of the picture. What is the
> problem. In Canada we are well served by FEDEX and the United States Postal
> Service. Amateur radio equipment crosses the border with out any problem. I
> realize that Hawaii and Alaska may be a bit far from the "lower 48" but the
> same delivery services are available even though surface transportation may
> be a little bit slow. In the US you also have UPS, the folks in Brown which
> we Canadians prefer not to use because the often make the border crossing
> more difficult than it needs to be and we don't like getting stuck with
> brokerage fees.
>
> So why the discrimination, if the buyer knows that delivery may take a little
> longer and is prepared to accept the fact then it becomes a non problem. If
> the seller is intimidated by the prospect of complicated paperwork, he
> needn't be. Please leave it up to the buyer to decide whether he wants to
> bib or not.
>
> I can not speak for shipments to Europe, Africa, India, China, or the South
> Pacific but for fellow Americans, or friendly northern neighbours, I think
> that people should be prepared to deal with us.
>
> Thanx for letting get this off my chest and I realize that I have cross
> posted this to four different newsgroups but I wanted to get to a broad
> audience.
>
> Paul
>

My sentiments exactly Paul. Its ridiculous we either are part of
the USA or we are'nt. Those catalogs that say "extra chipping
costs to Hawaii/Pr/Alaska etc I give them the deep six.
Joe

3991. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-16 03:12:09 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <12e538b8vm4e61e@corp.supernews.com>
Source record: 10991
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

k8vf_mark@centurytel.net wrote:
> >
>
>>The only possible problem is loss or damage. USPS air delivers in a few
>>days and for a reasonable border fee, most of which is sales tax at this
>
>
>
> The issue is cost, I believe.
>
> For some reason sellers dont want to pay the cost to the last two
> states, EVEN IF THE BUYER IS FRONTING THE FEES> DOnt know why.
>
> I have shipped to Hawaii several times with no issues at all other than
> time.
>
> I have had no problems with Canada, other than time. Sometimes it
> takes an inordinate amount of time . But you can accept that if BOTH
> parties are good communicators.
>
> Keep in touch with your seller or buyer, dont just fail to respond. It
> makes them nervous, folks.
>
> Mark
> K8VF
> Michigan
>

Several years ago I had a pack and ship business. one of my customers had a VCR he wanted mailed to his son some where in Alaska. The post office used a contract air carrier to deliver the mail to the island where the son lived. As the package with the VCR was being off loaded from the seaplane it was dropped overboard. It took over a month to receive payment from the USPS (he did insure the package).

Dave WD9BDZ

3992. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-16 04:00:43 UTC
From: ASIS <car_mar@ozemail.com.au>
Message-ID: <44e2983a$0$310$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 10992
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

yeah man me too i you dont mind,

i need a project to keep me going

thanks

"me" <me@me.com> wrote in message news:44d69eec@quokka.wn.com.au...
> Kev wrote:
>
> Kev a tanker wanker ,,,, do tell more Kev Deck or ER ?
>
>
>> news wrote:
>>
>>> yes thanks glenn. I would like a copy of the circuit.
>>>
>>> email james_about@hotmail.com with the info please.
>>>
>>> Any thing you need also. I keep a fairly extensive collection of radio
>>> software and circuits.
>>>
>>> And gidday to Kev ....tanker wanker. private joke.
>>>
>>>
>>
>> :)
>>
>>
>> Kev

3993. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-16 05:07:58 UTC
From: Buck <not@this.time>
Message-ID: <cb95e2hlesd8642n4sj5fc40rhkla0erat@4ax.com>
Source record: 10993
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Tue, 15 Aug 2006 08:39:34 GMT, Paul Hinman <paul.hinman@shaw.ca>
wrote:

>I frequently see postings in the ham radio related newsgroups for items
>currently being offered on E-Bay.
>
>All to often I that items will be shipped only to the lower 48 states,
>leaving hams in Hawaii, Alaska, and Canada out of the picture. What is
>the problem. In Canada we are well served by FEDEX and the United
>States Postal Service. Amateur radio equipment crosses the border with
>out any problem. I realize that Hawaii and Alaska may be a bit far from
>the "lower 48" but the same delivery services are available even though
>surface transportation may be a little bit slow. In the US you also
>have UPS, the folks in Brown which we Canadians prefer not to use
>because the often make the border crossing more difficult than it needs
>to be and we don't like getting stuck with brokerage fees.
>
>So why the discrimination, if the buyer knows that delivery may take a
>little longer and is prepared to accept the fact then it becomes a non
>problem. If the seller is intimidated by the prospect of complicated
>paperwork, he needn't be. Please leave it up to the buyer to decide
>whether he wants to bib or not.
>
>I can not speak for shipments to Europe, Africa, India, China, or the
>South Pacific but for fellow Americans, or friendly northern neighbours,
>I think that people should be prepared to deal with us.
>
>Thanx for letting get this off my chest and I realize that I have cross
>posted this to four different newsgroups but I wanted to get to a broad
>audience.
>
>Paul
\

As for canada, there is a problem with tracking. At least a couple of
years ago, the cost of tracking a package, when possible, was
horrendously high. In the case of the US mail or Fedex, it was
impossible. I shipped to canada and the buyer said he didn't get it.
He sent a very impolite letter the day I noticed all other items
shipped that day arrived. I know he received it and later admitted
that it was shipped to the wrong address, which I know better.

Not being able to track makes for a risk that I was unwilling to handle at the time, so I cut out shipping to canada.

As for hawaii and alaska, tracking and shipping costs were terrible to those places as well. Some items can't be shipped by air and would be shipped by ship requiring a time delay in which, again, thieves take advantage of and get their refund.

The combination of eBay and Paypal creates a haven for thieves in those areas and others. They favor the buyer and it will ultimately cost the seller more in the long run.

APO and FPO can't be tracked either. Tracking is a requirement for the eBay/paypal so-called protection.

I was once a gi. Gi's move. Sometimes it takes a long while for the gi to receive mail that has to follow him/her.

I realize that the problems are caused by the 'few', but they create a risk or null out certain protective clauses in contracts. SOme businesses can afford to go through the extra effort, wait the extra time or live with the occasional loss. A business that loses one sale in a hundred can afford the loss better than an individual who stands to lose one in the only one or two sales they make.

Ebay/paypal is too protective for the buyers and not the sellers. The law is too difficult to motivate for most of the little sales that originate from ebay. Thieves know this and take advantage of this at every opportunity they can.

Buck
n4pgw

--
73 for now
Buck
N4PGW

3994. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-16 05:10:57 UTC
From: Buck <not@this.time>
Message-ID: <05a5e294iqe6e9gbr13jfnkam6jnqr4tv9@4ax.com>
Source record: 10994
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

>My sentiments exactly Paul. Its ridiculous we either are part of
>the USA or we are'nt. Those catalogs that say "extra chipping
>costs to Hawaii/Pr/Alaska etc I give them the deep six.
> Joe

But the costs are extra to those businesses. shipping to those
states/territories are higher than cross-continent shipping.

--
73 for now
Buck
N4PGW

3995. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-16 08:36:13 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <ebul8a$p7e$1@news2.kornet.net>
Source record: 10996
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

```
--
Say no to institutionalized interference.
Just say NO to HD/IBOC!
"David G. Nagel" <nagel@core.com> wrote in message
news:12e538b8vm4e61e@corp.supernews.com...
> k8vf_mark@centurytel.net wrote:
>> >
>>
>>>The only possible problem is loss or damage. USPS air delivers in a few
>>>days and for a reasonable border fee, most of which is sales tax at this
>>
>>
>>
>> The issue is cost, I believe.
>>
>> For some reason sellers dont want to pay the cost to the last two
>> states, EVEN IF THE BUYER IS FRONTING THE FEES> DOnt know why.
>>
>> I have shipped to Hawaii several times with no issues at all other than
>> time.
>>
>> I have had no problems with Canada, other than time. Sometimes it
>> takes an inordinate amount of time . But you can accept that if BOTH
>> parties are good communicators.
>>
>> Keep in touch with your seller or buyer, dont just fail to respond. It
>> makes them nervous, folks.
>>
>> Mark
>> K8VF
>> Michigan
>>
>
>
> Several years ago I had a pack and ship business. one of my customers had
> a VCR he wanted mailed to his son some where in Alaska. The post office
> used a contract air carrier to deliver the mail to the island where the
> son lived. As the package with the VCR was being off loaded from the
> seaplane it was dropped overboard. It took over a month to receive payment
> from the USPS (he did insure the package).
>
```

Only a month? Not bad, really. USPS is notoriously slow with insurance claims (but then, aren't they all?)

3996. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-16 09:09:22 UTC
From: Rex <me@hutmail.invalid>
Message-ID: <92o5e2tmlq6u0bl2sf3td3vsjk3cl7cfkf@4ax.com>
Source record: 10997
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Wed, 16 Aug 2006 01:07:58 -0400, Buck <not@this.time> wrote:

>As for canada, there is a problem with tracking. At least a couple of
>years ago, the cost of tracking a package, when possible, was
>horrendously high. In the case of the US mail or Fedex, it was
>impossible. I shipped to canada and the buyer said he didn't get it.
>He sent a very impolite letter the day I noticed all other items
>shipped that day arrived. I know he received it and later admitted
>that it was shipped to the wrong address, which I know better.
>
>Not being able to track makes for a risk that I was unwilling to
>handle at the time, so I cut out shipping to canada.
>
[snip middle details]
>
>Ebay/paypal is too protective for the buyers and not the sellers. The
>law is too difficult to motivate for most of the little sales that
>originate from ebay. Thieves know this and take advantage of this at
>every opportunity they can.
>
>Buck
>n4pgw
>
>--
>73 for now
>Buck
>N4PGW

Well explained. Not my issue anyway, but I never heard about all that.

3997. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-16 10:06:59 UTC
From: Paul Hinman <paul.hinman@shaw.ca>
Message-ID: <77CEg.406517$iF6.166744@pd7tw2no>
Source record: 10898
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Buck wrote:

>On Tue, 15 Aug 2006 08:39:34 GMT, Paul Hinman <paul.hinman@shaw.ca>
>wrote:
>
>
>
>>I frequently see postings in the ham radio related newsgroups for items
>>currently being offered on E-Bay.
>>
>>All to often I that items will be shipped only to the lower 48 states,
>>leaving hams in Hawaii, Alaska, and Canada out of the picture. What is
>>the problem. In Canada we are well served by FEDEX and the United
>>States Postal Service. Amateur radio equipment crosses the border with
>>out any problem. I realize that Hawaii and Alaska may be a bit far from
>>the "lower 48" but the same delivery services are available even though
>>surface transportation may be a little bit slow. In the US you also
>>have UPS, the folks in Brown which we Canadians prefer not to use
>>because the often make the border crossing more difficult than it needs
>>to be and we don't like getting stuck with brokerage fees.
>>
>>So why the discrimination, if the buyer knows that delivery may take a
>>little longer and is prepared to accept the fact then it becomes a non
>>problem. If the seller is intimidated by the prospect of complicated
>>paperwork, he needn't be. Please leave it up to the buyer to decide
>>whether he wants to bib or not.
>>
>>I can not speak for shipments to Europe, Africa, India, China, or the
>>South Pacific but for fellow Americans, or friendly northern neighbours,
>>I think that people should be prepared to deal with us.
>>
>>Thanx for letting get this off my chest and I realize that I have cross
>>posted this to four different newsgroups but I wanted to get to a broad
>>audience.
>>
>>Paul
>>
>>
>\
>
>As for canada, there is a problem with tracking. At least a couple of
>years ago, the cost of tracking a package, when possible, was
>horrendously high. In the case of the US mail or Fedex, it was

>impossible. I shipped to canada and the buyer said he didn't get it.
>He sent a very impolite letter the day I noticed all other items
>shipped that day arrived. I know he received it and later admitted
>that it was shipped to the wrong address, which I know better.
>
>Not being able to track makes for a risk that I was unwilling to
>handle at the time, so I cut out shipping to canada.
>
>As for hawaii and alaska, tracking and shipping costs were terrible to
>those places as well. Some items can't be shipped by air and would be
>shipped by ship requiring a time delay in which, again, thieves take
>advantage of and get their refund.
>
>The combination of eBay and Paypal creates a haven for thieves in
>those areas and others. They favor the buyer and it will ultimately
>cost the seller more in the long run.
>
>APO and FPO can't be tracked either. Tracking is a requirement for
>the eBay/paypal so-called protection.
>
>I was once a gi. Gi's move. Sometimes it takes a long while for the
>gi to receive mail that has to follow him/her.
>
>I realize that the problems are caused by the 'few', but they create a
>risk or null out certain protective clauses in contracts. SOme
>businesses can afford to go through the extra effort, wait the extra
>time or live with the occasional loss. A business that loses one sale
>in a hundred can afford the loss better than an individual who stands
>to lose one in the only one or two sales they make.
>
>Ebay/paypal is too protective for the buyers and not the sellers. The
>law is too difficult to motivate for most of the little sales that
>originate from ebay. Thieves know this and take advantage of this at
>every opportunity they can.
>
>Buck
>n4pgw
>
>
>
The tracking is not a problem, FEDEX tracking works across the borders
and the USPS and Canada Post tracking systems interface with each other
using the tracking number issued at the point of mailing.

--
Paul S. Hinman - VE6LDS
long West 113 deg 27 min 20 sec
lat North 53 deg 27 min 3 sec
Maidenhead Locator DO33gk

3998. Re: Dick Smith Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-16 10:10:18 UTC
From: Kev <kevcat@optunet.com.au>
Message-ID: <44e2ef04$0$22361$afc38c87@news.optusnet.com.au>
Source record: 10899
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

ASIS wrote:

> yeah man me too i you dont mind,
>
> i need a project to keep me going
>
> thanks

Yeah you wish

Kev

3999. ** FLEA at MIT ** Sunday August 20th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-16 11:46:36 UTC
From: w1gsl@mit.edu
Message-ID: <44e3059c$0$577$b45e6eb0@senator-bedfellow.mit.edu>
Source record: 10900
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

This comming Sunday...

+++ Now even more Buyers Parking !!!
Thanks to Shire we have use of their new parking lot
across Albany St from the SWAPFEST !!!

!! ** More Buyers PARKING is available ** for details see
http://web.mit.edu/w1gsl/Public/flyer

*** !!!! In our Traditional GARAGE and the adjacent lot !!!! ****
so come rain or shine or super heat the Flea is on !!!

********* $1 buyers discount with hardcopy of this notice ********

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS - HAM RADIO

FLEA all SUMMER at MIT
Sunday August 20th 2006
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
free, off-street parking for >2000 cars!

Buyers admission is $5 (you get $1 off if
you're lucky enough to have a copy of our ad)
and sellers spaces are $20 for the first and
$15 for each additional at the gate.

The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
time starting at 7AM.

SEASON PASS + Advance Seller Discount

A sellers discount season pass is available which
offers a 30% discount. By prepaying you get a
discount and earlier admission. See the registration form.

*** Attention Sellers ***
Prepaid vendors.. Season Pass or monthly,

will be admitted FIRST.
Separate lines will form prior to gate opening
for prepaid and nonprepaid vendors

!! RAIN or SHINE !! Have no fear of rain, a covered
well illuminated tailgate area is available for all
sellers (6'8" clearance).

Talk-in: 145.23- (PL 88.5) W1BOS/R and
W1XM/R-449.725/444.725 (PL 114.8/2A).

Sponsors: MIT Electronics Research Society
MIT UHF Repeater Association (W1XM)
MIT Radio Society (W1MX)
Harvard Wireless Club (W1AF)

For more info / advanced reservations 617 253 3776

********** $1 buyers discount with hard copy of this notice ***********

<<<<<<<<<<<<<<<<<<<<<< cut here >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

Mail the coupon below by the 5th of the month to be a Prepaid Vendor.

FLEA at MIT 2006 Rates

SELLERS

To use your prepaid spaces the named vendor MUST be present.
Rates include one admission per space.

Advance $17 First space
$12 Additional Spaces
Must be received by the 5th of the month.

Gate Admission $20 First Space
$15 Additional Spaces
Admission is after the prepaid vendors

Early Bird Buyer -Admission after the prepaid vendor line is admitted. ~ 7:15AM
** You may not sell. **
$15 per person at the gate.

****************************** cut here ******************************

FLEA at MIT 2006 Advance Space Application

____April ____May ____June ____ July ____Aug ___Sept ____Oct
@ $17 for the first each month + $12 each additional

Name _____ Call _____ $ Included_____

Address _____ Phone _____ Make Check to
The MIT Radio Society
City _____ State _____ Zip _____ PO Box 397082
Cambridge MA 02139

E-mail _____

****
Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754
****

4000. Re: Please cease and desist there are gruops for that sort content

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-16 12:08:50 UTC
From: Mark@kb9rqz.com
Message-ID: <sl26e29tf98k100bcmb6iutvu0g4ovupll@4ax.com>
Source record: 10901
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

On Tue, 15 Aug 2006 15:17:23 -0400, "Mark The Moron Morgan"
<konstans@homomale.com> wrote:
cease and desist
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4001. STFU

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-16 12:31:10 UTC
From: Not Cocksucker Lloyd <not_time_turd_lloyd@yahoo.com>
Message-ID: <1155731470.893781.68090@m73g2000cwd.googlegroups.com>
Source record: 10902
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

an_old_friendless cocksucker wrote:
> cease

Cease breathing.

4002. Coax Connectors, Adapters & Bulk Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-16 15:27:14 UTC
From: AAA RF Products <sales@aaarfproducts.com>
Message-ID: <XPGEg.175$TA5.65@fed1read09>
Source record: 10903
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

Please visit our new website www.aaarfproducts.com

4003. cease desist and grow up

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-16 15:49:28 UTC
From: an old freind <kb9rqz-ars@hotmail.com>
Message-ID: <1155743368.829657.131340@m79g2000cwm.googlegroups.com>
Source record: 10904
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

```
Not Cocksucker Lloyd wrote:
> an_old_friendless cocksucker wrote:
> > cease
>
> Cease breathing
eom
```

4004. Retard Mark makes good spell

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-16 19:31:58 UTC
From: peewee_lloyd_davies@yahoo.com
Message-ID: <1155756718.845363.87450@b28g2000cwb.googlegroups.com>
Source record: 10905
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

```
an old fraud wrote:
> Not Cocksucker Lloyd wrote:
> > an_old_friendless cocksucker wrote:
> > > cease
> >
> > Cease breathing
> eom

"eom?" BWHAHAHAHAHAHAHAHAHAHA!
```

4005. Re: Radio Direction Finder

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-16 19:54:31 UTC
From: Steve <nospam@yahoo.com>
Message-ID: <44e377f9$1@dnews.tpgi.com.au>
Source record: 10906
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,aus.radio.amateur.misc,aus.radio.cb,aus.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

"brizzy bastard" <NOTROLLSjamesinbrisbane@hotmail.com> wrote in message
news:44d6d365$0$11970$afc38c87@news.optusnet.com.au...
> A cheap tracking device can be purchased through one of the following
pages.
>
http://tech-software.net/index.php?module=pagemaster&PAGE_user_op=view_page&
> PAGE_id=5&MMN_position=7:7
> http://www.silcom.com/~pelican2/PicoDopp/PICODOPP.htm
> I really don't think tracking devices have to be expensive but if you
don't
> like paying for a good one, then I can provide a very simple 555ic timer
> circuit you can use that will cost about $10 to make.
> Here is the circuit of a very simple but workable tracking device that I
> once used to track a signal to tandy's store in the toowong towers in
> Brisbane. Once you learn how to use it, you can track to a square metre. A
> hand held radio is the best choice of radio to use with the tracker. This
> shop blocked ch 7 for 3 days until I had some free time to go and see
where
> it was coming from. The same shop did it again some time later and the
> culprit lost his job at that location thanks to a night time worker that
was
> on the ball. The signal was a radio on the shelf connected to power with a
> small antenna and a clip lead over the mic insert to hold it on tx.
> http://www.k1ttt.net/technote/doppler.html
> http://au.geocities.com/vk4jzz/side.jpg
>

I've bought one of the Ramsey kits which should arrive this week.
http://www.ramseyelectronics.com/cgi-bin/commerce.exe?preadd=action&key=DDF1
I'll let you guys know how well it works when it's assembled.
Tracking to within a couple of houses is easy even without a radio that has
a signal meter but the doppler will make it all that much faster.
the serial ratbags and spastics in Sydney will get a fright when its up and
running. Unfortunately Sydney repeaters are going through one of those
phases where every sub-moron with a radio is having an obsessive compulsive
episode and we have about 20 whispering retards making the repeater
unusable. Hopefully within the next 4 weeks I can post an excel spreadsheet
with all their info. they usually piss off when they lose their anonymity.

4006. Cease desist and grow up

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-16 19:56:26 UTC
From: Mark@kb9rqz.com
Message-ID: <q2u6e29s13sf59b0d4isjhl8bgmfst27cp@4ax.com>
Source record: 10907
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

On 16 Aug 2006 12:31:58 -0700, peewee_lloyd_davies@yahoo.com wrote:

>
>an old fraud wrote:
>> Not Cocksucker Lloyd wrote:
>> > an_old_friendless cocksucker wrote:
>> > > cease
>> >
>> > Cease breathing
>> eom
>
>"eom?" BWHAHAHAHAHAHAHAHAHAHA!
End Of Message
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4007. Re: Cease and desist - Mark, Just ignore them.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-16 23:15:19 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <bGNEg.6808$Qf.3454@newsread2.news.pas.earthlink.net>
Source record: 10908
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

"an_old_friend" <konstans@hotmail.com> wrote in news:1155687181.832750.241820
@p79g2000cwp.googlegroups.com:

>
> kb9rqz_child_moles...@yahoo.com wrote:
> cease and desist
>

Mark, Just ignore them.

They only tease you because of the stupid things you say when you
follow up. Just ignore them and they'll give up.

Stop giving them reasons to tease you. It only makes you look
more stupid.

Take a break from the radio groups for a while, Maybe work on your
moon bounce some more.

SC

4008. Re: Cease and desist - Mark, Just ignore them.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-16 23:15:22 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <eGNEg.6810$Qf.402@newsread2.news.pas.earthlink.net>
Source record: 10909
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

"an_old_friend" <konstans@hotmail.com> wrote in news:1155687181.832750.241820
@p79g2000cwp.googlegroups.com:

>
> kb9rqz_child_moles...@yahoo.com wrote:
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They only tease you because of the stupid things you say when you
follow up. Just ignore them and they'll give up.

Stop giving them reasons to tease you. It only makes you look
more stupid.

Take a break from the radio groups for a while, Maybe work on your
moon bounce some more.

SC

4009. Need to read old PLDs (PLS153 & PLS173)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-17 01:23:45 UTC
From: Jim Flanagan <jflan@tampabay.rr.com>
Message-ID: <ByPEg.1199$Tg1.12@tornado.tampabay.rr.com>
Source record: 10910

Hi -
Does anyone know of a simple way to read the
Philips PLS153 & PLS173 parts without buying
a programmer? I need to 'jury-rig' something
to do the job. Any ideas?
Thanks.
Jim

4010. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-17 05:53:55 UTC
From: Buck <not@this.time>
Message-ID: <8218e2pdv9ldrtfknv5q687ni1e5d7q1do@4ax.com>
Source record: 10911
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Wed, 16 Aug 2006 10:06:59 GMT, Paul Hinman <paul.hinman@shaw.ca>
wrote:

>>
>>
>>
>The tracking is not a problem, FEDEX tracking works across the borders
>and the USPS and Canada Post tracking systems interface with each other
>using the tracking number issued at the point of mailing.

Things may have changed, but when I tried to get tracking and/or proof
of delivery, I couldn't get it and got ripped off.

--
73 for now
Buck
N4PGW

4011. Re: Cease desist and grow up

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-17 12:45:09 UTC
From: Not Cocksucker Lloyd <not_time_turd_lloyd@yahoo.com>
Message-ID: <1155818709.467035.142500@h48g2000cwc.googlegroups.com>
Source record: 10912
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Mark@kb9rqz.com wrote:
> On 16 Aug 2006 12:31:58 -0700, peewee_lloyd_davies@yahoo.com wrote:
>
> >
> >an old fraud wrote:
> >> Not Cocksucker Lloyd wrote:
> >> > an_old_friendless cocksucker wrote:
> >> > > cease
> >> >
> >> > Cease breathing
> >> eom
> >>
> >"eom?" BWHAHAHAHAHAHAHAHAHAHA!
> End Of Message

BWHAHAHAHAHA You only backpedal again.

4012. Re: Cease desist and grow up

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-17 14:03:33 UTC
From: Mark@kb9rqz.com
Message-ID: <fpt8e2pat54sbvle5jp3bnbkpk599voa3p@4ax.com>
Source record: 10913
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

On 17 Aug 2006 05:45:09 -0700, "Not Cocksucker Lloyd"
<not_time_turd_lloyd@yahoo.com> wrote:

>
cease and desist your harrassment
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4013. Re: HQ170 vs HQ180

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-17 14:46:07 UTC
From: Bob <balbert3@verizon.net>
Message-ID: <Pi%Eg.62857$hH1.10694@trnddc08>
Source record: 10914

AndyS wrote:
> Andy writes:
>
> I have lusted after an HQ180 for 50 years. And now I
> might go out and buy one with my next Social Security
> check....
>
> So, how many here have experience with the 180 ??
> I understand the 170 is more stable and a better receiver...
> Anyone care to comment on this....???
>
> I don't ham much anymore, but if I get a Hammarlund
> I want to know what I might have to modify to get it working
> well.... Anyone with experience in stabilizing/rebuilding/repair
> on these Hammarlund models might like to talk about their
> experiences, and I would like to listen...
>
> 73s from Andy in Eureka, Texas W4OAH
>
The HQ-170 only covered the ham bands of the time. The HQ-180 was
general coverage. Otherwise the two were rather similar.

73, Bob

4014. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-17 19:16:12 UTC
From: You <You@shadow.orgs>
Message-ID: <You-666FBC.11163217082006@netnews.worldnet.att.net>
Source record: 10915
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

In article <8218e2pdv9ldrtfknv5q687ni1e5d7q1do@4ax.com>,
Buck <not@this.time> wrote:

> On Wed, 16 Aug 2006 10:06:59 GMT, Paul Hinman <paul.hinman@shaw.ca>
> wrote:
>
>
> >>
> >>
> >>
> >The tracking is not a problem, FEDEX tracking works across the borders
> >and the USPS and Canada Post tracking systems interface with each other
> >using the tracking number issued at the point of mailing.
>
> Things may have changed, but when I tried to get tracking and/or proof
> of delivery, I couldn't get it and got ripped off.

yea, don't believe FedEx when they say they deliver to Alaska....They
only deliver to Anchortown, Fairbanks, and Juneau..... for all the bush
villages and towns, FedEx gets turned over to the USPS in Anchorage
for delivery, and there is NO Tracking after that..... FedEx SUCKS
for Alaska delivery..... Lost a Laptop to there system, no refund,
or claim was ever paid. got a letter from the Manager saying,
"So Sorry for your loss, I feel your pain." I'd like to give him
a bit of my pain, right in the ***........

4015. AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-17 20:34:27 UTC
From: Andrea Baldoni <abaldoni@nospam.invalid>
Message-ID: <X-WdnZl4X9xOT3nZRVnyuA@kpnqwest.it>
Source record: 10916

Hello.
I'm wondering about a thing...

When the AGC reduces the gain of an amplifier, composed by FETs (DG or SG)
or BJT, the SNR remains constant?

Or the performance of the amplifier may degrade/upgrade?

I'm researching about the matter and I just read that, in a BJT for instance,
emitter current is inversely proportional to the noise. So, if AGC reduces
the gain (so current), SNR degrade?

The question arises from a thing I just noted with a HF receiver... disabling
AGC reduces (slightly) the noise (at least in FM reception)...
Maybe just be a side effect, like noisy gain control signal...

Ciao,
AB

... Andrea Baldoni, 2002: messaggio non protetto da copyright.

4016. Re: Cease desist and grow up - Mark, Just ignore them.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-17 22:32:14 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <O76Fg.5135$Sn3.3764@newsread3.news.pas.earthlink.net>
Source record: 10917
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Mark@kb9rqz.com wrote in news:fpt8e2pat54sbvle5jp3bnbkpk599voa3p@4ax.com:

> On 17 Aug 2006 05:45:09 -0700, "Not Cocksucker Lloyd"
> <not_time_turd_lloyd@yahoo.com> wrote:
>
>>
> cease and desist your harrassment
> http://kb9rqz.blogspot.com/
>

Mark, Just ignore them.

They only tease you because of the stupid things you say when you
follow up. Just ignore them and they'll give up.

Stop giving them reasons to tease you. It only makes you look
more stupid.

Take a break from the radio groups for a while, Maybe work on your
moon bounce some more.

SC

4017. Re: Cease desist and grow up - Mark, Just ignore them.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-17 22:32:30 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <286Fg.5136$Sn3.3589@newsread3.news.pas.earthlink.net>
Source record: 10918
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

"Not Cocksucker Lloyd" <not_time_turd_lloyd@yahoo.com> wrote in
news:1155818709.467035.142500@h48g2000cwc.googlegroups.com:

>
> Mark@kb9rqz.com wrote:
>> On 16 Aug 2006 12:31:58 -0700, peewee_lloyd_davies@yahoo.com wrote:
>>
>> >
>> >an old fraud wrote:
>> >> Not Cocksucker Lloyd wrote:
>> >> > an_old_friendless cocksucker wrote:
>> >> > > cease
>> >> >
>> >> > Cease breathing
>> >> eom
>> >
>> >"eom?" BWHAHAHAHAHAHAHAHAHAHA!
>> End Of Message
>
> BWHAHAHAHAHA You only backpedal again.
>
>

Mark, Just ignore them.

They only tease you because of the stupid things you say when you
follow up. Just ignore them and they'll give up.

Stop giving them reasons to tease you. It only makes you look
more stupid.

Take a break from the radio groups for a while, Maybe work on your
moon bounce some more.

SC

4018. Re: HQ170 vs HQ180

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-17 22:46:49 UTC
From: mhke4klt@aol.com
Message-ID: <1155854809.109968.207410@m79g2000cwm.googlegroups.com>
Source record: 10919

AndyS wrote:
> Andy writes:
>
> I have lusted after an HQ180 for 50 years. And now I
> might go out and buy one with my next Social Security
> check....
>
> So, how many here have experience with the 180 ??
> I understand the 170 is more stable and a better receiver...
> Anyone care to comment on this....???
>
> I don't ham much anymore, but if I get a Hammarlund
> I want to know what I might have to modify to get it working
> well.... Anyone with experience in stabilizing/rebuilding/repair
> on these Hammarlund models might like to talk about their
> experiences, and I would like to listen...
>
> 73s from Andy in Eureka, Texas W4OAH

4019. Re: HQ170 vs HQ180

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-17 23:03:44 UTC
From: mhke4klt@aol.com
Message-ID: <1155855824.478328.242350@i42g2000cwa.googlegroups.com>
Source record: 10920

Hi Andy, I owned a Hammarlund HQ-180 and I thought it was fabulous! I used it primarily for AM broadcast DXing. It would tune stations my ham HF rigs had a hard time picking out, even with DSP and filters etc. It was great on the sidebands in the ham allocations, and SWL was a joy. I sold it to make room for a HF ham rig. I kick myself for selling it, now that I have a shack that is big enough for it and my other radio toys. I never had mine alligned or re-capped because I didn't think it was needed. It performed very well. I used it more often than my Racal RA- 6790GM and my Collins R-388URR and they were both sold before the Hammarlund went. If I ever find another good condition one I will grab it, no questions asked! 73, Mike...w1sox > Andy writes:
>
> I have lusted after an HQ180 for 50 years. And now I
> might go out and buy one with my next Social Security
> check....
>
> So, how many here have experience with the 180 ??
> I understand the 170 is more stable and a better receiver...
> Anyone care to comment on this....???
>
> I don't ham much anymore, but if I get a Hammarlund
> I want to know what I might have to modify to get it working
> well.... Anyone with experience in stabilizing/rebuilding/repair
> on these Hammarlund models might like to talk about their
> experiences, and I would like to listen...
>
> 73s from Andy in Eureka, Texas W4OAH

4020. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-17 23:10:08 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1155856208.223644.33300@m73g2000cwd.googlegroups.com>
Source record: 10921

>From: Andrea Baldoni on Thurs, Aug 17 2006 1:34 pm

>Hello.
>I'm wondering about a thing...
>
>When the AGC reduces the gain of an amplifier, composed by FETs (DG or SG)
>or BJT, the SNR remains constant?

Maybe, maybe not...

>Or the performance of the amplifier may degrade/upgrade?

Maybe, maybe not...

>I'm researching about the matter and I just read that, in a BJT for instance,
>emitter current is inversely proportional to the noise. So, if AGC reduces
>the gain (so current), SNR degrade?

Not necessarily true. Noise, true natural noise, in a bipolar
junction transistor is dependent on MANY things besides the
emitter current. Foremost of all is the source impedance
of the BJT's driving source: SNR will increase on both sides
of the measured least-SNR current in some transistors. If you
look at the characteristics/datasheet information on several
hundred different transistors you will begin to get the idea
of how many factors go into noise generation within the
transistor. :-)

Most complex Gilbert-cell ICs (Motorola MC1590, MC1350 as
examples) will control gain by "stealing" current of a
differential-input, common-emitter stage. While the example
ICs can control gain over a 60 db dynamic range, the worst
noise generated inside those bipolar-transistor architecture
ICs occurs at minimum gain control input (maximum
amplification).

At higher and higher input signal levels, there would be more
AGC control action but the SNR would also be higher and higher.

>The question arises from a thing I just noted with a HF receiver... disabling
>AGC reduces (slightly) the noise (at least in FM reception)...

There isn't much FM on HF. What there is would be in
narrow-band Data mode signals. Some of that Data is a
combination of AM and PM similar to a wireline modem's
modulation.

Disabling the AGC would put the overall gain of the receiver
at maximum. Naturally there would APPEAR to be "more noise"
since the receiver would be picking up ALL noise available at
the antenna input.

>Maybe just be a side effect, like noisy gain control signal...

That's also possible, but unlikely there in my opinion.

What is needed in an investigation of this is a reasonably-
well-calibrated signal generator with a calibrated attenuator.
On AM you could simply increase the signal generator output
until the total signal plus noise reaches a certain level at
the detector, usually 10 db above input of just noise alone
(common definition of SNR).

LenAnderson@ieee.org

4021. FA:MILLER MEISSNER IF+RF CANS/COILS +++

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 01:11:37 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <dt8Fg.638693$Fs1.436396@bgtnsc05-news.ops.worldnet.att.net>
Source record: 10922

Have a few coils, cokes on now but I will more Miller, a few Meissner IF cans and RF coils, coil forms very soon.

Watch for these at :
http://search.ebay.com/_W0QQfrppZ25QQfrtsZ25QQfsooZ1QQfsopZ1QQsassZheytubeguy

Also, I will have a UK Eddystone NEW IN BOX next week too. heytubeguy

4022. Re: HQ170 vs HQ180

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 04:38:38 UTC
From: Mike Burch <Libertybell7@mchsi.com>
Message-ID: <ivbFg.96349$FQ1.54882@attbi_s71>
Source record: 10923

Hi Andy,

I don't know what the differences are but I owned an HQ170 about 20 years ago and I thought it was a superb product. The audio was just the best and the sensitivity was unparalleled. What ever you do.... go get one!! Don't wait anymore. Life is just too short. :-)

Mike K8MB
Apache Junction AZ

4023. Re: Need to read old PLDs (PLS153 & PLS173)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 05:07:13 UTC
From: "Dr. Anton T. Squeegee" <SpammersBlow@dev.null>
Message-ID: <MPG.1f4eeadb550172669896fb@news.drizzle.com>
Source record: 10924

In article <ByPEg.1199$Tg1.12@tornado.tampabay.rr.com>,
jflan@tampabay.rr.com (known to some as Jim Flanagan) scribed...

> Hi -
> Does anyone know of a simple way to read the
> Philips PLS153 & PLS173 parts without buying
> a programmer? I need to 'jury-rig' something
> to do the job. Any ideas?

Keeping in mind that the ability to read any PAL is directly
related to whether the security fuse is intact...

'Jury-rigging' a reader for something as potentially complex as a
PLD is not a simple exercise.

SHAMELESS SELF-PLUG: I offer reading, archiving, and programming
services for many kinds of logic and memory devices. I've checked those
devices against the Unisite's list, and it does support both the PLS153
and 157.

If this is strictly for an amateur radio project, I would be happy
to do the read/archive operation at no charge other than return postage.

If this is for a commercial project, it would be $24.50, and that
would include return postage.

See http://www.bluefeathertech.com/device.html for more details.

73 de KC7GR

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute
(Known to some as Bruce Lane, KC7GR)
http://www.bluefeathertech.com -- kyrrin a/t bluefeathertech d-o=t calm
"Salvadore Dali's computer has surreal ports..."

4024. VHF/UHF antenna on a motorcycle

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 10:02:01 UTC
From: Tom <on4vdv@R.E.M.O.V.E.T.H.I.Shotmail.com>
Message-ID: <tegFg.27967$PM3.413819@phobos.telenet-ops.be>
Source record: 10925
Cross-posted to:
alt.ham-radio.vhf-uhf,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hello all ,

I would like to install a VHF-UHF antenna on my motorcycle . It's a Suzuki GSX750 . I did some tests with a Diamond NR-770H and it works well . The only problem is that the antenna is to big for such a bike .
Afterwards i did a test with a Diamond NR-77 . The antenna is about 43 cm and that's about the size i would like to use .
The problem i have with this antenna is the swr , it's to high .

Anyone an idea how i can solve this problem ?

Many thanks .

Tom

4025. Re: VHF/UHF antenna on a motorcycle

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 11:04:35 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1155899075.530532.171230@h48g2000cwc.googlegroups.com>
Source record: 10926
Cross-posted to:
alt.ham-radio.vhf-uhf,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Tom wrote:
> Hello all ,
>
> I would like to install a VHF-UHF antenna on my motorcycle
>
> Anyone an idea how i can solve this problem ?
>

Andy suggests:
Well, if it were me, I think it would look really cool on top
of my helmet.
As an alternative, you could mount a couple of Viking horns
on either side of the helmet, and use them as a dipole....
Use Texas longhorns if you want to go to HF......
Lots of fashion possibilities..

Good luck, Andy W4OAH

4026. Re: VHF/UHF antenna on a motorcycle

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 11:54:02 UTC
From: Christen Fihl <look_at_HSPascal.fihl.net@nospam.plz>
Message-ID: <44e5aa5a$0$173$edfadb0f@dread11.news.tele.dk>
Source record: 10927
Cross-posted to:
alt.ham-radio.vhf-uhf,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Here is a helmet model ;-)
http://www.armyradio.com/arsc/customer/product.php?productid=1625&cat=99&page=1
as Andy suggests

--
Christen Fihl
http://HSPascal.Fihl.net

4027. Re: VHF/UHF antenna on a motorcycle

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 12:22:19 UTC
From: Not Cocksucker Lloyd <not_time_turd_lloyd@yahoo.com>
Message-ID: <1155903739.085231.305400@h48g2000cwc.googlegroups.com>
Source record: 10928
Cross-posted to:
alt.ham-radio.vhf-uhf,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

AndyS wrote:
> Tom wrote:
> > Hello all ,
> >
> > I would like to install a VHF-UHF antenna on my motorcycle
> >
> > Anyone an idea how i can solve this problem ?
> >
>
> Andy suggests:
> Well, if it were me, I think it would look really cool on top
> of my helmet.

LIke those 1950's sci-fi movie astronauts!

> As an alternative, you could mount a couple of Viking horns
> on either side of the helmet, and use them as a dipole....
> Use Texas longhorns if you want to go to HF......
> Lots of fashion possibilities..
>
> Good luck, Andy W4OAH

LOL!!!!!!!!

4028. Retard Marky spams some more

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 12:50:22 UTC
From: peewee_lloyd_davies@yahoo.com
Message-ID: <1155905422.359878.320760@m73g2000cwd.googlegroups.com>
Source record: 10929
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

MarkMoron@kb9rqz.com wrote:
>ce

Make any illegal EME contacts with bootleggers, Markie?

4029. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 13:35:45 UTC
From: tim gorman <tgorman2@cox.net>
Message-ID: <hnf4ce.tfn.ln@tg6124.ab0wr.net>
Source record: 10932

Andrea Baldoni wrote:

>
>
> Hello.
> I'm wondering about a thing...
>
> When the AGC reduces the gain of an amplifier, composed by FETs (DG or SG)
> or BJT, the SNR remains constant?
>
> Or the performance of the amplifier may degrade/upgrade?
>
> I'm researching about the matter and I just read that, in a BJT for
> instance, emitter current is inversely proportional to the noise. So, if
> AGC reduces the gain (so current), SNR degrade?
>
> The question arises from a thing I just noted with a HF receiver...
> disabling AGC reduces (slightly) the noise (at least in FM reception)...
> Maybe just be a side effect, like noisy gain control signal...
>
> Ciao,
> AB
>
> ... Andrea Baldoni, 2002: messaggio non protetto da copyright.

You might also ask yourself whether it really matters or not. If your signal is strong enough to begin driving the AGC to limit the system gain do you really care what the noise level actually is? Once the AGC threshhold is reached, if the signal strength goes up faster than the noise contribution from the system goes up do you really care what the noise level actually is?

tim ab0wr

4030. Re: Retard Marky spams some more

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 13:50:13 UTC
From: Mark@kb9rqz.com
Message-ID: <4vgbe2dfv69e6frv93c2h198gkkupc9fs3@4ax.com>
Source record: 10931
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

On 18 Aug 2006 05:50:22 -0700, peewee_lloyd_davies@yahoo.com wrote:

>MarkMoron@kb9rqz.com wrote:
>>ce
>
>Make any illegal EME contacts with bootleggers, Markie?
no eme contact s ilegal
cease desists and grow up
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4031. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 13:55:43 UTC
From: kh <nospam@nospam.com>
Message-ID: <0QMXZWh9EdSr-pn2-zZuVyPTYdECn@localhost>
Source record: 10930
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.antenna

> "Paul Hinman" <paul.hinman@shaw.ca> wrote in message
> news:aLfEg.400583$Mn5.137675@pd7tw3no...
> I frequently see postings in the ham radio related newsgroups for items
> currently being offered on E-Bay.
>
> All to often I that items will be shipped only to the lower 48 states,
> leaving hams in Hawaii, Alaska, and Canada out of the picture. What is the
> problem. In Canada we are well served by FEDEX and the United States Postal
> Service. Amateur radio equipment crosses the border with out any problem.
> I realize that Hawaii and Alaska may be a bit far from the "lower 48" but
> the same delivery services are available even though surface transportation
> may be a little bit slow. In the US you also have UPS, the folks in Brown
> which we Canadians prefer not to use because the often make the border
> crossing more difficult than it needs to be and we don't like getting stuck
> with brokerage fees.
>
> So why the discrimination, if the buyer knows that delivery may take a
> little longer and is prepared to accept the fact then it becomes a non
> problem. If the seller is intimidated by the prospect of complicated
> paperwork, he needn't be. Please leave it up to the buyer to decide whether
> he wants to bib or not.
>
> I can not speak for shipments to Europe, Africa, India, China, or the South
> Pacific but for fellow Americans, or friendly northern neighbours, I think
> that people should be prepared to deal with us.
>
> Thanx for letting get this off my chest and I realize that I have cross
> posted this to four different newsgroups but I wanted to get to a broad
> audience.
>
> Paul

Paul,

The reason is very straightforward. This is a boatanchor newsgroup
and it's mostly geezers who deal in old radios.

Geezers live in the past; WE don't think critically; the same tired
thoughts cycle through our heads. Even worse, many of us
hallucinate and make up reasons. You'll see several in this
thread.

Many geezers (to be fair, not all) are Xeno-phobic.

To them, Hawai'i is FAR away and never having been there, geezers imagine that it's a foreign country with different laws a strange language. In their minds, it's a not that far from Hawai'i to, say, Nigeria or Pakistan. Even if they could call the Honolulu police to report a deal gone bad, they would not be able to speak to them with finding a translater.

On the other hand, a geezer thinks, OK, I'm in Virginia, if a $30 deal in Kansas goes bad, I'll just get in the Biscayne and drive over there tomorrow, demand my money. I have that recourse.

People! As Paul says, Hawaii and Alaska are U.S. States.
They have senators in Washington. They vote for the president. As far as the U.S.P.S, FedEx, and UPS are concerned, those states are, like, right over there.

To Sprint and other fone companies, after 7 or 8 PM, just pick up your fone and those places are a free call. If you pay for wired service, it's 5 or 7 cents a minute.

Here are some actual numbers from www.fedex.com

2 day service - 20 pounds

Virginia to Kansas - $61.85
Virginia to California -$65.83
Virginia to Hawai'i - $66.87

2 day service - 60 pounds

Virginia to Kansas - $151.93
Virginia to California -$166.63
Virginia to Hawai'i - $169.24

About the same price for 2nd day service.

FedEx Ground service - 20 pounds

Virginia to Kansas - $12.70 - 4 days
Virginia to California -$16.03 - 4 days
Virginia to Hawai'i - $48.22 - 7 days

FedEx Ground service - 60 pounds

Virginia to Kansas - $28.40 - 4 days
Virginia to California -$39.08 - 4 days
Virginia to Hawai'i - $114.63 - 7 days

Three days longer and more dollars going ground to Hawai'i. But then Buyer Pays Shipping!

The same tracking and return receipt, the same laws govern the business deal. It takes about the same amount of time.

The reason that they say "lower 48" is that they think it's still 1936. It just comes out. There's no reason other than old

thoughts cycling in old heads like regeneration in a triode.

It's like hollarin' out,

Kids these days!

You call that music!

Dag-nabbit!

I've bought items from Canada and sold to Canada. One thing I don't like about it is that it's expensive to ship across the border. In fact, it's cheaper to ship though Canada to Alaska.

But then, buyer pays.

I just had the experience of buying from China, a DEGEN DE1103. If you don't have one, go over to the Bay and look up the seller LIYPN. $44 for the radio and $24 shipping and insurance. Took about 8 days to get here.

This is the best pocket shortware radio. Check out the reviews on the web. 1 kHz readout, better than 1 uV sensitivity, stable, 4 and 6 kHz filters. Covers 100 kHz to 30 mHz continuous so you can listen to AM broadcast, 160 meters, everything!

I can sit in my car, pull out the whip antenna and copy 7040 CW in the evening. I heard W1AW CW the other day, this is in Virginia.

SSB sounds good. Well, mostly good. I still can't understand the hollarin' on 27,000.

While you're buying and enjoying the DEGEN, think about global commerce and the fact that you just traded with a real foreign country.

de ah6gi/4

4032. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 14:11:51 UTC
From: Cecil Moore <mycall@hotmail.com>
Message-ID: <HUjFg.9222$1f6.5869@newssvr27.news.prodigy.net>
Source record: 10933
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.antenna

kh wrote:
> On the other hand, a geezer thinks, OK, I'm in Virginia, if a
> $30 deal in Kansas goes bad, I'll just get in the Biscayne and drive
> over there tomorrow, demand my money. I have that recourse.

While spending $400 for gasoline?
--
73, Cecil, http://www.qsl.net/w5dxp

4033. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 14:33:25 UTC
From: "i3hev, mario held" <marioheld@tiscali.it>
Message-ID: <44e5cf80$0$13738$5fc30a8@news.tiscali.it>
Source record: 10934

tim gorman wrote:

> You might also ask yourself whether it really matters or not. If your signal
> is strong enough to begin driving the AGC to limit the system gain do you
> really care what the noise level actually is? ....

But you may very well care for the SNR on an interesting weak signal
which you are trying to listen to, while a strong nearby signal
activates your AGC... >:)

--
73 es 51 de i3hev, op. mario

Il vero Radioamatore si riconosce... dal call in firma!
- Campagna 2005 "Sono un Radioamatore e me ne vanto"

it.hobby.radioamatori.moderato
http://digilander.libero.it/hamweb
http://digilander.libero.it/esperantovenezia

4034. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 14:41:08 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <4qCdnXN2a71pTHjZnZ2dnUVZ8s-dnZ2d@bt.com>
Source record: 10936

Regardless of an amplifier's gain, the signal to noise ratio at its
output remains the same as the signal to noise ratio at its input.

Obviously - if its a linear amplifier!

Reg.

4035. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 14:42:22 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <ec4jke$db0$1@theodyn.ncf.ca>
Source record: 10935

"i3hev, mario held" (marioheld@tiscali.it) writes:
> tim gorman wrote:
>
>> You might also ask yourself whether it really matters or not. If your signal
>> is strong enough to begin driving the AGC to limit the system gain do you
>> really care what the noise level actually is? ....
>
> But you may very well care for the SNR on an interesting weak signal
> which you are trying to listen to, while a strong nearby signal
> activates your AGC... >:)
>
In that case though, you should be worried about that nearby strong signal
dropping the gain of the receiver so you can't hear the weak signal,
the fact that the noise level may increase won't matter because the
lower gain will make the signal unreceivable anyway.

Michael VE2BVW

4036. Re: VHF/UHF antenna on a motorcycle

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 15:39:47 UTC
From: nitespark <nitespark@cox.net>
Message-ID: <6blFg.80936$LF4.934@dukeread05>
Source record: 10937
Cross-posted to:
alt.ham-radio.vhf-uhf,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Tom wrote:

> Hello all ,
>
> I would like to install a VHF-UHF antenna on my motorcycle . It's a Suzuki
> GSX750 . I did some tests with a Diamond NR-770H and it works well . The
> only problem is that the antenna is to big for such a bike .
> Afterwards i did a test with a Diamond NR-77 . The antenna is about 43 cm
> and that's about the size i would like to use .
> The problem i have with this antenna is the swr , it's to high .
>
> Anyone an idea how i can solve this problem ?
>
> Many thanks .
>

You may not be getting a proper counter-poise to the antenna system.

I would check grounding on the antenna and make certain the antenna
mount is in good solid contact with the metal frame of the bike.

You mentioned the larger antenna worked well. Does that mean the SWR
was good or it just performed adequately?

Which band is having the SWR problems?

What type of mount does the Diamond use? I am very partial to the NMO
type antenna mount. I know there are some antennas that use an SO239
type mount which is just a "UHF" connector on the end of a piece of
coax. These are not that well suited for 70cm operation although you do
see them quite a bit.

Also, how much power are you going to be putting into the antenna? I
would be concerned about RF exposure if its very much.

Andy
WD4KDN

4037. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 17:54:00 UTC
From: "i3hev, mario held" <marioheld@tiscali.it>
Message-ID: <44e5fe81$0$13715$5fc30a8@news.tiscali.it>
Source record: 10938

Michael Black wrote:

> In that case though, you should be worried about that nearby strong signal
> dropping the gain of the receiver so you can't hear the weak signal...

may be you are not thinking of cw... :)

Provided the SNR is good enough, you can filter and post-amplify your
weak signal, e.g. with a good AF filter, or a dsp.

Of course, if the IF stages are (reasonably) linear in response, you can
disable the AGC, but this would be no answer to the original question ;)

--
73 es 51 de i3hev, op. mario

Il vero Radioamatore si riconosce... dal call in firma!
- Campagna 2005 "Sono un Radioamatore e me ne vanto"

it.hobby.radioamatori.moderato
http://digilander.libero.it/hamweb
http://digilander.libero.it/esperantovenezia

4038. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 17:56:15 UTC
From: "i3hev, mario held" <marioheld@tiscali.it>
Message-ID: <44e5ff08$0$13715$5fc30a8@news.tiscali.it>
Source record: 10939

Reg Edwards wrote:

> Regardless of an amplifier's gain, the signal to noise ratio at its
> output remains the same as the signal to noise ratio at its input.
>
> Obviously - if its a linear amplifier!

I'm afraid this is quite wrong :(

Your statement would be a correct one if and only if the amplifier is a
non-noisy one - which, alas, is not a real case...

--
73 es 51 de i3hev, op. mario

Il vero Radioamatore si riconosce... dal call in firma!
- Campagna 2005 "Sono un Radioamatore e me ne vanto"

it.hobby.radioamatori.moderato
http://digilander.libero.it/hamweb
http://digilander.libero.it/esperantovenezia

4039. Re: VHF/UHF antenna on a motorcycle

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 18:16:38 UTC
From: Philo <philo@nospampse.be>
Message-ID: <aunFg.28588$%k3.359554@phobos.telenet-ops.be>
Source record: 10940
Cross-posted to:
alt.ham-radio.vhf-uhf,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Tom" <on4vdv@R.E.M.O.V.E.T.H.I.Shotmail.com> wrote in message
news:tegFg.27967$PM3.413819@phobos.telenet-ops.be...
> Hello all ,
>
> I would like to install a VHF-UHF antenna on my motorcycle . It's a Suzuki
> GSX750 . I did some tests with a Diamond NR-770H and it works well . The
> only problem is that the antenna is to big for such a bike .
> Afterwards i did a test with a Diamond NR-77 . The antenna is about 43 cm
> and that's about the size i would like to use .
> The problem i have with this antenna is the swr , it's to high .
>
> Anyone an idea how i can solve this problem ?
>
> Many thanks .
>
> Tom
>

Just a word of caution:

Years ago, when the Brussels police had VHF radios mounted on BMW bikes for the first time, the ABS brakes stopped functioning when the transmitter was on (Not only the ABS, the brakes).

I suppose ABS brakes are more EMC proof nowadays, but you can not be too sure.

4040. Can I use a 120V Variac to get 220V?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 19:31:03 UTC
From: w8kzw@hotmail.com
Message-ID: <1155929463.373199.177360@74g2000cwt.googlegroups.com>
Source record: 10941

I want to reform the electrolytics in an amp I'm bringing back to life.
It runs high power, 220 volts ac only.

Can I use my 110 volt variac in conjunction with a 110V to 220V step-up
transformer to power up the amp? Obviously I'd not go key-down, but I
do want to ultimately get to the full B+ on the tubes.

How would I wire-up the variac / transformer, assuming it's possible?

Thanks in advance for the help, guys.

73,
Jeff
W8KZW

4041. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 19:37:55 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <eJWdnZJrGtjoinvZRVnysQ@bt.com>
Source record: 10942

"i3hev, mario held" wrote
> Reg Edwards wrote:
>
> > Regardless of an amplifier's gain, the signal to noise ratio at
its
> > output remains the same as the signal to noise ratio at its input.
> >
> > Obviously - if its a linear amplifier!
>
> I'm afraid this is quite wrong :(
>
> Your statement would be a correct one if and only if the amplifier
is a
> non-noisy one - which, alas, is not a real case...
>
==========

If an amplifier incorporates a noise generator or also behaves as a
filter, then it is no longer just an amplifier. My statement is quite
correct.

Reg.

4042. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 20:04:22 UTC
From: "i3hev, mario held" <marioheld@tiscali.it>
Message-ID: <44e61d0f$0$13738$5fc30a8@news.tiscali.it>
Source record: 10943

Reg Edwards wrote:

> If an amplifier incorporates a noise generator...
> ... then it is no longer just an amplifier. ....

... so, we must conclude that amplifiers do not exist! >:)

of course, there is no real amplifying device which does not generate
noise; or, more precisely, there is no non-noisy real device at all :)

If you choose not to call "amplifier" a device which amplifies signals
if it has a non-unity noise figure, please feel free to do so - we live
in a (at least partially) free world... but you will be alone! >:))

Regards!
--
73 es 51 de i3hev, op. mario

it.hobby.radioamatori.moderato
http://digilander.libero.it/hamweb
http://digilander.libero.it/esperantovenezia

4043. Re: VHF/UHF antenna on a motorcycle

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 20:31:51 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <ec5alo$89j$1@news.service.uci.edu>
Source record: 10945
Cross-posted to:
alt.ham-radio.vhf-uhf,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi Tom,

You might want to try an HT antenna, such as the RH77CA - about 38 CM
long.

73, ac6xg

Tom wrote:
> Hello all ,
>
> I would like to install a VHF-UHF antenna on my motorcycle . It's a Suzuki
> GSX750 . I did some tests with a Diamond NR-770H and it works well . The
> only problem is that the antenna is to big for such a bike .
> Afterwards i did a test with a Diamond NR-77 . The antenna is about 43 cm
> and that's about the size i would like to use .
> The problem i have with this antenna is the swr , it's to high .
>
> Anyone an idea how i can solve this problem ?
>
> Many thanks .
>
> Tom
>
>
>

4044. Re: Can I use a 120V Variac to get 220V?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 20:59:21 UTC
From: jgboyles@aol.com
Message-ID: <1155934761.490230.54790@74g2000cwt.googlegroups.com>
Source record: 10944

w8kzw@hotmail.com wrote:
> I want to reform the electrolytics in an amp I'm bringing back to life.
> It runs high power, 220 volts ac only.
>
> Can I use my 110 volt variac in conjunction with a 110V to 220V step-up
> transformer to power up the amp? Obviously I'd not go key-down, but I
> do want to ultimately get to the full B+ on the tubes.
>
> How would I wire-up the variac / transformer, assuming it's possible?
>
> Thanks in advance for the help, guys.
>
> 73,
> Jeff
> W8KZW

Hi Jeff, Wire the output of the variac to the primary of the transformer, and the secondary to the 220V power input of the Amp. You may want to remove the tube(s) or disable the filaments to reduce the burden on the step up transformer.
If the power transformer in the amp has a 110v tap, connect it up and then just use the variac. Be careful when you are doing this, there are all sorts of lethal voltages present. Good luck.
Gary N4AST

4045. Re: Retard Marky spams some more - Mark, Just ignore them.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-18 23:32:00 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <Q5sFg.5596$Sn3.4807@newsread3.news.pas.earthlink.net>
Source record: 10946
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Mark@kb9rqz.com wrote in news:4vgbe2dfv69e6frv93c2h198gkkupc9fs3@4ax.com:

> On 18 Aug 2006 05:50:22 -0700, peewee_lloyd_davies@yahoo.com wrote:
>
>>MarkMoron@kb9rqz.com wrote:
>>>ce
>>
>>Make any illegal EME contacts with bootleggers, Markie?
> no eme contact s ilegal
> cease desists and grow up
> http://kb9rqz.blogspot.com/
>

Mark, Just ignore them.

They only tease you because of the stupid things you say when you
follow up. Just ignore them and they'll give up.

Stop giving them reasons to tease you. It only makes you look
more stupid.

Take a break from the radio groups for a while, Maybe work on your
moon bounce some more.

SC

4046. Re: Can I use a 120V Variac to get 220V?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-19 00:40:00 UTC
From: w8kzw@hotmail.com
Message-ID: <1155947999.982943.13600@75g2000cwc.googlegroups.com>
Source record: 10947

>
> Hi Jeff, Wire the output of the variac to the primary of the
> transformer, and the secondary to the 220V power input of the Amp. You
> may want to remove the tube(s) or disable the filaments to reduce the
> burden on the step up transformer.
> If the power transformer in the amp has a 110v tap, connect it up and
> then just use the variac. Be careful when you are doing this, there
> are all sorts of lethal voltages present. Good luck.
> Gary N4AST

Thanks, Gary, but the devil is in the details.

The 220 out from the step-up transformer is from one end of the
secondary coil to the other.

The amp is essentially asking for two 110 V lines, working against a
common "ground".

So, somehow I must go from this:

0 <-----220-----> 0

to this:

0 0

0

and therein lies my confusion.

Here are the connectors labeled:

0 0
A B

to this:

0 0
C D
0
E

... all I need to do is to connect the dots!

4047. Re: VHF/UHF antenna on a motorcycle

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-19 01:48:53 UTC
From: Robert J Mitchell <robjmitch@iprimus.com.au>
Message-ID: <44e66e04_1@news.iprimus.com.au>
Source record: 10848
Cross-posted to:
alt.ham-radio.vhf-uhf,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

As a long time m/c rider I suggest ride to live and stuff
radio....concentration being the key word mate !!

"Jim Kelley" <jwkelley@uci.edu> wrote in message
news:ec5alo$89j$1@news.service.uci.edu...
> Hi Tom,
>
> You might want to try an HT antenna, such as the RH77CA - about 38 CM
> long.
>
> 73, ac6xg
>
>
>
>
> Tom wrote:
>> Hello all ,
>>
>> I would like to install a VHF-UHF antenna on my motorcycle . It's a
>> Suzuki
>> GSX750 . I did some tests with a Diamond NR-770H and it works well . The
>> only problem is that the antenna is to big for such a bike .
>> Afterwards i did a test with a Diamond NR-77 . The antenna is about 43 cm
>> and that's about the size i would like to use .
>> The problem i have with this antenna is the swr , it's to high .
>>
>> Anyone an idea how i can solve this problem ?
>>
>> Many thanks .
>>
>> Tom
>>
>>
>>
>

4048. Re: Can I use a 120V Variac to get 220V?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-19 02:46:26 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1155955586.539941.265270@m73g2000cwd.googlegroups.com>
Source record: 10849

w8kzw@hotmail.com wrote:
> I want to reform the electrolytics in an amp I'm bringing back to life.
> It runs high power, 220 volts ac only.
>
> Can I use my 110 volt variac in conjunction with a 110V to 220V step-up
> transformer to power up the amp? Obviously I'd not go key-down, but I
> do want to ultimately get to the full B+ on the tubes.
>
> How would I wire-up the variac / transformer, assuming it's possible?
>
> Thanks in advance for the help, guys.
>
> 73,
> Jeff
> W8KZW

Its relatively simple and easy. Connect a 100w light globe in series with the ac power input - this will limit current to a safe level. Run for 10 hrs or so, will give caps a chance to reform....start with the tubes in so the filament current draw limits cap voltage, then later remove tubes to get virtually full voltage across caps....

Andrew VK3BFA.

4049. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-19 03:48:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12ed2h4pqf5cl07@corp.supernews.com>
Source record: 10850

i3hev, mario held wrote:
> Reg Edwards wrote:
>
>> If an amplifier incorporates a noise generator...
>> ... then it is no longer just an amplifier. ....
>
> ... so, we must conclude that amplifiers do not exist! >:)
>
> of course, there is no real amplifying device which does not generate
> noise; or, more precisely, there is no non-noisy real device at all :)
>
> If you choose not to call "amplifier" a device which amplifies signals
> if it has a non-unity noise figure, please feel free to do so - we live
> in a (at least partially) free world... but you will be alone! >:))
>
> Regards!

Don't be too hasty. Reg has verified he's got some coax that's much lower loss than anyone else can buy (it actually meets the predictions of his coax loss program), and has verified it by measuring it many times. Maybe he also has a secret source of noise-free amplifiers. You never know.

Roy Lewallen, W7EL

4050. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-19 12:56:59 UTC
From: Richard Crowley <rcrowley@xpr7t.net>
Message-ID: <12ee2kslfqpbu87@corp.supernews.com>
Source record: 10851
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.antenna

"kh" < wrote ...
> The reason is very straightforward. This is a boatanchor
> newsgroup and it's mostly geezers who deal in old radios.

> Geezers live in the past; WE don't think critically; the same
> tired thoughts cycle through our heads. Even worse, many
> of us hallucinate and make up reasons. You'll see several
> in this thread.

Including your own posting, apparently.

> I've bought items from Canada and sold to Canada. One
> thing I don't like about it is that it's expensive to ship across
> the border. In fact, it's cheaper to ship though Canada to Alaska.
>
> But then, buyer pays.

Unless something goes wrong. The abuse of international
transactions is legendary. Even eBay, PayPal, et.al. seem
to acknowledge it. As another poster observed, if you are
a large-volume commercial vendor, you can "eat" the
occasional transaction gone wrong. But if you are selling
one-off things (boat-anchors or not) on eBay, etc. it has a
significant chilling effect, no matter what generation you
represent.

4051. Re: Can I use a 120V Variac to get 220V?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-19 19:55:18 UTC
From: jgboyles@aol.com
Message-ID: <1156017318.567094.52980@74g2000cwt.googlegroups.com>
Source record: 10852

w8kzw@hotmail.com wrote:
> >
> > Hi Jeff, Wire the output of the variac to the primary of the
> > transformer, and the secondary to the 220V power input of the Amp. You
> > may want to remove the tube(s) or disable the filaments to reduce the
> > burden on the step up transformer.
> > If the power transformer in the amp has a 110v tap, connect it up and
> > then just use the variac. Be careful when you are doing this, there
> > are all sorts of lethal voltages present. Good luck.
> > Gary N4AST
>
> Thanks, Gary, but the devil is in the details.
>
> The 220 out from the step-up transformer is from one end of the
> secondary coil to the other.
>
> The amp is essentially asking for two 110 V lines, working against a
> common "ground".
>
> So, somehow I must go from this:
>
> 0 <-----220-----> 0
>
> to this:
>
> 0 0
>
> 0
>
> and therein lies my confusion.
>
> Here are the connectors labeled:
>
>
> 0 0
> A B
>
> to this:
>
> 0 0
> C D
> 0
> E
>

> ... all I need to do is to connect the dots!

Jeff, I would just leave the ground floating and connect C and D to the 220V secondary of the transformer. All you are trying to do is energize the HV supply of the amp. If you have a schematic of the amp, you should be able to figure where to supply the 220 to do just that.

Gary N4AST

4052. Re: Can I use a 120V Variac to get 220V?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-19 19:56:22 UTC
From: "John, N9JG" <John@Xremove.meYgotwals.com>
Message-ID: <G1KFg.63$5i7.27@newsreading01.news.tds.net>
Source record: 10853

Your advice is elegant in its simplicity.

"Andrew VK3BFA" <ablight@alphalink.com.au> wrote in message
news:1155955586.539941.265270@m73g2000cwd.googlegroups.com...
>
> w8kzw@hotmail.com wrote:
>> I want to reform the electrolytics in an amp I'm bringing back to life.
>> It runs high power, 220 volts ac only.
>>
>> Can I use my 110 volt variac in conjunction with a 110V to 220V step-up
>> transformer to power up the amp? Obviously I'd not go key-down, but I
>> do want to ultimately get to the full B+ on the tubes.
>>
>> How would I wire-up the variac / transformer, assuming it's possible?
>>
>> Thanks in advance for the help, guys.
>>
>> 73,
>> Jeff
>> W8KZW
>
> Its relatively simple and easy. Connect a 100w light globe in series
> with the ac power input - this will limit current to a safe level. Run
> for 10 hrs or so, will give caps a chance to reform....start with the
> tubes in so the filament current draw limits cap voltage, then later
> remove tubes to get virtually full voltage across caps....
>
> Andrew VK3BFA.
>

4053. Re: VHF/UHF antenna on a motorcycle

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-19 21:22:06 UTC
From: "Gary P. Fiber" <gfiber@comcast.net>
Message-ID: <330fe2pstnus1k26m9oc623qi2ld4kbkik@4ax.com>
Source record: 10854

On Fri, 18 Aug 2006 10:02:01 GMT, "Tom"
<on4vdv@R.E.M.O.V.E.T.H.I.Shotmail.com> wrote:

>Hello all ,
>
>I would like to install a VHF-UHF antenna on my motorcycle . It's a Suzuki
>GSX750 . I did some tests with a Diamond NR-770H and it works well . The
>only problem is that the antenna is to big for such a bike .
>Afterwards i did a test with a Diamond NR-77 . The antenna is about 43 cm
>and that's about the size i would like to use .
>The problem i have with this antenna is the swr , it's to high .
>
>Anyone an idea how i can solve this problem ?
>
>Many thanks .
>
>Tom
>
>

Use a 1/2 wave antenna. Many marine shops stock VHF 1/2 wave antennas
for mast top mounting on sail boats. The beauty is no counterpoise is
required. I think some looking at Randall / Larson you will also find
they make 1/2 wave antennas.

For the typical automotive installed mobile whip you will need a
counterpoise. Generally on the auto that's not a problem as the body
is metal and presents a nice large ground plane.

Gary K8IZ

4054. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-19 23:05:26 UTC
From: Andrea Baldoni <abaldoni@nospam.invalid>
Message-ID: <evednfRH-e2rBHrZnZ2dnUVZ8smdnZ2d@kpnqwest.it>
Source record: 10855

LenAnderson@ieee.org <LenAnderson@ieee.org> wrote:

: >I'm researching about the matter and I just read that, in a BJT for
: >instance, emitter current is inversely proportional to the noise. So,
: >if AGC reduces the gain (so current), SNR degrade?

: Not necessarily true. Noise, true natural noise, in a bipolar
: ...
: of how many factors go into noise generation within the
: transistor. :-)

So, if you have to engineer a (let's start with HF) receiver, do you think
it may better to:

1)
find a way to insert automatically a stepped attenuation (maybe
using a diode switched resistor network) and leaving amplifiers without AGC,
thus optimizing them for a particular gain

2)
build circuits with so high dynamic range that's completely impossible to
have input signals overload them (what's the dynamic range one should
normally expect at the antenna input, excluding obvious limit-case situations
where the transmitting output is fed into the receiver input...?)

3)
use the usual AGC

...I'm thinking the 1 could be a good solution if the demodulator had to be
a digital one. That way, a calibrated attenuator simply add bits to the ADC.
Hovewer, the 2 is very attractive, providing that all is analog, or the
ADC dynamic range is better than the one that could come from the antenna...

I've read most use the 3, digitizing the AGC signal maybe with a second
ADC channel, to have anyway a sort of more bits of resolution.
So probably I'm wrong and the right solution is the 3... but only if adding
an AGC never ruin amplifiers performance.

: There isn't much FM on HF. What there is would be in
: narrow-band Data mode signals. Some of that Data is a
: combination of AM and PM similar to a wireline modem's
: modulation.

In fact I was receiving 144MHz using a converter.

: What is needed in an investigation of this is a reasonably-
: well-calibrated signal generator with a calibrated attenuator.

Unfortunately I have only a Instek function generator, and I'm not
very satisfied with any intrument I bought from this firm...

Anyway, sooner or later I'll build a dds one...

Ah, another question. I have a very precise digital voltmeter. Very
precise, 6.5digits (this time from Agilent)... Unfortunately, it's
absolutely unable to handle RF.
I would like to build a "RF" frontend for it... Any ideas?
I'm thinking to a precise rectifier built with an OP AMP followed by a
OP AMP integrator...

Ciao,
AB

... Andrea Baldoni, 2002: messaggio non protetto da copyright.

4055. Re: AM Stereo/FM Stereo Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-19 23:20:16 UTC
From: "amstereo@meduci.com" <amstereo@meduci.com>
Message-ID: <1156029616.494681.270550@m79g2000cwm.googlegroups.com>
Source record: 10856

You may wish to click on the following link:

http://Meduci.com

What you described is available for $140 each postpaid to the lower
48 United States. It is based upon Motorola MC13028 decoder chip.

Sincerely,

Meduci, LLC
Jeff Deck

You write:
>I would like to be able to build, from scratch, an radio receiver for
>AM Stereo and FM Stereo. I only have a rough idea of what I need (I DO
>need a C-QUAM for example, a MC13028), and I have next to no experience
>with electronics (just an electronics lab class, and some education on
>computer-programmed boards, during university), so I have no idea where
>to start (although I would be able to solder the thing together once I
>knew what I had to do). I do know, however, what I want in my
>theoretical receiver: a small size that I can carry around, 2 speakers
>for stereo output, knob tuning like a regular analog dial radio (i.e.,
>with a small arrow on a horizontal dial pointing out the frequency),
>and possibly the ability to run off batteries or mains (220V 50Hz) as
>well as a jack for outputting to headphones (or a computer for
>airchecking purposes ;)). And of course, no old-fashioned tech like
>tubes ;).
>
>I know Chris Cuff has been known to make them, but who knows where he's
>been these last few years? (Okay, he did have a few reviews at Amazon
>as late as last year... and I just emailed him a few hours ago, but who
>knows if he still checks his inbox?) Besides, I've seen his radios at
>sites on AM Stereo, and the tuning he uses doesn't exactly lend well to
>sensitive tuning (with the frequencies written right on the knob).
>
>Come on, help me out here.

4056. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-19 23:57:51 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12ef9c4hlloatf4@corp.supernews.com>
Source record: 10857

Andrea Baldoni wrote:
> . . .
> 2)
> build circuits with so high dynamic range that's completely impossible to
> have input signals overload them (what's the dynamic range one should
> normally expect at the antenna input, excluding obvious limit-case situations
> where the transmitting output is fed into the receiver input...?)
> . . .

One night I heard audio in the background when listening to my direct conversion 40 meter receiver. It was designed specifically to be as immune as possible to AM demodulation, and since I had finished its optimization several years before, I hadn't heard any audio from demodulated AM. (It was common when I was using mixers with poorer balance and dynamic range.) It didn't take long to find the station with my home receiver. It was at about 7335 kHz, a religious HF broadcast station in San Francisco (about 600 miles from here). The broadcast was in Russian, so they were evidently beaming to Russia and I wouldn't be far off the main beam.

Some careful measurements showed a signal strength of 250 mV RMS at my receiver terminals. (That's 74 dB over the typical S9 value of 50 uV.) I was using a vertical 4-square array, which isn't at all optimum for that path. I hooked the antenna directly to my oscilloscope and could see the carrier and modulation.

I took the receiver on a visit to England, and heard the audio from a large number of AM stations in the background, so I believe the signal levels there from HF broadcasters commonly exceeded the 250 mV I saw only once at home.

The problem can of course be reduced by use of very narrow filters, but they're often so close to the 40 meter band edges that even that wouldn't be enough in most cases.

I've also encountered some staggeringly strong signals when operating Field Day, when a group with a high or even moderate power transmitter is on the next ridge or otherwise very close.

The bottom line is that I'd be hesitant to trust just about any number for a "worst case" maximum signal strength. Be sure to test any proposed design on 40 meters for a while from your location in Europe.

Roy Lewallen, W7EL

4057. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-20 01:39:55 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <0cffe25vf0sgaoeojup6lhtudk6s9m64qp@4ax.com>
Source record: 10858

On Fri, 18 Aug 2006 16:33:25 +0200, "i3hev, mario held"
<marioheld@tiscali.it> wrote:

>tim gorman wrote:
>
>> You might also ask yourself whether it really matters or not. If your signal
>> is strong enough to begin driving the AGC to limit the system gain do you
>> really care what the noise level actually is? ....
>
>But you may very well care for the SNR on an interesting weak signal
>which you are trying to listen to, while a strong nearby signal
>activates your AGC... >:)

In theory the system bandwidth should not allow that strong signal to
hit the AGC. Of course practical systems this may not be true.

However, manual gain control helps if the stronger signal is not
overloading the front end causing gain compression and
intermodulation.

Allison

4058. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-20 01:44:44 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <kgffe2dfjer7akpn6p2c9aup94f3a91dbr@4ax.com>
Source record: 10859

On Fri, 18 Aug 2006 19:54:00 +0200, "i3hev, mario held"
<marioheld@tiscali.it> wrote:

>Michael Black wrote:
>
>> In that case though, you should be worried about that nearby strong signal
>> dropping the gain of the receiver so you can't hear the weak signal...
>
>may be you are not thinking of cw... :)
>
>Provided the SNR is good enough, you can filter and post-amplify your
>weak signal, e.g. with a good AF filter, or a dsp.
>
>Of course, if the IF stages are (reasonably) linear in response, you can
>disable the AGC, but this would be no answer to the original question ;)

Since the SNR is established by the frontend the IF system can have a
more relaxed SNR.

However be wary of ICs like the MC1350 as the gain reduction occurs
the internal noise is bad. I've built several recievers using this
part and at ~10db gain reduction the noise jumps way up. I've gone
to cascode JFETs as the noise is more predictable and generally
lower. The device used does make a difference.

Allison

4059. Re: VHF/UHF antenna on a motorcycle

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-20 03:07:25 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1156043245.547218.141830@b28g2000cwb.googlegroups.com>
Source record: 10860
Cross-posted to:
alt.ham-radio.vhf-uhf,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

From: Tom on Fri, Aug 18 2006 3:02 am

>I would like to install a VHF-UHF antenna on my motorcycle . It's a Suzuki
>GSX750 . I did some tests with a Diamond NR-770H and it works well . The
>only problem is that the antenna is to big for such a bike .
>Afterwards i did a test with a Diamond NR-77 . The antenna is about 43 cm
>and that's about the size i would like to use .
>The problem i have with this antenna is the swr , it's to high .
>
>Anyone an idea how i can solve this problem ?

Try contacting your local PD radio repair place.

Motorcycle police have been using VHF-UHF radios on their
motors for over 40 years. Successfully. They must be
doing something right, yes? :-)

Quod erat demonstrandum.

LenAnderson@ieee.org

4060. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-20 03:12:14 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1156043534.843690.217490@i42g2000cwa.googlegroups.com>
Source record: 10861

From: Andrea Baldoni on Sat, Aug 19 2006 4:05 pm

>LenAnder...@ieee.org <LenAnder...@ieee.org> wrote:
>
>: >I'm researching about the matter and I just read that, in a BJT for
>: >instance, emitter current is inversely proportional to the noise. So,
>: >if AGC reduces the gain (so current), SNR degrade?
>
>: Not necessarily true. Noise, true natural noise, in a bipolar
>: ...
>: of how many factors go into noise generation within the
>: transistor. :-)
>
>So, if you have to engineer a (let's start with HF) receiver, do you think
>it may better to:

There's no "engineering" involved, just a crunching of numbers
AFTER you find the input levels versus AGC and how much noise
is actually generated...and approximately WHERE this excess
noise is coming from.

>1)
>find a way to insert automatically a stepped attenuation (maybe
>using a diode switched resistor network) and leaving amplifiers without AGC,
>thus optimizing them for a particular gain

I see no need of that at this point. "Getting fancy" with
extra circuitry is rather useless without knowing what the
problem all this fancy circuitry is supposed to cure.

>2)
>build circuits with so high dynamic range that's completely impossible to
>have input signals overload them (what's the dynamic range one should
>normally expect at the antenna input, excluding obvious limit-case situations
>where the transmitting output is fed into the receiver input...?)

That's NOT the issue here.

Noise and signal-to-noise ratios are only important at LOWEST
signal levels, not the highest.

>3)
>use the usual AGC

Why not? Decades of designs in many countries have successfully
operated with "usual AGC." [voltage-controlled, sometimes
current-controlled gain stages driven by a DC control line]

>...I'm thinking the 1 could be a good solution if the demodulator had to be
>a digital one. That way, a calibrated attenuator simply add bits to the ADC.
>Hovewer, the 2 is very attractive, providing that all is analog, or the
>ADC dynamic range is better than the one that could come from the antenna...

Experiment any way you want but I can't see that as your cure.

>I've read most use the 3, digitizing the AGC signal maybe with a second
>ADC channel, to have anyway a sort of more bits of resolution.
>So probably I'm wrong and the right solution is the 3... but only if adding
>an AGC never ruin amplifiers performance.

A rather common (for decades of designs and production) AGC action
is no more than 6 db change in output for 60 to 100 db of input
signal (carrier) change.

AGC should be approached from the standpoint of a servo loop.
The "error signal" is the change in carrier level at the
detector. The controlled items are the RF and IF amplifiers.
The time-constant of the error feedback loop (what is commonly
called "the AGC line") is quite slow but fast enough to try to
keep detector level constant through flutter (rapid reflections
at VHF and up) and ionospheric path variations.

If "the AGC line" somehow has some noise in it, that noise is
probably going to change RF-IF amplifier gain. However, the
frequency of that noise is going to be low; it is band-
limited by the usual AGC line decoupling.

Let's look at SNR with low to higher antenna input levels:
1. Assume you have (for example) 1 uV of noise at no-signal.
2. If the RF signal is 3.16 uV then the signal-plus-noise
to noise ratio is 10 db.
3. If the RF signal is 10 uV then the signal-plus-noise to
noise ratio is 20 db.
4. If the RF signal is 31.6 uV then the signal-plus-noise
to noise ratio is 30 db.

The common (for about 40+ years, internationally) level of
receiver sensitivity for AM mode signals is a 10 db signal-
plus-noise to noise ratio. That's an easy test, done by
connecting an AC voltmeter (that can measure RMS voltage)
to the detector output. With no signal input, all you get
is front-end noise; note that. Apply a known-level RF
source to the antenna input, adjust that level to be 10 db
higher than the noise level measured with no signal input.
Note the RF source level; that is the "minimum
sensitivity" level for the common "10 db S+N:N" criterion.

For FM or PM it is a bit more complicated. FM and PM
rely on quieting through the Limiter stages ahead of the
FM detector. For most tests of FM/PM sensitivity you NEED
a known-signal-source-level to determine the quieting.

>: There isn't much FM on HF. What there is would be in
>: narrow-band Data mode signals. Some of that Data is a
>: combination of AM and PM similar to a wireline modem's
>: modulation.
>
>In fact I was receiving 144MHz using a converter.

That data was omitted. Have you checked out the converter
insofar as adding noise? You can get a rough comparison
by using another HF receiver.

Have you checked your internal (to HF receiver) FM
demodulator characteristics? Do you have the manufacturer's
specifications on that? Since nearly all FM/PM demods
use Limiters, they normally operate with AGC off.

>: What is needed in an investigation of this is a reasonably-
>: well-calibrated signal generator with a calibrated attenuator.
>
>Unfortunately I have only a Instek function generator, and I'm not
>very satisfied with any intrument I bought from this firm...
>
>Anyway, sooner or later I'll build a dds one...

You can't work in the dark (without instruments) when
trying to troubleshoot electronics.

A DDS (Direct Digital Synthesis) signal generator gives
you very precise FREQUENCY. For years there have been
L-C oscillator based signal generators which have been
stable enough in frequency to determine AGC action.

What you really need to investigate the AGC is PRECISE
RF ATTENUATION -and- a way to calibrate the maximum RF
output. [an ordinary diode detector could do that if it
was itself calibrated against a known RF source LEVEL]

>Ah, another question. I have a very precise digital voltmeter. Very
>precise, 6.5digits (this time from Agilent)... Unfortunately, it's
>absolutely unable to handle RF.
>I would like to build a "RF" frontend for it... Any ideas?
>I'm thinking to a precise rectifier built with an OP AMP followed by a
>OP AMP integrator...

The usual method of making a "precise" RF voltmeter is to
begin with a wideband video amplifier with gain controls
setting the gain in the full-scale ranges desired.

However, the BACK END needs attention, particularly if you
want TRUE RMS measurement. The "less precise" HP3400A
AC voltmeter could do that True RMS within 1% using an
analog meter readout (mirrored scale on meter). The
3400A used a pair of matched heaters and thermocouples.
Amplified AC heated one heater. A high-gain DC op-amp

had inputs (opposing) from both thermocouples. Op-amp output heated the second heater. This was self-balancing. The AC Voltage indicated actually came from the DC op-amp output.

If you are going to measure AC-RF volts of both sinewaves and noise, you need True RMS indication. Without that the noise (random stuff) read by simple averaging rectifiers will be DOWN by as much as 50% compared to a sinewave input. There are three basic types of AC voltmeters made: Rectify-average (common to handheld multimeters); Logarithmic (now a standard of high-end bench multimeters) using special ICs for True RMS conversion to DC; Thermal (now out of favor in new designs but using the first-principles of measuring the effective heating of a resistive load). Thermocouple sensors are reliable, can handle overloads, but a diode string biased for forward conduction can produce DC voltage changes of -2 mV / degree C heating.

For some references, you can search the Internet for "RMS to DC" conversion, or begin at www.ednmag.com, go to their Archives button, select issue for May 11, 2000, and look at the "How It Works" article by Jim Williams of Linear Technology Corporation. LTC made an IC that was a dual heater-sensor, the LT1088, but that IC is now discontinued. The article shows a "front end" as well as the whole AC voltmeter circuit.

LenAnderson@ieee.org

4061. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-20 03:19:19 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1156043959.936323.84540@75g2000cwc.googlegroups.com>
Source record: 10862

>nospam@nouce.bellatlantic.net wrote:
>> On Fri, 18 Aug 2006 19:54:00 +0200, "i3hev, mario held"
>> <marioheld@tiscali.it> wrote:
>> >Michael Black wrote:
>
>> However be wary of ICs like the MC1350 as the gain reduction occurs
>> the internal noise is bad. I've built several recievers using this
>> part and at ~10db gain reduction the noise jumps way up. I've gone
>> to cascode JFETs as the noise is more predictable and generally
>> lower. The device used does make a difference.
>
>> Allison

I have to disagree on the MC1350 and way back 30 years to its
predecessor, MC1590. The prototype HF receiver presently on
my workbench has a NF of 5.5 and that hardly rises more than
that with AGC current applied to the AGC pin.

BTW, that receiver, single-conversion with one IF at 21.4 MHz,
uses only MC1350s up to the detector, including the one mixer
stage. [LO is a separate PLL board]

LenAnderson@ieee.org

4062. Re: VHF/UHF antenna on a motorcycle

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-20 03:54:22 UTC
From: Alan <me@somewhere.com.au.invalid>
Message-ID: <45nfe29sgf57sd2g4gts1am5ov4cl7dutl@4ax.com>
Source record: 10863
Cross-posted to:
alt.ham-radio.vhf-uhf,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On 19 Aug 2006 20:07:25 -0700, "LenAnderson@ieee.org"
<LenAnderson@ieee.org> wrote:

>From: Tom on Fri, Aug 18 2006 3:02 am
>
>>I would like to install a VHF-UHF antenna on my motorcycle . It's a Suzuki
>>GSX750 . I did some tests with a Diamond NR-770H and it works well . The
>>only problem is that the antenna is to big for such a bike .
>>Afterwards i did a test with a Diamond NR-77 . The antenna is about 43 cm
>>and that's about the size i would like to use .
>>The problem i have with this antenna is the swr , it's to high .
>>
>>Anyone an idea how i can solve this problem ?

Talk to your local two way radio supplier/service company about a
"ground independant" antenna.

Alan

--
Sell your surplus electronic components at
http://ozcomponents.com
Search or browse for that IC, capacitor,
crystal or other component you need.

4063. Re: Can I use a 120V Variac to get 220V?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-20 08:11:33 UTC
From: mike <spamme0@go.com>
Message-ID: <VOUFg.8689$RQ5.1143@trnddc03>
Source record: 10864

John, N9JG wrote:
> Your advice is elegant in its simplicity.

And OPTIMISTIC in it's generality.
While one might imagine situations where this technique is
useful, it would be better to define a strategy that takes
into consideration the exact configuration of the PS in
your unspecified amplifier.

If your caps don't need reforming, any technique will work.
If they do, you're gonna have some current flow. It's not
hard to imagine a scenario whereby you have 25W or more
dissipated in your caps. I don't call this safe. A 100W
light bulb will keep you from blowing up the rectifiers while
you're blowing up the caps.

Assuming you have solid-state rectifiers, go back to the
variac and transformer. Depending on the value of the high voltage,
There may be issues if you just turn off the tube filaments.
The series lamp can still be helpful, but isn't the whole story.

It's always helpful to disclose the parameters of the situation
when asking for advice. Otherwise, you'll get 10 different
solutions based on 10 different assumptions, none of which will be
correct.
mike
>
> "Andrew VK3BFA" <ablight@alphalink.com.au> wrote in message
> news:1155955586.539941.265270@m73g2000cwd.googlegroups.com...
>
>>w8kzw@hotmail.com wrote:
>>
>>>I want to reform the electrolytics in an amp I'm bringing back to life.
>>> It runs high power, 220 volts ac only.
>>>
>>>Can I use my 110 volt variac in conjunction with a 110V to 220V step-up
>>>transformer to power up the amp? Obviously I'd not go key-down, but I
>>>do want to ultimately get to the full B+ on the tubes.
>>>
>>>How would I wire-up the variac / transformer, assuming it's possible?
>>>
>>>Thanks in advance for the help, guys.
>>>
>>>73,
>>>Jeff

>>>W8KZW
>>
>>Its relatively simple and easy. Connect a 100w light globe in series
>>with the ac power input - this will limit current to a safe level. Run
>>for 10 hrs or so, will give caps a chance to reform....start with the
>>tubes in so the filament current draw limits cap voltage, then later
>>remove tubes to get virtually full voltage across caps....
>>
>>Andrew VK3BFA.
>>
>
>
>

4064. Re: Can I use a 120V Variac to get 220V?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-20 09:40:12 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1156066812.072148.253150@i3g2000cwc.googlegroups.com>
Source record: 10865

mike wrote:
> John, N9JG wrote:
> > Your advice is elegant in its simplicity.
>
> And OPTIMISTIC in it's generality.
> While one might imagine situations where this technique is
> useful, it would be better to define a strategy that takes
> into consideration the exact configuration of the PS in
> your unspecified amplifier.

Gee, that sounds like the opening page of a PowerPoint presentation -
your not a manager by proffession, are you?

And if you have an engineering degree, and want to engage in endless
metaphysical speculation, thats a very good idea.....whatever it
was.....amongst the verbiage....
>
> If your caps don't need reforming, any technique will work.
> If they do, you're gonna have some current flow. It's not
> hard to imagine a scenario whereby you have 25W or more
> dissipated in your caps. I don't call this safe. A 100W
> light bulb will keep you from blowing up the rectifiers while
> you're blowing up the caps.

Rubbish. Where do you get this 25w figure from, and across how many
capacitors in a (typical) series string - oh, and lets ignore idling
current through transformer and bleeeder resistors, and filamnet
current drain, and blowers, and dial lamps, and.....which would further
reduce available volts across the caps.... And whats this "imagine a
scenario" stuff - I thought you were trying to be precise and were
chiding me for my lack of hard data....
>
> Assuming you have solid-state rectifiers, go back to the
> variac and transformer. Depending on the value of the high voltage,
> There may be issues if you just turn off the tube filaments.
> The series lamp can still be helpful, but isn't the whole story.

So, what voltage do you set the variac too? - how do you work it out?
>
> It's always helpful to disclose the parameters of the situation
> when asking for advice. Otherwise, you'll get 10 different
> solutions based on 10 different assumptions, none of which will be
> correct.
> mike

True. There are probably 10 different ways of puting out a fire, but
the easiest is dumping a bucket of water on it.

Honestly, this is ridiculous - most modern (ie, last 40 years) caps are
fine, will survive horrendous abuse, and unless you have the
manufacturers data sheets for these capacitors, (and the power
transformer, and the rectifiers) how are you going to set these
parameters anyway? - this is a linear amplifier, not the space shuttle.

Why do people insist on making things sooooo complicated, almost
theoretical physics level - it isnt. Dont let irelevant theory get in
the way of practical electronics.

The intial switch on of ANYTHING that hasnt been powered up for years
is going to be the time it dies - at least the bulb will stop it
bursting into flames, the variac method will jsut slowly ramp up volts
until something blows catasphropically (I know, used to do this, got
sick of replacing fuses in the variac.)

As well, you have the added complication of multiple, lashed together
transformers which MUST all be correctly phased and able to take the
load current . a recipe for confusion at least.

And no, I cant spell. Spend too much time with soldering irons rather
than physics journals.

Andrew VK3BFA.

> > "Andrew VK3BFA" <ablight@alphalink.com.au> wrote in message
> > news:1155955586.539941.265270@m73g2000cwd.googlegroups.com...
> >
> >>w8kzw@hotmail.com wrote:
> >>
> >>>I want to reform the electrolytics in an amp I'm bringing back to life.
> >>> It runs high power, 220 volts ac only.
> >>>
> >>>Can I use my 110 volt variac in conjunction with a 110V to 220V step-up
> >>>transformer to power up the amp? Obviously I'd not go key-down, but I
> >>>do want to ultimately get to the full B+ on the tubes.
> >>>
> >>>How would I wire-up the variac / transformer, assuming it's possible?
> >>>
> >>>Thanks in advance for the help, guys.
> >>>
> >>>73,
> >>>Jeff
> >>>W8KZW
> >>
> >>Its relatively simple and easy. Connect a 100w light globe in series
> >>with the ac power input - this will limit current to a safe level. Run
> >>for 10 hrs or so, will give caps a chance to reform....start with the
> >>tubes in so the filament current draw limits cap voltage, then later
> >>remove tubes to get virtually full voltage across caps....

> >>
> >>Andrew VK3BFA.
> >>
> >
> >
> >

4065. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-20 12:32:01 UTC
From: Brian <kb9bvn@earthlink.net>
Message-ID: <5DYFg.9998$xp2.7906@newsread1.news.pas.earthlink.net>
Source record: 10866
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I ship to anyone that wants to pay for it. I do avoid APO/FPO shipping, and not because of scams but because of very very poor delivery chances on anything not a 1 ounce letter.

I sent several boxes of supplies to friends serving in Iraq with the US Marine Corps...most of the boxes languished in a warehouse in Germany for about 4 weeks before being hauled to Iraq...then it was another 2 or 3 weeks befire they actually got the stuff. Needless to say, never ship a puppy or kitten to a war zone. I have one realative that was in Iraq for a year (the last time). I mailed him a Christmas package at the end of October. He got home in February and still hadn't received it.

I ship DX but the buyer has to pay for the shipping.

--
==========
Radio Amateurs - Fill your junk box, from my junkbox!
http://www.hamradparts.com
73 de KB9BVN
==========

"Paul Hinman" <paul.hinman@shaw.ca> wrote in message
news:aLfEg.400583$Mn5.137675@pd7tw3no...
> I frequently see postings in the ham radio related newsgroups for items
> currently being offered on E-Bay.
>
> All to often I that items will be shipped only to the lower 48 states,
> leaving hams in Hawaii, Alaska, and Canada out of the picture. What is
> the problem. In Canada we are well served by FEDEX and the United
> States Postal Service. Amateur radio equipment crosses the border with
> out any problem. I realize that Hawaii and Alaska may be a bit far from
> the "lower 48" but the same delivery services are available even though
> surface transportation may be a little bit slow. In the US you also
> have UPS, the folks in Brown which we Canadians prefer not to use
> because the often make the border crossing more difficult than it needs
> to be and we don't like getting stuck with brokerage fees.
>
> So why the discrimination, if the buyer knows that delivery may take a
> little longer and is prepared to accept the fact then it becomes a non
> problem. If the seller is intimidated by the prospect of complicated
> paperwork, he needn't be. Please leave it up to the buyer to decide
> whether he wants to bib or not.
>
> I can not speak for shipments to Europe, Africa, India, China, or the

> South Pacific but for fellow Americans, or friendly northern neighbours,
> I think that people should be prepared to deal with us.
>
> Thanx for letting get this off my chest and I realize that I have cross
> posted this to four different newsgroups but I wanted to get to a broad
> audience.
>
> Paul
>
> --
> Paul S. Hinman - VE6LDS
> long West 113 deg 27 min 20 sec
> lat North 53 deg 27 min 3 sec
> Maidenhead Locator DO33gk
>
>
>

4066. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-20 12:41:48 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <ec9l4rkph1@news2.kornet.net>
Source record: 10867
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

```
--
Say no to institutionalized interference.
Just say NO to HD/IBOC!
"Brian" <kb9bvn@earthlink.net> wrote in message
news:5DYFg.9998$xp2.7906@newsread1.news.pas.earthlink.net...
>I ship to anyone that wants to pay for it. I do avoid APO/FPO shipping,
>and
> not because of scams but because of very very poor delivery chances on
> anything not a 1 ounce letter.
>
> I sent several boxes of supplies to friends serving in Iraq with the US
> Marine Corps...most of the boxes languished in a warehouse in Germany for
> about 4 weeks before being hauled to Iraq...then it was another 2 or 3
> weeks
> befire they actually got the stuff. Needless to say, never ship a puppy
> or
> kitten to a war zone. I have one realative that was in Iraq for a year
> (the
> last time). I mailed him a Christmas package at the end of October. He
> got
> home in February and still hadn't received it.
>

Yes, shipping to OIF/OEF is very very slow. This is because nobody wants to
go in there. Regular fuel shipments can take 2 weeks to cross the country.
Shipping to APO/AE (Europe), APO/AA (Americas) and APO/AP (Pacific region)
is fairly steady, at least going by Priority. Parcel Post or Media Mail go
by SAM (Space Available Mail) and can take months to get ANYWHERE within the
military postal system. This is because EVERY other class of mail gets
priority over SAM, and some of those parcels don't leave the mil hub for
weeks (stateside).
```

4067. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-20 13:02:44 UTC
From: Bob W7AVK <rsrolfne@atnet.net>
Message-ID: <44E85D74.4050504@atnet.net>
Source record: 10868
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

What I've done sending goodies to our troops is to use the flat rate
Priority Boxes available free at the post office. All you can stuff
into it for the 2 pounds rate or $8.10. Mose have been delivered within
a couple weeks.

If interested might check out http://www.anysolder.com

73 Bob W7AVK

4068. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-20 16:06:30 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <v91he2pohctpp0c18k0g0d53g5pt701thv@4ax.com>
Source record: 10869

On 19 Aug 2006 20:19:19 -0700, "LenAnderson@ieee.org"
<LenAnderson@ieee.org> wrote:

>
>>nospam@nouce.bellatlantic.net wrote:
>>> On Fri, 18 Aug 2006 19:54:00 +0200, "i3hev, mario held"
>>> <marioheld@tiscali.it> wrote:
>>> >Michael Black wrote:
>>
>>> However be wary of ICs like the MC1350 as the gain reduction occurs
>>> the internal noise is bad. I've built several recievers using this
>>> part and at ~10db gain reduction the noise jumps way up. I've gone
>>> to cascode JFETs as the noise is more predictable and generally
>>> lower. The device used does make a difference.
>>
>>> Allison
>
> I have to disagree on the MC1350 and way back 30 years to its
> predecessor, MC1590. The prototype HF receiver presently on
> my workbench has a NF of 5.5 and that hardly rises more than
> that with AGC current applied to the AGC pin.

Read EMRFD page 6.16 (ARRL press) they tested the 1350 and at the
point where the gain cell has equal conduction on both legs the noise
rises significantly. I duplicated the test fixture and yes, it's
noisy, from around 6db to around 11db in my fixture when gain is
reduced by 10db and that was at 16mhz. In a reciever that used
it I went to two cascode stages using JFETs and the difference noise
was notable for weak signals just into the agc range. I restrict the
1590/1350/ca3028 for lower perfomance recievers now.

I also verified that the 1590 does same and also the CA3028
wired as differential AGC. Even tried three 2n3904s and
same result. The agc range was good and at full gain the
noise was ok but the noise increase at partial agc was surprizing.

> BTW, that receiver, single-conversion with one IF at 21.4 MHz,
> uses only MC1350s up to the detector, including the one mixer
> stage. [LO is a separate PLL board]

I do most of my RX experimentation at 6/ 2M and 70cm SSB so
noise and overload perfomance are important to me. Images
are also a big problem as I'm near a lot of VHF/hf broadcast.

Allison

4069. Help Leader LSW-359 Manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-20 17:49:42 UTC
From: Alain <Alain@nospam.fr>
Message-ID: <44e8a0ba$0$5985$636a55ce@news.free.fr>
Source record: 10870

Hello,
I seek the manual operator and characteristics of the sweep signal generator
Leader LSW-359
Thanks for helping me.
Alain

XXXf1mdt@free.frXXX
(-X)

4070. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-20 19:46:25 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1156103185.261420.21420@74g2000cwt.googlegroups.com>
Source record: 10871

From: nos...@nouce.bellatlantic.net on Sun, Aug 20 2006 9:06 am

>On 19 Aug 2006 20:19:19 -0700, "LenAnder...@ieee.org"
><LenAnder...@ieee.org> wrote:
>>>nos...@nouce.bellatlantic.net wrote:
>>>> On Fri, 18 Aug 2006 19:54:00 +0200, "i3hev, mario held"
>>>> <marioh...@tiscali.it> wrote:
>>>> >Michael Black wrote:
>
>>>> However be wary of ICs like the MC1350 as the gain reduction occurs
>>>> the internal noise is bad. I've built several recievers using this
>>>> part and at ~10db gain reduction the noise jumps way up. I've gone
>>>> to cascode JFETs as the noise is more predictable and generally
>>>> lower. The device used does make a difference.
>
>>>> Allison
>
>> I have to disagree on the MC1350 and way back 30 years to its
>> predecessor, MC1590. The prototype HF receiver presently on
>> my workbench has a NF of 5.5 and that hardly rises more than
>> that with AGC current applied to the AGC pin.
>
>Read EMRFD page 6.16 (ARRL press) they tested the 1350 and at the
>point where the gain cell has equal conduction on both legs the noise
>rises significantly. I duplicated the test fixture and yes, it's
>noisy, from around 6db to around 11db in my fixture when gain is
>reduced by 10db and that was at 16mhz. In a reciever that used
>it I went to two cascode stages using JFETs and the difference noise
>was notable for weak signals just into the agc range. I restrict the
>1590/1350/ca3028 for lower perfomance recievers now.

Apparently I hit some nerve on my disagreement.

My first experience with the MC1590 was in 1973 and a need to
operate over 55-64 MHz. Electronic gain control was essential
and it had to be fast. Motorola supplied some additional
information which was later incorporated into appnotes.

The MC1350 was marketed around '73 along with the MC1330
video detector as a TV IF system. It didn't sell that
well in quantities (presumably) and both were dropped
from active production (Lansdale acquired masks and now
makes the MC1350). The 1350 (8-pin DIP) should use the
same die in the metal can MC1590. While neither one was
ever touted as a super-champ low-noise device, it is what

I consider respectable as to NF. The fact that it has
differential input and differential output is convenient
from the standpoint of circuit design. Especially so when
input impedances (each side) has a dependable 5K R in
parallel with about 5 pF total capacitance. Gain of both
begins to fall above 75 MHz with output loads of 100 Ohms
resistive. I've found no noticeable difference between
differential input v. single-ended.

That IC is what I term a "double Gilbert cell" in that
AGC control current affects both differential inputs
equally (or very nearly so). Whether one connects to
both inputs or just one shouldn't make any difference
other than output gain.

>I also verified that the 1590 does same and also the CA3028
>wired as differential AGC. Even tried three 2n3904s and
>same result. The agc range was good and at full gain the
>noise was ok but the noise increase at partial agc was surprizing.

I've never encountered any "surprising" increase in noise
at any AGC input to a 1590 or 1350 causing partial gain
reduction. That is as true in 2005 as it was in 1973. If
there is a SNR of 10 db at an RF carrier input of 3 uV and
a gain reduction of 10 db for a 10 uV RF input results in
3 db more noise in the front end, the SNR with a 10 uV
input is still higher than the one at 3 uV. What has been
"lost" there?

Let's look at the original problem starting this thread:
There was a claim of "increased noise" with AGC on, but
no quantifiable data. The sudden segue to stating that a
certain IC is "bad" is a leap that defies good design
practices to me. I'm not impressed that the ARRL had some
test data in a publication; having been hands-on with this
Motorola design for a number of years, I have a number of
RCA lab notebook pages filled with my testing of it along
with a patent involving it granted 1974...besides my own
hobby notebooks.

Low-noise input amplifier design is an entirely separate
subject and there are a number of other active devices
which can do lower NFs than 5. What was orignally needed
was some way of getting some numbers and test configuration
of Andrea's problem...to pin down a possible reason for
alleged increased noise with AGC applied, presumably a
"partial AGC" application. [I can't quantify "partial"
as a numeric value...maybe others can?]

>I do most of my RX experimentation at 6/ 2M and 70cm SSB so
>noise and overload perfomance are important to me. Images
>are also a big problem as I'm near a lot of VHF/hf broadcast.

[<shrug> I live about 6 miles from 50 KW KMPC on AM...]

If we can get back to the original claim of "increased noise with AGC applied" we might be able to help Andrea some. We don't know what Andrea has for a main receiver and interjecting some "badness" remarks by the ARRL about a certain IC isn't going to help clarify Andrea's problem.

LenAnderson@ieee.org

4071. Re: What is wrong with Hawaii, Alaska, and Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-20 19:52:05 UTC
From: Spokesman <his@spam.net>
Message-ID: <w8idnXu9IsjtIHXZnZ2dnUVZ_q2dnZ2d@wightman.ca>
Source record: 10872
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

"Paul Hinman" <paul.hinman@shaw.ca> wrote in message
news:aLfEg.400583$Mn5.137675@pd7tw3no...
I frequently see postings in the ham radio related newsgroups for items currently being offered on E-Bay.

All to often I that items will be shipped only to the lower 48 states, leaving hams in Hawaii, Alaska, and Canada out of the picture. What is the problem. In Canada we are well served by FEDEX and the United States Postal Service. Amateur radio equipment crosses the border with out any problem. I realize that Hawaii and Alaska may be a bit far from the "lower 48" but the same delivery services are available even though surface transportation may be a little bit slow. In the US you also have UPS, the folks in Brown which we Canadians prefer not to use because the often make the border crossing more difficult than it needs to be and we don't like getting stuck with brokerage fees.

So why the discrimination, if the buyer knows that delivery may take a little longer and is prepared to accept the fact then it becomes a non problem. If the seller is intimidated by the prospect of complicated paperwork, he needn't be. Please leave it up to the buyer to decide whether he wants to bib or not.

I can not speak for shipments to Europe, Africa, India, China, or the South Pacific but for fellow Americans, or friendly northern neighbours, I think that people should be prepared to deal with us.

Thanx for letting get this off my chest and I realize that I have cross posted this to four different newsgroups but I wanted to get to a broad audience.

Paul

--
Paul S. Hinman - VE6LDS
long West 113 deg 27 min 20 sec
lat North 53 deg 27 min 3 sec
Maidenhead Locator DO33gk

4072. Re: Can I use a 120V Variac to get 220V?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-20 21:58:12 UTC
From: jgboyles@aol.com
Message-ID: <1156111092.533615.250060@m79g2000cwm.googlegroups.com>
Source record: 10873

Andrew VK3BFA wrote:
> mike wrote:
> > John, N9JG wrote:
> > > Your advice is elegant in its simplicity.
> >
> > And OPTIMISTIC in it's generality.
> > While one might imagine situations where this technique is
> > useful, it would be better to define a strategy that takes
> > into consideration the exact configuration of the PS in
> > your unspecified amplifier.
>
> Gee, that sounds like the opening page of a PowerPoint presentation -
> your not a manager by proffession, are you?
>
> And if you have an engineering degree, and want to engage in endless
> metaphysical speculation, thats a very good idea.....whatever it
> was.....amongst the verbiage....
> >
> > If your caps don't need reforming, any technique will work.
> > If they do, you're gonna have some current flow. It's not
> > hard to imagine a scenario whereby you have 25W or more
> > dissipated in your caps. I don't call this safe. A 100W
> > light bulb will keep you from blowing up the rectifiers while
> > you're blowing up the caps.
>
> Rubbish. Where do you get this 25w figure from, and across how many
> capacitors in a (typical) series string - oh, and lets ignore idling
> current through transformer and bleeeder resistors, and filamnet
> current drain, and blowers, and dial lamps, and.....which would further
> reduce available volts across the caps.... And whats this "imagine a
> scenario" stuff - I thought you were trying to be precise and were
> chiding me for my lack of hard data....
> >
> > Assuming you have solid-state rectifiers, go back to the
> > variac and transformer. Depending on the value of the high voltage,
> > There may be issues if you just turn off the tube filaments.
> > The series lamp can still be helpful, but isn't the whole story.
>
> So, what voltage do you set the variac too? - how do you work it out?
> >
> > It's always helpful to disclose the parameters of the situation
> > when asking for advice. Otherwise, you'll get 10 different
> > solutions based on 10 different assumptions, none of which will be
> > correct.

> > mike
>
> True. There are probably 10 different ways of puting out a fire, but
> the easiest is dumping a bucket of water on it.
>
> Honestly, this is ridiculous - most modern (ie, last 40 years) caps are
> fine, will survive horrendous abuse, and unless you have the
> manufacturers data sheets for these capacitors, (and the power
> transformer, and the rectifiers) how are you going to set these
> parameters anyway? - this is a linear amplifier, not the space shuttle.
>
> Why do people insist on making things sooooo complicated, almost
> theoretical physics level - it isnt. Dont let irelevant theory get in
> the way of practical electronics.
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> The intial switch on of ANYTHING that hasnt been powered up for years
> is going to be the time it dies - at least the bulb will stop it
> bursting into flames, the variac method will jsut slowly ramp up volts
> until something blows catasphropically (I know, used to do this, got
> sick of replacing fuses in the variac.)
>
> As well, you have the added complication of multiple, lashed together
> transformers which MUST all be correctly phased and able to take the
> load current . a recipe for confusion at least.
>
> And no, I cant spell. Spend too much time with soldering irons rather
> than physics journals.
>
> Andrew VK3BFA.

All he was asking was how to hook up a variac. Seemed simple enough.

Gary N4AST

4073. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-20 22:03:18 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <2phhe21tmriborj1ghc22k0lcr3sjdo01v@4ax.com>
Source record: 10874

On 20 Aug 2006 12:46:25 -0700, "LenAnderson@ieee.org"
<LenAnderson@ieee.org> wrote:

shortend>>>>>

>>Read EMRFD page 6.16 (ARRL press) they tested the 1350 and at the
>>point where the gain cell has equal conduction on both legs the noise
>>rises significantly. I duplicated the test fixture and yes, it's
>>noisy, from around 6db to around 11db in my fixture when gain is
>>reduced by 10db and that was at 16mhz. In a reciever that used
>>it I went to two cascode stages using JFETs and the difference noise
>>was notable for weak signals just into the agc range. I restrict the
>>1590/1350/ca3028 for lower perfomance recievers now.
>
> Apparently I hit some nerve on my disagreement.
>
> My first experience with the MC1590 was in 1973 and a need to
> operate over 55-64 MHz. Electronic gain control was essential
> and it had to be fast. Motorola supplied some additional
> information which was later incorporated into appnotes.
>
> The MC1350 was marketed around '73 along with the MC1330
> video detector as a TV IF system. It didn't sell that
> well in quantities (presumably) and both were dropped
> from active production (Lansdale acquired masks and now
> makes the MC1350). The 1350 (8-pin DIP) should use the
> same die in the metal can MC1590. While neither one was
> ever touted as a super-champ low-noise device, it is what
> I consider respectable as to NF.

Wide open and at >20db reduction the noise figure is not bad at
all. Only that the apparent increase is noteable. I've seen it
occur with other topologies including simple bipolar or FET
stages (even tubes).

> The fact that it has
> differential input and differential output is convenient
> from the standpoint of circuit design. Especially so when
> input impedances (each side) has a dependable 5K R in
> parallel with about 5 pF total capacitance. Gain of both
> begins to fall above 75 MHz with output loads of 100 Ohms
> resistive. I've found no noticeable difference between
> differential input v. single-ended.

Those are the feature of the part that makes them desireable.

> That IC is what I term a "double Gilbert cell" in that
> AGC control current affects both differential inputs
> equally (or very nearly so). Whether one connects to
> both inputs or just one shouldn't make any difference
> other than output gain.

I call that circuit an analog four quadrant multiplier for what it
does not how it's made.

The feature of the Gilbert cell that applies for the AGC use is the
lack of DC shift at the output points keeping downstream
DC coupled stages at their undistrubed bias points.

However the active device that is in the agc control
positions is still a noise generator (as are all active devices)
and as agc increases it's contribution is additive to the
RF path devices. Makes little difference if the node where
outputs are combined see no DC shift the various diff amp
transistor as individual pairs do see a significant shift (100%
collector current to near 0).

It's easier to see using the older MC1550 or CA3028 diffamps
or even discretes in a diffamp with current source.

>>I also verified that the 1590 does same and also the CA3028
>>wired as differential AGC. Even tried three 2n3904s and
>>same result. The agc range was good and at full gain the
>>noise was ok but the noise increase at partial agc was surprizing.
>
> I've never encountered any "surprising" increase in noise
> at any AGC input to a 1590 or 1350 causing partial gain
> reduction. That is as true in 2005 as it was in 1973. If
> there is a SNR of 10 db at an RF carrier input of 3 uV and
> a gain reduction of 10 db for a 10 uV RF input results in
> 3 db more noise in the front end, the SNR with a 10 uV
> input is still higher than the one at 3 uV. What has been
> "lost" there?

The surprize is that I'd not considered the possibility that
the SN+N/N could degrade unevenly due to applied agc.
So I'd never paid attention until I was trying to improve an
earlier reciever design (ca1978) of my own and at the same
time aquired a copy of EMRFD and did some testing to verify
their resuts. Since the design was optimized for low RF
gain and high overload thresholds I was revisiting anything
that could better the design without loosing those features.
Note it's a single conversion system with high IF. The
problem was a MDS of -136dbm but the 10db Signal+N/N
point was around -110dbm and at ~121dbm it was worse
than at -130! The front end was common gate RF amp
(2n4416s) driving a pair of 4416s in a single balanced
mixer. Low noise but limited gain for better overload
performance. No agc before the IF. If needed there

are switchable resistive attenuators (3, 6,12db or 19db total).
Measured gain from antenna to IF is only 16db (after all losses).
Disable the agc or increase the threshold and it wasn't as
measurable or appeared to disappear.. The hunt was on.
The results were a surprize as there is no data for noise output
with no input or signal to noise with gain reduction. My Moto
databooks go way back, as do my National, RCA and
Signetics library. More current datasheets do not reflect any
improved information.

The revised RX used two stages of mpf102 Jfet in cascode
plus a diferential pair of 2n3904s to resolve the 5-10V agc to be
compatable with the new fet amp to replace the two MC1350s
and the problem of decreasing signal to noise as signal increased
with agc active disappeared. Not to say the fet amps did not do the
same thing only that the rate of noise increase was a smoother curve
from max gain to min gain. In retrospect a delaying AGC to the first
of the two 1350s could potentially have the same effect but was not
investigated. I may revisit it at some time as I still have the
original if module in the junkbox.

> Let's look at the original problem starting this thread:
> There was a claim of "increased noise" with AGC on, but
> no quantifiable data.

Thats a problem, the lack of data or information on the circuit.
Also I've repaired a few commercial radios that due to component
failure or "golden screwdriver" had the various operating conditions
sufficiently altered as to cause a similar problem.

> The sudden segue to stating that a
> certain IC is "bad" is a leap that defies good design
> practices to me. I'm not impressed that the ARRL had some
> test data in a publication; having been hands-on with this
> Motorola design for a number of years, I have a number of
> RCA lab notebook pages filled with my testing of it along
> with a patent involving it granted 1974...besides my own
> hobby notebooks.

That's nice but are the test results in error from two different
sources? No.

However, it's was a noteable weak point. But calling it bad is
your words. It's a point that needs to be understood and
allowed for. In a design with more RF gain and/or less mixer
noise it many not have been a factor or less of one. Also in the
case that brought it to a point for me even altering how agc is
applied might have achieved a better result.

Since the 1350 is at IF for most designs the noise is likely from
front end causes should be investigated first. One would hope the
design had secured the system noise performance before

the IF. However in low gain systems or system with no gain
before the mixer and first filters this may be problematic.

> Low-noise input amplifier design is an entirely separate
> subject and there are a number of other active devices
> which can do lower NFs than 5. What was orignally needed
> was some way of getting some numbers and test configuration
> of Andrea's problem...to pin down a possible reason for
> alleged increased noise with AGC applied, presumably a
> "partial AGC" application. [I can't quantify "partial"
> as a numeric value...maybe others can?]
>
>>I do most of my RX experimentation at 6/ 2M and 70cm SSB so
>>noise and overload perfomance are important to me. Images
>>are also a big problem as I'm near a lot of VHF/hf broadcast.
>
> [<shrug> I live about 6 miles from 50 KW KMPC on AM...]

10 miles from the Needham towers in MA. Not less than 8 VHF
broadcasters, then the usual crowd of UHF and now the
HDTV-UHF broadcasters and no small party of FM
broaccasters.

Oh and WKOX 1200 AM three miles away.

Then I have 9 hams within a 1 mile circle and two within 1500ft
running KW level at VHF. RFI are us. I understand overload
as >+15dbm on coax is common here.

It's an interesting design challenge to do low noise figure RX
and at the same time be overload resistant in a harsh environment.

> If we can get back to the original claim of "increased
> noise with AGC applied" we might be able to help Andrea
> some. We don't know what Andrea has for a main receiver
> and interjecting some "badness" remarks by the ARRL about
> a certain IC isn't going to help clarify Andrea's problem.

Having tested and understood the problem I would say the
authors of EMRFD did a fair job of pointing out the points where a
device needs better understanding. A blanket "it's great" is lore,
testing it and understanding it is engineering. Having done the
work to understand it better I can appreciate the perfomance of
the part and it's limitations.

I still use it and have a tube of them because it's a useful part.
Just like the often reviled SA602 mixer.

It's relevence is I've seen this before and understood it's origin
and also elsehere. The other aspect is that if a commonly
accepted part is not fully understood and can lead to undesired
effects then, why not others. AGC is not a trivial thing to be
tacked on and considered a problem solver. Protects the ears

but it's place in the reciever is not always understood. It does not always solve things like gross overload at the front end or possibly further down or outside the agc detectors bandwidth.

But a lack of information about his radio doesn't help us either. We do not know for instance what topology is used for RF and if any agc is even applied to it.

Allison

4074. Re: STFU - Mark, Just ignore them.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-20 22:51:11 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <zH5Gg.10949$xp2.6448@newsread1.news.pas.earthlink.net>
Source record: 10875
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

"Not Cocksucker Lloyd" <not_time_turd_lloyd@yahoo.com> wrote in
news:1155731470.893781.68090@m73g2000cwd.googlegroups.com:

>
> an_old_friendless cocksucker wrote:
>> cease
>
> Cease breathing.
>
>

Mark, Just ignore them.

They only tease you because of the stupid things you say when you
follow up. Just ignore them and they'll give up.

Stop giving them reasons to tease you. It only makes you look
more stupid.

Take a break from the radio groups for a while, Maybe work on your
moon bounce some more.

SC

4075. Re: Retard Mark makes good spell - Mark, Just ignore them.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-20 22:51:42 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <2I5Gg.10959$xp2.8866@newsread1.news.pas.earthlink.net>
Source record: 10876
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

peewee_lloyd_davies@yahoo.com wrote in news:1155756718.845363.87450
@b28g2000cwb.googlegroups.com:

>
> an old fraud wrote:
>> Not Cocksucker Lloyd wrote:
>> > an_old_friendless cocksucker wrote:
>> > > cease
>> >
>> > Cease breathing
>> eom
>
> "eom?" BWHAHAHAHAHAHAHAHAHAHA!
>
>

Mark, Just ignore them.

They only tease you because of the stupid things you say when you
follow up. Just ignore them and they'll give up.

Stop giving them reasons to tease you. It only makes you look
more stupid.

Take a break from the radio groups for a while, Maybe work on your
moon bounce some more.

SC

4076. Re: Can I use a 120V Variac to get 220V?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-21 02:00:38 UTC
From: "Roger (K8RI)" <ValidAddress@my.com>
Message-ID: <8p4ie25psm2f3dcrbrof92sgrbtrc57hnv@4ax.com>
Source record: 10877

On Sun, 20 Aug 2006 08:11:33 GMT, mike <spamme0@go.com> wrote:

>John, N9JG wrote:
>> Your advice is elegant in its simplicity.
>
>And OPTIMISTIC in it's generality.
>While one might imagine situations where this technique is
>useful, it would be better to define a strategy that takes
>into consideration the exact configuration of the PS in
>your unspecified amplifier.
>
>If your caps don't need reforming, any technique will work.
>If they do, you're gonna have some current flow. It's not
>hard to imagine a scenario whereby you have 25W or more
>dissipated in your caps. I don't call this safe. A 100W
>light bulb will keep you from blowing up the rectifiers while
>you're blowing up the caps.

I had this happen with a 3 week old amp. One of the low voltage caps
blew. It sounded like a shotgun being fired in my basement. The
"can" hit the top of the 8877 amp and flattened out like a 38
wadcutter hitting something solid.

It doesn't have to be a boat anchor to have a cap blow.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com

4077. Re: Can I use a 120V Variac to get 220V?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-21 17:19:22 UTC
From: w8kzw@hotmail.com
Message-ID: <1156180762.325147.141100@74g2000cwt.googlegroups.com>
Source record: 10878

Thanks for the (mostly helpful) replies, guys.

Applying each one of the two ends of the 220V coil of the transformer to the 220V legs of the amplifier plug made sense. I guess I was mostly wrestling with how to handle the gounded / grounding lug of the amplifier plug.

Gary said to just leave it floating, but wouldn't grounding it be safer?

4078. Re: Can I use a 120V Variac to get 220V?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-21 20:42:42 UTC
From: jgboyles@aol.com
Message-ID: <1156192962.932636.260320@b28g2000cwb.googlegroups.com>
Source record: 10879

w8kzw@hotmail.com wrote:
> Thanks for the (mostly helpful) replies, guys.
>
> Applying each one of the two ends of the 220V coil of the transformer
> to the 220V legs of the amplifier plug made sense. I guess I was
> mostly wrestling with how to handle the gounded / grounding lug of the
> amplifier plug.
>
> Gary said to just leave it floating, but wouldn't grounding it be safer?

Since you will be running the variac through a 110/220v isolation transformer, you will lose reference to the utility ground, so there is no reason to connect up the ground on the amp. If by some chance the 110v windings in the amp are on different cores, or are actually 2 transformers, then you would need a common (ground) reference for the two. This is probably not your case, be nice if you had a schematic.

Gary N4AST

4079. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-21 21:15:01 UTC
From: Andrea Baldoni <abaldoni@nospam.invalid>
Message-ID: <N-WdnTcdJenIv3fZnZ2dnUVZ8tGdnZ2d@kpnqwest.it>
Source record: 10880

LenAnderson@ieee.org <LenAnderson@ieee.org> wrote:

: If we can get back to the original claim of "increased
: noise with AGC applied" we might be able to help Andrea
: some. We don't know what Andrea has for a main receiver
: and interjecting some "badness" remarks by the ARRL about
: a certain IC isn't going to help clarify Andrea's problem.

Sorry for the short answer. The receiver is a Yaesu FR-101 with his internal 2m converter. Actually, I'm doing some recalibration but I didn't found at now nothing really out. I just noted that, mostly noticeable in FM mode (by noise increasing) but present in all modes looking s-meter, the response of the IF was not a gaussian with a flat top. In the center there was a little decreasing area. If you tune it perfectly, you had a sligtly less signal than little up or down in freq.

So I started recalibrating. I had stopped because I had trouble with the noise blanker. In the manual, there is a indication of a test point where hook a voltmeter, but there is not any test point nor any indication on the schematic where the exact point is. The transformer is T116, maybe someone could help. Tomorrow I'll figure out what to do, I think I'll hook the voltmeter as to measure the voltage rectified, at the gate of the FET. If you have the schematic (it's freely downloadable in many places) maybe you could tell if I'm right.

Anyway, thankyou very much you want to help troubleshooting my receiver, but I was using what I noted (increase in noise with AGC on) mainly to start a general discussion about AGC implementation and effects, and his future in digital receivers as well as in homebrew very high-end ones. It has started, and it's very interesting.

Ciao,
AB

... Andrea Baldoni, 2002: messaggio non protetto da copyright.

4080. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-21 22:24:47 UTC
From: Andrea Baldoni <abaldoni@nospam.invalid>
Message-ID: <-N-dnT3VvvMyr3fZRVnyrg@kpnqwest.it>
Source record: 10881

Roy Lewallen <w7el@eznec.com> wrote:

: The bottom line is that I'd be hesitant to trust just about any number
: for a "worst case" maximum signal strength. Be sure to test any proposed
: design on 40 meters for a while from your location in Europe.

Uh. Very interesting, Roy.
Even a receiver with AGC has his own limits and probably what you experienced
would have surely overload most commercial ones...
Some numbers must be fixed, even if very high ones. So, how one could
proceed?

Ciao,
AB

... Andrea Baldoni, 2002: messaggio non protetto da copyright.

4081. Re: Can I use a 120V Variac to get 220V?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-22 00:46:00 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1156207560.495067.75020@m79g2000cwm.googlegroups.com>
Source record: 10882

j
>
> All he was asking was how to hook up a variac. Seemed simple enough.
>
> Gary N4AST

True. But why lose the chance for an argument? - my issue was with the over complication of a simple task....and if someone needs to ask questions on how to set up a variac and a transformer, then the keep it simple approach (ie, the light bulb) has much to recomend it.

Andrew VK3BFA.

4082. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-22 02:16:20 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <6tpke2h5uksplnv3ud85rki5nfbdjjnca5@4ax.com>
Source record: 10883

On Mon, 21 Aug 2006 16:15:01 -0500, Andrea Baldoni
<abaldoni@nospam.invalid> wrote:

>LenAnderson@ieee.org <LenAnderson@ieee.org> wrote:
>
>: If we can get back to the original claim of "increased
>: noise with AGC applied" we might be able to help Andrea
>: some. We don't know what Andrea has for a main receiver
>: and interjecting some "badness" remarks by the ARRL about
>: a certain IC isn't going to help clarify Andrea's problem.
>
>Sorry for the short answer. The receiver is a Yaesu FR-101 with his internal
>2m converter. Actually, I'm doing some recalibration but I didn't found at
>now nothing really out. I just noted that, mostly noticeable in FM mode
>(by noise increasing) but present in all modes looking s-meter, the response
>of the IF was not a gaussian with a flat top. In the center there was a
>little decreasing area. If you tune it perfectly, you had a sligtly less
>signal than little up or down in freq.

Dual conversion for HF and triple conversion of 2m. There would
not be RF agc on the 2m converter. In FM modes you should see
limiting so agc is behavour is different.

>So I started recalibrating. I had stopped because I had trouble with the
>noise blanker. In the manual, there is a indication of a test point where
>hook a voltmeter, but there is not any test point nor any indication on the
>schematic where the exact point is. The transformer is T116, maybe someone
>could help. Tomorrow I'll figure out what to do, I think I'll hook the
>voltmeter as to measure the voltage rectified, at the gate of the FET.
>If you have the schematic (it's freely downloadable in many places) maybe
>you could tell if I'm right.

Likely a test point that is not marked on the board. I don't have
a print handy.

>Anyway, thankyou very much you want to help troubleshooting my receiver,
>but I was using what I noted (increase in noise with AGC on) mainly to
>start a general discussion about AGC implementation and effects, and his
>future in digital receivers as well as in homebrew very high-end ones. It
>has started, and it's very interesting.

Having experimented with recievers since before EE school and still
many decades later I find it challenging. Always looking for and at
new ideas.

Allison

4083. SolderSmoke #30: Solar pwr, IRF 510 amp, QST 50, BITX20, rockbound rigs, solar min?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-22 06:16:15 UTC
From: bill.meara@gmail.com
Message-ID: <1156227375.140032.44290@75g2000cwc.googlegroups.com>
Source record: 10884
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.basics

WE'VE MOVED! WE'VE MOVED! WE'VE MOVED! Please note new site for SolderSmoke. http://www.soldersmoke.com

Check out a video clip of "The Making of Solder Smoke #30" and "A Video Tour of M0HBR" at http://www.gadgeteer.us/VIDEO.HTM

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http://www.soldersmoke.com

Topics discussed in SolderSmoke #30:

-- Bill goes solar powered
-- Mike and the rock-bound rig
-- Steve Weber's IRF-510 amp
-- QST 50 Challenge
-- Farhan's BITX20
-- New Gadgeteer Video page
-- The earliest homebrewers
-- MIT courses on-line
-- Sound of the Sun, and Jupiter
-- Solar minimum at last?
-- MAILBAG: NT7S, WA8KNE, ZL1SAM, N3UMW, WB7AEI, NE1OB, NS5Z, K8WPE

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We hope you enjoy the program. Please send us feedback.

73 from London
Bill M0HBR N2CQR CU2JL
http://www.gadgeteer.us

4084. selecting bias inductors for amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-23 11:08:57 UTC
From: hq105862@hotmail.com
Message-ID: <1156331337.369646.48320@i3g2000cwc.googlegroups.com>
Source record: 10885

Hi,

I've been sleceting inductors for chip amplifiers based on the datasheets, but I would really like to understand what I should be doing.

If I am designing an amplifer that is to operate over say 3.4 to 4.2GHz, should I be looking for an inductor with self resonance above that band, or at centre frequency, and why?

(I know that at self resonance, the inductor will be resistive, below inductive, and above capacitive, but I don't know what I should be looking for.)

Should I be looking for high Q or low Q, and for what reasons would I choose each.

What numerical values actually equate to High Q and Low Q?

Is Q of 9 low, and Q of 35 high, for example?

thanks

4085. Re: selecting bias inductors for amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-23 16:46:52 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12ep1jthn8vi4a5@corp.supernews.com>
Source record: 10886

<hq105862@hotmail.com> wrote in message
news:1156331337.369646.48320@i3g2000cwc.googlegroups.com...
> If I am designing an amplifer that is to operate over say 3.4 to
> 4.2GHz, should I be looking for an inductor with self resonance above
> that band, or at centre frequency, and why?

The "safe" advice is to choose one where the SRF is above the band you're designing for, but strictly speaking you can usually get away with SRF within the band or even a little below.

Your inductor can be modeled as an "ideal" inductor with a capacitor in parallel. Up until resonance, the reactance of the physical inductor is positive and varies (roughly) linearly with frequency. At resonance, the reactance of the capacitor is equal but opposite that of the inductor so you have Yin = 1/sC + sL = 0 --> an open circuit. Above resonance, the physical inductor still has positive reactance but now it's decreasing with frequency... not what you want!

> (I know that at self resonance, the inductor will be resistive, below
> inductive, and above capacitive, but I don't know what I should be
> looking for.)

You're looking for an impedance that's "significantly" (conservately, at least 10x but realistically often 4x is fine -- the more conservative you are, the less insertion loss you'll get) greater than the characteristic impedance of your transmission line. (If you run it through a calculator, you'll see that 50 ohms in parallel with, say, j*50*10 is still *very* close to 50 ohms, and even 50 ohms in parallel with j*4*50 really isn't half bad).

> Should I be looking for high Q or low Q, and for what reasons would I
> choose each.

About the only upside of a high Q inductor for biasing is slightly lower insertion loss, and a very significant downside is that the inductor's resonances above the band you're interested in will be "strong" and can cause large (>1dB), narrow perturbations (resonances) in the system's insertion loss. A lower Q will tend to "smooth out" those resonances.

Indeed, if you're looking to build a wideband bias circuit, you often use several inductors in series (small-medium-large, say) *with resistors in parallel that purpose de-Q the inductors*. Without the de-Qing resistors, the high-Q inductors have nasty interactions (two or three together will conspire to appear as something approaching a short circuit at some frequency!)...

> What numerical values actually equate to High Q and Low Q?

I'd call "high" Q>100 and "low" Q<10. High Q inductors are generally not obtainable in "chip" form; you need air cores or exotic dielectrics to get such high Q's at VHF/UHF. (For that matter, at least in my mind, high Q inductors generally shouldn't be used for biasing -- they're used for filters. :-))

> Is Q of 9 low, and Q of 35 high, for example?

35 is "middle of the road, drifting towards low." Q=35 is a decent inductor to use for biasing... not too lossy, but lossy enough to avoid the resonance problems discussed above.

---Joel

4086. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-23 19:52:56 UTC
From: tim gorman <tgorman2@cox.net>
Message-ID: <ombice.s81.ln@tg6124.ab0wr.net>
Source record: 10887

Andrea Baldoni wrote:

>
>
> LenAnderson@ieee.org <LenAnderson@ieee.org> wrote:
>
> : If we can get back to the original claim of "increased
> : noise with AGC applied" we might be able to help Andrea
> : some. We don't know what Andrea has for a main receiver
> : and interjecting some "badness" remarks by the ARRL about
> : a certain IC isn't going to help clarify Andrea's problem.
>
> Sorry for the short answer. The receiver is a Yaesu FR-101 with his
> internal 2m converter. Actually, I'm doing some recalibration but I didn't
> found at now nothing really out. I just noted that, mostly noticeable in
> FM mode (by noise increasing) but present in all modes looking s-meter,
> the response of the IF was not a gaussian with a flat top. In the center
> there was a little decreasing area. If you tune it perfectly, you had a
> sligtly less signal than little up or down in freq.
>

..... snip .....

>
> Ciao,
> AB

Are you sure you are seeing an AGC problem? What you describe above, with slightly less signal in the center, is typical of a *filter* with dip in the middle of the passband. This is *not* a result of increased signal strength causing more AGC and thus more noise when the receiver is tuned to exact center on a signal. It is the result of a filter design choice (lower cost) or the result of the filter tuning (tuned for better shape at the edges which causes more dip in the middle).

Without knowing more about the receiver I can't make any guesses as to what is in play here but I question if this is an AGC artifact.

tim ab0wr

4087. Re: buying stupid in the USA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-24 00:31:33 UTC
From: bobbbo <hrse4@yahoo.com>
Message-ID: <92901$44ecf536$d1cc7c6f$29385@snip.allthenewsgroups.com>
Source record: 10888
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.boatanchors,rec.radio.shortwave

"mike maghakian" <maghakian@comcast.net> wrote in message
news:NaKdnUoccopEXXHZnZ2dnUVZ_q2dnZ2d@comcast.com...
> sometimes people complain when I point out people paying real stupid
prices
> for something on eBay.

The reason for that is Hamfests and Swap Meets in general are DEAD.
Finished! Kaputski! Stick-a-fork-into-it! (etc..etc..)
Dayton Included too. I went to Dayton this year after a 5 Year sabbatical.
Fully 1/3'rd of the outside vendor spaces were empty.
Just 5 Years ago this was a rarity and 10 years ago it was downright
impossible.

Why? Reasons are many....aging ham/swl population, SK's, health/travel,
cost
of gas food lodging etc... then again, why drive when you can order new
online
an it's at your door via UPS in a few days?

Ham radio is changing and it is aging. more than HALF the hams I used
to talk with on 75M HF just from 10 Years ago are all SK's. That alone
speaks volumes folks!

E-Bay did not kill hamfests. Hams themselves are dying off and
most of the stuff is ending up on e-Bay where it's a feeding frenzy.
This too will end in a few (10?) Years time also.

In short....Wayne Green (W2NSD) had it right all along folks.

Enjoy the rest of the ride.

4088. Re: buying stupid in the USA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-24 02:05:36 UTC
From: Mr Fed UP <mrfedup@bellsouth.net>
Message-ID: <gM7Hg.6401$e9.971@bignews4.bellsouth.net>
Source record: 10889
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.boatanchors,rec.radio.shortwave

Yep! All them are reasons I have stopped attending Dayton and many other hamfests.
But ebay is also a contributor. I got some 2m old crystal rigs via ebay and shipping
cost more than the radios. My last time at Dayton a few years ago it was a costly
one day ticket (my health not good either) and $8 to park in a handicap parking spot
that might as well been down at the mall it was so far. I thought handicap parking
meant CLOSE to the doors. With Gas about $3 a gallon depending on the wind...
another $100 bucks down the tail pipe. The items for the most part these days
are "vintage" things that have been to more hamfests than I have or they are
"Like New" and priced as new. Most "Homebrew" projects in magazines and
books these days have little chance of success with the ol' junk box and requires
a large part of it to be bought and often via mail. "What radio supply store?"
When you do get to a hamfest the people are rude, bump into you, step on you,
just same as many drivers on the road have aggressive attitudes. All the fun of the fest's
has gone as well as a pleasurable drive getting there has gone. And the total cost
of just going is 1/2 the cost of a new 2m rig. UGH!!

Oh and don't forget other tech'y things like the cell phones that has displaced a lot
of would be radio operators for maybe contacts with more secure and reliable
contacts. 2m and 70cm not as impressive as it used to be. "What do you mean,
point the antenna UP?" LOL ;-) My wireless home phone and my computer
has more MHZ than my radio now. ;-(

Maybe it's as well though. Having started in the TUBE days and seeing SMD parts
now I can't find, or use if I could find them for projects... might be appropriate that we go
out together in a few years.

Sorry I missed the original post to this thread. Hope it didn't wander too far...

Have rag chew paper too . LOL

de K4TWO Gary OT
--
emailto: k4two@spamspoiler.arrl.net

"bobbbo" <hrse4@yahoo.com> wrote in message
news:92901$44ecf536$d1cc7c6f$29385@snip.allthenewsgroups.com...
>
> "mike maghakian" <maghakian@comcast.net> wrote in message
> news:NaKdnUoccopEXXHZnZ2dnUVZ_q2dnZ2d@comcast.com...
>> sometimes people complain when I point out people paying real stupid
> prices
>> for something on eBay.
>
> The reason for that is Hamfests and Swap Meets in general are DEAD.
> Finished! Kaputski! Stick-a-fork-into-it! (etc..etc..)
> Dayton Included too. I went to Dayton this year after a 5 Year sabbatical.
> Fully 1/3'rd of the outside vendor spaces were empty.
> Just 5 Years ago this was a rarity and 10 years ago it was downright
> impossible.
>
> Why? Reasons are many....aging ham/swl population, SK's, health/travel,
> cost
> of gas food lodging etc... then again, why drive when you can order new
> online
> an it's at your door via UPS in a few days?
>
> Ham radio is changing and it is aging. more than HALF the hams I used
> to talk with on 75M HF just from 10 Years ago are all SK's. That alone
> speaks volumes folks!
>
> E-Bay did not kill hamfests. Hams themselves are dying off and
> most of the stuff is ending up on e-Bay where it's a feeding frenzy.
> This too will end in a few (10?) Years time also.
>
> In short....Wayne Green (W2NSD) had it right all along folks.
>
> Enjoy the rest of the ride.
>
>

4089. Re: buying stupid in the USA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-24 03:04:42 UTC
From: ole droopy-drawers <eggnoganeverclear@binarynet.net>
Message-ID: <26e22$44ed1726$d1cc566b$31136@snip.allthenewsgroups.com>
Source record: 10890
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.boatanchors,rec.radio.shortwave

"Mr Fed UP" <mrfedup@bellsouth.net> wrote in message
news:gM7Hg.6401$e9.971@bignews4.bellsouth.net...

> My wireless home phone and my computer
> has more MHZ than my radio now. ;-(
> de K4TWO Gary OT

Gary my boy, you just broke the DaVinci Code. :-)

That statement alone noted above speaks sheer volumes for those
educated and or intelligent enough to comprehend
the implications of the same. Thanks for a most refreshing posting.

4090. Re: buying stupid in the USA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-24 03:17:04 UTC
From: m II <c@in.the.hat>
Message-ID: <QS8Hg.14999$Ch.13074@clgrps13>
Source record: 10891
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.boatanchors,rec.radio.shortwave

ole droopy-drawers wrote:

> "Mr Fed UP" <mrfedup@bellsouth.net> wrote in message
> news:gM7Hg.6401$e9.971@bignews4.bellsouth.net...
>
>> My wireless home phone and my computer
>> has more MHZ than my radio now. ;-(
>> de K4TWO Gary OT
>
> Gary my boy, you just broke the DaVinci Code. :-)
>
> That statement alone noted above speaks sheer volumes for those
> educated and or intelligent enough to comprehend
> the implications of the same. Thanks for a most refreshing posting.

That has long been common knowledge to those of us who noticed the
downhill slide of radio receiver quality when the Volume knobs became
larger than the Tuning knobs.

mike

4091. Re: buying stupid in the USA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-24 07:20:00 UTC
From: "Dr. Anton T. Squeegee" <SpammersBlow@dev.null>
Message-ID: <MPG.1f56f2fe8927a6f9896fe@news.drizzle.com>
Source record: 10892

In article <92901$44ecf536$d1cc7c6f$29385@snip.allthenewsgroups.com>,
hrse4@yahoo.com (known to some as bobbbo) scribed...

> "mike maghakian" <maghakian@comcast.net> wrote in message
> news:NaKdnUoccopEXXHZnZ2dnUVZ_q2dnZ2d@comcast.com...
> > sometimes people complain when I point out people paying real stupid
> prices
> > for something on eBay.
>
> The reason for that is Hamfests and Swap Meets in general are DEAD.
> Finished! Kaputski! Stick-a-fork-into-it! (etc..etc..)

<snippety>

You could have fooled me. There's nearly a dozen swaps every year,
at different times of said year, here in the PacNorthwest.

The SF Bay Area, Lawndale (southern California), and San Diego all
have monthly hamateur swap meets. I regularly attend several. They're
about as far from "dead" as one can expect.

Yes, Greed-bay has had an effect on the quantity and variety of
equipment that shows up at such events. However, there still seems to be
plenty to go around.

Suggestion: Research before you generalize.

73 de KC7GR

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute
(Known to some as Bruce Lane, KC7GR)
http://www.bluefeathertech.com -- kyrrin a/t bluefeathertech d-o=t calm
"Salvadore Dali's computer has surreal ports..."

4092. Re: selecting bias inductors for amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-24 07:22:44 UTC
From: hq105862@hotmail.com
Message-ID: <1156404164.056431.323370@h48g2000cwc.googlegroups.com>
Source record: 10893

Hi Joel,

Thanks for a great reply, and good example of why usenet is so good!.

best regards

4093. HP Impedance measurements book

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-24 09:29:38 UTC
From: "Gian, I7SWX" <i7swx@yahoo.com>
Message-ID: <1156411778.761963.296700@b28g2000cwb.googlegroups.com>
Source record: 10894

Hi All,

for those fiddling with measurements and not following the N2PK-VNA
project I have just "stolen" from Paul, N2PK, the following message
(and downloaded the book).

73

Gian
I7SWX

There is a wealth of information regarding impedance measurement in:

<http://cp.literature.agilent.com/litweb/pdf/5950-3000.pdf>

--
73,
Paul, N2PK

4094. Re: HP Impedance measurements book

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-24 10:26:37 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <_q-dnbFhoeRE43DZnZ2dnUVZ8tCdnZ2d@pipex.net>
Source record: 10895

> There is a wealth of information regarding impedance measurement in:
>
> <http://cp.literature.agilent.com/litweb/pdf/5950-3000.pdf>
++++++++++++++++++++++++++++++++
Indeed a knowledge treasure ,at least for an amateur like myself.

Great learning stuff

Frank GM0CSZ / KN6WH

4095. Re: buying stupid in the USA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-24 17:34:42 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12eropjloqlik6a@corp.supernews.com>
Source record: 10896
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.boatanchors,rec.radio.shortwave

"Mr Fed UP" <mrfedup@bellsouth.net> wrote in message
news:gM7Hg.6401$e9.971@bignews4.bellsouth.net...
> My last time at Dayton a few years ago it was a costly
> one day ticket (my health not good either) and $8 to park in a handicap
> parking spot
> that might as well been down at the mall it was so far.

I believe the admission prices at Dayton are largely driven by the "going rate" for the Hara Arena; renting large spaces like that is *quite* expensive. The prices are certainly not high compared to similarly sized non-amateur conventions I've attended.

The handicapped parking largely seems to be an issue because *so many* people request it these days; it's impossible to have literally 300 handcapped parking spots *all* close to the door. I agree that you're probably better off parking in a handcapped spot at the mall and riding the shuttle bus.

I believe that for hamfests to continue being successful, they're going to have to concentrate more on educational seminars, demonstrations, and events (transmitter hunts, contests, etc.) rather than just a swapmeet.

I think it's a often sign of trouble when any organization seems to spend an inordinate amount of time worrying about their own numbers rather than just engaging in what it is that brought them together in the first place and letting the membership numbers drive themselves. Ham radio (or at least the ARRL) seem quite preoccupied with membership levels...

> My wireless home phone and my computer
> has more MHZ than my radio now. ;-(

:-) Yeah, I know what you mean. To some degree FCC regulations have held back the development of amateur radio, but on the other hand the number of amateurs out there who could successfully *design* or even *assemble* something similar in complexity to a cell phone is miniscule.

> Maybe it's as well though. Having started in the TUBE days and seeing SMD
> parts
> now I can't find, or use if I could find them for projects... might be
> appropriate that we go
> out together in a few years.

Parts availability today is, in many cases, far better than ever before. Mouser and DigiKey are real treasure troves of inexpensive RF parts, you know in the click of a mouse what the stock status is, and they deliver quickly.

---Joel Kostad

4096. Re: HP Impedance measurements book

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-25 03:50:40 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1156477840.713027.277950@i42g2000cwa.googlegroups.com>
Source record: 10897

Highland Ham wrote:
> > There is a wealth of information regarding impedance measurement in:
> >
> > <http://cp.literature.agilent.com/litweb/pdf/5950-3000.pdf>
> ++++++++++++++++++++++++++++++++
> Indeed a knowledge treasure ,at least for an amateur like myself.
>
> Great learning stuff
>
> Frank GM0CSZ / KN6WH

You can get a similar appnote from QuadTech at www.quadtech.com
"LCR Measurement Primer," 4th Edition, 60 pp. QuadTech took over
the LCR bridge and electronic instruments from General Radio Co.

A few sites have copies of General Radio's "Experimenter" which
might be of interest to those looking behind front panels for
intimate details. [nothing beats the HP Journal in my mind but
others mileage may vary]

Also, at www.tm.agilent.com there is a copy of Hewlett-Packard
Journal, Volume 29, Number 4, December 1977, which gives a good
description of their old HP-4262A LCR Meter.

LenAnderson@ieee.org

4097. looking for a yaesu ft747gx owners manual

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-25 07:37:24 UTC
From: hamguy1 <hamguy1@optusnet.com.au>
Message-ID: <44eea8b3$0$22363$afc38c87@news.optusnet.com.au>
Source record: 10798
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,free.uk.amateur-radio,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

gi guys, im in australia i was wondering does anyone have access to a site to download owners manuals etc on cd etc prerfably for free ,thanks in advance david nsw australia .

4098. Re: looking for a yaesu ft747gx owners manual

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-25 07:50:05 UTC
From: "Guy P. Distaffen" <guypd@rochester.rr.com>
Message-ID: <NYxHg.28225$8j3.11694@twister.nyroc.rr.com>
Source record: 10799
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,free.uk.amateur-radio,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

http://www.three-peaks.net/FT-747GX_Manual.pdf

"hamguy1" <hamguy1@optusnet.com.au> wrote in message
news:44eea8b3$0$22363$afc38c87@news.optusnet.com.au...
> gi guys, im in australia i was wondering does anyone have access to a site
> to download owners manuals etc on cd etc prerfably for free ,thanks in
> advance david nsw australia .
>

4099. Re: HP Impedance measurements book

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-25 09:17:13 UTC
From: "Gian, I7SWX" <i7swx@yahoo.com>
Message-ID: <1156497433.179853.81000@m73g2000cwd.googlegroups.com>
Source record: 10800

Hi,

following Len message I have downloaded the "LCR Measurement Primer," .
Nice booklet.
I also discovered an applications collection "The LCR Collector" on the
same site. There are infos already reported in the Primer but extra
measurements.

Good sharing

73

Gian
I7SWX

LenAnderson@ieee.org wrote:
> Highland Ham wrote:
> > > There is a wealth of information regarding impedance measurement in:
> > >
> > > <http://cp.literature.agilent.com/litweb/pdf/5950-3000.pdf>
> > ++++++++++++++++++++++++++++++++
> > Indeed a knowledge treasure ,at least for an amateur like myself.
> >
> > Great learning stuff
> >
> > Frank GM0CSZ / KN6WH
>
> You can get a similar appnote from QuadTech at www.quadtech.com
> "LCR Measurement Primer," 4th Edition, 60 pp. QuadTech took over
> the LCR bridge and electronic instruments from General Radio Co.
>
> A few sites have copies of General Radio's "Experimenter" which
> might be of interest to those looking behind front panels for
> intimate details. [nothing beats the HP Journal in my mind but
> others mileage may vary]
>
> Also, at www.tm.agilent.com there is a copy of Hewlett-Packard
> Journal, Volume 29, Number 4, December 1977, which gives a good
> description of their old HP-4262A LCR Meter.
>
> LenAnderson@ieee.org

4100. Re: Can I use a 120V Variac to get 220V?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-25 09:46:50 UTC
From: mike <spamme0@go.com>
Message-ID: <eGzHg.15223$RQ5.8939@trnddc03>
Source record: 10801

Andrew VK3BFA wrote:
<tirade 1 deleted
>
> Rubbish. Where do you get this 25w figure from,
<tirade 2 deleted>

Well, you could do the math...it's easy.
I was too lazy to do the nonlinear math for the lamp.
But an experienced (good) engineer knows how to
quickly make approximations to weed out BAD ideas.
That skill is uncommon. You'd think it's obvious.
And the GOOD engineers do it instinctively.
But the other 99% just don't get it. They'll head
down the dead-end road 'till they reach the end
then bang their head on the barricade. A (good)
engineering manager shines a light on those dead-end
barricades. See, there are situations where a light
bulb can fix a problem.

When the problem is largely unspecified, a (good)
consultant requests specificity. It's easy to
ASSUME that it doesn't have tube rectifiers, but we
don't really know.
When the consequences can be BAD, and the problem
is unspecified, a (good)
consultant recommends a conservative approach.
And when the original poster merely requested clarification
on a conservative approach, it's low risk. Proposing
a higher risk option is ill advised.

A (good) teacher tries to understand the implications of
the question and keep the student out of harm's way.

I'm gonna pull some numbers outa my ass, 'cause that's
where I keep my common sense. That way, I get a new
supply every day.

The series light bulb likely works 99.99% of the time.
But doing nothing probably works 99.98% of the time.
If your estimates are different, state them. How many times
have you turned on your amp? How many times has it blowed up
because you didn't reform the caps?

At the risk of repeating myself...IF your caps NEED reforming,
it's wise to bring them up slowly with a variac. Adding the
series light bulb will make it even safer, but only if appropriately

sized and you're paying attention...there's that pesky specificity again.

If you're really interested in reforming caps, take them out
and use a variable power supply with a BIG resistor separately for each
one. Do it very slowly...but nobody really asked that...
Ya see, if you've got series caps...more pesky specificity...
a leaky one can cause the good one to fail. But nobody aked that
either. And maybe they've got equalizing bleeders that can mitigate
the problem...assuming one's not open and making the situation
worse...but nobody asked that either.

An interesting question might be, "how do you refurbish an amp that
hasn't been turned on in a while?" But nobody asked that...

Shooting from the hip, firing off the one true, onesizefitsall, solution
when you don't know the particulars and are not accountable for the
result is...
well...it's the "internet way"!

mike

4101. Re: looking for a yaesu ft747gx owners manual

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-25 10:55:52 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <gdOdnWJVYf-oSnPZRVnytw@pipex.net>
Source record: 10802
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,free.uk.amateur-radio,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

```
>> gi guys, im in australia i was wondering does anyone have access to a site
>> to download owners manuals etc on cd etc prerfably for free ,thanks in
>> advance david nsw australia .
=======================================
Suggest you go to www.mods.dk select manuals select Yaesu You'll
find manual and circuit diagramme somewhere down the bottom of the list.

Unless you support the site financially you can download ONLY 1 document
each day .

Good Luck

Frank GM0CSZ / KN6WH
```

4102. Re: Can I use a 120V Variac to get 220V?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-25 13:04:41 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1156511081.356559.14800@i42g2000cwa.googlegroups.com>
Source record: 10803

mike wrote:
> Andrew VK3BFA wrote:
> <tirade 1 deleted
> >
> > Rubbish. Where do you get this 25w figure from,
> <tirade 2 deleted>
>
> Well, you could do the math...it's easy.

> Shooting from the hip, firing off the one true, onesizefitsall, solution
> when you don't know the particulars and are not accountable for the
> result is...
> well...it's the "internet way"!
>
> mike

RANT
ON.....
I am NOT disputing your theory - its correct as far as it goes, youve left out lots of other factors that, ideally, should be considered in this case, But its irrelevant to the original question. And in real life I would ignore it as being too anal retentive.

If the original poster needed to ask how to hook up two transformers, then your quasi mathematical analysis would be totally innapropriate to the job specifications. Did you think of this at all? It is covered in most 1st year engineering course...(RTFM)

My method, with the light bulb, might be crude, (it is crude, so?) but it will work. And have proved that it works, more times than I can remember. Linear and switching power supplies.

A simple question - using the light bulb method, whats the WORSE that can happen? If the amp is horribly faulty (and lets not even bother about doing insulation tests on the (old) transformer, that would make it even more complicated) then the light bulb will light to full brilliance.

Even an engineer could see that theres something wrong, and then fault find it. (After doing the math, of course)

The variac method - again, the same simple question - whats the WORSE thing that could go wrong. And I will answer that, not from theory, but from practice. The voltage is slowly ramped up until something fails abruptly and catastrophically. With no current limiting beyond a mains fuse in the variac (You did check its rating, didnt you?) the electros

will disintigrate like shotgun cartridges generating lots of additional work. (no harm was done to the person, being a trained engineer they had safety goggles on...didnt they?)

(The above assumes its a linear supply - if its SMPS, then the switching devices sacrifice themselves in a vain attempot to save the fuse)

I have spent my entire working life in this field - working as a technician fixing up the design problems of engineers. Stuff that any competent technician would know NOT to do, from practical experience. In my working life, I have met approx 5 competent engineers. The rest were theoretical bullshit artists who soon moved into management purely on the strength of having a degree - they were as hopeless at that as they were at engineering, but there they had less chance to do actual damage.

Are you a "working" engineer - do you own a soldering iron? - lots of theory, plenty of if/but/maybe/ because/planning, but no real appreciation of what the problem is - firing up an old amplifier. Thats all - its not a design exercise, theres no cahce of a Nobel Prize in this one, the project doesnt need to be managed, no consultants needed to give a "proffessional " opinon, no SPICE models needed - just how to power up an amplifier with minimal damage.

RANT
OFF.....
.....

woo.....

TIRADE
ON.....
.....

And I am heartily sick of "armchair experts" making life bloody complicated when someone asks a legitimate question that is best answered without a theoretical textbook analysis - I have seen far too many people at radio clubs made to feel inadequate because some smartarse engineer has given a long winded incomprehensible, irrelevant answer to a simple question. These people leave, and dont bother to come to any more meetings, or ask any more questions.

One of the best teachers I ever had was an engineer - a very rare person, a brilliant teacher and a competent engineer. He woked out where the question was coming from, ie the level the student was capable of understanding - he then started from basic principles, with great patience, and took the student forward until they could understand the rocket science behind the question.

And if you want to see a good textbook using this method, grab a copy of 'The Art of Engineering" by Horowitz(sp) and Hill. read it - you might learn something from it about communication skill.

If you cant help, dont hinder.

Andrew VK3BFA.

I

4103. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-25 18:06:55 UTC
From: Andrea Baldoni <abaldoni@nospam.invalid>
Message-ID: <Vl-dnTwXhpOioXLZnZ2dnUVZ8qCdnZ2d@kpnqwest.it>
Source record: 10804

tim gorman <tgorman2@cox.net> wrote:

: Are you sure you are seeing an AGC problem? What you describe above, with
: slightly less signal in the center, is typical of a *filter* with dip in

I have the filter dip; it was not cured with realigning, but realigning was
anyway helpful to gain a dB or two.
I also see that disabling AGC cause less noise in FM while listening to 2m
converted to HF by the internal converter of the Yaesu FR-101. I didn't check
if enabling or disabling AGC cause any change in the filter dip, anyway I'll
check and report soon.

: Without knowing more about the receiver I can't make any guesses as to what
: is in play here but I question if this is an AGC artifact.

It uses a MC1496G as mixer and two CA3053 as IF. Plus some DG FETs, in first
RF amplifier, after the mixer... What information do you need?

Ciao,
AB

... Andrea Baldoni, 2002: messaggio non protetto da copyright.

4104. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-25 20:52:22 UTC
From: tim gorman <tgorman2@cox.net>
Message-ID: <1crnce.972.ln@tg6124.ab0wr.net>
Source record: 10805

Andrea Baldoni wrote:

>
>
> tim gorman <tgorman2@cox.net> wrote:
>
> : Are you sure you are seeing an AGC problem? What you describe above,
> : with slightly less signal in the center, is typical of a *filter* with
> : dip in
>
> I have the filter dip; it was not cured with realigning, but realigning
> was anyway helpful to gain a dB or two.
> I also see that disabling AGC cause less noise in FM while listening to 2m
> converted to HF by the internal converter of the Yaesu FR-101. I didn't
> check if enabling or disabling AGC cause any change in the filter dip,
> anyway I'll check and report soon.
>
> : Without knowing more about the receiver I can't make any guesses as to
> : what is in play here but I question if this is an AGC artifact.
>
> It uses a MC1496G as mixer and two CA3053 as IF. Plus some DG FETs, in
> first RF amplifier, after the mixer... What information do you need?
>
> Ciao,
> AB
>
> ... Andrea Baldoni, 2002: messaggio non protetto da copyright.

A block diagram would be helpful. Do you know if the AGC is being derived from the audio chain or from a sampling circuit in the IF chain?

Where are you turning off the AGC? In the FR-101? It sounds like you have a frequency converter feeding an HF receiver with an FM position. Is that correct? Could you just as easily tune in 2-m SSB as well as 2-m FM?

I can't seem to grasp why turning off the AGC would result in *less* noise, especially on FM.

The "noise factor" of the system is probably fixed by the converter, not the receiver. It would be like hooking an antenna to an HF receiver. Usually the noise in the receiver is set by the atmospheric noise the antenna picks up, not by the noise factor of the receiver. (On the higher HF bands, 15m and 10m, this may not always be the case) The same would apply for the 2m converter. Unless it is designed very well its contribution to the noise at the antenna of the receiver would probably mask the noise factor of the receiver itself.

If you could kill the power to the converter you could probably test for this by just killing the power and seeing what happens to the noise out of the receiver speaker. If it goes down, then the noise factor of the receiver is irrelevant. If it doesn't change then the converter is contributing less noise than the receiver itself.

If turning off the AGC causes less noise output then my first guess would be to look at what "turning off the AGC" is actually doing. Is it actually breaking the AGC loop so the AGC inputs to the CA3053 amps are left floating? Or does turning off the AGC actually mean putting a fixed bias on the CA3053's? Either case could potentially cause the gain of the CA3053's to actually go down with the AGC turned off and that might be what is going on.

Can you actually monitor the AGC loop to see what happens to the AGC voltage when the AGC is turned off?

tim ab0wr

4105. Re: Can I use a 120V Variac to get 220V?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-25 21:59:53 UTC
From: jgboyles@aol.com
Message-ID: <1156543193.700468.147250@b28g2000cwb.googlegroups.com>
Source record: 10806

> And if you want to see a good textbook using this method, grab a copy
> of 'The Art of Engineering" by Horowitz(sp) and Hill. read it - you
> might learn something from it about communication skill.
>
> If you cant help, dont hinder.
>
>
> Andrew VK3BFA.

Hi Andrew, don't you mean "grab a copy of 'The Art of Electronics' by Paul Horowitz and Winfield Hill"? As far as I can tell H & H never wrote 'The Art of Engineering'.

You made some halfway good points in the age old "me Technician you Engineer" argument, but you lost credibility when you recommended a book that doesn't exsist. Attention to detail, Engineers do, Technicians don't :-).

If you can't help, don't hinder.

This had nothing to do with the orginal question-sorry.

Gary N4AST

4106. QST June 2006

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-26 11:41:36 UTC
From: Rob <robnang34@gmail.com>
Message-ID: <QrWHg.80021$Eh1.71543@tornado.ohiordc.rr.com>
Source record: 10807

Would anyone have a copy of QST June 2006 that they could scan the article about building a homebrew 600 watt amplifier on page 39 or possibly know of a link where I could download it? Thanks, Rob WB8VWI

4107. Re: QST June 2006

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-26 13:13:35 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <hMCdnZKLF44P1W3ZnZ2dnUVZ_vednZ2d@comcast.com>
Source record: 10808

Try the Cleveland Public Library.

"Rob" <robnang34@gmail.com> wrote in message
news:QrWHg.80021$Eh1.71543@tornado.ohiordc.rr.com...
> Would anyone have a copy of QST June 2006 that they could scan the
> article about building a homebrew 600 watt amplifier on page 39 or
> possibly know of a link where I could download it? Thanks, Rob WB8VWI

4108. Re: radiomart descriptions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-26 13:42:02 UTC
From: Wesleywoo-woo <applegate444@yahoo.nosprem.com>
Message-ID: <bac77$44f04f82$d1cc790d$30393@snip.allthenewsgroups.com>
Source record: 10809
Cross-posted to: rec.ham-radio.misc,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.swap,rec.radio.boatanchors,rec.radio.shortwave

I have a better idea Mike. If you don't like the guy re-selling
things he bought at estate sales and other places, simply ignore him.
It's just that simple. Go to another Deli and get your Cornbeef on Rye
at another store. Life's too short to worry about ham radio dealers
that's fer damm sure! :)

"mike maghakian" <maghakian@comcast.net> wrote in message
news:8Y-dnQuvbIz2GHLZnZ2dnUVZ_uydnZ2d@comcast.com...
> look at this auction:
>
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&ssPageName=ADME:B:WNA:US:112&item=110023382429&id=
>
> the seller said he bought it in a radio mart acution and gives the
number.
> radio mart said it was "stunning" and "excellent"
> the seller is now noting all the problems if you read the question
section.
>
> for those of you considering a radiomart auction. consider that he thinks
> telling lies is standard operating procedure.
>
>

4109. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-26 18:12:54 UTC
From: Andrea Baldoni <abaldoni@nospam.invalid>
Message-ID: <2eCdnYEIhbm7Em3ZRVny2w@kpnqwest.it>
Source record: 10810

tim gorman <tgorman2@cox.net> wrote:

: A block diagram would be helpful. Do you know if the AGC is being derived
: from the audio chain or from a sampling circuit in the IF chain?

The AGC is derived sampling the RF level at the last IF. In the same point,
(using another diode, capacitor, etc.) there is the AM detector. The same RF
signal go to a diode balanced modulator along with BFO signal for CW and SSB
and to the input of FM IF amplifier (TA7061AP).

: Where are you turning off the AGC? In the FR-101? It sounds like you have a
: frequency converter feeding an HF receiver with an FM position. Is that
: correct? Could you just as easily tune in 2-m SSB as well as 2-m FM?

I have a FR-101 with the onboard 2m converter. Yes, I could tune 2m SSB but
it's difficult to find SSB on 2m here usually so I didn't any test. The FR-101
is CW/SSB/AM/Narrow AM in segments of the HF range, plus you could buy (as a
option) a onboard 2m converter, a onboard 6m converter and a onboard FM
detector. I have all boards installed, so I eventually could use FM on
HF as well as 2m or 6m.

: If you could kill the power to the converter you could probably test for
: this by just killing the power and seeing what happens to the noise out of
: the receiver speaker. If it goes down, then the noise factor of the
: receiver is irrelevant. If it doesn't change then the converter is
: contributing less noise than the receiver itself.

Turning on the 2m converter don't seem to change noise level, while instead
turning on the 6m converter seems to double the noise. Maybe it needs
realigning, I never use it so I don't know if it's working well.

: If turning off the AGC causes less noise output then my first guess would be
: to look at what "turning off the AGC" is actually doing. Is it actually

The AGC line is derived from a fixed voltage using a 9V zener, then the RF
GAIN pot permit to divide this voltage from 100% to ground and feed it (trough
a resistor) to the first RF amplifier of the HF receiver (a DG FET) as well as
the first RF amplifier of the 2m converter, and the same for 6m converter.
It is also fed to the last but one CA3053. Other amplifiers are fixed gain
I suppose.
Everything in the receiver needs to reduce gain, lower this voltage by more
or less shorting it to ground.
For instance, the standby button shorts it to ground, silencing the receiver
completely. The RF level at the last IF instead reduce it by means of common
emitter transistor: the AGC voltage from zener at the collector and the
rectified and filtered IF at the base.
When you disable AGC, you disconnect the collector of this transistor, thus

the signal is let alone to the level adjusted with RF gain pot (normally at maximum, so it is 9V).

Ciao,
AB

... Andrea Baldoni, 2002: messaggio non protetto da copyright.

4110. Re: QST June 2006

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-26 19:20:44 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <dr71f21lipnqg4f13useljrusc3g7dkvr0@4ax.com>
Source record: 10811

On Sat, 26 Aug 2006 11:41:36 GMT, Rob <robnang34@gmail.com> wrote:

>Would anyone have a copy of QST June 2006 that they could scan the
>article about building a homebrew 600 watt amplifier on page 39 or
>possibly know of a link where I could download it? Thanks, Rob WB8VWI

the design is a motorola published design. Communications Concepts
also sells parts to make it and has the schematic on their site.

Allison

4111. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-26 19:50:32 UTC
From: Andrea Baldoni <abaldoni@nospam.invalid>
Message-ID: <R4GdnfcXDfKVO23ZnZ2dnUVZ8qOdnZ2d@kpnqwest.it>
Source record: 10812

nospam@nouce.bellatlantic.net wrote:

: Dual conversion for HF and triple conversion of 2m. There would
: not be RF agc on the 2m converter. In FM modes you should see
: limiting so agc is behavour is different.

By looking closer at the AGC circuits, there is RF AGC also in the 2m
and 6m converters. However, the AGC involves not all amplifiers in this
receiver, just the first and the last but one. I often see different
configurations in receivers, where every amplifier is controlled.
Maybe they thought it would suffice.

: Likely a test point that is not marked on the board. I don't have
: a print handy.

I had calibrate it for the minimum voltmeter reading, because it appears that
the signal is negative over a positive DC bias, supplied by the JFET.
Probably there is another point where the signal is positive, anyway it
should be the same.

: Having experimented with recievers since before EE school and still
: many decades later I find it challenging. Always looking for and at
: new ideas.

I have read very interesting articles on QEX (by downloading them in PDF
format from the site) following back the chain of cross references starting
from "A software defined radio for the masses" to the R1 and R2.

Every designer has his own ideas about AGC, dynamic range, et all. Often
very different. While I never (as now) tried to design a receiver, I want
to carefully understand the reasons behind every implementation. So I could
build my own opinion and in future choose what I think better for a receiver
project.

Anther interesting argument is LO: DDS, PLL or DDS+PLL?

Ciao,
AB

... Andrea Baldoni, 2002: messaggio non protetto da copyright.

4112. Kenwood ST-1 Base Station schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-26 20:20:27 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1156623627.794705.75480@75g2000cwc.googlegroups.com>
Source record: 10813

Andy asks:

Does anyone have a schematic of a Kenwood ST-1, which
is the base station stand/charger for a TR2400, that they
could Email to me ? Thanks.

Andy in Eureka, Texas W4OAH

4113. Re: buying stupid in the USA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-26 20:47:42 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <zr2Ig.25108$j8.24391@bignews7.bellsouth.net>
Source record: 10814
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.boatanchors,rec.radio.shortwave

bobbbo wrote:
> "mike maghakian" <maghakian@comcast.net> wrote in message
> news:NaKdnUoccopEXXHZnZ2dnUVZ_q2dnZ2d@comcast.com...
>> sometimes people complain when I point out people paying real stupid
> prices
>> for something on eBay.
>
> The reason for that is Hamfests and Swap Meets in general are DEAD.
> Finished! Kaputski! Stick-a-fork-into-it! (etc..etc..)
> Dayton Included too. I went to Dayton this year after a 5 Year sabbatical.
> Fully 1/3'rd of the outside vendor spaces were empty.
> Just 5 Years ago this was a rarity and 10 years ago it was downright
> impossible.
>
> Why? Reasons are many....aging ham/swl population, SK's, health/travel,
> cost
> of gas food lodging etc... then again, why drive when you can order new
> online
> an it's at your door via UPS in a few days?
>
> Ham radio is changing and it is aging. more than HALF the hams I used
> to talk with on 75M HF just from 10 Years ago are all SK's. That alone
> speaks volumes folks!
>
> E-Bay did not kill hamfests. Hams themselves are dying off and
> most of the stuff is ending up on e-Bay where it's a feeding frenzy.
> This too will end in a few (10?) Years time also.
>
> In short....Wayne Green (W2NSD) had it right all along folks.
>
> Enjoy the rest of the ride.
>
>
The various "free flea" ham events that pop up here ins S FL are well
attended. They are short and sweet events opening at the crack of
dawn and ending by noon. Stuff for sale is a mix of old radios
from the 50's through the 90's (with a few WWII boat anchors here
and there), lots of computer crap (who wants pre-pentium stuff these
days?), and a few tube vendors. Also the usual guys just cleaning
out their junk boxes. Why pay to go to a big ham fest when you
can show up at a freebee? I usually don't find any real big bargains,
but I do bump into old friends, chew the fat, and usually take home
some needed parts for a project.

Maybe the flea markets at the big
shows are lean because all the sellers have dumped their stuff at
the free fleas? It is a pain to have to load up, set up, hang around
for two long days and then pack it all back in and go home. With
the free fleas you just open your trunk throw a blanket on the floor
or open up a folding table or two. 5 or 6 hours later, (not too
long a drag) you pack it up and go home. You'll take less stuff
to sell, and maybe have to go to a few free fleas to get rid of it all
but somehow it seems like less wear and tear on the old body.

I still like to go to one big hamfest a year though, just to see what
the big vendors have come up with.

4114. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-26 22:01:20 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <kef1f29k4nloov4f642r7ebkhqin68dal8@4ax.com>
Source record: 10815

On Sat, 26 Aug 2006 14:50:32 -0500, Andrea Baldoni
<abaldoni@nospam.invalid> wrote:

>nospam@nouce.bellatlantic.net wrote:
>
>: Dual conversion for HF and triple conversion of 2m. There would
>: not be RF agc on the 2m converter. In FM modes you should see
>: limiting so agc is behavour is different.
>
>By looking closer at the AGC circuits, there is RF AGC also in the 2m
>and 6m converters. However, the AGC involves not all amplifiers in this
>receiver, just the first and the last but one. I often see different
>configurations in receivers, where every amplifier is controlled.
>Maybe they thought it would suffice.

Often not every amplifier needs to be controlled. It's a matter of
van the overall gain change be achieved with fewest control points.

>
>: Likely a test point that is not marked on the board. I don't have
>: a print handy.
>
>I had calibrate it for the minimum voltmeter reading, because it appears that
>the signal is negative over a positive DC bias, supplied by the JFET.
>Probably there is another point where the signal is positive, anyway it
>should be the same.

Generally will be. What I have seen in some cases is where the no
signal resting point for gain control bias voltage is not correct and
the gain can go up a bit before going down. Often seen on oder
recievers where the large part of the radio is discrete devices
and the various setpoints have drifited from age or componenet
changes.

>: Having experimented with recievers since before EE school and still
>: many decades later I find it challenging. Always looking for and at
>: new ideas.
>
>I have read very interesting articles on QEX (by downloading them in PDF
>format from the site) following back the chain of cross references starting
>from "A software defined radio for the masses" to the R1 and R2.

I've build R1, R2, MiniR2. I happen to like the miniR2 and use on
with the matching T2 in 6m as my highest performing RX. Highest
performing in this case is best dynamic range and lowest noise.

SDR is an extension of that work. However since most of the digital
work is done at low IF (under 50khz) or at baseband all of the
frontend, filter and IF issues remain though the tradeoffs may be
different.

>Every designer has his own ideas about AGC, dynamic range, et all. Often
>very different. While I never (as now) tried to design a receiver, I want
>to carefully understand the reasons behind every implementation. So I could
>build my own opinion and in future choose what I think better for a receiver
>project.

Very true. What was considered best in class for 1960, 1970, 1980
and so on has changed considerably. However it's possible to
use older topologies with newer devices and obtain perfomance
unattainable back then. What is easiest to build and make perform
is usually a low gain approach using amplifers that do not overload
easily to get a balanced dynamic range and noise figure. I've seen
too many chase for a high gain for sensitivity at low HF only to
be overloaded with man made and atmospheric noise.

A good example of a strong staple topology is the Elecraft K2. A
very solid single conversion with medium high IF transceiver. The
basic design topology is 25 years old (look up Progressive RX,
QST) but, it's well executed using current tech parts. The manual
is available on line and worth reading and reviewing.

>Another interesting argument is LO: DDS, PLL or DDS+PLL?

I use Analog with premix for lowest close in noise. Though I
also have a DDS with PLL tracking filter and a straight PLL
system that has proven satisfactory at my favorite band (6M).
In each case considerable care was taken to well shield and
filter the signals used while using the best techniques. Executed
with care and with an eye for how it fits into the system all work
well. Of those (opinion follows) I find DDS has agility and stability
with the very noticeable tradeoff for spurious outputs. Due to that
I prefer to restrict raw DDS to narrow band systems or clean
them up with a tracking PLL. The cost is power, and great
care in shielding as the various oscillators and the concurrent
need for a microprocessor to do the translation of knobs, buttons
and tuning displays into the digital control for DDS can contribute
to a lot of undesired signals (birdies).

So the whole subject of the LO system can be as complex as the
rest of the reciever and be a significant factor in it's total
performance.

Allison

4115. Re: QST June 2006

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-27 01:07:00 UTC
From: "g. beat"
Message-ID: <mt2dnWBku8KkbW3ZnZ2dnUVZ_qSdnZ2d@comcast.com>
Source record: 10816

"Rob" <robnang34@gmail.com> wrote in message
news:QrWHg.80021$Eh1.71543@tornado.ohiordc.rr.com...
> Would anyone have a copy of QST June 2006 that they could scan the article
> about building a homebrew 600 watt amplifier on page 39 or possibly know
> of a link where I could download it?

> Thanks, Rob WB8VWI

Rob,

IF you desire to build a solid-state RF amplifier -- it will be for
education / build desire -- rather an economics (in other words -- a used
Ameritron/MFJ ALS-600 (with 4 MOSFETs) is often much cheaper.

It is advisable at 500/600 watt and greater -- that 24/28 VDC or 48/50 VDC
RF transistors be used -- lighter gauge wire - less amperage from power
supplies.

Next read all that you can about Helge Granberg, K7ES(sk) -- Finland's
version of Art Collins
who wrote most of the Application Notes for Motorola that all other
designers have used as the baseline for their designs.
http://www.communication-concepts.com/application_notes.htm

Amplifier Home building
G3TSO (an award winner)
http://www.qsl.net/g3tso/HFLinearFrameSet1.html

Communication Concepts (supplier of boards referenced in the June 2006 QST
article)
http://www.communication-concepts.com/

Tom Snowden's 600 watt version -- using the MRF150 RF transistors
http://www.k0gkd.com/ssamp.html

Pieter Ibelings, N4IP
BROADBAND, SOLID STATE AMPLIFIER FOR HF AND 6 METERS
http://www.ibelings.com/n4ip/mrf157.html

Joel F. Paladino, N6AMG(sk) also had articles on MOSFET design featured in
QST and QEX in 1980s (consult back issues)

UK design using new power-MOSFETs
http://www.picks.force9.co.uk/throb.htm

w9gb

4116. Re: QST June 2006

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-27 01:16:35 UTC
From: "g. beat"
Message-ID: <tPKdncMWas_ob23ZnZ2dnUVZ_rednZ2d@comcast.com>
Source record: 10817

"Rob" <robnang34@gmail.com> wrote in message
news:QrWHg.80021$Eh1.71543@tornado.ohiordc.rr.com...
> Would anyone have a copy of QST June 2006 that they could scan the article
> about building a homebrew 600 watt amplifier on page 39 or possibly know
> of a link where I could download it? Thanks, Rob WB8VWI

Rob -

June 2006 QST, page 39
Homebrew Solid-state 600 W HF Amplifier
Tom Sowden, K0GKD
A low-voltage amp based on one of K7ES' (Helge Granberg -sk) classic
application notes .

The link to Tom's web site (below) --
will provide not only the article contents but MUCH more than in the QST
article !
http://www.k0gkd.com/ssamp.html

4117. Re: QST June 2006

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-27 01:39:43 UTC
From: Rob <robnang34@gmail.com>
Message-ID: <zJ6Ig.80091$Eh1.5857@tornado.ohiordc.rr.com>
Source record: 10818

g. beat <@ wrote:
> "Rob" <robnang34@gmail.com> wrote in message
> news:QrWHg.80021$Eh1.71543@tornado.ohiordc.rr.com...
>> Would anyone have a copy of QST June 2006 that they could scan the article
>> about building a homebrew 600 watt amplifier on page 39 or possibly know
>> of a link where I could download it? Thanks, Rob WB8VWI
>
> Rob -
>
> June 2006 QST, page 39
> Homebrew Solid-state 600 W HF Amplifier
> Tom Sowden, K0GKD
> A low-voltage amp based on one of K7ES' (Helge Granberg -sk) classic
> application notes .
>
> The link to Tom's web site (below) --
> will provide not only the article contents but MUCH more than in the QST
> article !
> http://www.k0gkd.com/ssamp.html
>
>
Thank you for all of the info!! Rob

4118. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-27 02:30:47 UTC
From: tim gorman <tgorman2@cox.net>
Message-ID: <n40rce.s38.ln@tg6124.ab0wr.net>
Source record: 10819

Andrea Baldoni wrote:

.....

> The AGC line is derived from a fixed voltage using a 9V zener, then the RF
> GAIN pot permit to divide this voltage from 100% to ground and feed it
> (trough a resistor) to the first RF amplifier of the HF receiver (a DG
> FET) as well as the first RF amplifier of the 2m converter, and the same
> for 6m converter. It is also fed to the last but one CA3053. Other
> amplifiers are fixed gain I suppose.
> Everything in the receiver needs to reduce gain, lower this voltage by
> more or less shorting it to ground.
> For instance, the standby button shorts it to ground, silencing the
> receiver completely. The RF level at the last IF instead reduce it by
> means of common emitter transistor: the AGC voltage from zener at the
> collector and the rectified and filtered IF at the base.
> When you disable AGC, you disconnect the collector of this transistor,
> thus the signal is let alone to the level adjusted with RF gain pot
> (normally at maximum, so it is 9V).
>
> Ciao,
> AB

Ok, have you checked the Dual Gate FET to insure that the bias supplied by the RF gain control puts the device at maximum gain when the AGC is off?

Dual Gate FET's have transducer gain curves that are peaked curves. Depending upon the Gate 2 voltage, the transducer gain can actually go down as the Gate1 to Source voltage goes up.

I would still be interested in knowing *exactly* what the AGC voltage on the gate of the DGFET is for 1) AGC on, no signal, RF gain wide open, and 2) AGC off, no signal, RF gain wide open. It would also be interesting to know what the Gate 1 bias voltage is for each state as well.

I'll bet you'll find an interesting interaction between the bias voltages and the actual stage gain as the controls are manipulated.

tim ab0wr

4119. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-27 13:11:46 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <mh53f25aui947hnco6q500phqgbagsa3r5@4ax.com>
Source record: 10820

On Sat, 26 Aug 2006 21:30:47 -0500, tim gorman <tgorman2@cox.net>
wrote:

>Andrea Baldoni wrote:
>
>.....................................
>
>>
>> The AGC line is derived from a fixed voltage using a 9V zener, then the RF
>> GAIN pot permit to divide this voltage from 100% to ground and feed it
>> (trough a resistor) to the first RF amplifier of the HF receiver (a DG
>> FET) as well as the first RF amplifier of the 2m converter, and the same
>> for 6m converter. It is also fed to the last but one CA3053. Other
>> amplifiers are fixed gain I suppose.
>> Everything in the receiver needs to reduce gain, lower this voltage by
>> more or less shorting it to ground.
>> For instance, the standby button shorts it to ground, silencing the
>> receiver completely. The RF level at the last IF instead reduce it by
>> means of common emitter transistor: the AGC voltage from zener at the
>> collector and the rectified and filtered IF at the base.
>> When you disable AGC, you disconnect the collector of this transistor,
>> thus the signal is let alone to the level adjusted with RF gain pot
>> (normally at maximum, so it is 9V).
>>
>> Ciao,
>> AB
>
>Ok, have you checked the Dual Gate FET to insure that the bias supplied by
>the RF gain control puts the device at maximum gain when the AGC is off?
>
>Dual Gate FET's have transducer gain curves that are peaked curves.
>Depending upon the Gate 2 voltage, the transducer gain can actually go down
>as the Gate1 to Source voltage goes up.
>
>I would still be interested in knowing *exactly* what the AGC voltage on the
>gate of the DGFET is for 1) AGC on, no signal, RF gain wide open, and 2)
>AGC off, no signal, RF gain wide open. It would also be interesting to know
>what the Gate 1 bias voltage is for each state as well.

Tim,

Your hitting the specifics of what I refered to earlier. I'll repeat
it for emphasis.

What I have seen in some cases is where the no
signal resting point for gain control bias voltage is not correct and
the gain can go up a bit before going down. Often seen on oder
recievers where the large part of the radio is discrete devices
and the various setpoints have drifted from age or componenet
changes.

I have seen this on older radios where parts have been replaced or
the original parts used were at opposing ends of the allowable
tolerence. Occasionally a part like a zener doide can drift form
heating. The end result is the full gain voltage can be off or full
gain for a single stage can be off (high or low from optimum).
In one case it was a mechanical switch (agc/manual) causing
difficulty (leakage path). Other suspect components seen in
Japanese built radios are those commonly used ceramic disk
caps for bypasses, they can and do go leaky(high resistance),
or short and I've even seen microphonic. I have a reciever I
repaired where the DGfet developed a substrate to gate2 short
which casued all manner of unusual problems.

The worst case by far was one that the agc bias point had drifted
a bit high. When on manual agc the RX was hot. When agc was
enabled the RX sensitvity would drop noticeably. The problem
was the higher agc bias point had the IF and RF running harder and
producing more noise and when agc was turned on it would see the
noise and pull the agc voltage. That sounds ok save for the front
end was more agc sensitivve than the overbiased IF and the front
end would loose gain faster (it was 2 jfets cascode) rendering the
reciever less sensitive. The fix was repairing the internal voltage
regulator that fed 9V to most of the circuits (it was running at 11v
due to open zener).

Just a few examples of what can occur. I havent even gone into the
golden screwdriver problems when pots are tweeked for "more".

>I'll bet you'll find an interesting interaction between the bias voltages
>and the actual stage gain as the controls are manipulated.

I'd be inclined to agree.

Allison

4120. FS: Old/New Hardware

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-27 18:49:10 UTC
From: Rob Mills <robmills@cox.net>
Message-ID: <vOIlg.4708$xk3.1840@dukeread07>
Source record: 10821

I stumbled on to a hand full of old/new parts that I will never use which consist of,

3 ea Millen 39005 universal joint couplings for 1/4 " shafts.

2 ea right angled geared drives that terminate with 2 1/2 " X 1/4" shafts. I believe these to be National parts.

1 ea 5 & 3/4" X 1/8 " flex shaft (can bet cut to length) that has an isolated coupling on each end that will accept 1/4 " shafts. I also believe this to be National part.

These are quality items, probably 30 - 40 years old. I'll send any place in the continental US for $20. Rob Mills

4121. 7854 Tube/Motorola 9TS136401 Schematic?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-27 19:20:16 UTC
From: Christopher Bucca <christopherbucca@verizon.net>
Message-ID: <QfmIg.1945$XD1.1566@trnddc01>
Source record: 10822

Hello all. I'm looking for a circuit schematic to use this tube on 6 meters and 2 meters. So far I'm stumped. I think that this tube was used in some early commercial tansceivers, but I'm not 100% sure. Also would like to know if this is same tube as Motorola P/N 9TS136401
It is the same size as a 5894 but with much thicker plate pins as well as amuch beefier plate structure with an extra fin in the structure for cooling. Even the glass is thicker.I'd even consider buying the final section that used this tube. Any help at all would be greatly appreciated. Thanks and 73

Chris
KC2BZH@arrl.net

4122. Re: buying stupid in the USA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-27 19:29:14 UTC
From: Christopher Bucca <christopherbucca@verizon.net>
Message-ID: <eomIg.1946$XD1.387@trnddc01>
Source record: 10823
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.boatanchors,rec.radio.shortwave

My biggest gripe is that the SAME guys show up selling the SAME old crap that you have seen for the last 4 or 5 years now and the all think that they have stuff made out of pure diamonds. If the rest of us don't buy their overpriced crap then prices would come in line with reality. (getting off soapbox now...;-)

Chris
KC2BZH@arrl.net

4123. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-27 20:36:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12f40jd6gilt63c@corp.supernews.com>
Source record: 10824

Andrea Baldoni wrote:
> Roy Lewallen <w7el@eznec.com> wrote:
>
> : The bottom line is that I'd be hesitant to trust just about any number
> : for a "worst case" maximum signal strength. Be sure to test any proposed
> : design on 40 meters for a while from your location in Europe.
>
> Uh. Very interesting, Roy.
> Even a receiver with AGC has his own limits and probably what you experienced
> would have surely overload most commercial ones...
> Some numbers must be fixed, even if very high ones. So, how one could
> proceed?

If you really want to be rigorous about it, you could set up some kind of logging system, perhaps with an A/D converter and computer connected to a reference antenna and simple detector, to measure and log signal strengths over a long period of time. The tough part would probably be deciding what kind of filter to precede it with; maybe something typical of what you expect to use in a real receiver. Then you could do a statistical analysis on the logged signal strengths. Whether or not that's worth while would be up to you -- it would at least certainly make an interesting article. Or, you could build something and put a coarse step attenuator at the front end, noting how much attenuation you have to apply when operating in order to keep the spurs down.

Roy Lewallen, W7EL

4124. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-27 20:56:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12f41ok8jpb605a@corp.supernews.com>
Source record: 10825

nospam@nouce.bellatlantic.net wrote:
> . . .
> It's relevence is I've seen this before and understood it's origin
> and also elsehere. The other aspect is that if a commonly
> accepted part is not fully understood and can lead to undesired
> effects then, why not others. . .

Very nearly 30 years ago, I was looking into "feed forward" circuits, a technique developed by someone at Tektronix for ultra-low distortion amplification. It turns out that the topology of the MC1350 is similar to what's needed, and a feed forward amplifier can be made from one plus just a few external components. But even by then, I'd learned that it's risky to use components for other than their intended purpose. So I collected 8 or 10 samples from various vendors (the part was widely sold then), and opened them up. Those in cans were easy, using a little can opener that worked like a tubing cutter. Some of the plastic DIP ones were more difficult, but one of the labs at Tek was able to dissolve the plastic while leaving the chip intact. Then I examined them carefully with an inspection microscope. Here's what I found:

1. There were at least three very different designs. The chip size of the largest was several times that of the smallest.
2. Some designs were inherently better balanced than others. Some had resistive "cross unders" where traces cross, which weren't the same on both sides of the circuit.

Based on this, I decided it was too risky to make a design based on that part number, since a vendor could change chip suppliers or designs without notice.

Interestingly, about six months later, I got a call from the component engineering group asking if I still had the chips. It seems that one or more of the vendors supplying that part (which was used for other applications at Tek) had changed their design, causing failure of some products and the shutting down of their production lines. Tek was big enough that vendors were often required to give advance notice before such changes, but they hadn't given any notice in this case.

I'm bringing this up because I'm hearing the MC1350 being spoken of as though all are the same. It wouldn't surprise me if, after all these years, they're now all being made with one design from one foundry. But those ones in your junk box might be way more different than you think.

This is almost certainly true of just about any IC.

Roy Lewallen, W7EL

4125. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-27 22:09:40 UTC
From: Christopher Bucca <christopherbucca@verizon.net>
Message-ID: <EKoIg.1971$XD1.1629@trnddc01>
Source record: 10826
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

I assume that you do not have the companion AM-65 audio amplifier?
Shame, because internal to that unit is a power supply (don't remember the numbers now) that allowed you to operate the AM-65/RT-70 combo from 6, 12 or 24 volts depending on the power supply used. The usually supplied unit used 24 volts (Korean War American military standard elec system). If you can't get the 12 volt version, modification instructions can be found in a 73 Magazine article called
"New Orders for the R-108" which was a companion receiver for the big brother of the RT-70, the RT-68. R-108 used the same series of plug in internal power supplies that the AM-65 did.
There was also a magazine article in the now defunct as well Ham Radio mag titled "Get on Six Meters-The Easy Way". It dealt with a manpack 6 channel radio of Canadian ancestry that also needed 90 Volts. I have the entire run of that magazine from 1969 to 1990 on cd. If I can figure out how to extract the stuff off the disk, I'll email it to you. Now, the fee for such information.....
You will regale me with tales of operation and modification of aforementioned Olive Drab garbed electronic equipment!!! I'll email you later from my own account so that you will get my real email address, or you can use the arrl reflector. 73

Chris
KC2BZH@arrl.net

"James F. Mayer" <jfma@ix.netcom.com> wrote in message
news:Hg1sf.10532$nm.866@newsread2.news.atl.earthlink.net...
> I need to generate 6v DC and 90v DC from a 12v DC automotive
> electrical system to power an RT-70A/GRC surplus military radio. I need
> about 250 mA at +6 volts and about 75 mA at +90 volts. I was thinking
> about using the guts from an old battery back up but it would be a bit of
> a kluge. Are there any 90 volt regulators in the 78xx series? How do I
> get the voltage up to where I can get something that I can get the 90
> volts from. Getting the 6 volts doesn't seem to be a problem. A 7806 off
> the battery should work for that unless any of you can see a problem doing
> that. Maybe the common common would be a problem. Right now I'm running
> it off of an HP6299A and an HP6236B with commons jumpered. I'd like to be
> able to go portable with it.
>

4126. Re: AGC signal/noise question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-28 02:25:31 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <dlk4f211iombdepqvm5hgeklktasi4e1b4@4ax.com>
Source record: 10827

On Sun, 27 Aug 2006 13:56:50 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>nospam@nouce.bellatlantic.net wrote:
>> . . .
>> It's relevence is I've seen this before and understood it's origin
>> and also elsehere. The other aspect is that if a commonly
>> accepted part is not fully understood and can lead to undesired
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>Very nearly 30 years ago, I was looking into "feed forward" circuits, a
>technique developed by someone at Tektronix for ultra-low distortion
>amplification. It turns out that the topology of the MC1350 is similar
>to what's needed, and a feed forward amplifier can be made from one plus
>just a few external components. But even by then, I'd learned that it's
>risky to use components for other than their intended purpose. So I
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>then), and opened them up. Those in cans were easy, using a little can
>opener that worked like a tubing cutter. Some of the plastic DIP ones
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>plastic while leaving the chip intact. Then I examined them carefully
>with an inspection microscope. Here's what I found:
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>the largest was several times that of the smallest.
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>resistive "cross unders" where traces cross, which weren't the same on
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>part number, since a vendor could change chip suppliers or designs
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>products and the shutting down of their production lines. Tek was big
>enough that vendors were often required to give advance notice before
>such changes, but they hadn't given any notice in this case.
>
>I'm bringing this up because I'm hearing the MC1350 being spoken of as
>though all are the same. It wouldn't surprise me if, after all these
>years, they're now all being made with one design from one foundry. But

>those ones in your junk box might be way more different than you think.
>
>This is almost certainly true of just about any IC.

Roy,

That is my engineering experience as well. At the time I did my
testing I had Motorola, National and Hitachi parts Some fairly current
date codes and a few from early 80s and and while the general
behavour was similar I noted differences in gain, overall noise
and DC balance as well. The noise increase was enough to
be noteable in a particular case but on analysis understandable
and to be expected.

Then again I date back to when the Fairchild UA703 was a
breakthrough gain block for RF.

Allison
KB!GMX

4127. Book recommendation please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-28 04:11:38 UTC
From: David <websales@orbitcoms.com>
Message-ID: <_1uIg.19044$rP1.12765@news-server.bigpond.net.au>
Source record: 10828

Anyone recommend a "decent" book that would cover oscillators, small signal RF amps and matching techniques sufficiently to enable a novice to start experimenting with circuits and have enough detail in the text to tweak the circuits to get them running properly ?

I have purchased numerous books and cannot yet find one that is capable of giving me enough clear information to do something useful (Or more to the point, I cannot seem to get onto the same wavelength as these guys).

My predominant interest is VHF (150MHz). Low power (1 Watt or less), no valves, no requirement to use rf transformers for matching through the entire circuit.

Someone mentioned an analog design book a while ago and that may have been appropriate and I could not remember the title. I thought it was "The art and science of analog circuit design" so I purchased that book and was disappointed to find it was full more of anecdotes of a bunch of well seasoned engineers along with some handy tips.

Thanks

David

4128. Re: Book recommendation please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-28 05:15:32 UTC
From: dplatt@radagast.org
Message-ID: <12f4uvk56v3l96c@corp.supernews.com>
Source record: 10829

>Anyone recommend a "decent" book that would cover oscillators, small
>signal RF amps and matching techniques sufficiently to enable a novice
>to start experimenting with circuits and have enough detail in the text
>to tweak the circuits to get them running properly ?

"Experimental Methods in RF Design" by Hayward, Campbell, and Larkin, available from the ARRL, would be a good place to start. It's the successor to the classic "Solid-State Design for the Radio Amateur" from back in 1977.

If you can find copies of Doug Demaw's "Design notebook" and "QRP notebook", there's some good reading there as well. Not as advanced as "Experimental Methods" but perhaps a bit more accessible.

Buying a bunch of back issues of QRPp might also be helpful. In a lot of the articles which discuss QRP receiver and transmitters, the authors go into detail about their own particular circuit preferences, tweaks, construction and debugging techniques, etc.

For a slightly deeper background, I'd recommend "Troubleshooting Analog Circuits" by Robert Pease. It's not specific to RF but is full of useful tricks and ideas.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4129. Re: Book recommendation please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-28 05:59:39 UTC
From: David <websales@orbitcoms.com>
Message-ID: <fDvIg.19114$rP1.6825@news-server.bigpond.net.au>
Source record: 10830

Dave,

I do have EMIRFD but find almost all the circuits are based around rf transformers for matching and most of them are low frequency (3MHz etc).

Regards

David

Dave Platt wrote:
>> Anyone recommend a "decent" book that would cover oscillators, small
>> signal RF amps and matching techniques sufficiently to enable a novice
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> Analog Circuits" by Robert Pease. It's not specific to RF but is full
> of useful tricks and ideas.
>

4130. Re: Book recommendation please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-28 06:19:14 UTC
From: dplatt@radagast.org
Message-ID: <12f52n26i1ufr42@corp.supernews.com>
Source record: 10831

>Dave,
>
>I do have EMIRFD but find almost all the circuits are based around rf
>transformers for matching and most of them are low frequency (3MHz etc).

For the primary matching stuff, that's true.

You might want to look at the sections on crystal filters... if I recall properly, there are some filter arrangements which use an LC match at one or both ends.

You might want to dig into the ARRL books on UHF and microwave, and perhaps a copy of the old ARRL VHF manual (out of print but available used).

I think, though, that you're probably out on the bleeding edge of amateur experimentation. Not a lot of people are homebrewing VHF gear these days, so there may not be a single book which goes into the sort of circuitry you're interested in with an eye towards from-scratch design work.

I'm looking right now at the ARRL VHF Manual's description of a 2-meter portable design, circa 1972 - AM transmitter and superregenerative receiver. It's all solid-state - no tubes. However, as with most such designs I've seen, it has quite a few transformers in it - typically part of single- or double-tuned resonant circuits between the stages. The design seems to do both the tuned filtering, and the impedance matching with the same components - not an unreasonable approach. The oscillator strips in a commercially-built 2-meter FM repeater's transmitter and receiver I tore apart recently use a similar approach.

If you really want a transformerless design, I'm sure it can be done, but the necessary L/T/pi matches may end up being more difficult to design, and trickier to tune than a more conventional transformer-based design.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

4131. Re: Book recommendation please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-28 09:06:13 UTC
From: David <websales@orbitcoms.com>
Message-ID: <9mylg.19199$rP1.13973@news-server.bigpond.net.au>
Source record: 10832

Dave,

At present I have an issue with a Butler emitter follower oscillator at 150MHz.

I have Matthy's "Crystal Oscillator Circuits" and Randall Rhea's "Oscillator design and computer simulation" books. Also EMIRFD, "Introduction to RF design by Wes Hayward", "Complete Wireless design by Sayre", "RF design by Boswick", ARRL handbook, VHF/UHF handbook and a few more fundamental electronics and antenna books but try as I might I just cannot seem to ever extract enough information from all these books combined to get a useful result.

The Butler design I am looking at has a circuit for 100MHz. I assume this would be close enough to use the same typology but adjust the tuning components for 150MHz.

The book mentions tuning near by not at resonance. I have no idea how far "near" is and should it be above or below resonance or does it not matter.

He then states the holder capacitance of the crystal is 4.2pF and that he tunes this capacitance out with a 410nH inductor. If I calculate this, I get 600nH inductor to tune out 4.2pF at 100MHz. Why would he use 410nH instead of the larger value ? No mention in the text.

He mentions that tuning "near" resonance is achieved with L and Cap from base to emitter. He shows a 8-15pF cap. If I assume the trimmer set about half way at say 12pF and use his value of L of 120nH then the circuit is actually tuned to 132MHz. (I am not sure if this 30% higher frequency is what e really means by "near resonance". He also does not take into account the Base emitter capacitance or the cap to ground of the c-tap. Is the assumption that these do not matter ?

I made the circuit with changes in values to try to achieve 150MHz and it worked but had extremely critical tuning (very small adjustment in the tuning C stopped the oscillation). It also appeared to run slightly lower than the stamped marking on the crystal so I assume the either the crystal is cut 100ppm lower for parallel mode or I have not tuned out enough Co or something ?
This is where I now need more detail to understand why the circuit behaves like this and what to do to fix it.

I would also like to change the bias current as the 19mA current draw is a lot for my application. 5mA would be good but without properly understanding how to calculate Rout of the emitter follower, I am not sure the resistance is getting too high toi drive the crystal.

I have tried common base butler designs and they seemed to be easier to
get going and understand but several text point out this design is prone
to have instabilities and small ranges of inductance in the tuned tank
that they will run over.

I need to find some text that would cover issues like this but not so
deep mathematically that I need a degree to use the math.

Thanks

Dave Platt wrote:
>> Dave,
>>
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>> transformers for matching and most of them are low frequency (3MHz etc).
>
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> perhaps a copy of the old ARRL VHF manual (out of print but available
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> resonant circuits between the stages. The design seems to do both the
> tuned filtering, and the impedance matching with the same components -
> not an unreasonable approach. The oscillator strips in a
> commercially-built 2-meter FM repeater's transmitter and receiver I
> tore apart recently use a similar approach.
>
> If you really want a transformerless design, I'm sure it can be done,
> but the necessary L/T/pi matches may end up being more difficult to
> design, and trickier to tune than a more conventional
> transformer-based design.
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4132. Re: Book recommendation please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-28 11:12:42 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12f5jtci14fijb3@corp.supernews.com>
Source record: 10833

It sounds like some of the HP or Motorola app notes might be helpful for this. Maybe someone can suggest some specific ones.

Roy Lewallen, W7EL

David wrote:
> Anyone recommend a "decent" book that would cover oscillators, small
> signal RF amps and matching techniques sufficiently to enable a novice
> to start experimenting with circuits and have enough detail in the text
> to tweak the circuits to get them running properly ?
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> I have purchased numerous books and cannot yet find one that is capable
> of giving me enough clear information to do something useful (Or more to
> the point, I cannot seem to get onto the same wavelength as these guys).
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> My predominant interest is VHF (150MHz). Low power (1 Watt or less), no
> valves, no requirement to use rf transformers for matching through the
> entire circuit.
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> been appropriate and I could not remember the title. I thought it was
> "The art and science of analog circuit design" so I purchased that book
> and was disappointed to find it was full more of anecdotes of a bunch of
> well seasoned engineers along with some handy tips.
>
> Thanks
>
> David
>

4133. Re: Book recommendation please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-28 12:40:59 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <k4p5f2pkqk0ls37l5oti0aifs5bp207ss1@4ax.com>
Source record: 10834

On Mon, 28 Aug 2006 05:59:39 GMT, David <websales@orbitcoms.com>
wrote:

>
>Dave,
>
>I do have EMIRFD but find almost all the circuits are based around rf
>transformers for matching and most of them are low frequency (3MHz etc).

Up to around 200mhz thats not a big issue if properly scaled and the
right ferrite used.

I've used a lot of ideas from that book at 6 and 2m. The book list
presented is one I'd have suggested and added the venerable handbook
both current and a few older copies.

Allison

>
>Regards
>
>David
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>Dave Platt wrote:
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>> For a slightly deeper background, I'd recommend "Troubleshooting
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>> of useful tricks and ideas.

>>

4134. Re: Book recommendation please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-28 13:25:40 UTC
From: David <websales@orbitcoms.com>
Message-ID: <o9CIg.19399$rP1.2861@news-server.bigpond.net.au>
Source record: 10835

Thanks for the feedback.

I do not have a ready supply of ferrite cores and do not really want to
wind coils.
I have surface mountable air fixed coils that provide Q > 100 that I
expect should be suitable for most applications and use of trimmer
capacitors.

The only high frequency crystal oscillator I could find in the EMRFD
(100MHz) is page 4.15 which is a common base butler. I understand these
suffer parasitic effects, the tank is only effective for a limited range
of inductance. The butler emitter follower is offered as a more superior
typology but this circuit is not found in this book.
The circuit values in his example are incorrect as the 25nH inductor in
the tank requires over 100pF to resonate at 100MHz. The circuit shown
has a net capacitance of around 40pF ?
There is very little design information given with respect to ratio of
the C-Tap or emitter bias.
I also have his book "Introduction to Radio Frequency design". This does
go into more depth but is centred mainly around colpitts oscillators
(not good for harmonic crystal oscillators).

nospam@nouce.bellatlantic.net wrote:
> On Mon, 28 Aug 2006 05:59:39 GMT, David <websales@orbitcoms.com>
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>

4135. Re: Book recommendation please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-28 16:38:06 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12f66vf520jl19f@corp.supernews.com>
Source record: 10836

Hi David,

I've read through the rest of the posts, and in general I think you have a decent selection of books. The couple I'd add:

"RF Oscillator Circuit Analysis and Design with Breadboard Experiments" by John Plastonek -- Which is no longer in print, but I could probably scan it in one of these days if you can't find a copy kicking around (I've made active efforts to find this Plastonek guy to ask him about this, and he seems to have dropped off the face of the planet). His oscillator circuits go up to ~100MHz, and he has some discussion as to why you might prefer one oscillator topology over another.

"Build Your Own Low-Power Transmitters: Projects for the Electronics Experimenter" by Graf & Sheets (you can preview it on-line at Amazon.com). He has plans in there for transmitters at pretty much all frequency from LF-SHF, and although I haven't build anything in it myself :-), I've heard from other people that the transmitters really do work.

"Practical RF Design Manual" by DeMaw -- Probably overlaps a lot of the of DeMaw books; now distributed by MFJ.

BTW, I wouldn't be so quick to give up on RF transformers and matching -- any RF circuit with active components in it is going to require some amount of matching, and while at times you can get away without formally considering it, doing so often gives up power or robustness. (I know it's a little disheartening to open up a commercial radio and see that they managed to achileve something like a stereo FM receiver all in 7 transistors and no RF transformers, but such designs are the evolutionary results of a lot of people spending a lot of time trying to cost minimize a product that's produced in the millions. And keep in mind that something like a cell phone today requires over 100 man years to design...)

Finally, don't write off books such as "The Art and Science of Analog Circuit Design" -- it's a great example of one of those books that has a lot of great advice in it, but until you've hit your head on the wall a few thousand times encountering the particular problems the authors have, its value isn't apparent. The sort of "tweaking" advice you're looking for with RF circuits is precisely what TAaSoACD is trying to provide... just more to folks building op-amps & data converters than RF circuit.

---Joel Kolstad

4136. Re: Book recommendation please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-28 19:36:45 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <skg6f2t9man1619b9qervda6t7hn8l2rjs@4ax.com>
Source record: 10837

On Mon, 28 Aug 2006 13:25:40 GMT, David <websales@orbitcoms.com>
wrote:

>Thanks for the feedback.
>
>I do not have a ready supply of ferrite cores and do not really want to
>wind coils.
>I have surface mountable air fixed coils that provide Q > 100 that I
>expect should be suitable for most applications and use of trimmer
>capacitors.
>
>The only high frequency crystal oscillator I could find in the EMRFD
>(100MHz) is page 4.15 which is a common base butler. I understand these
>suffer parasitic effects, the tank is only effective for a limited range
>of inductance. The butler emitter follower is offered as a more superior
>typology but this circuit is not found in this book.
>The circuit values in his example are incorrect as the 25nH inductor in
>the tank requires over 100pF to resonate at 100MHz. The circuit shown
>has a net capacitance of around 40pF ?

Built as described, it works. However the 25nH is an approximation
as distributed C and also lead lengths add significantly. Mine tuned
with 33ohms substituted for the crystal from 93 to 122mhz.

>There is very little design information given with respect to ratio of
>the C-Tap or emitter bias.

Read the test as the concepts are outlined rather than how to design
xyz circuit in cookbook fashon. If you need help, the easy way is
to calculate the reactances at the shown frequency and then using
those numbers scale for the desired frequency. The bias point would
be the same at any frequency for a given transistor and power.

>I also have his book "Introduction to Radio Frequency design". This does
>go into more depth but is centred mainly around colpitts oscillators
>(not good for harmonic crystal oscillators).

In general oscillators in the >20mhz range are harmonic or overtone
designs and more subject to parasitic effects. I've bult the 100mhz
design and it worked fine for me within the limits of the crystal used
though after a x4 multiplication the thermal drift was unacceptable
and the crystal was the first order contributor. The oscillator
otherwise behaved well.

My solution for the whole mess was a lower frequency osc
and using low order harmonics. The lower frequency crystale proved

both less fussy to oscilate and more stable in fundemental mode.
Note: I was interested in sufficient stability to copy SSB at ~1296mhz
so even a few dozen Hz drift is noticeable..

Allison
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>
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>nospam@nouce.bellatlantic.net wrote:
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>> wrote:
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>>> Dave,
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>>> I do have EMIRFD but find almost all the circuits are based around rf
>>> transformers for matching and most of them are low frequency (3MHz etc).
>>
>> Up to around 200mhz thats not a big issue if properly scaled and the
>> right ferrite used.
>>
>> I've used a lot of ideas from that book at 6 and 2m. The book list
>> presented is one I'd have suggested and added the venerable handbook
>> both current and a few older copies.
>>
>> Allison
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>>> Regards
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>>> David
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>>> Dave Platt wrote:
>>>>> Anyone recommend a "decent" book that would cover oscillators, small
>>>>> signal RF amps and matching techniques sufficiently to enable a novice
>>>>> to start experimenting with circuits and have enough detail in the text
>>>>> to tweak the circuits to get them running properly ?
>>>> "Experimental Methods in RF Design" by Hayward, Campbell, and Larkin,
>>>> available from the ARRL, would be a good place to start. It's the
>>>> successor to the classic "Solid-State Design for the Radio Amateur"
>>>> from back in 1977.
>>>>
>>>> If you can find copies of Doug Demaw's "Design notebook" and "QRP
>>>> notebook", there's some good reading there as well. Not as advanced
>>>> as "Experimental Methods" but perhaps a bit more accessible.
>>>>
>>>> Buying a bunch of back issues of QRPp might also be helpful. In a lot
>>>> of the articles which discuss QRP receiver and transmitters, the
>>>> authors go into detail about their own particular circuit preferences,

>>>> tweaks, construction and debugging techniques, etc.
>>>>
>>>> For a slightly deeper background, I'd recommend "Troubleshooting
>>>> Analog Circuits" by Robert Pease. It's not specific to RF but is full
>>>> of useful tricks and ideas.
>>>>
>>

4137. Beginner Radio w/o using air variable cap???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-28 21:42:55 UTC
From: SparkySKO <sparkysko@gmail.com>
Message-ID: <1156801375.566432.201790@m73g2000cwd.googlegroups.com>
Source record: 10838

Hello All,

[Basically this says, are there any practical alternatives to an air variable capacitor that a beginner can use in building his first receiver radio?]

I'm interested in getting my feet wet in building a receiver, but don't want to buy a 'kit'. I'd like to build a radio that has a knob I can somewhat tune it with. I've been really looking at regenerative radios and superheterodynes, although a simple radio is more important than how well it really performs.

One common theme in almost every 'simple' radio design I can find, is that they *ALL* use Air variable capacitors. While I'm sure these were everywhere 20 years ago, going to every major electronics supply house in Portland, Oregon has yielded me only with small trimmer capacitors, which AFAIK, will not do for a 'tuner'. I'm aware I can order online for about 10-20$ and purchase an air variable, but I'd like to see if any of you have any suggestions on what might work as an alternative?

Varactor diode seemed like a neat idea, although I guess they suffer from temperature fading. Would this make it impratical for a shortwave or AM receiver? Can you even make a regenerative radio out of a varactor? (Actually, I'll try ghetto rigging a red LED for a varactor, since I don't really care about it being nicely linear, I just want something with a knob that does something!).

Can anyone recommend any type of reasonably simple radio (simple mostly as in reasonably low parts count, i don't need an LCD readout) that could possibly be done with parts that can be had at a reasonably stocked electronics store. (Much more inventory than Fry's). A knob is important, I don't want to build one of those ghetto radios with the coil and a metal bead that I slide along the coil to 'tune' it. Any other way to use a potentiometer to tune a radio?

4138. Re: Beginner Radio w/o using air variable cap???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-28 22:11:26 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <Jq6dnWEwlYtg9G7ZnZ2dnUVZ_v2dnZ2d@web-ster.com>
Source record: 10839

SparkySKO wrote:
> Hello All,
>
> [Basically this says, are there any practical alternatives to an air
> variable capacitor that a beginner can use in building his first
> receiver radio?]
>
> I'm interested in getting my feet wet in building a receiver, but don't
> want to buy a 'kit'. I'd like to build a radio that has a knob I can
> somewhat tune it with. I've been really looking at regenerative radios
> and superheterodynes, although a simple radio is more important than
> how well it really performs.
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> that they *ALL* use Air variable capacitors. While I'm sure these were
> everywhere 20 years ago, going to every major electronics supply house
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> any of you have any suggestions on what might work as an alternative?
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> from temperature fading. Would this make it impratical for a shortwave
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> stocked electronics store. (Much more inventory than Fry's). A knob is
> important, I don't want to build one of those ghetto radios with the
> coil and a metal bead that I slide along the coil to 'tune' it. Any
> other way to use a potentiometer to tune a radio?
>
If you want to build a radio circuit without much circuitry you really
have to put up with either a variable cap or a variable coil. I'd say
you either have to scrounge something or buy one -- they're really not
that spendy.

Yes, you can go the varactor route, and folks have made it work well.
But you have to add more components, it'll never be the same, and you'll
have to tinker with it to keep it from drifting all over the place. For

a 1st-time radio it may not be a bad thing, but after that I'd go with a real variable element.

As far as your complaints about 'ghetto' radios -- your ability to build a high-quality, good looking tunable element is a matter of the talent that you were born with and the effort you take to use it. If you want to build something without many components then you're going to need to work at it anyway.

Having said that I wouldn't build -- I'd buy. Have you checked with Cascade Surplus Electronics in North Portland? It's been ages since I've been in there, so I can't guarantee anything. You may also want to try R 5-D 3 Electronic Surplus out in Southeast. He's got lots of old stuff there, if he doesn't have a variable cap he'll have some piece of crud that you can buy and harvest the caps.

After those two, consider going to yard and garage sales, buying old radios, and tearing out their capacitors. Stereo tuners from the 70's and 80's are best -- if it's big and has a knob, chances are it has a cap. If it receives FM and it's big and has a knob , chances are the cap will be a good size for shortwave. You may even find that it has a cap with a built-in reduction drive which is cool if you want to tune in CW.

Good luck.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

4139. Re: Beginner Radio w/o using air variable cap???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-28 23:23:52 UTC
From: laura halliday <marsgal42@hotmail.com>
Message-ID: <1156807432.877350.199500@m73g2000cwd.googlegroups.com>
Source record: 10840

SparkySKO wrote:
> Hello All,
>
> [Basically this says, are there any practical alternatives to an air
> variable capacitor that a beginner can use in building his first
> receiver radio?]
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> that they *ALL* use Air variable capacitors. While I'm sure these were
> everywhere 20 years ago, going to every major electronics supply house
> in Portland, Oregon has yielded me only with small trimmer capacitors,
> which AFAIK, will not do for a 'tuner'...

I'd try R5D3 first, then see if I could find something worth
cannibalizing at Cascade (note new address) or Wacky
Willy's (lots of junk, but you never know...). Then I'd hit the
various thrift stores and see if I could find an old FM tuner.

Are there any ham radio swap meets coming up?

If you go to R5D3, they really are on a residential side street
out in the middle of nowhere.

The parts are out there. Go get them!

Laura Halliday VE7LDH "Que les nuages soient notre
Grid: CN89mg pied a terre..."
ICBM: 49 16.05 N 122 56.92 W - Hospital/Shafte

4140. Re: Book recommendation please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-28 23:38:38 UTC
From: David <websales@orbitcoms.com>
Message-ID: <28LIg.19507$rP1.18962@news-server.bigpond.net.au>
Source record: 10841

From what I understand so far the bias should should not necessarily be the same and the capacitors will not scale as suggested.

The ESR of the crystal would be different for different overtone crystals so therefore the bias should change to provide correct drive and C to ground on the C-Tap would also need to change. According to Matthy the Cap to ground should be 0.5 to 1 x ESR and emitter drive impedance less than ESR. Or have I misinterpreted something here ?

I am also unsure of whether the tank should be tuned above or below resonance. Rhea's book suggests the tank should be capacitive at Fo indicating the tank itself would be tuned above the operating frequency.

I would like to learn more about the Butler emitter follower crystal oscillator.

If I ask the specific questions about this typology and someone gives me an answer, where did they obtain this information. Have they learned by just playing with the circuit in a hit and miss fashion or have they first obtained fundamental information from some text and using what they have learnt then played with the circuit. If so, what would this text be ?

If Ro = Rsource/(beta+1), is Rsource in the oscillator case of the emitter follower Rp of the coil in parallel with the bias resistance or does it also include (Rphi+RE) x Beta. Is Beta used here an approximation calculate by Ft/F ?

nospam@nouce.bellatlantic.net wrote:
> On Mon, 28 Aug 2006 13:25:40 GMT, David <websales@orbitcoms.com>
> wrote:
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>> Thanks for the feedback.
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>>>> Dave,
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>>>> transformers for matching and most of them are low frequency (3MHz etc).
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>>>> Dave Platt wrote:
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>>>>> available from the ARRL, would be a good place to start. It's the
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>>>>> For a slightly deeper background, I'd recommend "Troubleshooting
>>>>> Analog Circuits" by Robert Pease. It's not specific to RF but is full
>>>>> of useful tricks and ideas.
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>

4141. Re: Beginner Radio w/o using air variable cap???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-29 00:25:56 UTC
From: Greg Neill <gneillREM@OVE.THIS.netcom.ca>
Message-ID: <44f3882d$0$24197$9a6e19ea@news.newshosting.com>
Source record: 10842

"SparkySKO" <sparkysko@gmail.com> wrote in message
news:1156801375.566432.201790@m73g2000cwd.googlegroups.com...
> Hello All,
>
> [Basically this says, are there any practical alternatives to an air
> variable capacitor that a beginner can use in building his first
> receiver radio?]

Go here:

http://www.tubesandmore.com/

and check under Capacitors --> variable.

4142. Re: Beginner Radio w/o using air variable cap???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-29 03:12:39 UTC
From: mcalhoun@ksu.edu
Message-ID: <ed0bb7$2of@unix1.cc.ksu.edu>
Source record: 10843

"SparkySKO" <sparkysko@gmail.com> writes:

>[Basically this says, are there any practical alternatives to an air
>variable capacitor that a beginner can use in building his first
>receiver radio?]
>....[snip]....

For TWO BUCKS I bought a whole box full of cheapie "transistor radios"
from a church rummage sale a few weeks ago (most were about the size
of a man's wallet, but a few were about the size of a thick book), and

ALL OF THEM HAD AN AIR-VARIABLE TUNING CAPACITOR!

Don't fight a battle you don't need to fight; just tear up an old
"transistor radio"!

(Now the NEWER transistor radios -- the kind you buy at WalMart for
a buck each that have a "push to tune to the next station" button --
do NOT have air-variable capacitors, but the OLDER ones do!)

--
--Myron A. Calhoun, W0PBV.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
NRA Life Member and Rifle, Pistol, & Home Firearm Safety Certified Instructor
Certified Instructor for the Kansas Concealed-Carry Handgun license

4143. WTB COBRA 148 GTL Philippines Made

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-29 07:54:40 UTC
From: "copdoc1@optonline.net" <copdoc1@optonline.net>
Message-ID: <1156838080.181440.287260@75g2000cwc.googlegroups.com>
Source record: 10844

I am looking to purchase 1 or 2 Cobra 148 GTL units that were made in
the Philippines.
If you have or know of someone that has please contact me at
copdoc1@optonline.net
Thank You
Peter

4144. Re: Beginner Radio w/o using air variable cap???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-29 10:21:41 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1156846901.774589.229910@b28g2000cwb.googlegroups.com>
Source record: 10845

SparkySKO wrote:
> Hello All,
>
> [Basically this says, are there any practical alternatives to an air
> variable capacitor that a beginner can use in building his first
> receiver radio?]
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> I'm interested in getting my feet wet in building a receiver, but don't
> want to buy a 'kit'. I'd like to build a radio that has a knob I can
> somewhat tune it with. I've been really looking at regenerative radios
> and superheterodynes, although a simple radio is more important than
> how well it really performs.
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> One common theme in almost every 'simple' radio design I can find, is
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> Varactor diode seemed like a neat idea, although I guess they suffer
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> Can anyone recommend any type of reasonably simple radio (simple mostly
> as in reasonably low parts count, i don't need an LCD readout) that
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> stocked electronics store. (Much more inventory than Fry's). A knob is
> important, I don't want to build one of those ghetto radios with the
> coil and a metal bead that I slide along the coil to 'tune' it. Any
> other way to use a potentiometer to tune a radio?

Varying the inductance by moving a core in and out of the coil works
just as well, and is quite easy to make at home.

Leon

4145. Re: Beginner Radio w/o using air variable cap???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-29 11:37:13 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <LFVIg.62$Wf3.27@newsfe02.lga>
Source record: 10846

"Tim Wescott" <tim@seemywebsite.com> wrote in message
news:Jq6dnWEwlYtg9G7ZnZ2dnUVZ_v2dnZ2d@web-ster.com...

> Yes, you can go the varactor route, and folks have made it work well. But
> you have to add more components, it'll never be the same, and you'll have
> to tinker with it to keep it from drifting all over the place.

Varactors are not that tough, and don't mistake the "never be the same". Good varactor rigs are much more pleasant than anything with a variable cap. (Although there are plenty of bad varactor designs out there!) Yes, sometimes there are a couple more components, but not many more. It does take some work to get a varactor oscillator close to drift-free, but five minutes with a calculator will get you close enough for SWLing. Oh by the way, getting a capacitor oscillator close to drift free can be a challenge, especially if you don't have hard-to-get air inductors, and microphonics in that case can be a challenge, too. The larger size of the variable cap/air inductor makes mechanical construction details a lot more important. There's really no free lunch.

Varactors do have some temperature coefficient, and they are often coupled with toroid inductors, which also have some considerable temperature coefficient. Most of the designs you see out there are for CW rigs in the ham bands, where temperature stability is extremely important. The maze of capacitors around the varactor are there to balance the temperature coefficients. Usually there is a polystyrene capacitor which has a temperature coefficient opposite to the toroid and varactor, but you can never get exactly the right value for that, so it is a question of getting the right combination of positive and negative temperature coefficients AND the right value of capacitance. For AM in the broadcast band, you can probably come close enough with one or two capacitors. For a rig with a 200 Hz CW filter at 15 meters, it can be a real bear keeping the frequency to within the 0.0001% that you need for comfortable operation.

That being said, it is undoubtedly easier to use a variable cap, and caps can be cannabalized from old radios easily and cheaply. Leon also mentions the possibility of making a variable inductor. Actually, from time to time articles have appeared about making variable caps, too. In either case, though, you will need considerable mechanical skills.

One thing that makes projects hard, especially your first projects, is this idea that you need exactly the right part. With a little help from your trusty calculator, you can play pretty fast and loose with parts values in most projects. In the case of a tuning cap, if you can find something on the right planet it typically isn't too tough to make adjustments to accomodate the different part. Study your circuit and understand what each part is doing, especially around the tuning circuits. It is usually pretty

simple to make some adjustments, especially if, as you suggest, getting some precise tuning range isn't critical.

..

4146. Re: Book recommendation please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-29 12:04:46 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <bt98f2hicolgjiqi2r6igsuj33sg9uj2h2@4ax.com>
Source record: 10847

On Mon, 28 Aug 2006 23:38:38 GMT, David <websales@orbitcoms.com>
wrote:

> From what I understand so far the bias should should not necessarily be
>the same and the capacitors will not scale as suggested.
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>The ESR of the crystal would be different for different overtone
>crystals so therefore the bias should change to provide correct
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The DC bias would be unchanged. The feedback required may need
to be altered but thats a product of frequency and transistor(or fet)
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In short if the circuit shown uses a 100mhz crystal in a 7th overtone
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for a narrow range of frequencies like that the ERS varies but not
greatly. This does not cover the difference between good quality
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Believe it or not, doesn't matter. You'll build it and then have to
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Generally I try to avoid high order oscilators(overtone) as stability
and the need for being tuned doesn't suit my needs.

I've never seen a in depth analysis in any one book. I apply
my EE training plus 30+ years of theory vs what really happens
and go from there. Sometimes being an engineer is really more like
science where you observe and build or search out theory to explain
the observed behavour, or you break out the diddle stick and adjust
it and move on to bigger problems.

>If Ro = Rsource/(beta+1), is Rsource in the oscillator case of the
>emitter follower Rp of the coil in parallel with the bias resistance
>or does it also include (Rphi+RE) x Beta. Is Beta used here an
>approximation calculate by Ft/F ?

Thats all first order rule of thumb. However, are you trying to build
one working oscillator or flog it to death? I say that as I've found
it to be both less than an exact science and that accurate to more
than 3 decimal places is excess for operation. For one oscillator
it is both easy and practical to dead bug it and see if it meets
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Allison

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>
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>nospam@nouce.bellatlantic.net wrote:
>> On Mon, 28 Aug 2006 13:25:40 GMT, David <websales@orbitcoms.com>
>> wrote:
>>
>>> Thanks for the feedback.
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>>> I do not have a ready supply of ferrite cores and do not really want to
>>> wind coils.
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>>>>>> tweaks, construction and debugging techniques, etc.
>>>>>>
>>>>>> For a slightly deeper background, I'd recommend "Troubleshooting
>>>>>> Analog Circuits" by Robert Pease. It's not specific to RF but is full
>>>>>> of useful tricks and ideas.
>>>>>>
>>

4147. Re: Beginner Radio w/o using air variable cap???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-29 13:34:47 UTC
From: Hamateur <Hamateur@www.web>
Message-ID: <12f8gjn37mpsh9f@corp.supernews.com>
Source record: 10748

SparkySKO wrote:
>
> [Basically this says, are there any practical alternatives to an air
> variable capacitor that a beginner can use in building his first
> receiver radio?]

This homebrew 10-600pF book-shaped air variable has knob tuning:
http://www.leradiodisophie.it/CV-libro.html

Wind a simple coil, add a diode and audio amplification -
see what you can hear.

4148. Re: radiomart descriptions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-29 14:31:46 UTC
From: Chas <wg2a@mhtc.net>
Message-ID: <1pGdnVp-eZwh0mnZnZ2dnUVZ_qudnZ2d@bright.net>
Source record: 10749
Cross-posted to: rec.ham-radio.misc,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.swap,rec.radio.boatanchors,rec.radio.shortwave

It's the lying that bothers most of us, I bought a radio from him and it smoked when I plugged it in, upon examination, I found it was NO WHERE NEAR what he described, he used photos that didn't show the imperfections and outright lied about the ownership. I know several people who have sold gear to him (using his gottahaveit1995 name) only to see radio-mart sell it a week later, claiming it came from his personal collection and had owned it for years!! Then he lies about the condition of it, not to mention that he shill bids on his gear using the above mentioned gottahaveit1995 name. This asshole needs to be run off ebay, because of how he screws unsuspecting bidders!!

"Wesleywoo-woo" <applegate444@yahoo.nosprem.com> wrote in message news:bac77$44f04f82$d1cc790d$30393@snip.allthenewsgroups.com...
>I have a better idea Mike. If you don't like the guy re-selling
> things he bought at estate sales and other places, simply ignore him.
> It's just that simple. Go to another Deli and get your Cornbeef on Rye
> at another store. Life's too short to worry about ham radio dealers
> that's fer damm sure! :)
>
>
> "mike maghakian" <maghakian@comcast.net> wrote in message
> news:8Y-dnQuvbIz2GHLZnZ2dnUVZ_uydnZ2d@comcast.com...
>> look at this auction:
>>
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&ssPageName=ADME:B:WNA:US:112&item=110023382429&id=
>>
>> the seller said he bought it in a radio mart acution and gives the
> number.
>> radio mart said it was "stunning" and "excellent"
>> the seller is now noting all the problems if you read the question
> section.
>>
>> for those of you considering a radiomart auction. consider that he thinks
>> telling lies is standard operating procedure.
>>
>>
>

4149. Re: Beginner Radio w/o using air variable cap???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-29 16:08:38 UTC
From: SparkySKO <sparkysko@gmail.com>
Message-ID: <1156867718.040087.165480@b28g2000cwb.googlegroups.com>
Source record: 10750

I finally caved in and cannibalized a radio. 8$ at big lots (heck they even had one for 4$, but this one had a bigger 'knob'). Sure enough, a variable cap (plastic spacers in between the plates).

4150. Re: Beginner Radio w/o using air variable cap???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-29 16:12:53 UTC
From: PhattyMo <PhattyMo@nospam.gmail>
Message-ID: <44f46781$0$34071$815e3792@news.qwest.net>
Source record: 10751

SparkySKO wrote:
> Hello All,
>
> [Basically this says, are there any practical alternatives to an air
> variable capacitor that a beginner can use in building his first
> receiver radio?]
>
> I'm interested in getting my feet wet in building a receiver, but don't
> want to buy a 'kit'. I'd like to build a radio that has a knob I can
> somewhat tune it with. I've been really looking at regenerative radios
> and superheterodynes, although a simple radio is more important than
> how well it really performs.
>
> One common theme in almost every 'simple' radio design I can find, is
> that they *ALL* use Air variable capacitors. While I'm sure these were
> everywhere 20 years ago, going to every major electronics supply house
> in Portland, Oregon has yielded me only with small trimmer capacitors,
> which AFAIK, will not do for a 'tuner'.

Oh, A local!
Okay,I'mma spill the beans,and 'leak' my hidden treasure trove..
Check out "R5D3 Electronic Surplus" out in Milwaukie,off of Johnson
Creek road.
He's got *tons* of tubes,and lots of other useful parts for cheap.
Got a couple bins/boxes full of variable caps and all that stuff.

Bob's a cool guy. Tell him "that young punk" sent ya. ;-)

>I'm aware I can order online
> for about 10-20$ and purchase an air variable, but I'd like to see if
> any of you have any suggestions on what might work as an alternative?
>
> Varactor diode seemed like a neat idea, although I guess they suffer
> from temperature fading. Would this make it impratical for a shortwave
> or AM receiver? Can you even make a regenerative radio out of a
> varactor? (Actually, I'll try ghetto rigging a red LED for a varactor,
> since I don't really care about it being nicely linear, I just want
> something with a knob that does something!).
>
> Can anyone recommend any type of reasonably simple radio (simple mostly
> as in reasonably low parts count, i don't need an LCD readout) that
> could possibly be done with parts that can be had at a reasonably
> stocked electronics store. (Much more inventory than Fry's). A knob is
> important, I don't want to build one of those ghetto radios with the
> coil and a metal bead that I slide along the coil to 'tune' it. Any

> other way to use a potentiometer to tune a radio?
>

4151. Re: Harry E. Landsberg, Jr., CIA Maltese Falcon: Kennedy assassination, IRAN/CONTRA, UFO's

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-29 18:31:11 UTC
From: Christopher Bucca <christopherbucca@verizon.net>
Message-ID: <PJ%Ig.38401$NF3.1470@trnddc05>
Source record: 10752

Could someone please chlorinate her end of the gene pool, PLEASE??

"Laura" <lhann10243@earthlink.net> wrote in message
news:1135568602.102362.228660@g14g2000cwa.googlegroups.com...
> Harry E. Landsberg, Jr., CIA Maltese Falcon: Kennedy assassination,
> IRAN/CONTRA, UFO's
>
> My late father, Harry E. Landsberg, Jr. is apparently one of the 35 CIA
> Officers memorialized on the north wall of the Original Headquarters
> Building lobby whose "names ... must remain secret, even in death."
>
> Please see:
>
> http://www.angelfire.com/journal2/landsbergphotos2/maltese_falcon_search_terms_maltese_falcon_cia_dot_gov.jpg
>
> taking note of the search terms "maltese+falcon."
>
> Then:
>
> http://www.angelfire.com/journal2/landsbergphotos2/maltese_falcon_cia_dot_gov_memorial_wall.jpg
>
> and
>
> http://www.angelfire.com/journal2/landsbergphotos2/maltese_falcon_cia_dot_gov_memorial_wall_2.jpg
>
> ----
>
> I was discredited as being mentally ill in 1981 and again in 1985. As
> a result I was motivated to research family matters.
>
> In 2004 I learned that my husband, Richard Hanning, Jr., was a
> Marine/covert operator assigned to me. We met in 1985 and I knew I was
> a target when I met him. I just didn't know I was his target.
>
> We are divorced. My life has been in danger and I have been revealing
> information about my family and their associates as a result.
>
> Please see:
>
> "Harry E. Landsberg, Jr. -- resemblance to man in photo with Specter"

> http://home.earthlink.net/~lhann10243/index.html
>
> and
>
> "IRAN/CONTRA: Fleming O. Landsberg, Fleming Landsberg, U.S. Ordinance
> [sic] Inc."
> http://home.earthlink.net/~lhann10243/id85.html
>
> and
>
> "Landsbergs and Maddens -- Mirror" (UFO's)
> http://www.angelfire.com/journal2/landsbergphotos/Landsbergs_and_Maddens_mirror.html
>
> ----
>
> I am a survivor of satanic ritual abuse and mind control.
>
> Please see:
>
> "The Love Game"
> http://home.earthlink.net/~sammark4/id2.html
>
> and
>
> "Scars and other signs of mind control"
> http://home.earthlink.net/~sammark4/id5.html
>
> ----
>
> My legal mother, Donna Jean Volkmer Landsberg, worked as secretary to
> the Undersecretary of the Navy in the 1940's, likely James Forrestal.
>
> He died under mysterious circumstances. Please see:
>
> "The Death of James Forrestal" by Richard M. Dolan
> http://keyholepublishing.com/Death%20of%20James%20Forrestal.htm
>
> ----
>
> I had a vision of Donna as a three-headed bird (black heads.)
>
> I was searching for photos of Vanessa Redgrave and found this photo
> which was similar to the bird in my vision:
>
> http://www.angelfire.com/journal2/landsbergphotos2/donnas_bird_head_more_like_this.jpg
>
> Then searching on "Maltese Falcon" I came across "The Virtual Tour of
> the CIA:"
>
> http://images.google.com/imgres?imgurl=http://www.cia.gov/cia/information/

> tour/83stars_lg.jpg&imgrefurl=http://www.cia.gov/cia/information/tour/
> stars.html&h=465&w=600&sz=184&tbnid=fQ8WESE-YHkpWM:&tbnh=103&tbnw
> =133&hl=en&start=130&prev=/images%3Fq%3D%2522maltese%2Bfalcon
> %2522%26start%3D120%26svnum%3D10%26hl%3Den%26lr%3D%26sa%3DN
>
> or
>
> http://www.cia.gov/cia/information/tour/stars.html
>
> There is no mention of the words "Maltese Falcon" on the page.
>
> ----
>
> There was a Divine Intervention in late 2003 and I have been protected
> as I have been enduring harassment in the astral plane.
>
> Please see:
>
> "Mystical Journey"
> http://home.earthlink.net/~sammark4/id157.html
>
> "Mystical Journey -- more"
> http://home.earthlink.net/~silent_no_more99/id41.html
>
> "Mystical Journey -- more ii"
> http://home.earthlink.net/~sammark4lhann/id17.html
>
> "Mystical Journey -- more iii"
> http://home.earthlink.net/~twainablelhann/id17.html
>
> and
>
> "To My Friend"
> http://home.earthlink.net/~sammark4/id214.html
>
> "To My Friend -- more"
> http://home.earthlink.net/~sammark4lhann/id33.html
>
> "To My Friend -- more ii"
> http://home.earthlink.net/~twainablelhann/id12.html
>
> "To My Friend -- more iii"
> http://home.earthlink.net/~twainable2lhann/id7.html
>
> ----
>
> Laura Landsberg
> 305 Linden St., Apt. B
> Fond du Lac, WI 54935
> (920) 922-2599

>

4152. Re: Book recommendation please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-29 20:41:09 UTC
From: David <websales@orbitcoms.com>
Message-ID: <FD1Jg.19969$rP1.8517@news-server.bigpond.net.au>
Source record: 10753

Thanks for the information.

The book example uses a 5th OT 100MHz crystal. My application uses a 7th OT 151 MHz crystal.

I suspect the ESR jumps from around 60-70 in the 5th OT to a max. of 120R for the 7th OT.

Something I find a little confusing though in in Matthys book at the beginning he explains that in series mode, the lower the impedances driving and loading the crystal - the better as this ensures the crystal has maximum control of the feedback path.

But during his explanation of the butler emitter follower, he mentions the load cannot be "too" small and suggests optimal load of 1/2 to 1 x ESR. Can you shed some light on this for me please.

I realise another option is to build a 3rd OT oscillator followed by a tripler and filtering but I find when I do this that I have trouble getting rid of harmonics. Also each tank circuit ends up adding lots of cost to the circuit as I usually use a fixed air-wound SMD format coil and SMD trimmer cap and these are expensive.

Another option was I could use a PLL as I have a heap of the LMX1602. Then the trouble is that the microcontroller overhead goes.(Having to set frequency each time the system boots). I also looked at other PLL ICs like the motorola devices that can be pre-programmed with pin settings but these seem to be hard to obtain now.

Thanks again. I appreciate the time people have taken to consider my questions and provide me with some valuable insight that I have not yet gained from experience. (I suppose that is the power of such a forum as this anyway).

regards

David

nospam@nouce.bellatlantic.net wrote:
> On Mon, 28 Aug 2006 23:38:38 GMT, David <websales@orbitcoms.com>
> wrote:
>
>> From what I understand so far the bias should should not necessarily be
>> the same and the capacitors will not scale as suggested.
>>
>> The ESR of the crystal would be different for different overtone
>> crystals so therefore the bias should change to provide correct

>> drive and C to ground on the C-Tap would also need to change. According
>> to Matthy the Cap to ground should be 0.5 to 1 x ESR and emitter drive
>> impedance less than ESR. Or have I misinterpreted something here ?
>
> The DC bias would be unchanged. The feedback required may need
> to be altered but thats a product of frequency and transistor(or fet)
> gain at the target frequency and any change in overtone used.
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> In short if the circuit shown uses a 100mhz crystal in a 7th overtone
> mode it will scale if a 89mhz 7th overtone crystal is used. Usually
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> greatly. This does not cover the difference between good quality
> crystal and poor quality crystals, If you going to use poor quality
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>>>>>>>
>>>>>>> For a slightly deeper background, I'd recommend "Troubleshooting
>>>>>>> Analog Circuits" by Robert Pease. It's not specific to RF but is full
>>>>>>> of useful tricks and ideas.
>>>>>>>
>

4153. Hi-Q Ceramic Caps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-29 21:57:19 UTC
From: SparkySKO <sparkysko@gmail.com>
Message-ID: <1156888639.427999.12080@p79g2000cwp.googlegroups.com>
Source record: 10754

Hello All!

Bare with me, I'm a newbie.

I'm looking into building the Radio Shack Special

http://www.electronics-lab.com/projects/rf/007/

And looking through the parts list, I see that he references using Hi-Q Ceramic Capacitors. This radio is for FM, so 90-110mhz.

I have a bunch of normal ceramic capacitors, but no hi-q capacitors. Is there really much of a difference between the two, or am I likely to fail if I don't use them? I'd hate to solder all this onto a board, and risk messing up the board when removing them.

Any advice on the difference between them would be helpful. I'm guessing they oscillate better, or at higher frequencies.

4154. Re: Book recommendation please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-29 22:07:05 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <cce9f2dqgivieoju4hc4qm1t0495112t9h@4ax.com>
Source record: 10755

On Tue, 29 Aug 2006 20:41:09 GMT, David <websales@orbitcoms.com>
wrote:

>Thanks for the information.
>
>The book example uses a 5th OT 100MHz crystal. My application uses a 7th
>OT 151 MHz crystal.
>
>I suspect the ESR jumps from around 60-70 in the 5th OT to a max. of
>120R for the 7th OT.

I dont consider that a huge jump, considering the amount of tolereance
there is in that kind of thing.

>Something I find a little confusing though in in Matthys book at the
>beginning he explains that in series mode, the lower the impedances
>driving and loading the crystal - the better as this ensures the crystal
>has maximum control of the feedback path.

if the crystal feedbak path loads the crystal too greatly the problems
of mode jumping and poor starting are present.

>But during his explanation of the butler emitter follower, he mentions
>the load cannot be "too" small and suggests optimal load of 1/2 to 1 x
>ESR. Can you shed some light on this for me please.

too low the osc will not start (low effective gain) and too high
allows for possible mode shifts.

>I realise another option is to build a 3rd OT oscillator followed by
>a tripler and filtering but I find when I do this that I have trouble
>getting rid of harmonics. Also each tank circuit ends up adding lots of
>cost to the circuit as I usually use a fixed air-wound SMD format coil
>and SMD trimmer cap and these are expensive.

I would think using double tuned and properly coupled the undesired
harmonics should easily be more than 70db down. Requires some care in
layout and grounding.

>Another option was I could use a PLL as I have a heap of the LMX1602.
>Then the trouble is that the microcontroller overhead goes.(Having to
>set frequency each time the system boots). I also looked at other PLL
>ICs like the motorola devices that can be pre-programmed with pin
>settings but these seem to be hard to obtain now.

Those headaches and also sidebands that are not well surpressed
if care is not taken make it potentially worse than 3rd OT and

tripler.

build and test is my suggestion.

Allison

>
>
>nospam@nouce.bellatlantic.net wrote:
>> On Mon, 28 Aug 2006 23:38:38 GMT, David <websales@orbitcoms.com>
>> wrote:
>>
>>> From what I understand so far the bias should should not necessarily be
>>> the same and the capacitors will not scale as suggested.
>>>
>>> The ESR of the crystal would be different for different overtone
>>> crystals so therefore the bias should change to provide correct
>>> drive and C to ground on the C-Tap would also need to change. According
>>> to Matthy the Cap to ground should be 0.5 to 1 x ESR and emitter drive
>>> impedance less than ESR. Or have I misinterpreted something here ?
>>
>> The DC bias would be unchanged. The feedback required may need
>> to be altered but thats a product of frequency and transistor(or fet)
>> gain at the target frequency and any change in overtone used.
>>
>> In short if the circuit shown uses a 100mhz crystal in a 7th overtone
>> mode it will scale if a 89mhz 7th overtone crystal is used. Usually
>> for a narrow range of frequencies like that the ERS varies but not
>> greatly. This does not cover the difference between good quality
>> crystal and poor quality crystals, If you going to use poor quality
>> crystals there may be other issues to investigate as well.
>>
>>> I am also unsure of whether the tank should be tuned above or below
>>> resonance. Rhea's book suggests the tank should be capacitive at Fo
>>> indicating the tank itself would be tuned above the operating frequency.
>>
>> Believe it or not, doesn't matter. You'll build it and then have to
>> tune it for proper oscillation. At around 100mhz the circuit
>> parasitics such as coil construction, PC board trace capacitance
>> and inductance, transistor characteristics, transistor, coil and
>> capactior lead length are all in the mix.
>>
>>> I would like to learn more about the Butler emitter follower crystal
>>> oscillator.
>>>
>>> If I ask the specific questions about this typology and someone gives me
>>> an answer, where did they obtain this information. Have they learned by
>>> just playing with the circuit in a hit and miss fashion or have they
>>> first obtained fundamental information from some text and using what
>>> they have learnt then played with the circuit. If so, what would this
>>> text be ?

>>
>> Generally I try to avoid high order oscilators(overtone) as stability
>> and the need for being tuned doesn't suit my needs.
>>
>> I've never seen a in depth analysis in any one book. I apply
>> my EE training plus 30+ years of theory vs what really happens
>> and go from there. Sometimes being an engineer is really more like
>> science where you observe and build or search out theory to explain
>> the observed behavour, or you break out the diddle stick and adjust
>> it and move on to bigger problems.
>>
>>> If Ro = Rsource/(beta+1), is Rsource in the oscillator case of the
>>> emitter follower Rp of the coil in parallel with the bias resistance
>>> or does it also include (Rphi+RE) x Beta. Is Beta used here an
>>> approximation calculate by Ft/F ?
>>
>> Thats all first order rule of thumb. However, are you trying to build
>> one working oscillator or flog it to death? I say that as I've found
>> it to be both less than an exact science and that accurate to more
>> than 3 decimal places is excess for operation. For one oscillator
>> it is both easy and practical to dead bug it and see if it meets
>> your needs. If you going to build in quantity something using it
>> that is a whole different set of issues.
>>
>> Allison
>>
>>>
>>>
>>>
>>> nospam@nouce.bellatlantic.net wrote:
>>>> On Mon, 28 Aug 2006 13:25:40 GMT, David <websales@orbitcoms.com>
>>>> wrote:
>>>>
>>>>> Thanks for the feedback.
>>>>>
>>>>> I do not have a ready supply of ferrite cores and do not really want to
>>>>> wind coils.
>>>>> I have surface mountable air fixed coils that provide Q > 100 that I
>>>>> expect should be suitable for most applications and use of trimmer
>>>>> capacitors.
>>>>>
>>>>> The only high frequency crystal oscillator I could find in the EMRFD
>>>>> (100MHz) is page 4.15 which is a common base butler. I understand these
>>>>> suffer parasitic effects, the tank is only effective for a limited range
>>>>> of inductance. The butler emitter follower is offered as a more superior
>>>>> typology but this circuit is not found in this book.
>>>>> The circuit values in his example are incorrect as the 25nH inductor in
>>>>> the tank requires over 100pF to resonate at 100MHz. The circuit shown
>>>>> has a net capacitance of around 40pF ?
>>>> Built as described, it works. However the 25nH is an approximation

>>>> as distributed C and also lead lengths add significantly. Mine tuned
>>>> with 33ohms substituted for the crystal from 93 to 122mhz.
>>>>
>>>>> There is very little design information given with respect to ratio of
>>>>> the C-Tap or emitter bias.
>>>> Read the test as the concepts are outlined rather than how to design
>>>> xyz circuit in cookbook fashon. If you need help, the easy way is
>>>> to calculate the reactances at the shown frequency and then using
>>>> those numbers scale for the desired frequency. The bias point would
>>>> be the same at any frequency for a given transistor and power.
>>>>
>>>>> I also have his book "Introduction to Radio Frequency design". This does
>>>>> go into more depth but is centred mainly around colpitts oscillators
>>>>> (not good for harmonic crystal oscillators).
>>>> In general oscillators in the >20mhz range are harmonic or overtone
>>>> designs and more subject to parasitic effects. I've bult the 100mhz
>>>> design and it worked fine for me within the limits of the crystal used
>>>> though after a x4 multiplication the thermal drift was unacceptable
>>>> and the crystal was the first order contributor. The oscillator
>>>> otherwise behaved well.
>>>>
>>>> My solution for the whole mess was a lower frequency osc
>>>> and using low order harmonics. The lower frequency crystale proved
>>>> both less fussy to oscilate and more stable in fundemental mode.
>>>> Note: I was interested in sufficient stability to copy SSB at ~1296mhz
>>>> so even a few dozen Hz drift is noticeable..
>>>>
>>>> Allison
>>>>>
>>>>>
>>>>>
>>>>> nospam@nouce.bellatlantic.net wrote:
>>>>>> On Mon, 28 Aug 2006 05:59:39 GMT, David <websales@orbitcoms.com>
>>>>>> wrote:
>>>>>>
>>>>>>> Dave,
>>>>>>>
>>>>>>> I do have EMIRFD but find almost all the circuits are based around rf
>>>>>>> transformers for matching and most of them are low frequency (3MHz etc).
>>>>>> Up to around 200mhz thats not a big issue if properly scaled and the
>>>>>> right ferrite used.
>>>>>>
>>>>>> I've used a lot of ideas from that book at 6 and 2m. The book list
>>>>>> presented is one I'd have suggested and added the venerable handbook
>>>>>> both current and a few older copies.
>>>>>>
>>>>>> Allison
>>>>>>
>>>>>>
>>>>>>> Regards

>>>>>>>
>>>>>>> David
>>>>>>>
>>>>>>> Dave Platt wrote:
>>>>>>>>> Anyone recommend a "decent" book that would cover oscillators, small
>>>>>>>>> signal RF amps and matching techniques sufficiently to enable a novice
>>>>>>>>> to start experimenting with circuits and have enough detail in the text
>>>>>>>>> to tweak the circuits to get them running properly ?
>>>>>>>> "Experimental Methods in RF Design" by Hayward, Campbell, and Larkin,
>>>>>>>> available from the ARRL, would be a good place to start. It's the
>>>>>>>> successor to the classic "Solid-State Design for the Radio Amateur"
>>>>>>>> from back in 1977.
>>>>>>>>
>>>>>>>> If you can find copies of Doug Demaw's "Design notebook" and "QRP
>>>>>>>> notebook", there's some good reading there as well. Not as advanced
>>>>>>>> as "Experimental Methods" but perhaps a bit more accessible.
>>>>>>>>
>>>>>>>> Buying a bunch of back issues of QRPp might also be helpful. In a lot
>>>>>>>> of the articles which discuss QRP receiver and transmitters, the
>>>>>>>> authors go into detail about their own particular circuit preferences,
>>>>>>>> tweaks, construction and debugging techniques, etc.
>>>>>>>>
>>>>>>>> For a slightly deeper background, I'd recommend "Troubleshooting
>>>>>>>> Analog Circuits" by Robert Pease. It's not specific to RF but is full
>>>>>>>> of useful tricks and ideas.
>>>>>>>>
>>

4155. Re: Hi-Q Ceramic Caps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-29 22:33:29 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <u4g9f2dr6lgp1tjbsrg8n285862tpp9u52@4ax.com>
Source record: 10756

On 29 Aug 2006 14:57:19 -0700, "SparkySKO" <sparkysko@gmail.com>
wrote:

>Hello All!
>
>Bare with me, I'm a newbie.

Only if you're female.

4156. Re: Hi-Q Ceramic Caps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-29 23:51:03 UTC
From: SparkySKO <sparkysko@gmail.com>
Message-ID: <1156895462.934525.236310@h48g2000cwc.googlegroups.com>
Source record: 10757

Wes Stewart wrote:
> On 29 Aug 2006 14:57:19 -0700, "SparkySKO" <sparkysko@gmail.com>
> wrote:
>
> >Hello All!
> >
> >Bare with me, I'm a newbie.
>
> Only if you're female.

Okay okay, bear with me.. Sorry, I went to a public school.

4157. Re: Hi-Q Ceramic Caps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-30 01:39:07 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12f9r1uhrlah72e@corp.supernews.com>
Source record: 10758

For the 5 pF and 15 pF capacitors, use only NPO (C0G) ceramic capacitors -- otherwise the frequency will drift. For just receiving FM broadcast, you *might* get by with "stable" ceramic caps, like X7R, since the signals are broad. But try to get NPO if you can.

For the other capacitors, use ones which are physically small. Multilayer ceramic capacitors are smaller than disks.

Get some solder wick, which is a wire braid soaked with flux. To remove components, first remove the solder with the wick, then you can pull the components out without damaging the board. Any beginner's board that won't tolerate removal of parts is crap and shouldn't be on the market.

Roy Lewallen, W7EL

SparkySKO wrote:
> Hello All!
>
> Bare with me, I'm a newbie.
>
> I'm looking into building the Radio Shack Special
>
> http://www.electronics-lab.com/projects/rf/007/
>
> And looking through the parts list, I see that he references using Hi-Q
> Ceramic Capacitors. This radio is for FM, so 90-110mhz.
>
> I have a bunch of normal ceramic capacitors, but no hi-q capacitors. Is
> there really much of a difference between the two, or am I likely to
> fail if I don't use them? I'd hate to solder all this onto a board, and
> risk messing up the board when removing them.
>
> Any advice on the difference between them would be helpful. I'm
> guessing they oscillate better, or at higher frequencies.
>

4158. Re: Beginner Radio w/o using air variable cap???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-30 04:40:51 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12fa5mm8b60as66@corp.supernews.com>
Source record: 10759

xpyttl wrote:
> . . .
> Varactors do have some temperature coefficient, and they are often coupled
> with toroid inductors, which also have some considerable temperature
> coefficient. Most of the designs you see out there are for CW rigs in the
> ham bands, where temperature stability is extremely important. The maze of
> capacitors around the varactor are there to balance the temperature
> coefficients. Usually there is a polystyrene capacitor which has a
> temperature coefficient opposite to the toroid and varactor, but you can
> never get exactly the right value for that, so it is a question of getting
> the right combination of positive and negative temperature coefficients AND
> the right value of capacitance. For AM in the broadcast band, you can
> probably come close enough with one or two capacitors. For a rig with a 200
> Hz CW filter at 15 meters, it can be a real bear keeping the frequency to
> within the 0.0001% that you need for comfortable operation.
> . . .

All toroid inductors aren't equal, and neither are capacitors.

I routinely build VFOs with no temperature compensation which have about 200 Hz total warmup drift on 40 meters. The trick is to use components which have inherently low temperature coefficients rather than try to make ones with high coefficients compensate each other. Polystyrene capacitors have a fairly high temperature coefficient, but it's in the opposite direction than a typical poor inductor. Sometimes people get lucky and the combination works ok, but often they don't and it doesn't.

The other thing you have to do is design your oscillator so that its frequency depends almost solely on the tank components and not the active device.

I found that good quality NPO ceramic capacitors have the lowest temperature coefficient of any commonly available parts, and inductors wound on type 6 powdered iron cores were the best. It's the inductor which dominates the drift in my VFOs, and that small amount can easily be compensated if desired by replacing part of the tank C with a capacitor with controlled temperature coefficient.

I described these techniques (except for compensation) in more detail in "An Optimized QRP Transceiver", in August 1980 QST.

Roy Lewallen, W7EL

4159. Re: Beginner Radio w/o using air variable cap???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-30 04:48:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12fa65p2cc7pn81@corp.supernews.com>
Source record: 10760

laura halliday wrote:
> . . .
> I'd try R5D3 first, then see if I could find something worth
> cannibalizing at Cascade (note new address) or Wacky
> Willy's (lots of junk, but you never know...). Then I'd hit the
> various thrift stores and see if I could find an old FM tuner.

At Sea-Pac this year I found out that Wacky Willy's has also moved from its long time location across from the Reedville Cafe.

> Are there any ham radio swap meets coming up?

There's the Salem club swap meet at Rickreall in February, and Sea-Pac at Seaside in June, but no other major local ones I know of. I'm sure that a query on a local repeater would bring full details of any others.

> . . .

Roy Lewallen, W7EL

4160. Re: Beginner Radio w/o using air variable cap???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-30 05:06:26 UTC
From: "H. P. Friedrichs" <noemail@please.com>
Message-ID: <1f2dnYSIN8hOgWjZnZ2dnUVZ_sGdnZ2d@velocitywest.com>
Source record: 10761

Here's a radio tuner based on a variometer and fixed capacitor. The
variometer housing is a CDROM container; the capacitor is built from
blank CDROMS.

http://www.hpfriedrichs.com/rr-cdrom.htm

73
Pete
AC7ZL

Hamateur wrote:

> SparkySKO wrote:
>
>>[Basically this says, are there any practical alternatives to an air
>>variable capacitor that a beginner can use in building his first
>>receiver radio?]
>
>
> This homebrew 10-600pF book-shaped air variable has knob tuning:
> http://www.leradiodisophie.it/CV-libro.html
>
> Wind a simple coil, add a diode and audio amplification -
> see what you can hear.
>

4161. looking for service manual for 747 urgent

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-30 07:42:06 UTC
From: hamguy1 <hamguy1@optusnet.com.au>
Message-ID: <44f54147$0$18777$afc38c87@news.optusnet.com.au>
Source record: 10762
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,free.uk.amateur-radio,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

hi guys , i have a yaesu757gx 1 it has a few little problems the main vfo is off on modes usb lsb as well the tx usb freq is off .i was wondering if anyone could help me out with a free pdf or win rar service manual they have online or in there favourites i need help to align this 747 where it should be originally .thanks in advance ham guy1 nsw australia .

4162. Re: looking for service manual for 747 urgent

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-30 09:55:03 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <cqidnfrK5oPq_WjZRVnyqA@pipex.net>
Source record: 10763
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,free.uk.amateur-radio,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

hamguy1 wrote:
> hi guys , i have a yaesu757gx 1 it has a few little problems the main vfo
> is off on modes usb lsb as well the tx usb freq is off .i was wondering if
> anyone could help me out with a free pdf or win rar service manual they have
> online or in there favourites i need help to align this 747 where it should
> be originally .thanks in advance ham guy1 nsw australia .
>
>
==========
You'll find the manual at www.mods.dk Manuals ----> Yaesu ----->

Frank GM0CSZ / KN6WH

4163. Re: looking for service manual for 747 urgent

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-30 16:02:37 UTC
From: Alan Holmes <alan.holmes@virgin.net>
Message-ID: <xEiJg.204$SH2.38@newsfe4-gui.ntli.net>
Source record: 10764
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,free.uk.amateur-radio,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:cqidnfrK5oPq_WjZRVnyqA@pipex.net...
> hamguy1 wrote:
>> hi guys , i have a yaesu757gx 1 it has a few little problems the main
>> vfo is off on modes usb lsb as well the tx usb freq is off .i was
>> wondering if anyone could help me out with a free pdf or win rar service
>> manual they have online or in there favourites i need help to align this
>> 747 where it should be originally .thanks in advance ham guy1 nsw
>> australia .
> ========================
> You'll find the manual at www.mods.dk Manuals ----> Yaesu ----->

What is the point, he obviously didn't bother to read your first post on the
subject!

>
> Frank GM0CSZ / KN6WH

4164. Re: Hi-Q Ceramic Caps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-30 18:10:03 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1156961403.048645.304590@e3g2000cwe.googlegroups.com>
Source record: 10765

Actually, modern ceramic capacitors generally are pretty high Q, though I wonder if the "Hi-Q" may be a trademarked name. The problem, as Roy suggests, is more likely to be temperature stability, and as he says, the 5pF and 15pF parts in the design are the ones to be careful about. I'd guess you will have a very hard time finding 5pF and 15pF capacitors which are NOT either temperature stable (NPO or C0G type) or controlled coefficient (negative or positive temperature coefficient, typically used to compensate for drift in coils...since a coil typically expands with increased temperature, its inductance goes up, and that can be compensated by a capacitor whose capacitance goes down). The dielectrics which are not stable, like X7R, Y5V and Z5U, are used in high capacitance parts, and looking at a couple manufacturers' data sheets, the smallest value X7R I see is 100pF. If the capacitor is large enough, it may be marked "NPO" or "N220" or something similar to let you know its temperature characteristic.

In the RF part of the circuit, especially, keeping lead lengths very short is important. You don't want the part that's supposed to be a capacitor also include a lot of inductance.

There are ceramic capacitors which are specially designed for use at UHF and microwave frequencies, and maintain very high Q up into GHz frequencies, but you shouldn't need anything like that. Also, be aware that "5pF" is deprecated: modern parts are much more likely to be in the standard "e12" sequence: 1.0, 1.2, 1.5, 1.8, 2.2, 2.7, 3.3, 3.9, 4.7, 5.6, 6.8, 8.2, 10, ... So for the "5pF" you'd use a 4.7pF part (and probably not notice the difference at all).

Another note: I notice the instructions you referenced say to use a form for the source coil that's EXACTLY 8mm diameter. I'm confident that if you use one that's 5/16" diameter, you won't notice the difference. In fact, if you use one that's 1/4" diameter and wind it with 32 turns of close-wound 24 AWG enamelled wire, it's very likely to work just as well. You could also use a 2.2uH commercial RF inductor.

So maybe you were only baring your soul...

Cheers,
Tom

SparkySKO wrote:
> Hello All!
>
> Bare with me, I'm a newbie.
>
> I'm looking into building the Radio Shack Special

>
> http://www.electronics-lab.com/projects/rf/007/
>
> And looking through the parts list, I see that he references using Hi-Q
> Ceramic Capacitors. This radio is for FM, so 90-110mhz.
>
> I have a bunch of normal ceramic capacitors, but no hi-q capacitors. Is
> there really much of a difference between the two, or am I likely to
> fail if I don't use them? I'd hate to solder all this onto a board, and
> risk messing up the board when removing them.
>
> Any advice on the difference between them would be helpful. I'm
> guessing they oscillate better, or at higher frequencies.

4165. Re: looking for service manual for 747 urgent

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-30 22:48:32 UTC
From: Samuel Morse <ditdit@f2s.com>
Message-ID: <obudnYcTm7XPiGvZRVnyig@giganews.com>
Source record: 10766
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,free.uk.amateur-radio,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Alan Holmes wrote:

> What is the point, he obviously didn't bother to read your first post on the
> subject!

What a helpful chap you are!

4166. Re: What would be best way to go from 12 VDC to 12 VAC, 350 Ma, freq not critical?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-30 23:37:26 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <WipJg.8823$pX3.5965@trnddc07>
Source record: 10767

Here's a$15 turnkey solution:

A $10 12VDC-to-115VAC power inverter:
(http://www.harborfreight.com/cpi/ctaf/displayitem.taf?Itemnumber=92707)

+ a $5 12VAC wall transformer:
(http://www.jameco.com/webapp/wcs/stores/servlet/ProductDisplay?langId=-1&storeId=10001&catalogId=10001&productId=211271&pa=211271PS)

.

Joe
W3JDR

"Jim" <wdxp@cox.net> wrote in message
news:u2pbf2denqf3vov3v7ot5iepg058hp4q2u@4ax.com...
>I have a special ozone generating lamp that requires approx 12 VAC at
> 330 MA (will have to be current limited, as it strikes a gaseous arc
> and too much current will melt the filaments). I would like to use it
> in an automotive application.
>
> What would you suggest for circuitry to make the conversion?
> Frequency is not critical, but some form of current limiting is.
>
> Jim
>

4167. Re: radiomart descriptions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-30 23:38:29 UTC
From: David Heinsohn <dheinson@swbell.net>
Message-ID: <VjpJg.6982$q63.4842@newssvr13.news.prodigy.com>
Source record: 10768
Cross-posted to: rec.ham-radio.misc,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.swap,rec.radio.boatanchors,rec.radio.shortwave

"not to mention that he
shill bids on his gear using the above mentioned gottahaveit1995 name"

How do you know this when he makes his auctions private ? Except for X
material, why would one want a private auction ?

I will agree that he describes the gear much more glowingly than I. He has
re-sold 3 of my radios. One went out on a Monday and it was listed Sunday.

Dave

"Chas" <wg2a@mhtc.net> wrote in message
news:1pGdnVp-eZwh0mnZnZ2dnUVZ_qudnZ2d@bright.net...
> It's the lying that bothers most of us, I bought a radio from him and it
> smoked when I plugged it in, upon examination, I found it was NO WHERE
NEAR
> what he described, he used photos that didn't show the imperfections and
> outright lied about the ownership. I know several people who have sold
gear
> to him (using his gottahaveit1995 name) only to see radio-mart sell it a
> week later, claiming it came from his personal collection and had owned it
> for years!! Then he lies about the condition of it, not to mention that he
> shill bids on his gear using the above mentioned gottahaveit1995 name.
This
> asshole needs to be run off ebay, because of how he screws unsuspecting
> bidders!!
>
> "Wesleywoo-woo" <applegate444@yahoo.nosprem.com> wrote in message
> news:bac77$44f04f82$d1cc790d$30393@snip.allthenewsgroups.com...
> >I have a better idea Mike. If you don't like the guy re-selling
> > things he bought at estate sales and other places, simply ignore him.
> > It's just that simple. Go to another Deli and get your Cornbeef on Rye
> > at another store. Life's too short to worry about ham radio dealers
> > that's fer damm sure! :)
> >
> >
> > "mike maghakian" <maghakian@comcast.net> wrote in message
> > news:8Y-dnQuvbIz2GHLZnZ2dnUVZ_uydnZ2d@comcast.com...
> >> look at this auction:
> >>
> >
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&ssPageName=ADME:B:WNA:US:112&item=110023382429&id=
> >>

> >> the seller said he bought it in a radio mart acution and gives the
> > number.
> >> radio mart said it was "stunning" and "excellent"
> >> the seller is now noting all the problems if you read the question
> > section.
> >>
> >> for those of you considering a radiomart auction. consider that he
thinks
> >> telling lies is standard operating procedure.
> >>
> >>
> >
>
>

4168. Re: Beginner Radio w/o using air variable cap???

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-30 23:45:08 UTC
From: kl7r <kl7r@yahoo.com>
Message-ID: <1156981508.851910.197150@m79g2000cwm.googlegroups.com>
Source record: 10769

Check out the Tin Ear receiver:

http://www.amqrp.org/kits/tin_ear/TinEar%20Manual.pdf

It uses a plastic drinking straw wrapped with wire and a brass screw
to make a variable inductor that is part of a permeability tuned VFO.

3 FETs 4 NPNs and 1 PNP
1 toroid

It is no longer available as a kit but all the info is there to build
one yourself.

4169. Re: looking for service manual for 747 urgent

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-31 08:36:19 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1157013378.229849.252960@h48g2000cwc.googlegroups.com>
Source record: 10770
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Samuel Morse wrote:
> Alan Holmes wrote:
>
> > What is the point, he obviously didn't bother to read your first post on the
> > subject!
>
> What a helpful chap you are!

Yes, but he has a point - the original person posted this same request
on a VK board on the 24th, was pointed towards mods.dk, but still
keeps on asking the same question!

I think he wants someone to do it for him........and burn a CD, and
mail it to him.....

Andrew VK3BFA.

4170. Re: What would be best way to go from 12 VDC to 12 VAC, 350 Ma, freq not critical?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-31 11:56:12 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <cqCdnQjhneXEU2vZRVnyqQ@pipex.net>
Source record: 10771

> That will do it, thanks, better than tinkering with circuits for a
> week or two..
==========
Why not ....after all this is a Newsgroup dedicated to home
construction.

Frank GM0CSZ / KN6WH

4171. Re: What would be best way to go from 12 VDC to 12 VAC, 350 Ma, freq not critical?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-31 17:00:40 UTC
From: James Thompson <Jamesthompson2002@hotmail.com>
Message-ID: <a335b$44f715b7$471cd629$7695@ALLTEL.NET>
Source record: 10772

```
"Jim" <wdxp@cox.net> wrote in message
news:rvhdf21n3b423bd3b35hkvc2fkbkvd7kci@4ax.com...
> That will do it, thanks, better than tinkering with circuits for a
> week or two..
>
>
>
> On Wed, 30 Aug 2006 23:37:26 GMT, "W3JDR" <joe@roccis.com> wrote:
>
>>Here's a$15 turnkey solution:
>>
>>A $10 12VDC-to-115VAC power inverter:
>> (http://www.harborfreight.com/cpi/ctaf/displayitem.taf?Itemnumber=92707)
>>
>> + a $5 12VAC wall transformer:
>>(http://www.jameco.com/webapp/wcs/stores/servlet/ProductDisplay?langId=-1&storeId=10001&
catalogId=10001&productId=211271&pa=211271PS)
>>
>>.
>>
>>Joe
>>W3JDR
>>
>>
>>"Jim" <wdxp@cox.net> wrote in message
>>news:u2pbf2denqf3vov3v7ot5iepg058hp4q2u@4ax.com...
>>>I have a special ozone generating lamp that requires approx 12 VAC at
>>> 330 MA (will have to be current limited, as it strikes a gaseous arc
>>> and too much current will melt the filaments). I would like to use it
>>> in an automotive application.
>>>
>>> What would you suggest for circuitry to make the conversion?
>>> Frequency is not critical, but some form of current limiting is.
>>>
>>> Jim
>>>
>>
>

Adding ozone to the intake huh? Carefull not to have any gas leak around
the carb. I would like more details myself you this, like how to control
the amount of ozone to the gas mix etc.
```

4172. how can I use 74ls192 as 74ls190 ????

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-31 17:16:29 UTC
From: shashwat <shashwatjnawali@gmail.com>
Message-ID: <1157044589.480926.136950@i42g2000cwa.googlegroups.com>
Source record: 10773

I am building this project where I have to use presettable BCD up down counter 74ls192 but that IC is not available in my country... Instead 74LS190 is available.. How can I configure it to work the same???? I am from a small asian country, NEPAL... Can anyone help me out??? the circuit I am building is the watchman watcher which uses this counter to count how many times the watchman has missed the call... its at http://electronicsforu.com/electronicsforu/lab/ at no.. 54 .. don't hesitate to help me.. its my 2 credit project..

4173. Re: how can I use 74ls192 as 74ls190 ????

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-31 17:58:42 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1157047122.047611.197990@m79g2000cwm.googlegroups.com>
Source record: 10774

It looks like there are two problems. One is that you don't have a "clear" input on the 74LS190, and the "clear" on the 74LS192 is used in the circuit. But you can use the "load" input, with the A,B,C,D inputs set to zero to accomplish the same thing. Be sure to think about whether the clear takes place when the input is high or low, and whether the load input behaves the same way.

The other problem, of course, is that the '190 uses a single clock input, and an UP/DOWN selection, instead of separate UP and DOWN clocks. Since this is apparently a school project, you should expect to do a little thinking, and then you will learn more. Try to think of a very simple logic circuit, which has two inputs (up clock and down clock) and two outputs (up/down, and clock) that will accomplish what you need. One thing to be careful about: how long before the clock signal comes must the up/down input on the 74LS190 be stable? That is, if the clock comes just when the up/down signal is changing, the 74LS190 may get confused. "Do I count up, or do I count down?" So you want to make sure the clock comes only after the up/down is stable. What do you do if an UP clock comes at the same time as a DOWN clock? Should that ever happen in the circuit you are building? COULD it ever happen?

If you think about all this, and still have questions, please post again. Most people here won't want to just give you the answer, but will want you to think about it yourself. We are quite willing to give you ideas to get you started thinking, but it's from the thinking that you will really learn.

Cheers,
Tom

shashwat wrote:
> I am building this project where I have to use presettable BCD up down
> counter 74ls192 but that IC is not available in my country... Instead
> 74LS190 is available.. How can I configure it to work the same???? I am
> from a small asian country, NEPAL... Can anyone help me out??? the
> circuit I am building is the watchman watcher which uses this counter
> to count how many times the watchman has missed the call... its at
> http://electronicsforu.com/electronicsforu/lab/ at no.. 54 .. don't
> hesitate to help me.. its my 2 credit project..

4174. Contemporary HV Rectification

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-31 19:02:54 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1157050974.453969.142090@74g2000cwt.googlegroups.com>
Source record: 10775

Hi Guys,

I am just about to start on a 2kV supply for a 4CX250 amp. I have a 750VA 1500V transformer and a couple of 15uF 7.5kV caps.

In the full wave rectifier department I seem to have a few options:

1) A bridge of Microwave oven rectifiers like the NTE517, 15kV PIV, 550mA avg, 200A peak surge

This is by far the simplest and has the same surge capability and 500ma / 1500V is in the same ball park as the 750VA transformer rating.

I assume that a small capacitor across each of the 4 devices would be wise -- any suggestions of value.

2) A string of 3 or 4 1N4508 rectifiers, 3-4kV PIV, 3A avg, 200A peak surge

The standard topology for this seems to be voltage equalizing resistors across each rectifier along with a transient absorbing cap - maybe 10nF.

I am sure I have seen some comments that the resistors may reduce reliability (short of using MELF, most metal film resistors seem to be rated at 300-500v). Are their other easily available higher voltage parts ?

Finally a 1500V sine wave has a peak of 2100V, so 3 x 1kV rectifiers is never going to approach the total avalanche voltage, so why bother with the balancing resistors? Sure, the caps have a more balanced voltage across them if the resistors are included...

This design involves 12 x (rectifier + resistor + cap) which is starting to take up some PCB space where some well insulated posts are all that is required to support 4 microwave oven rectifiers.

All comments appreciated,

Thanks,

Mark

4175. Re: radiomart descriptions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-31 20:28:02 UTC
From: Chas <wg2a@mhtc.net>
Message-ID: <9-ydna8LspfC22rZnZ2dnUVZ_oydnZ2d@bright.net>
Source record: 10776
Cross-posted to: rec.ham-radio.misc,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.swap,rec.radio.boatanchors,rec.radio.shortwave

Because before his auctions went "Private", you could see "gottahaveit1995 bidding on numerous things of his. Ebays use of "Private" auctions mystifies me, it only serves to protect questionable dealers, anyone else have more insight?

"David Heinsohn" <dheinson@swbell.net> wrote in message news:VjpJg.6982$q63.4842@newssvr13.news.prodigy.com...
> "not to mention that he
> shill bids on his gear using the above mentioned gottahaveit1995 name"
>
> How do you know this when he makes his auctions private ? Except for X
> material, why would one want a private auction ?
>
> I will agree that he describes the gear much more glowingly than I. He has
> re-sold 3 of my radios. One went out on a Monday and it was listed Sunday.
>
> Dave
>
> "Chas" <wg2a@mhtc.net> wrote in message
> news:1pGdnVp-eZwh0mnZnZ2dnUVZ_qudnZ2d@bright.net...
>> It's the lying that bothers most of us, I bought a radio from him and it
>> smoked when I plugged it in, upon examination, I found it was NO WHERE
> NEAR
>> what he described, he used photos that didn't show the imperfections and
>> outright lied about the ownership. I know several people who have sold
> gear
>> to him (using his gottahaveit1995 name) only to see radio-mart sell it a
>> week later, claiming it came from his personal collection and had owned
>> it
>> for years!! Then he lies about the condition of it, not to mention that
>> he
>> shill bids on his gear using the above mentioned gottahaveit1995 name.
> This
>> asshole needs to be run off ebay, because of how he screws unsuspecting
>> bidders!!
>>
>> "Wesleywoo-woo" <applegate444@yahoo.nosprem.com> wrote in message
>> news:bac77$44f04f82$d1cc790d$30393@snip.allthenewsgroups.com...
>> >I have a better idea Mike. If you don't like the guy re-selling
>> > things he bought at estate sales and other places, simply ignore him.
>> > It's just that simple. Go to another Deli and get your Cornbeef on Rye
>> > at another store. Life's too short to worry about ham radio dealers
>> > that's fer damm sure! :)

>> >
>> >
>> > "mike maghakian" <maghakian@comcast.net> wrote in message
>> > news:8Y-dnQuvbIz2GHLZnZ2dnUVZ_uydnZ2d@comcast.com...
>> >> look at this auction:
>> >>
>> >
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&ssPageName=ADME:B:WNA:US:112&item=11002338
2429&id=
>> >>
>> >> the seller said he bought it in a radio mart acution and gives the
>> > number.
>> >> radio mart said it was "stunning" and "excellent"
>> >> the seller is now noting all the problems if you read the question
>> > section.
>> >>
>> >> for those of you considering a radiomart auction. consider that he
> thinks
>> >> telling lies is standard operating procedure.
>> >>
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4176. Re: radiomart descriptions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-31 20:28:44 UTC
From: Chas <wg2a@mhtc.net>
Message-ID: <9-ydna4LspfC22rZnZ2dnUVZ_oydnZ2d@bright.net>
Source record: 10777
Cross-posted to: rec.ham-radio.misc,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.swap,rec.radio.boatanchors,rec.radio.shortwave

Because before his auctions went "Private", you could see "gottahaveit1995 bidding on numerous things of his. Ebays use of "Private" auctions mystifies me, it only serves to protect questionable dealers, anyone else have more insight?

"David Heinsohn" <dheinson@swbell.net> wrote in message news:VjpJg.6982$q63.4842@newssvr13.news.prodigy.com...
> "not to mention that he
> shill bids on his gear using the above mentioned gottahaveit1995 name"
>
> How do you know this when he makes his auctions private ? Except for X
> material, why would one want a private auction ?
>
> I will agree that he describes the gear much more glowingly than I. He has
> re-sold 3 of my radios. One went out on a Monday and it was listed Sunday.
>
> Dave
>
> "Chas" <wg2a@mhtc.net> wrote in message
> news:1pGdnVp-eZwh0mnZnZ2dnUVZ_qudnZ2d@bright.net...
>> It's the lying that bothers most of us, I bought a radio from him and it
>> smoked when I plugged it in, upon examination, I found it was NO WHERE
> NEAR
>> what he described, he used photos that didn't show the imperfections and
>> outright lied about the ownership. I know several people who have sold
> gear
>> to him (using his gottahaveit1995 name) only to see radio-mart sell it a
>> week later, claiming it came from his personal collection and had owned
>> it
>> for years!! Then he lies about the condition of it, not to mention that
>> he
>> shill bids on his gear using the above mentioned gottahaveit1995 name.
> This
>> asshole needs to be run off ebay, because of how he screws unsuspecting
>> bidders!!
>>
>> "Wesleywoo-woo" <applegate444@yahoo.nosprem.com> wrote in message
>> news:bac77$44f04f82$d1cc790d$30393@snip.allthenewsgroups.com...
>> >I have a better idea Mike. If you don't like the guy re-selling
>> > things he bought at estate sales and other places, simply ignore him.
>> > It's just that simple. Go to another Deli and get your Cornbeef on Rye
>> > at another store. Life's too short to worry about ham radio dealers
>> > that's fer damm sure! :)

>> >
>> >
>> > "mike maghakian" <maghakian@comcast.net> wrote in message
>> > news:8Y-dnQuvbIz2GHLZnZ2dnUVZ_uydnZ2d@comcast.com...
>> >> look at this auction:
>> >>
>> >
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&ssPageName=ADME:B:WNA:US:112&item=11002338
2429&id=
>> >>
>> >> the seller said he bought it in a radio mart acution and gives the
>> > number.
>> >> radio mart said it was "stunning" and "excellent"
>> >> the seller is now noting all the problems if you read the question
>> > section.
>> >>
>> >> for those of you considering a radiomart auction. consider that he
> thinks
>> >> telling lies is standard operating procedure.
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4177. Re: radiomart descriptions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-31 20:57:06 UTC
From: Mike <no@where.man>
Message-ID: <12fej93b8d99jc5@news.supernews.com>
Source record: 10778
Cross-posted to: rec.ham-radio.misc,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.swap,rec.radio.boatanchors,rec.radio.shortwave

"Chas" <wg2a@mhtc.net> wrote in message
news:9-ydna4LspfC22rZnZ2dnUVZ_oydnZ2d@bright.net...
> Because before his auctions went "Private", you could see "gottahaveit1995
> bidding on numerous things of his. Ebays use of "Private" auctions
> mystifies
> me, it only serves to protect questionable dealers, anyone else have more
> insight?

The purpose of Private auctions is just that - private. As in not public.

For example, where I work, we have a yearly "sell off some old computers to
the employees" thing. We have used eBay private auctions for this. Only
our employees can bid - not the general public.

Mike

4178. Re: Contemporary HV Rectification

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-08-31 23:29:43 UTC
From: jgboyles@aol.com
Message-ID: <1157066982.987471.19870@i42g2000cwa.googlegroups.com>
Source record: 10779

MarkAren wrote:
> Hi Guys,
>
> I am just about to start on a 2kV supply for a 4CX250 amp. I have a
> 750VA 1500V transformer and a couple of 15uF 7.5kV caps.
>
> In the full wave rectifier department I seem to have a few options:
>
> 1) A bridge of Microwave oven rectifiers like the NTE517, 15kV PIV,
> 550mA avg, 200A peak surge
>
> This is by far the simplest and has the same surge capability and
> 500ma / 1500V is in the same ball park as the 750VA transformer
> rating.
>
> I assume that a small capacitor across each of the 4 devices would be
> wise -- any suggestions of value.
>
> 2) A string of 3 or 4 1N4508 rectifiers, 3-4kV PIV, 3A avg, 200A peak
> surge
>
> The standard topology for this seems to be voltage equalizing
> resistors across each rectifier along with a transient absorbing cap -
> maybe 10nF.
>
> I am sure I have seen some comments that the resistors may reduce
> reliability (short of using MELF, most metal film resistors seem to be
> rated at 300-500v). Are their other easily available higher voltage
> parts ?
>
> Finally a 1500V sine wave has a peak of 2100V, so 3 x 1kV rectifiers
> is never going to approach the total avalanche voltage, so why bother
> with the balancing resistors? Sure, the caps have a more balanced
> voltage across them if the resistors are included...
>
> This design involves 12 x (rectifier + resistor + cap) which is
> starting to take up some PCB space where some well insulated posts
> are all that is required to support 4 microwave oven rectifiers.
>
> All comments appreciated,
>
> Thanks,
>
> Mark

Mark, The 1N4007 or JE125, NTE125 diodes are 10 cents each in groups of 100. Get a bunch of one or the other, see what you can get at 2kv FWB rectifier, less than 1 amp. Power up surge may be a problem. No equalizing R or C. Should be cheep enough to run several in each leg of the FWB to see what you can get. I seem to remember that the equalizing R and C has been decided not needed.

Gary N4AST

4179. Re: looking for service manual for 747 urgent

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-01 00:22:25 UTC
From: "g. beat"
Message-ID: <uuydnXeRvK_V4GrZnZ2dnUVZ_v6dnZ2d@comcast.com>
Source record: 10780

"hamguy1" <hamguy1@optusnet.com.au> wrote in message
news:44f54147$0$18777$afc38c87@news.optusnet.com.au...
> hi guys , i have a yaesu757gx 1 it has a few little problems the main vfo
> is off on modes usb lsb as well the tx usb freq is off .i was wondering if
> anyone could help me out with a free pdf or win rar service manual they
> have online or in there favourites i need help to align this 747 where it
> should be originally .thanks in advance ham guy1 nsw australia .

Service Manual for the FT-757GX -- download it from here:
http://www.eserviceinfo.com/downloadsm/13332/Yaesu_FT757GX.html

Check the trimmer capacitors.

4180. Using the Virtual Ionosphere

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-01 00:28:50 UTC
From: sailtamarack@yahoo.ca
Message-ID: <1157070530.139182.294000@m73g2000cwd.googlegroups.com>
Source record: 10781

Are you tired of buying or building amateur radio equipment? Perhaps putting up an antenna isn't fun anymore. Maybe straining for DX is taking too much effort. Well don't despair - there is an alternative.

You need to consider becoming one of the "next generation" hams. Communicate around the world using your computer and special "radio" software. Traditional VoIP programs like eQSO, Echolink and Skype don't make you feel like a "real ham". You need to take the next step and use the Virtual Ionosphere and the CQ100 Transceiver. Call CQ, twiddle the knobs, send CW and RTTY, use ham lingo and make contacts around the world. However, you will need a ham ticket and $89 (after the trial period) in order to use this next generation "radio".

Full details at www.qsonet.com

Geez - I hope this isn't a glimpse of the future. I think I'll just keep building stuff and be a "relic" ham

Roger

4181. MRX-40 modification

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-01 00:53:19 UTC
From: "ve2ghi@gmail.com" <ve2ghi@gmail.com>
Message-ID: <1157071999.677010.81130@b28g2000cwb.googlegroups.com>
Source record: 10782

Hello OM,
I have build the MRX-40 form a kit many years ago. It
work fine but ...
Now I would like to make a small modification to this receiver.
I would like to replace the tuning capacitor with some kind of diode.
I manage to add a small potentiometer with the shaft getting outside
and I remove the initial capacitor. Now I wonder how and what kind of
diode I could use. I dont have also any idea about what to expect in
the
range of tuning.
May be someone else had the same idea

Any help is will be greatly appraciate.
Happy day
72 de Jean (VE2GHI)

4182. Anyone used Superspice simulator ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-01 01:07:17 UTC
From: David <websales@orbitcoms.com>
Message-ID: <9JLJg.21126$rP1.2457@news-server.bigpond.net.au>
Source record: 10783

Has anyone here used Superspice ?

I am looking for some information regarding setting up the Simulation parameters to view Phase and Magnitude response for an oscillator circuit (I have opened up the feedback path to enable a signal to be injected through the amp and resonator.

I cannot find what I want in the documentation that came with the software and the company has not replied to my email so I am hoping someone else may be able to help.

Alternately if you know of a shareware or freeware simulator that could I could use that has plenty of forum support ?

The exercise is to work through the book I have on computer simulation "Oscillator Design and Computer Simulation" by Randall Rhea and see if I can get the same results from the examples he gives (the version of his book I have is the very first book sold and the software he used that comes with the book is on an old disk I cannot read).

I have RFSIM99 but cannot see if I can get phase and magnitude responses, I can get magnitude OK but want to have phase information together with this to observe what the relationship is between them at any given point.

Being "green" with regard to simulation, I do not want to purchase a commercial simulator until I have some experience and am confident I will be able to use it to obtain meaningful results.

Thanks in advance.

4183. Re: Anyone used Superspice simulator ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-01 01:17:38 UTC
From: sailtamarack@yahoo.ca
Message-ID: <1157073458.638932.197760@b28g2000cwb.googlegroups.com>
Source record: 10784

You might want to consider using LTSpice. Oscillators are documented and the forum support on the Yahoo group is top notch. The program is available from Linear Technology as a free download (with regular updates).

URL is: http://www.linear.com/company/software.jsp

Good luck - Roger

4184. Re: Anyone used Superspice simulator ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-01 02:41:02 UTC
From: David <websales@orbitcoms.com>
Message-ID: <25NJg.21156$rP1.9012@news-server.bigpond.net.au>
Source record: 10785

Thanks. That software does the trick. My results are now similar with
the text example.

I downloaded the program and managed to get it running immediately
without documentation. Just need to figure out how to
load the S parameter file for my device now instead of preselecting one
of the models they give in the list.

sailtamarack@yahoo.ca wrote:
> You might want to consider using LTSpice. Oscillators are documented
> and the forum support on the Yahoo group is top notch. The program is
> available from Linear Technology as a free download (with regular
> updates).
>
> URL is: http://www.linear.com/company/software.jsp
>
> Good luck - Roger
>

4185. Re: What would be best way to go from 12 VDC to 12 VAC, 350 Ma, freq not critical?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-01 04:13:13 UTC
From: BobH <WanderingMetalHead@DUMPSPAM.yahoo.com>
Message-ID: <trOJg.209$za1.25@news02.roc.ny>
Source record: 10786

W3JDR wrote:
> Here's a$15 turnkey solution:
>
> A $10 12VDC-to-115VAC power inverter:
> (http://www.harborfreight.com/cpi/ctaf/displayitem.taf?Itemnumber=92707)
>
> + a $5 12VAC wall transformer:
> (http://www.jameco.com/webapp/wcs/stores/servlet/ProductDisplay?langId=-1&storeId=10001&catalogId=10001&productId=211271&pa=211271PS)
>
> .
>
> Joe
> W3JDR
>
>
> "Jim" <wdxp@cox.net> wrote in message
> news:u2pbf2denqf3vov3v7ot5iepg058hp4q2u@4ax.com...
>
>>I have a special ozone generating lamp that requires approx 12 VAC at
>>330 MA (will have to be current limited, as it strikes a gaseous arc
>>and too much current will melt the filaments). I would like to use it
>>in an automotive application.
>>
>>What would you suggest for circuitry to make the conversion?
>>Frequency is not critical, but some form of current limiting is.

Where is the current limiting going to come from?

4186. Re: What would be best way to go from 12 VDC to 12 VAC, 350 Ma, freq not critical?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-01 10:34:38 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <21UJg.13911$pX3.5575@trnddc07>
Source record: 10787

```
Where is the current limiting going to come from?
-------------------------

The first question that has to be asked in reply is "What does the current
need to be limited to".

The current will automatically be limited to some level by virtue of the
small DC-AC inverter's limited drive capability and the small wall
transformer's limited output capability. 1st order current limiting can be
achieved just by picking the appropriate parts for these two units. However
if a lower current limit is needed then there's a simple solution available
called a "resistor".

Joe
W3JDR
```

4187. Re: Anyone used Superspice simulator ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-01 15:59:17 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12fgm6lsqdpmdb1@corp.supernews.com>
Source record: 10788

"David" <websales@orbitcoms.com> wrote in message
news:25NJg.21156$rP1.9012@news-server.bigpond.net.au...
> I downloaded the program and managed to get it running immediately without
> documentation. Just need to figure out how to
> load the S parameter file for my device now instead of preselecting one of
> the models they give in the list.

SPICE doesn't know anything about S parameters... you need a linear RF simulator to deal with them (and guess what? Randy Rhea, the guy who wrote your book, was the original designer of Genesys -- that's where all the screenshots in the book come from). With straight SPICE, the traditional approach is to curve-fit a rational polynomial to the S parameters and then use the polynomial directly (most simulators these days have a "Laplace" operator) or systematically turn it into a bunch of controlled sources along with RLCs that mathematically implement the same thing.

I believe that RFSim99 might work for you here...

---Joel Kolstad

4188. Re: Anyone used Superspice simulator ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-01 18:09:46 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1157134186.234168.169900@i3g2000cwc.googlegroups.com>
Source record: 10789

I don't know exactly what you are trying to get the phase information for, but RFSim99 can certainly display phase information for either or both of its ports; it acts like a vector network analyzer. Just select phase on the graphical display. It's in the pulldown menu on either side of the graph window. Alternatively, you can save the results as an S-parameter file.

With respect to using S-parameters in Spice, you should be able to convert them to the domain that Spice understands with no trouble, at least for discrete frequencies. It's more difficult if you need to come up with a physical model that yields the desired S-parameter performance over a range of frequencies. That's one of the really nice things about RFSim99: you can instantiate a one-port or two-port that uses an arbitrary set of S-parameters versus frequency. (Beware, though, that the two-port model assumes a common terminal between the two ports. And I've had trouble in the past trying to get an ideal transformer give isolation; it seemed to want to assume the non-dotted pins were both grounded. Try for example simulating port 1 feeding the dotted pin of one side, the non-dotted grounded, and the dotted pin of the other side grounded and the non-dotted pin feeding port 2. S11=0, S21 = -208dB.)

It's good to keep in mind that S-parameters and RFSim99 deal only with linear circuits. If your circuit is nonlinear, you should plan to use the time-simulation capability of Spice (or use some other simulator capable of dealing with nonlinear circuits).

Cheers,
Tom

David wrote:
> Has anyone here used Superspice ?
>
> I am looking for some information regarding setting up the Simulation
> parameters to view Phase and Magnitude response for an oscillator
> circuit (I have opened up the feedback path to enable a signal to be
> injected through the amp and resonator.
>
> I cannot find what I want in the documentation that came with the
> software and the company has not replied to my email so I am hoping
> someone else may be able to help.
>
> Alternately if you know of a shareware or freeware simulator that could
> I could use that has plenty of forum support ?
>

> The exercise is to work through the book I have on computer simulation
> "Oscillator Design and Computer Simulation" by Randall Rhea and see if I
> can get the same results from the examples he gives (the version of his
> book I have is the very first book sold and the software he used that
> comes with the book is on an old disk I cannot read).
>
> I have RFSIM99 but cannot see if I can get phase and magnitude
> responses, I can get magnitude OK but want to have phase information
> together with this to observe what the relationship is between them at
> any given point.
>
> Being "green" with regard to simulation, I do not want to purchase a
> commercial simulator until I have some experience and am confident I
> will be able to use it to obtain meaningful results.
>
> Thanks in advance.

4189. les femmes mures chaudes du net

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-01 19:58:23 UTC
From: patricia@duweb.niz
Message-ID: <44f890df$0$27375$ba4acef3@news.orange.fr>
Source record: 10790
Body handling: HTML body converted to readable text

Votre navigateur ne gere pas le frames !

This message was sent with NNTP Scribbler (www.e-advertize.com).

4190. RFSim99 anomalies

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-01 20:02:17 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1157140937.062925.222160@74g2000cwt.googlegroups.com>
Source record: 10791

Hi all,

Every once in a while I come across an anomaly in RFSim99. I'd be happy if someone could tell me that I'm doing something wrong in the following:

Fire up the simulator. Tools-->Design-->Attenuator. Pi Section, 50R input impedance, 50R output impedance, 10dB attenuation. Simulate. !Current schematic will be overwritten; OK. Now note that the graphics window displays S11 as 2E+31dB.

In the circuit window, edit the values of the two 96.25 ohm resistors; they have apparently been simulated to more decimal places than shown. Just manually enter 96.25 ohms for each. Now the magnitude of S11 and S22 show up as -102.69dB; that seems reasonable. The phases for S11, S12, S21 and S22 are all zero. Now, from the graphics window, File-->Save results as S Parameter File, and save the file in some convenient place, as type S parameter files (*.S2P).

Now delete the resistors from the schematic and instantiate a two-port in their place. In the 2 port properties window that comes up, select "Load File" and load the file you just created from the attenuator simulation. Notice that the phase is 89.994 degrees for each of the S parameters, at each frequency. Or at least that's what I'm getting. Continue on and connect up the schematic and notice that it simulates as 89.994 degrees. Edit the .s2p file with your favorite text editor and notice that it really does have 89.994 degrees in it.

Boy, I wish I could make a frequency-independent 90 degree phase shifter that easily in real life!

More similar fun: create a 10dB 50 ohm attenuator as before and simulate it. Add an 80nH inductor across the top, from port 1 to port 2, and put a 32pF capacitor between the bottom of the two 96.25 ohm resistors (connected together) and ground. Simulating that should give you an S21 that's 0dB at low frequency, smoothly transitioning to -10dB at high frequency, with -5dB at about 120MHz. But S11 and S22 have strange magnitude and phase behaviour. Change the 96.25 ohm resistors to 96.2 ohms, and the S11 and S22 magnitudes behave OK, though their phases are still strange at very low frequencies. Save as an s-parameter file again. For convenience, start another copy of RFSim99 so you can compare the results of a new simulation with the one you just did. In the new window, instantiate a 2-port and load the file you just saved into it. Notice in the file that S11 and S22 angles appear to match the simulation you just saved from; there's no 90 degree phase shift this time. But when you connect ports 1 and 2 to

the 2-port you just placed and simulate it, you find the phase of S11 and of S22 are all messed up. Huh?

Has my copy of RFsim99 gotten corrupted, or do others see this behaviour too?

Cheers,
Tom

4191. les femmes mures les plus chaudes du cul sont ici

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-01 20:22:15 UTC
From: patricia@duweb.niz
Message-ID: <44f89676$0$25937$ba4acef3@news.orange.fr>
Source record: 10792
Body handling: HTML body converted to readable text

[No readable article body recovered]

4192. Re: Anyone used Superspice simulator ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-01 22:10:37 UTC
From: David <websales@orbitcoms.com>
Message-ID: <xd2Kg.21512$rP1.13087@news-server.bigpond.net.au>
Source record: 10793

Tom

Oh, how unadventurous I were. You are correct, the phase selection is in the pull down window.

Thanks for that. I will go back to RFSIM99.

Do you know if they ever made another version of this program or sell a commercial version of it ?

Regards

David

K7ITM wrote:
> I don't know exactly what you are trying to get the phase information
> for, but RFSim99 can certainly display phase information for either or
> both of its ports; it acts like a vector network analyzer. Just select
> phase on the graphical display. It's in the pulldown menu on either
> side of the graph window. Alternatively, you can save the results as
> an S-parameter file.
>
> With respect to using S-parameters in Spice, you should be able to
> convert them to the domain that Spice understands with no trouble, at
> least for discrete frequencies. It's more difficult if you need to
> come up with a physical model that yields the desired S-parameter
> performance over a range of frequencies. That's one of the really nice
> things about RFSim99: you can instantiate a one-port or two-port that
> uses an arbitrary set of S-parameters versus frequency. (Beware,
> though, that the two-port model assumes a common terminal between the
> two ports. And I've had trouble in the past trying to get an ideal
> transformer give isolation; it seemed to want to assume the non-dotted
> pins were both grounded. Try for example simulating port 1 feeding the
> dotted pin of one side, the non-dotted grounded, and the dotted pin of
> the other side grounded and the non-dotted pin feeding port 2. S11=0,
> S21 = -208dB.)
>
> It's good to keep in mind that S-parameters and RFSim99 deal only with
> linear circuits. If your circuit is nonlinear, you should plan to use
> the time-simulation capability of Spice (or use some other simulator
> capable of dealing with nonlinear circuits).
>
> Cheers,
> Tom
>
>

> David wrote:
>> Has anyone here used Superspice ?
>>
>> I am looking for some information regarding setting up the Simulation
>> parameters to view Phase and Magnitude response for an oscillator
>> circuit (I have opened up the feedback path to enable a signal to be
>> injected through the amp and resonator.
>>
>> I cannot find what I want in the documentation that came with the
>> software and the company has not replied to my email so I am hoping
>> someone else may be able to help.
>>
>> Alternately if you know of a shareware or freeware simulator that could
>> I could use that has plenty of forum support ?
>>
>> The exercise is to work through the book I have on computer simulation
>> "Oscillator Design and Computer Simulation" by Randall Rhea and see if I
>> can get the same results from the examples he gives (the version of his
>> book I have is the very first book sold and the software he used that
>> comes with the book is on an old disk I cannot read).
>>
>> I have RFSIM99 but cannot see if I can get phase and magnitude
>> responses, I can get magnitude OK but want to have phase information
>> together with this to observe what the relationship is between them at
>> any given point.
>>
>> Being "green" with regard to simulation, I do not want to purchase a
>> commercial simulator until I have some experience and am confident I
>> will be able to use it to obtain meaningful results.
>>
>> Thanks in advance.
>

4193. Re: Anyone used Superspice simulator ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-01 23:49:48 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12fhhotcgmv9kc8@corp.supernews.com>
Source record: 10794

"David" <websales@orbitcoms.com> wrote in message
news:xd2Kg.21512$rP1.13087@news-server.bigpond.net.au...
> Do you know if they ever made another version of this program or sell a
> commercial version of it ?

The author, Stewart Hyde, didn't do so. See:
http://www.practicalrf.com/$Newsletter/e-letters/February2006/RFSim99.htm

4194. Re: MRX-40 modification

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-02 03:52:41 UTC
From: Klop <klopwander@yahoo.co.uk>
Message-ID: <44f8fede_2@news.tm.net.my>
Source record: 10795

Reposted.
<ve2ghi@gmail.com> wrote in message
news:1157071999.677010.81130@b28g2000cwb.googlegroups.com...
> Hello OM,
> I have build the MRX-40 form a kit many years ago. It
> work fine but ...
> Now I would like to make a small modification to this receiver.
> I would like to replace the tuning capacitor with some kind of diode.
> I manage to add a small potentiometer with the shaft getting outside
> and I remove the initial capacitor. Now I wonder how and what kind of
> diode I could use. I dont have also any idea about what to expect in
> the
> range of tuning.
> May be someone else had the same idea
>
> Any help is will be greatly appraciate.
> Happy day
> 72 de Jean (VE2GHI)
>
Try VU2UPX's excellent circuit:
http://www.qsl.net/vu2upx/Projects/dc_rx.htm
This uses varicaps for tuning in a NE602 based receiver (although this is
for 20m).

Also
http://www.hanssummers.com/radio/varicap/index.htm
for G0UPL's testing of several common diodes as varicaps.
Red LED's came out top!
Does anyone else have info on using them as varicaps for tuning?

73s
Klop

4195. Re: Anyone used Superspice simulator ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-02 08:36:47 UTC
From: David <websales@orbitcoms.com>
Message-ID: <zobKg.21780$rP1.14195@news-server.bigpond.net.au>
Source record: 10796

Joel,

Thanks for the link to the interview. I wish the commercial versions of software could be as simple to use as RFSIM99. I was ready to purchase the Gold version of the Superspice simulator and requested some adice from the manufacturer. Having sent 2 emails with no response I have decided to continue using the freeware RFSIM99.

I find RFsim to be really easy to use. I am a novice with regard to simulation but find the editor intuitive to us.

I have downloaded a number of "S-Parameter" files from manufacturers and it is a breeze to use these. I suppose If I could afford a network analyser I could develop a set of S-parameters for any device I use and any bias condition.

Its a shame someone did not develop the program and offer a low cost version with a few more features and support. I find the free version is great and would have been happy to pay something for it.

Regards

David

Joel Kolstad wrote:
> "David" <websales@orbitcoms.com> wrote in message
> news:xd2Kg.21512$rP1.13087@news-server.bigpond.net.au...
>> Do you know if they ever made another version of this program or sell a
>> commercial version of it ?
>
> The author, Stewart Hyde, didn't do so. See:
> http://www.practicalrf.com/$Newsletter/e-letters/February2006/RFSim99.htm
>
>

4196. Re: MRX-40 modification

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-02 10:53:12 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <9lnif2lltvtbts71v6djvbg01emtt6rfcv@4ax.com>
Source record: 10797

On Sat, 2 Sep 2006 11:52:41 +0800, "Klop" <klopwander@yahoo.co.uk>
wrote:

>Also
>http://www.hanssummers.com/radio/varicap/index.htm
>for G0UPL's testing of several common diodes as varicaps.
>Red LED's came out top!
>Does anyone else have info on using them as varicaps for tuning?

When using a semiconductor in a transparent package, you should
remember that the ambient light will generate a voltage across a
reverse biased junction.

When using a high resistance potentiometer to generate the tuning
voltage, the voltage generated by the ambient light might upset the
voltage across the diode and hence, the capacitance (and resonant
frequency) varies with the ambient light level.

At least keep the ambient light out of any diode with a transparent
package, when used in a high impedance reverse biased circuit.

Paul OH3LWR

4197. Re: MRX-40 modification

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-02 17:45:37 UTC
From: dplatt@radagast.org
Message-ID: <12fjgq1c5b7i11a@corp.supernews.com>
Source record: 10698

>>Also
>>http://www.hanssummers.com/radio/varicap/index.htm
>>for G0UPL's testing of several common diodes as varicaps.
>>Red LED's came out top!
>>Does anyone else have info on using them as varicaps for tuning?
>
>When using a semiconductor in a transparent package, you should
>remember that the ambient light will generate a voltage across a
>reverse biased junction.
>
>When using a high resistance potentiometer to generate the tuning
>voltage, the voltage generated by the ambient light might upset the
>voltage across the diode and hence, the capacitance (and resonant
>frequency) varies with the ambient light level.

And, if the ambient light was from a mains-powered bulb (fluorescents would be worse) there would be a significant amount of 50 or 60 Hz light-flicker energy. This might be sufficient to inject hum into the signal... flicking light modulates junction voltage, which modulates junction capacitance, which modulates the RF oscillator frequency.

So, the LED-varicap-tuned receiver might be both drifty, and hum-prone, if the LED were exposed to light.

>At least keep the ambient light out of any diode with a transparent
>package, when used in a high impedance reverse biased circuit.

Yup. A dab of black paint would be a good idea.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4198. WANTED: Micro908

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-02 19:36:15 UTC
From: Timothy@tholtom.freeserve.co.uk
Message-ID: <1157225775.179735.43680@m79g2000cwm.googlegroups.com>
Source record: 10699

Does anyone have a Micro908 for sale, either built (and working!) or in kit form unbuilt? Also interested in any "daughter cards" that go with this...

Anyone have one they want to sell?

Thanks!

Tim

4199. Re: Weller EC-2002-A

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-02 20:03:30 UTC
From: "g. beat"
Message-ID: <qJSdnfSbf44PfmTZnZ2dnUVZ_sqdnZ2d@comcast.com>
Source record: 10700

It really depends upon the control board that you have in the unit.

The later EC2002 models were a completely different animal - and had a microprocessor control (pic?) that could be programmed by an external programmer (expensive) - for set-back , specific temperature, etc.

This was used extensively for EC2002 stations used in production / assembly lines (strict control of iron temperature and tip profiles).

This is covered in the EC2002 manuals -- for these later models

Here is the manual on BAMA (you may wish to try mirror site for downloads)
http://bama.sbc.edu/weller.htm

Greg

==========

From: **THE-RFI-EMI-GUY** <blank>
Subject: Re: Weller Tech Sheets
Date: Sun, 11 Jun 2006 02:23:33 GMT

Do you have any tips on fixing a Weller EC-2002-A? It still regulates and heats, but the temperature display is dead. When first turned on it flashes "FFF" for a split second. I think maybe bad filter capacitor or something. Any thoughts on fixing? This is a nice unit I had just bought spare iron and tips for it. Tried another iron, and also measured proper resistance on the thermistor.

4200. Re: Beginner Radio w/o using air variable cap/oscillator parts and drift

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-03 00:34:43 UTC
From: WSQT <wsqtradio@ziplip.com>
Message-ID: <1157243682.996972.95950@p79g2000cwp.googlegroups.com>
Source record: 10701

BTW, real air trimmers seem to be far better for temperature stability than normal plastic dielectric trimmers! In an AM broadcast transmitter using a VXO, a plastic trimmer in series with one of two crystals(mixer setup) gave instability and a deep hetrodyne drone that got worse over several days(unattended remote pirate rig) even though the outside temperature was the same.

Replacing it with an air variable trimmer whose plates were apparently cut from two solid pieces of brass mude for utter stability, with no sign of drift over at least a 20 degree temperature change without having to reset it.

For noncritical applications, those little plastic variable caps from car stereos are pretty good. Have not used one in an ultra-critical application in a role giving a lot of control over frequency, but when I used one in the 2004 rig to shift a crystal maybe 2KHZ out of 16MHZ, it didn't seem to drift.

Of course, a VXO(pulled crystal) is a hell of a lot more stable than any VFO! A VXO and a similar but not the same frequency fixed crystal can give a suprisng tuning range with stability. Put in a crystal oven or even a heated/air conditioned room it would leave little to be desired in stability.

For a VFO for any application, the better your parts, the better your results. Wind coil on "air" or unity permeability cores such as wood or ceramic, and epoxy the windings in place. Blow on an oscillator's coil while listening to the beat note with and without the epoxy, and hear the difference for yourself. Wood cores seem to work fine with the epoxy covering.

With an air-core coil,a good tuning capacitor, and a circut that minimizes active device contribution to drift, you end up with a lot less chasing drift to do. Best active device for any VFO and probably any VXO as well is a JFET. Almost no heat(unlike a tube), and no junctions in the current path to change characteristics with temperature(unlike a bipolar). If you must use a powdered iron core, keep DC out of the windings as changes in the DC current change the permeability opf any ferrite or powered-iron core. Ferrite cores of any type have been named as an especially bad source of drift in oscillators, so don't use modified IF transfomers as tuners in oscillators expected to be stable. They are fine in tuned small-signal amps, just not in oscillators.

In that VXO with the bad trimmer, I got lucky and found the bad part first try, but this is unusual. If you have to track down drift expect

hours of work. That's why it takes less tiem to use the good stuff from the start, unless it takes hours of driving or biking to obtain it, of course.

4201. Tenna Pyramid Phase III Model PS-12

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-03 23:02:53 UTC
From: BobEmerson <bob.remerson@gmail.com>
Message-ID: <1157324573.079969.122290@74g2000cwt.googlegroups.com>
Source record: 10702

Good Day All,

I have recently come into possession of a Tenna Pyramid Phase III Model PS-12 and guess what? It does not work. I am inquiring as to the availability of a copy of a schematic for this device. If someone could email me a copy of it, I would be grateful.

Thanks
Bob Emerson
bob.remerson@gmail.com

4202. Re: Tenna Pyramid Phase III Model PS-12

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-04 01:33:53 UTC
From: "g. beat"
Message-ID: <Ga-dnR2CZZQeH2bZnZ2dnUVZ_sudnZ2d@comcast.com>
Source record: 10703

"BobEmerson" <bob.remerson@gmail.com> wrote in message
news:1157324573.079969.122290@74g2000cwt.googlegroups.com...
> Good Day All,
>
> I have recently come into possession of a Tenna Pyramid Phase III Model
> PS-12 and guess what? It does not work. I am inquiring as to the
> availability of a copy of a schematic for this device. If someone could
> email me a copy of it, I would be grateful.
>
> Thanks
> Bob Emerson
> bob.remerson@gmail.com
>

Bob,

IF you are lucky - you may find someone that has a schematics for this
model.
http://www.repeater-builder.com/astron/astron-index.html

I would suggest that you get a copy of the Astron RS-12 power supply -- it
will be CLOSE.
http://www.repeater-builder.com/astron/astron-rs12a.html

Power supply uses the LM723 regulator IC (the most common for linear power
supplies of this type) AND pass transistors for the current handling --
usually 2N3055 or 2N3771.

Here is the 1996 DIY web article that spells out "how they work"
http://www.seits.org/features/pwrsup.htm

Repairing a linear power supply (education, tech sheets, troubleshooting) --
there are over 25 web pages here for any DIY of Astron, Pyramid, TrippLite,
etc.
http://www.kbt-dc-supplies.com/index.php

w9gb

4203. Re: VHF/UHF antenna on a motorcycle

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-04 03:26:33 UTC
From: safemale <safemale@earthlink.cum>
Message-ID: <h27nf25qv54jh2qmtm2o9jlorc0ure4ngp@4ax.com>
Source record: 10704
Cross-posted to:
alt.ham-radio.vhf-uhf,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

a 300 ome twinlead j pole is 2 band and pouting it is a peace
ofd pvc pipe would make it self supproting
and no ground plain needed

On Fri, 18 Aug 2006 10:02:01 GMT, "Tom"
<on4vdv@R.E.M.O.V.E.T.H.I.Shotmail.com> wrote:

>Hello all ,
>
>I would like to install a VHF-UHF antenna on my motorcycle . It's a Suzuki
>GSX750 . I did some tests with a Diamond NR-770H and it works well . The
>only problem is that the antenna is to big for such a bike .
>Afterwards i did a test with a Diamond NR-77 . The antenna is about 43 cm
>and that's about the size i would like to use .
>The problem i have with this antenna is the swr , it's to high .
>
>Anyone an idea how i can solve this problem ?
>
>Many thanks .
>
>Tom
>
>

4204. Re: AM Stereo/FM Stereo Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-04 15:11:08 UTC
From: ungvichian@thaimail.com
Message-ID: <1157382668.181588.16040@74g2000cwt.googlegroups.com>
Source record: 10705

Well, after looking at a few datasheets, plus a nice Yugoslavian
website
(http://mikroelektronika.co.yu/english/product/books/rrbook/chapter4/chapter4a.htm
), I've come up with this circuit.

http://i9.photobucket.com/albums/a77/Rover_Wow/AMFM.png

So, how is it? Think it holds water? And how much would the budget be?

(And yes, I've already checked the voltages, and it works in a range
from 4.5-6.0V.)

4205. Dentron HF-200

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-04 15:26:09 UTC
From: W2AGN <w2agn@nospamw2agn.net>
Message-ID: <u-mdncxnj-QP2GHZnZ2dnUVZ_uudnZ2d@comcast.com>
Source record: 10706
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have a Dentron HF-200 5 band rig. It is a bit of a basket case, as someone took it apart, but it seems to be all there. I need a manual, schematic, whatever for it so maybe I could get it going.

John W2AGN

4206. Re: Tenna Pyramid Phase III Model PS-12

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-04 15:58:43 UTC
From: "g. beat"
Message-ID: <QNCdnVbaXuSr0GHZnZ2dnUVZ_ridnZ2d@comcast.com>
Source record: 10707

"g. beat >" <@<spam protected> wrote in message
news:Ga-dnR2CZZQeH2bZnZ2dnUVZ_sudnZ2d@comcast.com...
> "BobEmerson" <bob.remerson@gmail.com> wrote in message
> news:1157324573.079969.122290@74g2000cwt.googlegroups.com...
>> Good Day All,
>>
>> I have recently come into possession of a Tenna Pyramid Phase III Model
>> PS-12 and guess what? It does not work. I am inquiring as to the
>> availability of a copy of a schematic for this device. If someone could
>> email me a copy of it, I would be grateful.
>>
>> Thanks
>> Bob Emerson
>> bob.remerson@gmail.com
>>

Bob,

BTW, the LM723 will likely be soldered to the regulator PC board inside of the Pyramid.

1. Carefully desolder the part (solder wick works best). NOTE, the orientation of pin 1 on the PC board. The IC should have a notch for that side OR a dot above pin 1 on the plastic top molding.
Dave Metz discusses this in the article -- I bookmarked in earlier message for you (read this)

2. When you working with the LM723 regulator IC assure the large electrolytic capacitors are DISCHARGED before removing OR inserting in the socket (good way to destroy a perfectly good LM723).

Greg

4207. Re: Dentron HF-200

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-04 17:23:54 UTC
From: "g. beat"
Message-ID: <dKadnW2nUduw_GHZnZ2dnUVZ_o6dnZ2d@comcast.com>
Source record: 10708
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

"W2AGN" <w2agn@nospamw2agn.net> wrote in message
news:u-mdncxnj-QP2GHZnZ2dnUVZ_uudnZ2d@comcast.com...
>I have a Dentron HF-200 5 band rig. It is a bit of a basket case, as
>someone took it apart, but it seems to be all there. I need a manual,
>schematic, whatever for it so maybe I could get it going.
>
> John W2AGN

John -

http://www.mizuhoradio.com/dentron.html

History of Dentron QRP MLX and HF-200
http://www.kkn.net/archives/html/QRP-L/2002-03/msg01943.html

MIZUHO and NISHI MUSEN Reflector
http://www.mizuhoradio.com/index.html

Manual and schematic for MLX-Mini
http://www.mizuhoradio.com/manuals/MLX-MINI/dentronmlx.pdf

eHam.net reflector (Worst piece of ham gear) - W9SN comment
http://www.eham.net/articles/7436

gb

4208. MFJ CMOS Keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-04 17:31:13 UTC
From: Nobody <rock_sci@hotmail.com>
Message-ID: <1157391072.940990.306390@e3g2000cwe.googlegroups.com>
Source record: 10709

1) I have an MFJ keyer, no model number. It simply says "MFJ CMOS
Keyer" on the front. It has a built in paddle, of sorts. I am looking
for a schematic for the keyer. It uses a Curtis 8043 chip.

2) Does anyone have the pinouts for the Curtis 8043 chip?

Tim AA6DQ

4209. Re: Dentron HF-200

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-04 18:13:38 UTC
From: W2AGN <w2agn@nospamw2agn.net>
Message-ID: <qumdnREmfetP8WHZnZ2dnUVZ_tudnZ2d@comcast.com>
Source record: 10710
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

g. beat <@ wrote:
> "W2AGN" <w2agn@nospamw2agn.net> wrote in message
> news:u-mdncxnj-QP2GHZnZ2dnUVZ_uudnZ2d@comcast.com...
>> I have a Dentron HF-200 5 band rig. It is a bit of a basket case, as
>> someone took it apart, but it seems to be all there. I need a manual,
>> schematic, whatever for it so maybe I could get it going.
>>
>> John W2AGN
>
> John -
>
> http://www.mizuhoradio.com/dentron.html
>
> History of Dentron QRP MLX and HF-200
> http://www.kkn.net/archives/html/QRP-L/2002-03/msg01943.html
>
> MIZUHO and NISHI MUSEN Reflector
> http://www.mizuhoradio.com/index.html
>
> Manual and schematic for MLX-Mini
> http://www.mizuhoradio.com/manuals/MLX-MINI/dentronmlx.pdf
>
> eHam.net reflector (Worst piece of ham gear) - W9SN comment
> http://www.eham.net/articles/7436
>
> gb
>
>
Yep, none of those references cover the HF-200. No schematic, no info.
Just the MLX-mini, which I also have a working version of.

4210. Re: Tenna Pyramid Phase III Model PS-12

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-04 18:42:59 UTC
From: BobEmerson <bob.remerson@gmail.com>
Message-ID: <1157395379.115348.139480@i42g2000cwa.googlegroups.com>
Source record: 10711

g. beat wrote:
> "g. beat >" <@<spam protected> wrote in message
> news:Ga-dnR2CZZQeH2bZnZ2dnUVZ_sudnZ2d@comcast.com...
> > "BobEmerson" <bob.remerson@gmail.com> wrote in message
> > news:1157324573.079969.122290@74g2000cwt.googlegroups.com...
> >> Good Day All,
> >>
> >> I have recently come into possession of a Tenna Pyramid Phase III Model
> >> PS-12 and guess what? It does not work. I am inquiring as to the
> >> availability of a copy of a schematic for this device. If someone could
> >> email me a copy of it, I would be grateful.
> >>
> >> Thanks
> >> Bob Emerson
> >> bob.remerson@gmail.com
> >>
>
> Bob,
>
> BTW, the LM723 will likely be soldered to the regulator PC board inside of
> the Pyramid.
>
> 1. Carefully desolder the part (solder wick works best). NOTE, the
> orientation of pin 1 on the PC board. The IC should have a notch for that
> side OR a dot above pin 1 on the plastic top molding.
> Dave Metz discusses this in the article -- I bookmarked in earlier message
> for you (read this)
>
> 2. When you working with the LM723 regulator IC assure the large
> electrolytic capacitors are DISCHARGED before removing OR inserting in the
> socket (good way to destroy a perfectly good LM723).
>
> Greg

Sir,

Thank you for the answers. I'm in the process of reading all the
material and trying to make sense of it all. Thanks again

4211. Re: MFJ CMOS Keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-04 20:42:03 UTC
From: Mart <martin_rigby@hotmail.com>
Message-ID: <uq3pf29qn5lk15afcrfnnbeotqen3dg1sc@4ax.com>
Source record: 10712

On 4 Sep 2006 10:31:13 -0700, "Nobody" <rock_sci@hotmail.com> uttered:

}1) I have an MFJ keyer, no model number. It simply says "MFJ CMOS
}Keyer" on the front. It has a built in paddle, of sorts. I am looking
}for a schematic for the keyer. It uses a Curtis 8043 chip.
}
}2) Does anyone have the pinouts for the Curtis 8043 chip?
}
}Tim AA6DQ

Apparently the 8044 is a "close pin for pin substitute" for the 8043

See :- http://users.ox.ac.uk/~malcolm/radio/8044screen.pdf

Hth

Mart

4212. FS: HP3586B Frequency selective level meter VLF receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-05 00:48:48 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <QP3Lg.18657$Tg1.7308@tornado.tampabay.rr.com>
Source record: 10713

For Sale: HP3586B Frequency selective level meter VLF receiver

This unit has the high stability oscillator and is excellent condition. No dents, no scratches, and no dust inside whatsoever. I believe it was rack mounted at an environmentally controlled site and seldom used. I don't have the feet and the small blank panels (where the rack ears normally go) but these are common size. This unit works fantastic and has a new NICAD memory battery installed. I replaced one of the jacks in front with a BNC (easily reversed mod that screwed in). I also put a nice black anodized aluminum spinner knob on the VFO shaft encoder for ease of tuning. It makes for a very sensitive VLF receiver and can measure extremely low levels with great accuracy. By the way, there is an RF output jack on rear which enables you to sweep filters etc.

The service manual is included.

$495 plus shipping from central florida

Description :

HP 3586B Selective Level Meter 3586B: Meets North American Bell requirements, 50Hz to 32.5MHz frequency range with 75ohm unbalanced signal input, 4kHz to 1MHz frequency range with 124ohm balanced signal input, 4kHz to 1MHz frequency range with 135ohm balanced Input

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

4213. Re: MFJ CMOS Keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-05 03:23:08 UTC
From: Nobody <rock_sci@hotmail.com>
Message-ID: <1157426588.456391.131510@m79g2000cwm.googlegroups.com>
Source record: 10714

Mart wrote:
> On 4 Sep 2006 10:31:13 -0700, "Nobody" <rock_sci@hotmail.com> uttered:
>
> }1) I have an MFJ keyer, no model number. It simply says "MFJ CMOS
> }Keyer" on the front. It has a built in paddle, of sorts. I am looking
> }for a schematic for the keyer. It uses a Curtis 8043 chip.
> }
> }2) Does anyone have the pinouts for the Curtis 8043 chip?
> }
> }Tim AA6DQ
>
> Apparently the 8044 is a "close pin for pin substitute" for the 8043
>
> See :- http://users.ox.ac.uk/~malcolm/radio/8044screen.pdf
>
> Hth
>
> Mart

Thanks Mart.

Tim AA6DQ

4214. Re: Using the Virtual Ionosphere

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-05 04:06:09 UTC
From: wa4dou@juno.com
Message-ID: <1157429169.317656.281960@b28g2000cwb.googlegroups.com>
Source record: 10715

It's becoming increasingly difficult to even recognize the world that I grew up in. Roy

4215. Curious about the I.R.E. Standard Dummy Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-05 04:51:10 UTC
From: "H. P. Friedrichs" <nospam@please.com>
Message-ID: <1YOdna1FqcOin2DZnZ2dnUVZ_tCdnZ2d@velocitywest.com>
Source record: 10716
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I am interested in the origins and purpose of the "IRE (Institute of Radio Engineers) Standard Dummy Antenna," as used during the alignment of radio receivers.

I first came across this circuit in some old Hallicrafter's documentation, which described the alignment of a particular radio. The "IRE Standard Dummy Antenna" consists of four components--- a 200pf cap in series with a 20 uH inductor, which links the signal generator to the receiver's antenna input. A 400 pF cap in series with a 400 ohm resistor is connected in parallel with (shunts)the inductor.

I gather that this circuit models a wire antenna of some type. Is this true? What is the import of the component values and how were they arrived at? I modeled the circuit in Spice and graphed the transfer and impedance curves but it is not entirely clear to me what benefit there is to using this circuit.

I've also Googled this and found some references here and there, but nothing explains the "why" of it.

Is there anyone who can shed light on this?

73
Pete
AC7ZL

hpf (at) gainbroadband (dot) com

4216. Re: Curious about the I.R.E. Standard Dummy Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-05 05:10:26 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <44FD06B4.20425CB6@earthlink.net>
Source record: 10717
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"H. P. Friedrichs" wrote:
>
> I am interested in the origins and purpose of the "IRE (Institute of
> Radio Engineers) Standard Dummy Antenna," as used during the alignment
> of radio receivers.
>
> I first came across this circuit in some old Hallicrafter's
> documentation, which described the alignment of a particular radio. The
> "IRE Standard Dummy Antenna" consists of four components--- a 200pf cap
> in series with a 20 uH inductor, which links the signal generator to the
> receiver's antenna input. A 400 pF cap in series with a 400 ohm resistor
> is connected in parallel with (shunts)the inductor.
>
> I gather that this circuit models a wire antenna of some type. Is this
> true? What is the import of the component values and how were they
> arrived at? I modeled the circuit in Spice and graphed the transfer and
> impedance curves but it is not entirely clear to me what benefit there
> is to using this circuit.
>
> I've also Googled this and found some references here and there, but
> nothing explains the "why" of it.
>
> Is there anyone who can shed light on this?
>
> 73
> Pete
> AC7ZL
>
> hpf (at) gainbroadband (dot) com

Its to match the receiver to the generator.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

4217. Re: Curious about the I.R.E. Standard Dummy Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-05 05:15:12 UTC
From: Jeffrey D Angus <jangus@socal.rr.com>
Message-ID: <AJ7Lg.9549$Cs3.4981@tornado.socal.rr.com>
Source record: 10718
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Michael A. Terrell wrote:
> "H. P. Friedrichs" wrote:
>
>>I am interested in the origins and purpose of the "IRE (Institute of
>>Radio Engineers) Standard Dummy Antenna," as used during the alignment
>>of radio receivers.
>
> Its to match the receiver to the generator.

Or more specifically, it's to present a uniform high impedance
from the generator to the radio. At the time, with the exception
of a few lab grade instruments, signal generator outputs were all
over the map with regards to output impedance. The "dummy antenna"
presented a fairly uniform, and high, impedance to the radio and
kept from detuning the front end while doing an alignment while
connected to a signal generator.

Jeff

--
RESTRICTED AREA. Anyone intruding shall immediately become subject to
the jurisdiction of military law. Intruders will be subject to lethal
force, without warning, and on sight. USE OF DEADLY FORCE IS AUTHORIZED
under the Internal Security Act of 1950.

4218. Re: Curious about the I.R.E. Standard Dummy Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-05 11:19:15 UTC
From: Gary Tayman <caradio@verizon.net>
Message-ID: <T2dLg.3628$%k5.1695@trnddc08>
Source record: 10719
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Jeffrey D Angus" <jangus@socal.rr.com> wrote in message
news:AJ7Lg.9549$Cs3.4981@tornado.socal.rr.com...
>
> Or more specifically, it's to present a uniform high impedance
> from the generator to the radio. At the time, with the exception
> of a few lab grade instruments, signal generator outputs were all
> over the map with regards to output impedance. The "dummy antenna"
> presented a fairly uniform, and high, impedance to the radio and
> kept from detuning the front end while doing an alignment while
> connected to a signal generator.
>
> Jeff
>

Ahhh, so for the very first time, I finally hear an answer to one of those things that I've scratched my head about for years!

I've often wondered why the literature always says to stick a capacitor inline from the signal generator -- I figured if I had to do this all the time, then why didn't the signal generator maker put one in there? Turns out, usually they do, but it's probably not an impedance match. Still, for most radios I just stick the probe to the antenna and go to town. It's fine for the IF -- enough of it gets past the RF to give me a workable signal. Then for RF I use whatever frequency I need to check/adjust the LO. For final RF adjustments I plug in the antenna and tweak it up on a weak station.

Again, I probably differ from most of you because I work mainly with car radios. I already have a pretty decent antenna at the bench -- some $10 special from Auto Zone -- that does a great job. On a conversion there are no RF adjustments; on a repair/rebuild, I can do every adjustment except one, the one which must be done inside the car anyway -- the antenna trimmer. However even this gets checked -- I've noticed that with my bench antenna, the trimmer usually adjusts toward the "high" end, with the screw fairly loose. So if the trimmer tweaks in this area I'm fine. If it tweaks "tight", or not at all, I'll adjust the slug as needed -- or troubleshoot.

Actually it is rare that I ever have such a problem -- with one exception: the 58-60 T-Bird radios. Even these are just fine, usually, but I've had a number of them whose front ends are way off. I've spent many hours trying to figure out why, and come up with nothing. I've replaced RF caps, checked the range of trimmers, checked resistor tolerances, and basically gone over the circuit with a fine tooth comb. Everything checks perfect, but the alignment is out. So I adjust the tuning slug -- a pretty fair distance --

to bring it in line. I've had a couple that were so far off that I had to tinker with the others as well. It's really fun because those slugs are WAA-AAY up in there, and difficult to reach. You can't do it with a non-ferocious screwdriver, or even a ferocious one -- it's too tight. You have to reach the shaft with needle-nose. In any case, all this fun aside, I can tinker and bring it into line -- but I still wonder why I have to do it in the first place.

I think my next step in this "investigation" is to spend time with the next 58-60 T-Bird I get for conversion. If it's a good radio, when I disassemble I'll measure the tuning slugs, trimmers, fixed coils, etc., and write them down for reference.

--
Gary E. Tayman/Tayman Electrical
Sound Solutions For Classic Cars
http://www.taymanelectrical.com

4219. Re: Curious about the I.R.E. Standard Dummy Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-05 11:59:31 UTC
From: Ken <wklwns@cox.net>
Message-ID: <PEdLg.9370$TI4.6010@dukeread06>
Source record: 10720
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Maybe the slugs have lost some permeability. Which way do you have to
tune, more or less inductance? Ken

Gary Tayman wrote:

> "Jeffrey D Angus" <jangus@socal.rr.com> wrote in message
> news:AJ7Lg.9549$Cs3.4981@tornado.socal.rr.com...
>
>>Or more specifically, it's to present a uniform high impedance
>>from the generator to the radio. At the time, with the exception
>>of a few lab grade instruments, signal generator outputs were all
>>over the map with regards to output impedance. The "dummy antenna"
>>presented a fairly uniform, and high, impedance to the radio and
>>kept from detuning the front end while doing an alignment while
>>connected to a signal generator.
>>
>>Jeff
>>
>
>
> Ahhh, so for the very first time, I finally hear an answer to one of those
> things that I've scratched my head about for years!
>
> I've often wondered why the literature always says to stick a capacitor
> inline from the signal generator -- I figured if I had to do this all the
> time, then why didn't the signal generator maker put one in there? Turns
> out, usually they do, but it's probably not an impedance match. Still, for
> most radios I just stick the probe to the antenna and go to town. It's fine
> for the IF -- enough of it gets past the RF to give me a workable signal.
> Then for RF I use whatever frequency I need to check/adjust the LO. For
> final RF adjustments I plug in the antenna and tweak it up on a weak
> station.
>
> Again, I probably differ from most of you because I work mainly with car
> radios. I already have a pretty decent antenna at the bench -- some $10
> special from Auto Zone -- that does a great job. On a conversion there are
> no RF adjustments; on a repair/rebuild, I can do every adjustment except
> one, the one which must be done inside the car anyway -- the antenna
> trimmer. However even this gets checked -- I've noticed that with my bench
> antenna, the trimmer usually adjusts toward the "high" end, with the screw
> fairly loose. So if the trimmer tweaks in this area I'm fine. If it tweaks
> "tight", or not at all, I'll adjust the slug as needed -- or troubleshoot.
>

> Actually it is rare that I ever have such a problem -- with one exception:
> the 58-60 T-Bird radios. Even these are just fine, usually, but I've had a
> number of them whose front ends are way off. I've spent many hours trying
> to figure out why, and come up with nothing. I've replaced RF caps, checked
> the range of trimmers, checked resistor tolerances, and basically gone over
> the circuit with a fine tooth comb. Everything checks perfect, but the
> alignment is out. So I adjust the tuning slug -- a pretty fair distance --
> to bring it in line. I've had a couple that were so far off that I had to
> tinker with the others as well. It's really fun because those slugs are
> WAA-AAY up in there, and difficult to reach. You can't do it with a
> non-ferocious screwdriver, or even a ferocious one -- it's too tight. You
> have to reach the shaft with needle-nose. In any case, all this fun aside,
> I can tinker and bring it into line -- but I still wonder why I have to do
> it in the first place.
>
> I think my next step in this "investigation" is to spend time with the next
> 58-60 T-Bird I get for conversion. If it's a good radio, when I disassemble
> I'll measure the tuning slugs, trimmers, fixed coils, etc., and write them
> down for reference.
>

4220. Re: Anyone used Superspice simulator ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-05 16:49:14 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12frakbj1tk7i28@corp.supernews.com>
Source record: 10721

Hi David,

"David" <websales@orbitcoms.com> wrote in message
news:zobKg.21780$rP1.14195@news-server.bigpond.net.au...
> Thanks for the link to the interview. I wish the commercial versions of
> software could be as simple to use as RFSIM99. I was ready to purchase the
> Gold version of the Superspice simulator and requested some adice from the
> manufacturer. Having sent 2 emails with no response I have decided to
> continue using the freeware RFSIM99.

You might try posting to sci.electronics.design or sci.electronics.cad --
Kevin Aylward seems to read those on regular occasion.

Not to imply that ignoring your requests through his web site is acceptable,
of course.

> I have downloaded a number of "S-Parameter" files from manufacturers and it
> is a breeze to use these. I suppose If I could afford a network analyser I
> could develop a set of S-parameters for any device I use and any bias
> condition.

Yes, although de-embedding the fixture, mounting pads, etc. can sometimes be
annoying.

Depending on the frequencies you need to cover, there are several inexpensive
"homebrew" network analyzers out there... TAPR has one
(http://www.tapr.org/kits_vna.html), and there's another one kicking around
that's better for lower frequencies.

---Joel

4221. Re: Curious about the I.R.E. Standard Dummy Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-05 18:11:25 UTC
From: Frank Dresser <analogdial@worldnet.att.net>
Message-ID: <h5jLg.24826$mY1.23516@bgtnsc05-news.ops.worldnet.att.net>
Source record: 10722
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"H. P. Friedrichs" <nospam@please.com> wrote in message
news:1YOdna1FqcOin2DZnZ2dnUVZ_tCdnZ2d@velocitywest.com...
> I am interested in the origins and purpose of the "IRE (Institute of
> Radio Engineers) Standard Dummy Antenna," as used during the alignment
> of radio receivers.
>
> I first came across this circuit in some old Hallicrafter's
> documentation, which described the alignment of a particular radio. The
> "IRE Standard Dummy Antenna" consists of four components--- a 200pf cap
> in series with a 20 uH inductor, which links the signal generator to the
> receiver's antenna input. A 400 pF cap in series with a 400 ohm resistor
> is connected in parallel with (shunts)the inductor.
>
> I gather that this circuit models a wire antenna of some type. Is this
> true? What is the import of the component values and how were they
> arrived at? I modeled the circuit in Spice and graphed the transfer and
> impedance curves but it is not entirely clear to me what benefit there
> is to using this circuit.
>
> I've also Googled this and found some references here and there, but
> nothing explains the "why" of it.
>
> Is there anyone who can shed light on this?
>
> 73
> Pete
> AC7ZL

Yes, the dummy antenna models a wire resonant at 2.something Mc. I suppose that was taken to be more or less typical of the receiver antennas of the 30s. The dummy antenna's most important use is as a standardized load for measuring receiver sensitivity. Terman's Radio Engineer's Handbook has a few paragraphs on this.

If you're just adjusting the RF coils, peaking them up on the antenna normally used would be as good or better. Any sort of loose coupling between the generator and RF coils will get you in the ballpark with most radios.

Frank Dresser

4222. Re: Curious about the I.R.E. Standard Dummy Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-05 18:22:50 UTC
From: jbyrns@rcn.com
Message-ID: <jbyrns-0509061322500001@216-80-74-36.s36.tnt1.chgo.il.dialup.rcn.com>
Source record: 10723
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

In article <AJ7Lg.9549$Cs3.4981@tornado.socal.rr.com>, jangus@socal.rr.com wrote:

> Michael A. Terrell wrote:
> > "H. P. Friedrichs" wrote:
> >
> >>I am interested in the origins and purpose of the "IRE (Institute of
> >>Radio Engineers) Standard Dummy Antenna," as used during the alignment
> >>of radio receivers.
> >
> > Its to match the receiver to the generator.
>
> Or more specifically, it's to present a uniform high impedance
> from the generator to the radio. At the time, with the exception
> of a few lab grade instruments, signal generator outputs were all
> over the map with regards to output impedance. The "dummy antenna"
> presented a fairly uniform, and high, impedance to the radio and
> kept from detuning the front end while doing an alignment while
> connected to a signal generator.

This doesn't sound right, why would it be desirable "to present a uniform high impedance from the generator to the radio"? The impedance of the "IRE Standard Dummy Antenna" is not exactly what I would call "high" especially on some of the short wave bands, exactly what is a high impedance in this context?

It was my understanding that the purpose of the "IRE Standard Dummy Antenna" was to provide a standard antenna to use for making performance measurements, as well as for alignment at the factory and on the service bench.

As to the exact design of the of the "IRE Standard Dummy Antenna", I understood that it was meant to represent the impedance characteristics a typical antenna that might be used by a radio set owner. This topic has been discussed here before and I seem to vaguely remember that someone may have even dug up the exact nature of the antenna the "IRE Standard Dummy Antenna" was designed to simulate. IIRC if you are only doing MW broadcast band alignments a single capacitor will provide a very good approximation of the "IRE Standard Dummy Antenna" across the MW broadcast band. The coil, resistor and second capacitor are there mainly to provide the desired impedance on the short wave bands where the prototype antenna has resonant effects

There are at least two problems that the "IRE Standard Dummy Antenna" solves, the first being standardized measurements for obtaining

performance specifications, as it is possible for a manufacturer to "improve" his products specifications by using his own specially designed "Dummy Antenna". The second problem is how to align sets in the factory, or on the service bench, when the final users actual antenna system is not available. The problem is that the alignment of the antenna stage of a radio is greatly affected by the impedance of the actual antenna that is used with the radio. The "IRE Standard Dummy Antenna" provides an approximation of what was assumed to be a typical consumer antenna. Of course what you really want to do is align the set with the actual antenna attached that it is used with.

Regards,

John Byrns

Surf my web pages at, http://users.rcn.com/jbyrns/

4223. Re: FCC Field Strength Measurements

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-05 19:53:41 UTC
From: "John, N9JG" <john@Xremove.MeYgotwals.com>
Message-ID: <9BkLg.582$5i7.449@newsreading01.news.tds.net>
Source record: 10724

It was a bit more complicated than that. If the station under observation
was using a directional antenna (whether rotatable or switchable), the FCC
had to make sure no changes were made to the antenna in the interval between
the two measurements you have mentioned.

"Jim" <wdxp@cox.net> wrote in message
news:k5arf21trg2qukgn7c3ooic1of1q4p0dk3@4ax.com...
> Anyone know how the FCC makes their field strength measurements in the
> HF region? I seem to remember them using a 1 meter long dipole that
> gave readout in microvolts, and they would measure at a certain
> distance in meters from the antenna. I think the unit was calibrated
> and sealed so that the measurements could be used in court. They
> would make measurements at a certain distance, and then go into the
> violators home and have him tune up at 1 kw input, then read the
> strength again.
>
> I wonder what they use today?
>
> Can anyone point to an article on how to make an accurate field
> strength meter that would give a readout in microvolts/meter. I did a
> search but haven't found anything yet.
>
> Jim
>

4224. Re: FCC Field Strength Measurements

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-05 21:08:45 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-AE7764.13092905092006@netnews.worldnet.att.net>
Source record: 10725

In article <k5arf21trg2qukgn7c3ooic1of1q4p0dk3@4ax.com>,
Jim <wdxp@cox.net> wrote:

> Anyone know how the FCC makes their field strength measurements in the
> HF region? I seem to remember them using a 1 meter long dipole that
> gave readout in microvolts, and they would measure at a certain
> distance in meters from the antenna. I think the unit was calibrated
> and sealed so that the measurements could be used in court. They
> would make measurements at a certain distance, and then go into the
> violators home and have him tune up at 1 kw input, then read the
> strength again.
>
> I wonder what they use today?
>
> Can anyone point to an article on how to make an accurate field
> strength meter that would give a readout in microvolts/meter. I did a
> search but haven't found anything yet.
>
> Jim
>

Usually a Selective RF Field Strength Meter which was Cal'd to NIST,
or other Federal Standards, with a HP Spectrum Analyser watching
for significant changes in phase and power levels, during, and after,
original measurments. Usually all it took was,"a knock on the door"
and a Station Inspection to get the "Parties Attention", then if
there was a problem, after that, the FCC Field Agent would return
with a US Marshal in tow, and if that didn't work, it was off to the
IronBar Hotel, for the guy. If it was a vessel, then a USCG Chief PO
or Officer would replace the US Marshal, if he was busy elsewhere.
Nothing like a little Federal Mucsle to Get a bit of attention,
when required.

Me been there, done that.....

4225. Re: Curious about the I.R.E. Standard Dummy Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-05 21:19:26 UTC
From: nesesu <neil_sutcliffe@telus.net>
Message-ID: <1157491166.619900.121450@m73g2000cwd.googlegroups.com>
Source record: 10726
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Well put, John.
I have understood the purpose of the 'matching network' for years, but
I have been puzzled by the source impedance expected on the generator
side.
I have several RF generators of various vintages in my collection and
most of the older tube ones have most peculiar output attenuators that
would have impedances that vary all over the place depending on the
setting of the output attenuator, frequency and, to some degree, output
cable length. On 'modern' generators, once you cut in 10dB or more of
attenuator, the output inpedance it pretty close to the specified, but
even many of them are quite a low impedance at 0 dB.
Perhaps someone with spice can characterize the output impedance of the
IRE network when fed from a generator of 0 ohm, 50 ohm, 75 ohm and,
say, 200 ohm output impedance.

Neil S.

John Byrns wrote:
> In article <AJ7Lg.9549$Cs3.4981@tornado.socal.rr.com>, jangus@socal.rr.com
> wrote:
>
> > Michael A. Terrell wrote:
> > > "H. P. Friedrichs" wrote:
> > >
> > >>I am interested in the origins and purpose of the "IRE (Institute of
> > >>Radio Engineers) Standard Dummy Antenna," as used during the alignment
> > >>of radio receivers.
> > >
> > > Its to match the receiver to the generator.
> >
> > Or more specifically, it's to present a uniform high impedance
> > from the generator to the radio. At the time, with the exception
> > of a few lab grade instruments, signal generator outputs were all
> > over the map with regards to output impedance. The "dummy antenna"
> > presented a fairly uniform, and high, impedance to the radio and
> > kept from detuning the front end while doing an alignment while
> > connected to a signal generator.
> This doesn't sound right, why would it be desirable "to present a uniform
> high impedance from the generator to the radio"? The impedance of the
> "IRE Standard Dummy Antenna" is not exactly what I would call "high"
> especially on some of the short wave bands, exactly what is a high
> impedance in this context?
>

> It was my understanding that the purpose of the "IRE Standard Dummy
> Antenna" was to provide a standard antenna to use for making performance
> measurements, as well as for alignment at the factory and on the service
> bench.
>
> As to the exact design of the of the "IRE Standard Dummy Antenna", I
> understood that it was meant to represent the impedance characteristics a
> typical antenna that might be used by a radio set owner. This topic has
> been discussed here before and I seem to vaguely remember that someone may
> have even dug up the exact nature of the antenna the "IRE Standard Dummy
> Antenna" was designed to simulate. IIRC if you are only doing MW
> broadcast band alignments a single capacitor will provide a very good
> approximation of the "IRE Standard Dummy Antenna" across the MW broadcast
> band. The coil, resistor and second capacitor are there mainly to provide
> the desired impedance on the short wave bands where the prototype antenna
> has resonant effects
>
> There are at least two problems that the "IRE Standard Dummy Antenna"
> solves, the first being standardized measurements for obtaining
> performance specifications, as it is possible for a manufacturer to
> "improve" his products specifications by using his own specially designed
> "Dummy Antenna". The second problem is how to align sets in the factory,
> or on the service bench, when the final users actual antenna system is not
> available. The problem is that the alignment of the antenna stage of a
> radio is greatly affected by the impedance of the actual antenna that is
> used with the radio. The "IRE Standard Dummy Antenna" provides an
> approximation of what was assumed to be a typical consumer antenna. Of
> course what you really want to do is align the set with the actual antenna
> attached that it is used with.
>
>
> Regards,
>
> John Byrns
>
>
> Surf my web pages at, http://users.rcn.com/jbyrns/

4226. Re: Curious about the I.R.E. Standard Dummy Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-05 21:24:42 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <87udnXALxte9dmDZnZ2dnUVZ8tSdnZ2d@pipex.net>
Source record: 10727
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

It's really fun because those slugs are
> WAA-AAY up in there, and difficult to reach. You can't do it with a
> non-ferocious screwdriver, or even a ferocious one -- it's too tight. You
> have to reach the shaft with needle-nose. In any case, all this fun aside,
> I can tinker and bring it into line -- but I still wonder why I have to do
> it in the first place.
==========
I always use tame screwdrivers which don't need to be caged.

Frank GM0CSZ / KN6WH

4227. Re: Curious about the I.R.E. Standard Dummy Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-05 21:57:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5asrf2p3a4kkc4n80hi7os7h6ru90dqe65@4ax.com>
Source record: 10728
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Mon, 04 Sep 2006 21:51:10 -0700, "H. P. Friedrichs"
<nospam@please.com> wrote:

>I gather that this circuit models a wire antenna of some type. Is this
>true?

"The Institute of Radio Engineers has defined the INPUT SENSITIVITY OF
A RECEIVER as the number of microvolts required to produce standard
output when applied through a dummy antenna having the characteristic
impedance of the antenna with which the receiver is intended to
operate, to the input terminals of the receiver." Boonton, 1954

73's
Richard Clark, KB7QHC

4228. Re: Using the Virtual Ionosphere

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-05 23:41:42 UTC
From: Yuri Blanarovich <K3BU@optonline.net>
Message-ID: <cdLLg.92$jK2.63@newsfe09.lga>
Source record: 10742

Why bother with this, why have internet and pay fee, just open the call book
or log into QRZ.com and pretend you worked everybody and die happy!!!
Sheeesh, stoopid is what stoopid does.

I will stick with radios and real ionosphere, leave this stuff to M0RONs :-)

73 Yuri da BUm

<sailtamarack@yahoo.ca> wrote in message
news:1157070530.139182.294000@m73g2000cwd.googlegroups.com...
> Are you tired of buying or building amateur radio equipment? Perhaps
> putting up an antenna isn't fun anymore. Maybe straining for DX is
> taking too much effort. Well don't despair - there is an alternative.
>
> You need to consider becoming one of the "next generation" hams.
> Communicate around the world using your computer and special "radio"
> software. Traditional VoIP programs like eQSO, Echolink and Skype
> don't make you feel like a "real ham". You need to take the next step
> and use the Virtual Ionosphere and the CQ100 Transceiver. Call CQ,
> twiddle the knobs, send CW and RTTY, use ham lingo and make contacts
> around the world. However, you will need a ham ticket and $89 (after
> the trial period) in order to use this next generation "radio".
>
> Full details at www.qsonet.com
>
> Geez - I hope this isn't a glimpse of the future. I think I'll just
> keep building stuff and be a "relic" ham
>
> Roger
>

4229. Re: Curious about the I.R.E. Standard Dummy Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-06 01:24:40 UTC
From: Robert Sherrod <rtsherrod@mchsi.com>
Message-ID: <srpLg.30451$aJ.14390@attbi_s21>
Source record: 10729
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

H. P. Friedrichs wrote:
> I am interested in the origins and purpose of the "IRE (Institute of
> Radio Engineers) Standard Dummy Antenna," as used during the alignment
> of radio receivers.
>
> I first came across this circuit in some old Hallicrafter's
> documentation, which described the alignment of a particular radio. The
> "IRE Standard Dummy Antenna" consists of four components--- a 200pf cap
> in series with a 20 uH inductor, which links the signal generator to the
> receiver's antenna input. A 400 pF cap in series with a 400 ohm resistor
> is connected in parallel with (shunts)the inductor.
>
> I gather that this circuit models a wire antenna of some type. Is this
> true? What is the import of the component values and how were they
> arrived at? I modeled the circuit in Spice and graphed the transfer and
> impedance curves but it is not entirely clear to me what benefit there
> is to using this circuit.
>
> I've also Googled this and found some references here and there, but
> nothing explains the "why" of it.
>
> Is there anyone who can shed light on this?
>
> 73
> Pete
> AC7ZL
>
> hpf (at) gainbroadband (dot) com

I built an I.R.E. dummy antenna recently to perform an alignment on a
Hallicrafters S-120. It is cobbled together on a small perfboard with
copper lands around the holes, has a length of coax with a male BNC
connector to go the the sig-gen and a female BNC connector to attach the
sig-gen lead.

I will post a pic on a.b.p.r when I can.

Bobby
KC9IHK

4230. Re: Curious about the I.R.E. Standard Dummy Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-06 02:27:07 UTC
From: Brian <k6sti@n2.net>
Message-ID: <1157509627.081239.315910@m79g2000cwm.googlegroups.com>
Source record: 10730
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Pete, I was curious about the dummy antenna, too. Some time ago I modeled it and checked the impedance looking back into the output leads with a 50-ohm generator at the source. The results are here:

http://users.tns.net/~bb/dummy.htm

Before I did the model I figured that the dummy antenna was trying to simulate a certain length of wire on shortwave. But you can see that the magnitude of the output impedance (upper plot) is around 400 ohms throughout the shortwave part of the spectrum. Down in the broadcast band the network becomes almost purely capacitive, which is what a short wire will do.

In fact, at 500 and 1000 kHz (the two spots I checked), the dummy impedance is almost exactly that of a wire that runs 15 feet vertically and then 90 feet horizontally over perfectly conducting ground. I imagine they had a 100-foot wire in mind, a figure I think I've seen recommended for BC antenna length in the old days.

So I think the network is intended to be 400 ohms resistive at SW and at BC behave as a 100-foot wire would. I align radios with the network and then at installation I tweak the antenna capacitors, if they are easily accessible, on the actual antenna.

Brian

4231. SolderSmoke #31: Jupiter, WIFI antenna, Kootie keys, QRSS, NEW VIDEO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-06 03:54:51 UTC
From: bill.meara@gmail.com
Message-ID: <1157514891.551567.211470@m73g2000cwd.googlegroups.com>
Source record: 10731
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.astro.amateur,rec.radio.amateur.misc,sci.electronics.basics

SolderSmoke!
A SHOW FOR ELECTRONICS HOMEBREWERS!

http://www.soldersmoke.com

Listen at: http://www.soldersmoke.com

SolderSmoke #31 (September 4, 2006) is available on
http://www.soldersmoke.com

Also: check out a VIDEO on Bill's 20 Meter Solar
Powered DSB rig at:
http://www.youtube.com/watch?v=VnjAtGfkwpk

Topics covered in SolderSmoke #31:

-- Heathkit VTVM.
-- QRSS. Alaska to New Zealand!
-- Radio Jove.
-- Jupiter/IO laser.
-- Ten Tec interferometer http://yasi.fringes.org.
-- Kootie Key.
SM0VPO's website.
-- RF green thumb vs dead chickens.
-- Homebrew Wifi antennas.
-- KL7R's bookmarks and new shack photo.
-- PG1N's website.
-- QEX article on "Why antennas radiate."
-- MAILBAG: KF4LMZ, KJ6VU, G3PVG, W0MQY,

Tired of listening to Led Zepplin or NPR on your
I-Pod? Wouldn't you like to be able to carry with
you the kinds of ham radio conversations that you
listen to while in your radio shack?
Mike, KL7R, in Juneau, Alaska, and Bill, M0HBR, in
London, England meet regularly on the ECHOLINK system
to discuss their homebrew radio projects. We are
making them available as PODCASTS.

If you don't have an MP3 player you can just go to the
site below and listen to the latest program (and
earlier editions) using the audio software on your
computer.

http://www.soldersmoke.com

Here's the homepage for our show. All our programs are available here. There is also a blog and links to some of the sites and documents we've been discussing: http://www.soldersmoke.com

We hope you enjoy the program. Please send us feedback.

73 from London
Bill M0HBR N2CQR CU2JL
http://www.gadgeteer.us

4232. Re: Curious about the I.R.E. Standard Dummy Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-06 04:08:47 UTC
From: "H. P. Friedrichs" <nospam@please.com>
Message-ID: <CeadnckE3tVM1GPZnZ2dnUVZ_oudnZ2d@velocitywest.com>
Source record: 10732
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Brian--

Your spice simulation looked familiar...VERY familiar. As it turns out,
I had plotted similar curves and happened to have used Microcap as well!
I was just not sure I understood the relationship between the transfer
function I saw and some kind of physical antenna.

Your comments make sense, though I do have one question: How did you
calculate the impedance of the antenna with the shape and dimensions
that you described?

73
Pete
AC7ZL

Brian wrote:

> Pete, I was curious about the dummy antenna, too. Some time ago I
> modeled it and checked the impedance looking back into the output leads
> with a 50-ohm generator at the source. The results are here:
>
> http://users.tns.net/~bb/dummy.htm
>
> Before I did the model I figured that the dummy antenna was trying to
> simulate a certain length of wire on shortwave. But you can see that
> the magnitude of the output impedance (upper plot) is around 400 ohms
> throughout the shortwave part of the spectrum. Down in the broadcast
> band the network becomes almost purely capacitive, which is what a
> short wire will do.
>
> In fact, at 500 and 1000 kHz (the two spots I checked), the dummy
> impedance is almost exactly that of a wire that runs 15 feet vertically
> and then 90 feet horizontally over perfectly conducting ground. I
> imagine they had a 100-foot wire in mind, a figure I think I've seen
> recommended for BC antenna length in the old days.
>
> So I think the network is intended to be 400 ohms resistive at SW and
> at BC behave as a 100-foot wire would. I align radios with the network
> and then at installation I tweak the antenna capacitors, if they are
> easily accessible, on the actual antenna.
>
> Brian
>

4233. Re: Curious about the I.R.E. Standard Dummy Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-06 04:13:51 UTC
From: Jeffrey D Angus <jangus@socal.rr.com>
Message-ID: <3WrLg.27$rE5.5@tornado.socal.rr.com>
Source record: 10733
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Brian wrote:
> The results are here:
>
> http://users.tns.net/~bb/dummy.htm

Nice charts, thanks for doing those.

> So I think the network is intended to be 400 ohms resistive at
> SW and at BC behave as a 100-foot wire would.

Pretty much what I said initially. A uniform high impedance.
As others pointed out the output attenuator of most "service"
grade signal generators at the time was all over the place.

What I find amazing is that what we can do with Spice in a few
minutes was painstakingly done by hand until the they got the
results they desired. Then published as a "cook book" standard
for others to use.

The bottom line was that you could introduce a signal into the
receiver under test without undue de-tuning of the tuned circuits.

Jeff

--
RESTRICTED AREA. Anyone intruding shall immediately become subject to
the jurisdiction of military law. Intruders will be subject to lethal
force, without warning, and on sight. USE OF DEADLY FORCE IS AUTHORIZED
under the Internal Security Act of 1950.

4234. Re: Curious about the I.R.E. Standard Dummy Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-06 04:55:10 UTC
From: Brian <k6sti@n2.net>
Message-ID: <1157518510.827658.109280@i3g2000cwc.googlegroups.com>
Source record: 10734
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

> Your comments make sense, though I do have one question: How did you
> calculate the impedance of the antenna with the shape and dimensions
> that you described?

With a computer program.

Brian

4235. Re: Using the Virtual Ionosphere

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-06 13:16:28 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1157548588.786846.298970@m79g2000cwm.googlegroups.com>
Source record: 10735

sailtamarack@yahoo.ca wrote:
>
> Full details at www.qsonet.com
>
> Geez - I hope this isn't a glimpse of the future. I think I'll just
> keep building stuff and be a "relic" ham
>
> Roger

It aint radio - but then, are the current generation out of the box
radios either - or just another piece of disposable consumer junk?

Andrew VK3BFA.

4236. Re: Curious about the I.R.E. Standard Dummy Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-06 13:53:51 UTC
From: Brian <k6sti@n2.net>
Message-ID: <1157550831.436196.217530@m79g2000cwm.googlegroups.com>
Source record: 10736
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Pete, I forgot to mention the reason I believe the IRE dummy antenna tries to look like a 400-ohm resistive load at shortwave instead of a certain length of wire. You can see why here:

http://users.tns.net/~bb/antlen.gif

This is an old RCA chart showing the behavior of an end-fed wire for lengths to 125 feet. It indicates the many resonances and antiresonances a short wire can exhibit. Since the antenna impedance and the resulting performance vary so markedly with wire length, and because it would be unrealistic to expect all listeners to use one particular length, I think the dummy antenna is just intended to roughly match the input impedance of a typical radio. I'm not sure about consumer radios, but old communications receivers all seem to have a specified input impedance of either 300 or 400 ohms.

On the broadcast band, any wire shorter than about 150 feet will look capacitive. It won't exhibit the resonances you see in the chart at shortwave. So even if the wire is shorter than the 100-foot length the dummy antenna seems to model and exhibits a higher capacitive reactance, it won't affect the radio's RF tracking that much. On the broadcast band, most radios seem to use rather loose antenna coupling to minimize mistracking. This allows them to accomodate antennas of various length. There is an interesting discussion about antenna coupling strategies in the Radiotron Designer's Handbook.

Brian

4237. how to improvise a car battery charger?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-06 14:21:40 UTC
From: kadmocesio@hotmail.com
Message-ID: <1157552500.674173.19480@p79g2000cwp.googlegroups.com>
Source record: 10737

man i'am i deep trouble, and i need to improvize a car battery, Does anyone Knows how?

4238. Re: how to improvise a car battery charger?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-06 15:12:42 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1157555562.269652.3460@p79g2000cwp.googlegroups.com>
Source record: 10738

kadmocesio@hotmail.com wrote:
> man i'am i deep trouble, and i need to improvize a car battery, Does
> anyone Knows how?

Andy writes:

Yep. Take a piece of lamp cord with a plug on the end.

One lead to the negative terminal of the battery.

The other lead to a 100watt light bulb, a 5amp/100v rectifier diode,
to the plus terminal of the battery, in series......

This will charge the battery pretty well . If you are not careful,
it will also shock the hell out of you, but it is simple .

Clue: don't have the battery in your car when you do this....

It ain't rocket surgery, but you gotta understand what you're
doing. MacGiver could blow up a space shuttle with this setup......

Andy W4OAH

4239. Re: FCC Field Strength Measurements

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-06 23:06:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12ful3fc4pf9969@corp.supernews.com>
Source record: 10739

Wow, do they still do that? I haven't heard of anyone getting nailed for running illegal power for decades, even though very high power is the accepted norm in some segments of the amateur community. If they did get back to busting hams for running more than 1.5 kW, the QRO crowd would have to QSY to CB (or "freeband" frequencies) where it's safe.

But not to worry, the FCC has its hands full protecting our tender eyes from busted bras.

Roy Lewallen, W7EL

Jim wrote:
> Anyone know how the FCC makes their field strength measurements in the
> HF region? . . .

4240. Re: Weller EC-2002-A

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-06 23:35:45 UTC
From: Tree <wb7vyn@cox.net>
Message-ID: <1157585745.117068.279610@i42g2000cwa.googlegroups.com>
Source record: 10740

g. beat wrote:
> It really depends upon the control board that you have in the unit.
>
> The later EC2002 models were a completely different animal - and had a
> microprocessor control (pic?) that could be programmed by an external
> programmer (expensive) - for set-back , specific temperature, etc.
>
> This was used extensively for EC2002 stations used in production / assembly
> lines (strict control of iron temperature and tip profiles).
>
> This is covered in the EC2002 manuals -- for these later models
>
> Here is the manual on BAMA (you may wish to try mirror site for downloads)
> http://bama.sbc.edu/weller.htm
>
>
> Greg
>
> ==========
>
> From: **THE-RFI-EMI-GUY** <blank>
> Subject: Re: Weller Tech Sheets
> Date: Sun, 11 Jun 2006 02:23:33 GMT
>
> Do you have any tips on fixing a Weller EC-2002-A? It still regulates
> and heats, but the temperature display is dead. When first turned on it
> flashes "FFF" for a split second. I think maybe bad filter capacitor or
> something. Any thoughts on fixing? This is a nice unit I had just bought
> spare iron and tips for it. Tried another iron, and also measured proper
> resistance on the thermistor.

4241. Re: Weller EC-2002-A

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-06 23:38:48 UTC
From: Tree <wb7vyn@cox.net>
Message-ID: <1157585928.707718.134810@b28g2000cwb.googlegroups.com>
Source record: 10741

On one I had there is a 10mf-25v cap that was leake and it didn't allow
the display to work. This cap is in a circuit to produce a neg. voltage
off one on the rectifier diodes.
Thanks Dick wb7vyn
g. beat wrote:
> It really depends upon the control board that you have in the unit.
>
> The later EC2002 models were a completely different animal - and had a
> microprocessor control (pic?) that could be programmed by an external
> programmer (expensive) - for set-back , specific temperature, etc.
>
> This was used extensively for EC2002 stations used in production / assembly
> lines (strict control of iron temperature and tip profiles).
>
> This is covered in the EC2002 manuals -- for these later models
>
> Here is the manual on BAMA (you may wish to try mirror site for downloads)
> http://bama.sbc.edu/weller.htm
>
>
> Greg
>
> ==========
>
> From: **THE-RFI-EMI-GUY** <blank>
> Subject: Re: Weller Tech Sheets
> Date: Sun, 11 Jun 2006 02:23:33 GMT
>
> Do you have any tips on fixing a Weller EC-2002-A? It still regulates
> and heats, but the temperature display is dead. When first turned on it
> flashes "FFF" for a split second. I think maybe bad filter capacitor or
> something. Any thoughts on fixing? This is a nice unit I had just bought
> spare iron and tips for it. Tried another iron, and also measured proper
> resistance on the thermistor.

4242. Re: how to improvise a car battery charger?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-07 10:21:59 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <bpSLg.10432$YZ3.9222@trnddc03>
Source record: 10743

Don't forget about diode polarity: The cathode (-) end of the diode goes to
the battery and the anode end (+) goes to the lamp cord!

Joe
W3JDR

"AndyS" <andysharpe@juno.com> wrote in message
news:1157555562.269652.3460@p79g2000cwp.googlegroups.com...
>
> kadmocesio@hotmail.com wrote:
>> man i'am i deep trouble, and i need to improvize a car battery, Does
>> anyone Knows how?
>
> Andy writes:
>
> Yep. Take a piece of lamp cord with a plug on the end.
>
> One lead to the negative terminal of the battery.
>
> The other lead to a 100watt light bulb, a 5amp/100v rectifier diode,
> to the plus terminal of the battery, in series......
>
> This will charge the battery pretty well . If you are not careful,
> it will also shock the hell out of you, but it is simple .
>
> Clue: don't have the battery in your car when you do this....
>
>
>
> It ain't rocket surgery, but you gotta understand what you're
> doing. MacGiver could blow up a space shuttle with this setup......
>
> Andy W4OAH
>

4243. Re: how to improvise a car battery charger?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-07 11:31:57 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1157628717.862602.230150@m73g2000cwd.googlegroups.com>
Source record: 10744

AndyS wrote:

OOPS!!!!

i meant a 5 amp/ 1000 volt diode.... I guess you figured it
out yourself, but I couldn't let it pass...

This puts around a half amp, average, into the battery.

Paralleling 100 watt light bulbs will increasse it in steps.

Try not to exceed the diode current rating

W4OAH

4244. OT: Need Help on configuration.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-07 14:39:29 UTC
From: Paul P <paulREMOVE@REMOVEppinyotREMOVE.com>
Message-ID: <BaWLg.4342$I71.2107@trnddc01>
Source record: 10745

A fellow ham asked me to help him configure a Globe Linear Amp to his Kenwood TS-520 and antenna tuner. It appears to me that the Globe will not let receive signals pass back to the transceiver. This was proven in the shop while hooking up an antenna directly to the Kenwood then putting the linear in line and loosing the receive signal.

I posted a schematic of the Globe Linear on my web site at http://www.ppinyot.com/HomePage.htm. Click on the top most picture to expand the image. It does not appear to me that there is a return path for reception.

How would one accommodate this linear with a transceiver? Do I need two T/R relays to make this work?

Thanks in advance,
Paul.

4245. Re: OT: Need Help on configuration.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-07 16:26:20 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <45004824.50809@invalid.invalid>
Source record: 10746

Paul P wrote:
> A fellow ham asked me to help him configure a Globe Linear Amp to his
> Kenwood TS-520 and antenna tuner. It appears to me that the Globe will not
> let receive signals pass back to the transceiver. This was proven in the
> shop while hooking up an antenna directly to the Kenwood then putting the
> linear in line and loosing the receive signal.
>
> I posted a schematic of the Globe Linear on my web site at
> http://www.ppinyot.com/HomePage.htm. Click on the top most picture to
> expand the image. It does not appear to me that there is a return path for
> reception.
>
> How would one accommodate this linear with a transceiver? Do I need two T/R
> relays to make this work?

Judging from the diagram, yes. There is no receive path through that
amp, you're going to have to bypass it with relays/switches to receive.

At the time that amp was designed, it was unusual for a ham to have a
transceiver. Usually, you had a separate transmitter and receiver. And
you already had a T/R switch or relay to switch the antenna between the
two. (or, you used separate antennas for transmitting and receiving)
So if you bought the Globe Linear, you hooked it between your existing
transmitter and your existing T/R switch and you were in business. Of
course, it doesn't work that way with modern rigs!

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

4246. Re: OT: Need Help on configuration.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-07 16:40:56 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrneg0iso.2lnj.bit-bucket@shell.config.com>
Source record: 10747

On Thu, 07 Sep 2006 14:39:29 GMT, Paul P wrote:
> A fellow ham asked me to help him configure a Globe Linear Amp to his
> Kenwood TS-520 and antenna tuner. It appears to me that the Globe will not
> let receive signals pass back to the transceiver. This was proven in the
> shop while hooking up an antenna directly to the Kenwood then putting the
> linear in line and loosing the receive signal.
>
> I posted a schematic of the Globe Linear on my web site at
> http://www.ppinyot.com/HomePage.htm. Click on the top most picture to
> expand the image. It does not appear to me that there is a return path for
> reception.
>
> How would one accommodate this linear with a transceiver? Do I need two T/R
> relays to make this work?

Yep.
The amplifier pre-dates "transceivers".

To adapt it to transceiver use you'll need to switch the coax _around_
the amp during receive.

Don't expect to operate QSK. HI!HI!

"72 ohm coax"? hmmmm....

73
Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
38.24N 104.55W | @ config.com | Jonesy | OS/2
*** Killfiling google posts: <http//jonz.net/ng.htm>

4247. Bio-TERROR in America: The Government of Torture!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-07 17:19:03 UTC
From: nanodesigns_usa@yahoo.com
Message-ID: <1157649542.858806.218550@h48g2000cwc.googlegroups.com>
Source record: 10648

AMERICA IN DANGER of its own out-of-control Bio-Terror:
Is 1984 here? God help us, blinded!
Originally Secret Bio-Aerosols are misused to HARM and Torture in
U.S.A.

Our government needs TORTURE in U.S.? See details
below...
It has your VOTE, support? Abused...

CRITICS (political/social/cultural) are harassed and secretly
persecuted
along with their KIDS in schools/colleges, especially, during
tests/exams
(Think: Guantanamo "stress-positions" in the context of
1984-technologies)

Bio-Aerosols and aerosolized chemicals are used to cause:
- severe colds/coughs turning into bronchitis, eye irritation
- bacterial pneumonia/other pneumonia, shortness of breath
- surges of severe headaches, migraines, dizziness, etc.
- fainting collapses by symptoms-mimicking aerosols
- severe stomach pains (sharp, burning, nausea, etc)
- chest-wall pains, heart-muscle inflammations/trauma, etc.
WORSE:
- heart attacks under cover of second-hand smocking
- car crashes/accidents by Vertigo-causing aerosols
- liver/organ failure by small-dose toxins (trace-less?)
- cancer-causing/facilitating - months-long assasinations
This "Yushchenko syndrom" CAN destabilize NATIONs
Waste, Fraud, Cronism and Abuse in HomeSec/FBI

U.S. mail IS polluted in "anthrax-like" manner to HARM critics
Libraries, airplanes, hotels, offices, buses, trains - all polluted!

A network of Secret Gas-Aerosol Rooms operated in US
(in Philadelphia, Narberth, Lower Merion, PA)
(in Wilmington and Newark, DE)
(in Hampton, Williamsburg and Richmond, VA)
AND ELSEWHERE.... details below...
Bio-aerosols used to hurt and simulate panic attacks, etc.!
Soviets locked critics into nut-houses, now WE do the same!
Symptoms-mimicking aerosols do HARM, weak or ill people.

Say "Stop, I care" - call Senate (202) 224-3121
House of Representatives (202) 225-3121
What IS going on in America? *Print and Post*

Fabrication of Fear to grab Power by Fabrication of Believable Info

Big Brother spins protection...
And fear is used to clamp.
Democracy needs action!
On which side do you stand?

Looked at this?!! Go to Google/Yahoo newsGroups:

TORTURE IN USA: Secret Aerosol Rooms

US Scientist needs legal help dealing with the secret aerosols rooms
(SARs) operated illegally in Philadelphia area, Newark (DE), Hampton
and Williamsburg (VA) and other places. Highly volatile aerosols with
and without bacterial content cause dry cough, airways a...

Full text was at:
http://buyit.philly.com/findit/search/results.jsp?catId=krd_philenqda...

This was a new on-line ad placed in Philadelphia Inquirer and
Philadelphia Daily News on www.philly.com (see full text below)
It was about the secret aerosols rooms in US. One could find it by
searching "secret", say, in the ad section of philly.com.

Democracy can not function effectively without the informed public. As
a former NASA Langley scientist working in the area of nanotechnology
and nanoscale particles, I have been recently exposed to the
establishment of secret gas-aerosol rooms inside of United States, at
least in the Mid-Atlantic region (from Philadelphia to Virginia).
First, the highly irritant aerosols have surfaced at the NASA Langley
Research Center in several safety accidents. Investigations were
blocked, probably, because of lack of Congressional approval for such
financially-lucrative research at NASA. Later, these aerosols had been
encountered outside of NASA in Virginia, Delaware and Pennsylvania
.
This points out to yet another proliferation of originally-sensitive
technologies into domestic American life to hurt and harass people
without a proper oversight and much control. This amounts to torture,
extra-judicial prosecution and authoritarian intimidation tactics. The
use of such irritants and the operations of the secret gas-aerosol
rooms are gross violations of human and constitutional rights of
American citizens and various domestic and international laws.

------------------Full text of an ad from Philadelphia's
philly.com-------------------------
TORTURE IN USA: Secret Aerosol Rooms
US Scientist needs legal help dealing with the secret aerosols rooms
(SARs) operated illegally in Philadelphia area, Newark (DE), Hampton
and Williamsburg (VA). Highly volatile aerosols with and without
bacterial content cause dry cough, airways and eyes irritation, chest
pain and inflammation. FBI and Homeland Security associates are likely
operators of SARs, while collaborators may be hotel staff and

landlords, who get financial/material or other incentives. US citizens
and kids are victims.

Torture is any act by which severe pain, whether physical or
psychological, is intentionally inflicted on a person as a means of
intimidation, deterrence, revenge, punishment, sadism, or information
gathering. At times, medicine and medical practitioners have been drawn
into the ranks of torturers, either to judge what victims can endure,
to apply treatments which will enhance torture, or as torturers in
their own right. http://en.wikipedia.org/wiki/Torture

America in Danger!

America in danger -
The vice is NOT impeached.
America in danger -
The public trust is breached.

Big Brother spins protection
And fear is used to clamp.
Democracy needs action!
On which side do you stand?

Which side are you on, boys?
Which side moves you on?
Which side are you on, girls?
Which side did you wrong?
(Chorus after F. Reece)

Your church is burned by haters.
The priests to go to jail?
Your dreams are cheyned by traitors,
But hope still shines through veil.

Dust rooms came back to gas us
With neo-Naz (or Con) embrace...
New immigrants do make US!
And not the SSuper-race...

***

The Government of Torture

Our government needs TORTURE?!
It has your VOTE, and, now, support?
But peace (not vice) needs steady nurture
And trustful words of calm rapport.

Beware of loud, but FALSE, ideas
That flame a thirsty hellish torch.
Protect the old and true ideals
And Constitution's civic urge.

Yes, torture IS a hellish torch -
In bloody hands, a blinded sword,
With Constitution used to forge
All laws on rights as mere absurd!

Remember victim's silent cry
And SEE the Christ in all of us.
Don't let your government to spy
And torture with some bio-dust.

There is NO good use for evil torture!
No matter how the need is spinned
By Nixon's men, as bloody sergeants,
While truth is painfully re-skinned.

V. Haryk-Bukovynsky © VMH

4248. Re: MRX-40 modification

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-07 19:20:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12g0s8al21hf94e@corp.supernews.com>
Source record: 10649

Klop wrote:
> . . .
> Also
> http://www.hanssummers.com/radio/varicap/index.htm
> for G0UPL's testing of several common diodes as varicaps.
> Red LED's came out top!
> Does anyone else have info on using them as varicaps for tuning?

It's too bad he didn't think of trying zener diodes. By using zeners, you can choose a wide range of capacitances -- low voltage zeners have the most C and higher voltage zeners have less, high power zeners more than low power ones. I've used them for decades for such things as RIT adjustment. A reverse-biased transistor emitter-base junction is also basically a zener, with typical breakdown voltage of around 5 volts, so this works fine as a varicap when a fairly large amount of C is needed.

Any reverse biased diode will behave like a varicap, although as G0UPL found out, small signal diodes (intentionally) have a very small amount of C. The diodes sold as varicaps are doped to provide a particular and repeatable C-vs-V characteristic, but otherwise are the same as other diodes.

The real problem with using varicaps of any kind for tuning is the relatively high and nonlinear temperature coefficient.

Roy Lewallen, W7EL

4249. Re: FS: Very rare National MB-40-L

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-07 19:49:16 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <ftt0g2po1nqm3ruuld10rl99p68kiki6p5@4ax.com>
Source record: 10650

sold

4250. Re: FS: B & W 850A Plate tank assembly.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-07 19:49:51 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <nut0g2lcj23rmfct06c7ibs2hdjhlt6in1@4ax.com>
Source record: 10651
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

sold

4251. Re: FS: Yaesu FT221-R

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-07 19:50:47 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <pvt0g2l9m4t56hslcp00cp7pmlbagoveub@4ax.com>
Source record: 10652
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Thu, 10 Aug 2006 18:53:04 -0700, Wes Stewart <n7ws*@*yahoo.com>
wrote:

Price reduction: $150 Shipped CONUS

>Nice older 2-meter multimode. CW, USB, LSB, AM and FM transceiver.
>Min. 10W output. I've used this rig with external amps to run meteor
>and tropo scatter and EME.
>
>Been keeping it to get back on EME but health issues are preventing
>the construction of new antenna.
>
>Asking $225 including shipping to CONUS.
>
>email:n7ws@yahoo.com
>
>Thanks and 73,
>
>Wes

4252. Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-07 20:17:19 UTC
From: radio_rookie <phaneendra.piratla@gmail.com>
Message-ID: <1157660239.048126.59500@e3g2000cwe.googlegroups.com>
Source record: 10653

Hello,
I want to know the importance of intermediate frequency in any
receivers. IF was used in Superhet transceivers. My question is why
doesn't anyone use zero IF now a days. What is the problem of brining
the RF signal directly to baseband? Does the IF stage conditions the
incoming signal? What are the advantages of the IF stage?

Just confused. Can anyone throw some light on this?

Thanks.

4253. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-07 20:47:56 UTC
From: "i3hev, mario held" <marioheld@tiscali.it>
Message-ID: <45008555$0$13724$5fc30a8@news.tiscali.it>
Source record: 10654

hello!

radio_rookie wrote:

> ... IF was used in Superhet transceivers.

well, IF __is__ used in superhet receivers... :)

> My question is why
> doesn't anyone use zero IF now a days. ....

In fact, you can very well use zero IF in a receiver: what you get,
doing so, is a "direct conversion", or "synchrodyne", receiver, which
is simple, easy to design and realize, cheap, and yet can offer very
high level performances - as is well known to radio amateurs ;)

But... yes, there's a but, and a price to pay: in a DCR, you put all the
required gain (a hundred of dBs, give or take a few) in the base band
(or audio frequency) chain, and this is bad for noise! Most electronic
devices are sensitive to pressure, and a sound is a pressure wave... you
may end up with something which can be quite a decent microphone! >:)

Moreover, in a DCR it may be rather difficult to implement an effective
AGC, so switching from weak to loud signals may be annoying, and even
dangerous for hearing! Also, it's not easy to obtain a reasonable S-meter...

Last, but not least, a simple DCR is inherently a DSB receiver, lest you
implement it with rather complex mixers - which add much to the circuit
total complexity.

Adding all of this up, a superhet may be a good choice...
--
73 es 51 de i3hev, op. mario

Il vero Radioamatore si riconosce... dal call in firma!
- Campagna 2005 "Sono un Radioamatore e me ne vanto"

it.hobby.radioamatori.moderato
http://digilander.libero.it/hamweb
http://digilander.libero.it/esperantovenezia

4254. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-07 20:50:14 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <fC%Lg.28$oz7.2@newsfe07.lga>
Source record: 10655

"radio_rookie" <phaneendra.piratla@gmail.com> wrote in message
news:1157660239.048126.59500@e3g2000cwe.googlegroups.com...

> doesn't anyone use zero IF now a days. What is the problem of brining
> the RF signal directly to baseband? Does the IF stage conditions the
> incoming signal? What are the advantages of the IF stage?

Actually, it is fairly common -- it is called direct conversion and it is
very popular for simple rigs.

It is not without issues. Converting down to audio means that you cannot
eliminate the "other sideband". Also, since the RF amp needs to be
broadband, you can only get limited gain, so you end up needing a lot of
gain in the audio stage. This is achievable, but it is a little tricky to
manage oscillations, ringing and the like. In addition, getting narrow
bandwidth at audio is also a little dicey, and you can't have it at RF
unless you tune the RF ... also tricky.

Which is why most receivers these days are still superhets. You can choose
an IF that allows you to manage the bandwidth, and even so, multiple
conversion is pretty popular. Many commercial rigs are triple conversion,
typically with IF's around 60 MHz, 10 MHz and 455 kHz, with a very liberal
interpretation of "around" <g>

..

4255. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-07 21:11:03 UTC
From: dplatt@radagast.org
Message-ID: <12g12n7ku5ilf03@corp.supernews.com>
Source record: 10656

In article <45008555$0$13724$5fc30a8@news.tiscali.it>,
i3hev, mario held <marioheld@tiscali.it> wrote:

>Last, but not least, a simple DCR is inherently a DSB receiver, lest you
>implement it with rather complex mixers - which add much to the circuit
>total complexity.

As I understand it, in order to do SSB via direct conversion, you must use a modern version of the old IQ phasing technique. This requires doing the zero-IF mixdown twice, on two different versions of the signal (with a uniform 90-degree phase shift being applied to one copy of the RF or LO signal). The resulting two baseband outputs are then processed (with a further 90-degree phase shift being applied to one of them) and carefully mixed. This results in reinforcement of the desired sideband and suppression of the other.

The circuitry needed to apply the necessary phase shifts is not trivial (if you want enough accuracy to deliver acceptable opposite-sideband rejection), and is not necessarily simpler or less expensive than the filtering and extra stage of mixing done in a traditional IF-based SSB receiver or transmitter.

These days, of course, you can apply the phase shift by converting the two baseband signals to digital format, and implementing the final 90-degree phase shift via a digital FIR all-pass filter. This of course requires your design to have a pair of high-linearity ADCs, a DSP, and a DAC to reproduce the final (mixed) signal.

The "holy Grail" these days seems to be a direct-from-RF system, in which the RF signal is _directly_ sampled (at a ferociously-high sampling rate), and all of the phase shifts and downconversion and mixing are done digitally. RF-grade ADCs with the necessary linearity and speed aren't particularly inexpensive, especially if you need your system to deliver a very high dynamic range which can work properly even in the presence of strong in-band or near-band interferers.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4256. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-07 21:56:40 UTC
From: Caveat Lector <CL@nowhere.com>
Message-ID: <iA0Mg.8933$c07.3248@fed1read04>
Source record: 10657

See URL:
http://www.fas.org/man/dod-101/navy/docs/es310/superhet.htm#ads

and

http://www.eie.polyu.edu.hk/~ensurya/lect_notes/commun_cir/Ch1/Chapter1.htm

CL

"radio_rookie" <phaneendra.piratla@gmail.com> wrote in message
news:1157660239.048126.59500@e3g2000cwe.googlegroups.com...
> Hello,
> I want to know the importance of intermediate frequency in any
> receivers. IF was used in Superhet transceivers. My question is why
> doesn't anyone use zero IF now a days. What is the problem of brining
> the RF signal directly to baseband? Does the IF stage conditions the
> incoming signal? What are the advantages of the IF stage?
>
> Just confused. Can anyone throw some light on this?
>
> Thanks.
>

4257. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-07 22:58:13 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <il81g2dnq6v6cdef94frkua6dnmmh91351@4ax.com>
Source record: 10658

On Thu, 07 Sep 2006 21:11:03 -0000, dplatt@radagast.org (Dave Platt)
wrote:

>In article <45008555$0$13724$5fc30a8@news.tiscali.it>,
>i3hev, mario held <marioheld@tiscali.it> wrote:
>
>>Last, but not least, a simple DCR is inherently a DSB receiver, lest you
>>implement it with rather complex mixers - which add much to the circuit
>>total complexity.
>
>As I understand it, in order to do SSB via direct conversion, you must
>use a modern version of the old IQ phasing technique. This requires
>doing the zero-IF mixdown twice, on two different versions of the
>signal (with a uniform 90-degree phase shift being applied to one copy
>of the RF or LO signal). The resulting two baseband outputs are then
>processed (with a further 90-degree phase shift being applied to one
>of them) and carefully mixed. This results in reinforcement of the
>desired sideband and suppression of the other.
>
>The circuitry needed to apply the necessary phase shifts is not
>trivial (if you want enough accuracy to deliver acceptable
>opposite-sideband rejection), and is not necessarily simpler or less
>expensive than the filtering and extra stage of mixing done in a
>traditional IF-based SSB receiver or transmitter.

It is trivial, three stages of all pass using opamps for both the I
and Q paths and sum or difference the result. Using 1% parts and
decent opamps opposite sideband suppression of >45db is easy
and 50db or better attainable. Read Breeds and KK7Bs works.

However to build a good Image reject DCR and a good superhet
is not trivial when you consider shielding and mechanical issues
to get the best results.

>These days, of course, you can apply the phase shift by converting the
>two baseband signals to digital format, and implementing the final
>90-degree phase shift via a digital FIR all-pass filter. This of
>course requires your design to have a pair of high-linearity ADCs, a
>DSP, and a DAC to reproduce the final (mixed) signal.

This is more reproduceable and works very well.

>The "holy Grail" these days seems to be a direct-from-RF system, in
>which the RF signal is _directly_ sampled (at a ferociously-high
>sampling rate), and all of the phase shifts and downconversion and
>mixing are done digitally. RF-grade ADCs with the necessary linearity

>and speed aren't particularly inexpensive, especially if you need your
>system to deliver a very high dynamic range which can work properly
>even in the presence of strong in-band or near-band interferers.

Usually this technique is the "tailend" of a more conventional
Superhet so the RF detection is done at some low IF rather than
baseband. Typically 12-50khz for that IF. Problem is thes end up
being triple (or more) conversion reciever with the need for better
than average shielding or the birdies are prolific.

Allison

4258. Inductance specification

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-07 23:11:14 UTC
From: David <websales@orbitcoms.com>
Message-ID: <mG1Mg.25015$rP1.12224@news-server.bigpond.net.au>
Source record: 10659

As I was re-reading Boswick's RF Design book it occurred to me that I may have overlooked something very fundamental.

I often transform components from series to parallel form, and visa versa ,depending on what I am wanting to achieve.

What I have over looked is. What form do manufacturer's state Q and inductance ?

I took a look at a coil manufacturer's specs and they don't explicitly say whether the test circuit was series or parallel. I would assume that the standard would be series form ?

Would someone please advise me which it is ?

Though the Q would be same in either form, the inductance and loading could be slightly different.(ie. If I have assumed series form then when I transform into parallel form and calculate a specific Rp and L it would be incorrect if the inductance and Q in the manufacturer's data were specified in parallel form.)

Hopefully someone can make sense of what I am getting at here.

Thanks in advance

Regards

David

4259. Re: Inductance specification

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 00:20:24 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12g1dqcse5sgvc7@corp.supernews.com>
Source record: 10660

The Q should be identical when transformed. Q = Xs/Rs = Rp/Xp. It's true that Xs isn't exactly the same as Xp(*) (and therefore Ls isn't exactly equal to Lp), but for even a poor Q, they're much closer than typical component tolerances or even your ability to measure. Any design requiring this kind of accuracy should be reconsidered.

Of course, a series-parallel conversion is correct only at a single frequency, and the Q also varies with frequency. So such conversions need to be applied with caution.

(*) Xp/Xs = (Q^2 + 1) / Q^2, so the ratio is 1.01 when Q is 10, 1.0001 when Q is 100, etc.

Roy Lewallen, W7EL

David wrote:
> As I was re-reading Boswick's RF Design book it occurred to me that I
> may have overlooked something very fundamental.
>
> I often transform components from series to parallel form, and visa
> versa ,depending on what I am wanting to achieve.
>
> What I have over looked is. What form do manufacturer's state Q and
> inductance ?
>
> I took a look at a coil manufacturer's specs and they don't explicitly
> say whether the test circuit was series or parallel. I would assume that
> the standard would be series form ?
>
> Would someone please advise me which it is ?
>
> Though the Q would be same in either form, the inductance and loading
> could be slightly different.(ie. If I have assumed series form then when
> I transform into parallel form and calculate a specific Rp and L it
> would be incorrect if the inductance and Q in the manufacturer's data
> were specified in parallel form.)
>
> Hopefully someone can make sense of what I am getting at here.
>
> Thanks in advance
>
> Regards
>
> David

4260. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 00:39:24 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1157675964.683930.87820@i42g2000cwa.googlegroups.com>
Source record: 10661

From: radio_rookie on Thurs, Sep 7 2006 1:17 pm

>I want to know the importance of intermediate frequency in any
>receivers. IF was used in Superhet transceivers. My question is why
>doesn't anyone use zero IF now a days. What is the problem of brining
>the RF signal directly to baseband? Does the IF stage conditions the
>incoming signal? What are the advantages of the IF stage?
>
>Just confused. Can anyone throw some light on this?

This can be a HUGE subject, but, since this is "homebrew"
we can 'distill' it to a few things: :-)

1. Ever-present random NOISE in the front end. Can't
escape it. Since the amount of noise voltage
reaching the demodulator can be reduced by the
square-root of relative bandwidth, IF bandpass
filtering can cut down that random noise, yield
a constant selectivity regardless of RF input.

2. Direct conversion to baseband is subject to dynamic
range limitations v. the amount of RF input power
and RF input selectivity. i.e., a very strong signal
well out of the desired RF input range might mess
with the sampler causing intermodulation distortion.

3. Lowest RF input level (which determines the
"sensitivity" specification) requires a very low-
noise sampler to equate to a full superhet with an
IF chain. Samplers are not noise-free. Samplers
must compete on the tenths of microvolts (or less)
noise with conventional active mixers of now to
meet high-sensitivity specifications of today.

4 Software (as in an SDR architecture) is NOT simple
to implement, even in a very fast processor. While
it is easy to change demodulation modes, one needs to
understand the math behind the demodulation process.
If you have the TIME and the smarts, go for it; if
not, it may be months before your project works and
then it may not work very well.

5. Not all RF input signals are AM or derivatives of
that (on-off keying, SSB on HF). For FM or
combination AM-PM as in the "modem" fashion, it
might be much easier to implement via a separate IF

plus separate demodulator per mode.

6. In the beginning (1918 and Ed Armstrong in Paris
right after WW1), vacuum tubes were NOT what one
could call the best, noise-free, or even with much
gain. The superhet form allowed the same selectivity
(via the IF bandpass) at any desired RF input
frequency; that did not exist before the superhet.
Since that was a quantum-level improvement at the
time, it had a mystique about it that caused nearly
all designers to follow the IF chain idea with its
diode or tube "detector" (really a rectifier-mixer).
The math of modulation had been published in 1915
(John R. Carson of AT&T) but had yet to spread. It
was not intuitive to the non-mathematical and so
few designers got "into" possible new ways to mix
and demodulate. With better tubes that came after,
the IF and 2nd IF and even 3rd IF as discretes was
easier to design and make. That lasted until
roughly 1980 or about 6 decades, all superhets
having IF chains in a familiar arrangement. It was
"comfortable." More importantly, it worked.

7. If you want selectable bandpass filtering at all
frequencies, the IF with its input bandpass
filters at most any bandwidth you want is the
easiest to design-in and build. That way you
lop off the signals on either side as close to
the antenna as you can get.

8. Heterodyning (mixing) down to one frequency, the
IF, makes it easier to work and debug with a
semi-direct-conversion system. Especially so if
the desired RF inputs have many bands.

9. On the other hand, if portability, light weight,
and low power drain is a requirement (as in military
field receivers), plus all sorts of demodulation
modes, the SDR or Software Designed Radio is the
thing to do, using samplers, A->D conversion and
demodulation in a processor subsystem. Note: You
combine the front end of a conventional IF with
the processor sub-system replacing the IF back end
and 'detectors' to get the best of both.

There isn't any one simple answer. It is all a trade-off
between what is desired and what you can design and make
and how much you have to build plus your budget. Its all
wonderfully complex to decide and I love it. :-)

LenAnderson@ieee.org

4261. Re: Inductance specification

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 01:03:09 UTC
From: David <websales@orbitcoms.com>
Message-ID: <hj3Mg.25085$rP1.12578@news-server.bigpond.net.au>
Source record: 10662

Roy,

Thanks for your response. So basically it makes no real practical
difference which way they specify the parameters. The lowest Q inductors
I use have Q >= 30 anyway.

Regards

David

Roy Lewallen wrote:
> The Q should be identical when transformed. Q = Xs/Rs = Rp/Xp. It's true
> that Xs isn't exactly the same as Xp(*) (and therefore Ls isn't exactly
> equal to Lp), but for even a poor Q, they're much closer than typical
> component tolerances or even your ability to measure. Any design
> requiring this kind of accuracy should be reconsidered.
>
> Of course, a series-parallel conversion is correct only at a single
> frequency, and the Q also varies with frequency. So such conversions
> need to be applied with caution.
>
> (*) Xp/Xs = (Q^2 + 1) / Q^2, so the ratio is 1.01 when Q is 10, 1.0001
> when Q is 100, etc.
>
> Roy Lewallen, W7EL
>
> David wrote:
>> As I was re-reading Boswick's RF Design book it occurred to me that I
>> may have overlooked something very fundamental.
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>> I often transform components from series to parallel form, and visa
>> versa ,depending on what I am wanting to achieve.
>>
>> What I have over looked is. What form do manufacturer's state Q and
>> inductance ?
>>
>> I took a look at a coil manufacturer's specs and they don't explicitly
>> say whether the test circuit was series or parallel. I would assume
>> that the standard would be series form ?
>>
>> Would someone please advise me which it is ?
>>
>> Though the Q would be same in either form, the inductance and loading
>> could be slightly different.(ie. If I have assumed series form then
>> when I transform into parallel form and calculate a specific Rp and L

>> it would be incorrect if the inductance and Q in the manufacturer's
>> data were specified in parallel form.)
>>
>> Hopefully someone can make sense of what I am getting at here.
>>
>> Thanks in advance
>>
>> Regards
>>
>> David

4262. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 01:04:31 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1157677471.049917.187520@m73g2000cwd.googlegroups.com>
Source record: 10663

radio_rookie wrote:
> Hello,
> I want to know the importance of intermediate frequency in any
> receivers. IF was used in Superhet transceivers. My question is why
> doesn't anyone use zero IF now a days. What is the problem of brining
> the RF signal directly to baseband?

> Thanks.

Andy writes:
This is the eighth response to your question. All of the others
are accurate. HOWEVER, there is one technical problem with
a homodyne that outweighs the previous resonses...

The L.O, has to be EXACTLY the same frequency as the incoming
signal to provide proper demodulation......

With a superhet, depending on the modulation, you can be
many Khz in error (for AM) or a few dozen off (for voice SSB).
With homodyne, you may have to process a psuedo-baseband signal which
has frequency components you don't want..... that is a bitch....

In order to achieve the LO to be EXACTLY the same
frequency (phase doesn't matter since you can use I and Q),
it is necessary to achieve frequency lock. That requires a
much higher S/N than a simple superhet with a detector...
So you lose sensitivity. In some systems , you can lock
to a remote carrier, but you aren't really talking about those
methods, I don't. think....

So, the major technical problem is not SIMPLICITY or
BANDWIDTH or NUMBER OF STAGES...,.. it is
how to obtain an LO of the correct frequency.... All the
other problems are simple compared to this.... for most systems...

Andy W4OAH

PS I welcome dissent and would like very much to learn
if anything I have said is in error......

4263. Re: FCC Field Strength Measurements

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 02:49:28 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-8379D1.18500607092006@netnews.worldnet.att.net>
Source record: 10664

In article <12ful3fc4pf9969@corp.supernews.com>,
Roy Lewallen <w7el@eznec.com> wrote:

> Wow, do they still do that? I haven't heard of anyone getting nailed for
> running illegal power for decades, even though very high power is the
> accepted norm in some segments of the amateur community. If they did get
> back to busting hams for running more than 1.5 kW, the QRO crowd would
> have to QSY to CB (or "freeband" frequencies) where it's safe.
>
> But not to worry, the FCC has its hands full protecting our tender eyes
> from busted bras.
>
> Roy Lewallen, W7EL
>
> Jim wrote:
> > Anyone know how the FCC makes their field strength measurements in the
> > HF region? . . .

You are right on, here Roy, there aren't very many FCC Field Agents left
who actually have done this type of Enforcment Work, but there are a few.
Also there aren't many Field Agents left who can do the required
Calibration on the required Instruments, either, but there are a few.
Mostly the Field Staff spends its time doing Safety of Life and Property
Interference Work, these days, and filling out the Federal Paperwork
required to keep the few Field Offices left, open.

Me one of the few, who could do the work, but who
isn't there anymore.....

4264. Advice on Oscilloscopes Sought

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 03:03:43 UTC
From: jawod <jawod@fuse.net>
Message-ID: <1e59a$4500de1b$453d9423$2747@FUSE.NET>
Source record: 10665

Being relatively new to ham radio, I am considering some form of oscilloscope. I am intrigued by PC-based systems (eg., BitScope Pocket Analyzer)

I've read a few NG posts about used HP scopes and a few negative remarks about PC scopes.

My question:

Given my neophyte status and the likelihood that I would use a scope for anything more the basic / with learning, moderate/ complexity,
... is the PC-based scope a good choice for me?
Cost is under $400, not incl. a $40 analog probe.

John
AB8O

PS, apologies for cross-posting to two groups...just trying to get some good answers!

4265. Re: Advice on Oscilloscopes Sought

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 04:03:11 UTC
From: Alfred Green <nu8i@cox.net>
Message-ID: <fY5Mg.18876$RD.5767@fed1read08>
Source record: 10666

jawod wrote:
> Being relatively new to ham radio, I am considering some form of
> oscilloscope. I am intrigued by PC-based systems (eg., BitScope Pocket
> Analyzer)
>
> I've read a few NG posts about used HP scopes and a few negative remarks
> about PC scopes.
>
> My question:
>
> Given my neophyte status and the likelihood that I would use a scope for
> anything more the basic / with learning, moderate/ complexity,
> ... is the PC-based scope a good choice for me?
> Cost is under $400, not incl. a $40 analog probe.
>

If you are willing to go the Ebay route, and your budget is in the $400
range, you can pick up a seriously nice analog scope. I have a pair of
Tektronix 2245As in my lab that cost me quite a bit less than that each.
If you really need a DSO then that puts the price up a bit.
If your need is for something small and portable, then some of the newer
stuff is probably the only option, but I doubt you will get the same
level of performance/price.

Welcome to the hobby, BTW! I'm really pleased to see your interest in
getting the test equipment side in motion.
I am QRV on most bands from 160m to 10Gigs, and the majority of my gear
is homebrew. I have been a ham for almost four decades, and over that
time have spent a lot more on test gear than I have on commercial
radios. Having the gear to check out my creations goes a long way to
having the confidence to actually put them on the air and make contacts.

There is an old piece of wisdom that HP can't make a 'scope, and Tek
can't make a spectrum analyser. My experience supports that.

Maybe that doesn't answer your question directly, but I hope that helps
in some way.

GL & 73, Alf NU8I
Scottsdale AZ DM43an
160m > 10Gigs

4266. Re: Curious about the I.R.E. Standard Dummy Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 04:28:09 UTC
From: Jammer <Zengmeiste@aol.com>
Message-ID: <1157689689.247442.230760@e3g2000cwe.googlegroups.com>
Source record: 10667
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

GREAT info, that's why I lurk here often.

Just one teensy question, though...is this polarized?,
e.g. the 200pf cap is the receiver probe, the inductor
plus shunt is the signal gen connection? or versa-vice?

Thanks,
Terry Bakowski

[see you at the Peoria Superfest]

H. P. Friedrichs wrote:

> I first came across this circuit in some old Hallicrafter's
> documentation, which described the alignment of a particular radio. The
> "IRE Standard Dummy Antenna" consists of four components--- a 200pf cap
> in series with a 20 uH inductor, which links the signal generator to the
> receiver's antenna input. A 400 pF cap in series with a 400 ohm resistor
> is connected in parallel with (shunts)the inductor.
>

4267. Re: Curious about the I.R.E. Standard Dummy Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 05:03:15 UTC
From: "H. P. Friedrichs" <nospam@please.com>
Message-ID: <hpqdnZPNJ7oOZJ3YnZ2dnUVZ_oidnZ2d@velocitywest.com>
Source record: 10668
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Brian,

This link seems to be broken.

Pete
AC7ZL

Brian wrote:
> Pete, I forgot to mention the reason I believe the IRE dummy antenna
> tries to look like a 400-ohm resistive load at shortwave instead of a
> certain length of wire. You can see why here:
>
> http://users.tns.net/~bb/antlen.gif
>
> This is an old RCA chart showing the behavior of an end-fed wire for
> lengths to 125 feet. It indicates the many resonances and
> antiresonances a short wire can exhibit. Since the antenna impedance
> and the resulting performance vary so markedly with wire length, and
> because it would be unrealistic to expect all listeners to use one
> particular length, I think the dummy antenna is just intended to
> roughly match the input impedance of a typical radio. I'm not sure
> about consumer radios, but old communications receivers all seem to
> have a specified input impedance of either 300 or 400 ohms.
>
> On the broadcast band, any wire shorter than about 150 feet will look
> capacitive. It won't exhibit the resonances you see in the chart at
> shortwave. So even if the wire is shorter than the 100-foot length the
> dummy antenna seems to model and exhibits a higher capacitive
> reactance, it won't affect the radio's RF tracking that much. On the
> broadcast band, most radios seem to use rather loose antenna coupling
> to minimize mistracking. This allows them to accomodate antennas of
> various length. There is an interesting discussion about antenna
> coupling strategies in the Radiotron Designer's Handbook.
>
> Brian
>

4268. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 05:25:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12g1vm8jkmdoi23@corp.supernews.com>
Source record: 10669

AndyS wrote:
>
> Andy writes:
> This is the eighth response to your question. All of the others
> are accurate. HOWEVER, there is one technical problem with
> a homodyne that outweighs the previous resonses...
>
> The L.O, has to be EXACTLY the same frequency as the incoming
> signal to provide proper demodulation......
>
> With a superhet, depending on the modulation, you can be
> many Khz in error (for AM) or a few dozen off (for voice SSB).
> With homodyne, you may have to process a psuedo-baseband signal which
> has frequency components you don't want..... that is a bitch....
>
> In order to achieve the LO to be EXACTLY the same
> frequency (phase doesn't matter since you can use I and Q),
> it is necessary to achieve frequency lock. That requires a
> much higher S/N than a simple superhet with a detector...
> So you lose sensitivity. In some systems , you can lock
> to a remote carrier, but you aren't really talking about those
> methods, I don't. think....
>
> So, the major technical problem is not SIMPLICITY or
> BANDWIDTH or NUMBER OF STAGES...,.. it is
> how to obtain an LO of the correct frequency.... All the
> other problems are simple compared to this.... for most systems...
>
> Andy W4OAH
>
> PS I welcome dissent and would like very much to learn
> if anything I have said is in error......

I believe that what you said is true, but only for AM. What other kind of modulation requires better frequency accuracy from a direct conversion receiver LO than from a superhet LO? I believe that only a small fraction of today's amateurs are interested in AM reception, but of course it's the bread and butter of the SWL and BCL.

I've build direct conversion receivers for many years. Their simplicity is particularly evident when you compare a transceiver having a direct conversion receiver with one having a superhet receiver -- to be honest, be sure to include all the extra filtering necessary with the superhet. The single biggest disadvantage to DC receivers, in my opinion, is the difficulty of making a good AGC, particularly in conjunction with narrow

audio bandwidth. And they do have their own set of potential problems, such as unintended AM demodulation, the effects of LO leakage and radiation, and the difficulties in making a clean, stable, high gain audio amplifier. But all can be overcome once one understands the causes of the problems. All but perhaps the last one will be present in a digital version, too, so a casually designed and/or built one is likely to be a poor performer.

Roy Lewallen, W7EL

4269. Re: FS: Yaesu FT221-R

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 07:59:41 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <edr7lm$631$1@news2.kornet.net>
Source record: 10670
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Wes,

1) You still got this?
2) Will you ship USPS, as I can't receive parcels any other way?
3) You take PayPal?

The e-mail is good.

--
Say no to institutionalized interference.
Just say NO to HD/IBOC!
"Wes Stewart" <n7ws*@*yahoo.com> wrote in message
news:pvt0g2l9m4t56hslcp00cp7pmlbagoveub@4ax.com...
> On Thu, 10 Aug 2006 18:53:04 -0700, Wes Stewart <n7ws*@*yahoo.com>
> wrote:
>
> Price reduction: $150 Shipped CONUS
>
>>Nice older 2-meter multimode. CW, USB, LSB, AM and FM transceiver.
>>Min. 10W output. I've used this rig with external amps to run meteor
>>and tropo scatter and EME.
>>
>>Been keeping it to get back on EME but health issues are preventing
>>the construction of new antenna.
>>
>>Asking $225 including shipping to CONUS.
>>
>>email:n7ws@yahoo.com
>>
>>Thanks and 73,
>>
>>Wes
>

4270. Re: Curious about the I.R.E. Standard Dummy Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 13:16:41 UTC
From: Brian <k6sti@n2.net>
Message-ID: <1157721401.638360.304860@m73g2000cwd.googlegroups.com>
Source record: 10671
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

> This link seems to be broken.

Pete, I remove temporary items from my web site pretty quickly due to space restrictions. I tried to e-mail the chart to you but got the following reply:

----- The following addresses had permanent fatal errors -----
<hpf@gainbroadband.com>
(reason: 591 your host [216.86.143.7] is blacklisted by bl.spamcop.net. No mail will be accepted)

No more midnight spam for me! Anyway, the chart is back up for a couple more days.

By the way, on the perfboard I used to build my dummy antenna I added a 0.1 uF coupling capacitor between the signal generator input and a second output lead with an alligator clip. This provides a 50-ohm DC-isolated signal for IF alignment. I usually align radio IFs by sweeping a signal at the front end, often just blasting through the RF and mixer stages at 455 kHz. But the alligator clip is handy when I want to drive the mixer grid directly. You can drive the grid with the dummy network, but the 50-ohm source impedance of the direct output ensures that the parallel impedance at the grid doesn't affect the sweep flatness.

Brian

4271. Re: Advice on Oscilloscopes Sought

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 13:19:02 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <5eq2g29f7ka9egb5j321uf4pea7mm0djbe@4ax.com>
Source record: 10672

I have turned away from PC based test equipment because my PC changes
every few years and my applications become "Legacy Applications" that
either die or require an expensive upgrade.

The older test equipment still works as good as it ever did. Pick a
readily available scope (EBAY?) and read the specs. Compare it to the
other candidates.

Chances are that a Tektronix 453 with a bright screen will do
everything you want for less than $100 including shipping.
It just gets better from there.

Considering they are now 40 years old and still useful is mind
boggling!

Pick one, buy it, learn it. If it does not meet your expectations you
can usually get something out of it on Ebay & buy another.

On Thu, 07 Sep 2006 23:03:43 -0400, jawod <jawod@fuse.net> wrote:

>Being relatively new to ham radio, I am considering some form of
>oscilloscope. I am intrigued by PC-based systems (eg., BitScope Pocket
>Analyzer)
>
>I've read a few NG posts about used HP scopes and a few negative remarks
>about PC scopes.
>
>My question:
>
>Given my neophyte status and the likelihood that I would use a scope for
>anything more the basic / with learning, moderate/ complexity,
>... is the PC-based scope a good choice for me?
>Cost is under $400, not incl. a $40 analog probe.
>
>John
>AB8O
>
>PS, apologies for cross-posting to two groups...just trying to get some
>good answers!
John Ferrell W8CCW

4272. Re: Need Help on configuration.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 14:06:33 UTC
From: Paul P <paulREMOVE@REMOVEppinyotREMOVE.com>
Message-ID: <JNeMg.13$Qb2.9@trnddc08>
Source record: 10673

Thanks to all who replied. Your comments helped confirm what I suspected.
I am a new ham about 1.75 years experience. But quite middle aged.

Thanks
Paul P

4273. Re: Advice on Oscilloscopes Sought

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 15:58:41 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12g34pii4akb850@corp.supernews.com>
Source record: 10674

Hi John,

"John Ferrell" <johnferrell@sprintmail.com> wrote in message
news:5eq2g29f7ka9egb5j321uf4pea7mm0djbe@4ax.com...
>I have turned away from PC based test equipment because my PC changes
> every few years and my applications become "Legacy Applications" that
> either die or require an expensive upgrade.

I agree, although I'd say this is less of a problem these days than, say, a decade back... if you go with a USB interface there's a good chance the driver will work over the course of a couple major Windows OSes (e.g., Windows XP is largely backwards compatible with drivers back to NT); if test equipment manufacturers started using Ethernet more often, it'd make the equipment more or less usable over more than a decade of OSes.

The other nice thing in recent years is that laptops are now cheap enough (~$500 new) that you can often afford to, e.g., dedicate one to some specialized piece of test equpiment you have indefinitely. Desktops are ridiculously cheap -- ~$250 new in many cases --, but of course bulkier (and no integrated LCD).

> Chances are that a Tektronix 453 with a bright screen will do
> everything you want for less than $100 including shipping.
> It just gets better from there.

Any analog scope has rather limited utility for debugging digital logic. It can certainly be done, but I'd defy you to try to debug, e.g., an I2C or RS-232 exchange that hangs with one.

> Pick one, buy it, learn it. If it does not meet your expectations you
> can usually get something out of it on Ebay & buy another.

This is good advice... those old scopes have pretty much depreciated as much as they're going to, so learning on one is relatively cheap.

---Joel

4274. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 17:05:49 UTC
From: "i3hev, mario held" <marioheld@tiscali.it>
Message-ID: <4501a2c4$0$1005$5fc30a8@news.tiscali.it>
Source record: 10675

Dave Platt wrote:

> As I understand it, in order to do SSB via direct conversion, you must
> use a modern version of the old IQ phasing technique. ...

that's correct :)
the problem here is that you need a phasing filter offering a constant
(and precise) 90 degrees phase shift all over the receiver band, and
that can be tricky to do...

> These days, of course, you can apply the phase shift by
> converting the two baseband signals to digital format...

well, you're opening doors to digital radio :)
But, AFAIK, the actually attainable dynamics does
not seem to incite enthusiastic greetings... ;)

--
73 es 51 de i3hev, op. mario

Il vero Radioamatore si riconosce... dal call in firma!
- Campagna 2005 "Sono un Radioamatore e me ne vanto"

it.hobby.radioamatori.moderato
http://digilander.libero.it/hamweb
http://digilander.libero.it/esperantovenezia

4275. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 17:46:58 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <2ja3g2pupfnb87pvumv4i68oudj47788ud@4ax.com>
Source record: 10676

On Fri, 08 Sep 2006 19:05:49 +0200, "i3hev, mario held"
<marioheld@tiscali.it> wrote:

>Dave Platt wrote:
>
>> As I understand it, in order to do SSB via direct conversion, you must
>> use a modern version of the old IQ phasing technique. ...
>
>that's correct :)
>the problem here is that you need a phasing filter offering a constant
>(and precise) 90 degrees phase shift all over the receiver band, and
>that can be tricky to do...

This is not that hard and there are tricks to do this over very wide
ranges. The easiest is create a fixed 90 degree reference and down
convert it.

Another is use one of the I&Q output DDS chips.

>> These days, of course, you can apply the phase shift by
>> converting the two baseband signals to digital format...
>
>well, you're opening doors to digital radio :)
>But, AFAIK, the actually attainable dynamics does
>not seem to incite enthusiastic greetings... ;)

The problem is finding fast A/D with enough bits (more than 16)
and using 32bit processors to grind the data. Those two things
are not easy or cheap.. yet. But we are getting there.

Allison

4276. Re: Schematic drawing software?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 18:40:39 UTC
From: David Snyder Hale <david@noemail.com>
Message-ID: <edsdf6$1102$1@agate.berkeley.edu>
Source record: 10677

Bill Turner <noway@nohow.com> wrote:
> longer have access to it. Can someone recommend a program to use at
> home for creating schematic drawings? I don't care if it is payware as

Try EAGLE, at www.cadsoft.de

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu

4277. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 20:04:06 UTC
From: "i3hev, mario held" <marioheld@tiscali.it>
Message-ID: <4501cc8d$0$1001$5fc30a8@news.tiscali.it>
Source record: 10678

nospam@nouce.bellatlantic.net wrote:

> This is not that hard and there are tricks to do this over
> very wide ranges. The easiest is create a fixed 90 degree
> reference and down convert it.

that's true but, imho, there's no meaning in removing the (moderate)
complexities of the typical superhet receiver just to put (trickier)
complexities in quadrature downconverting... apart from part count,
controlling the reciprocal phase in two "identical" converters is in
itself not an easy task, since just a single degree of dephasing is
enough to degrade unwanted sideband rejection.

> ... Those two things
> are not easy or cheap.. yet. But we are getting there.

I'm sure we will get there soon enough, and it may
well be that just a few years will suffice; but, as
for now... they are not easy or cheap! :)

--
73 es 51 de i3hev, op. mario

Il vero Radioamatore si riconosce... dal call in firma!
- Campagna 2005 "Sono un Radioamatore e me ne vanto"

it.hobby.radioamatori.moderato
http://digilander.libero.it/hamweb
http://digilander.libero.it/esperantovenezia

4278. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 20:08:19 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1157746099.402074.108200@e3g2000cwe.googlegroups.com>
Source record: 10679

Roy Lewallen wrote:
>
> I believe that what you said is true, but only for AM. What other kind
> of modulation requires better frequency accuracy from a direct
> conversion receiver LO than from a superhet LO? I believe that only a
> small fraction of today's amateurs are interested in AM reception, but
> of course it's the bread and butter of the SWL and BCL.
> >
> Roy Lewallen, W7EL

Andy responds

I don't disagree with anything you've said. However , i've
found it a lot easier to make the final frequency adjustments
in a superhet since it can be done at a lower frequency.
Trying to sync up at 915 is more challenging than at 455 khz,
obviously. And for systems like FSK and SSB, you gotta
do it somewhere..... And with FM, since the beat formed
by the carrier depends on the modulation index of the
received signal, getting rid of it can be squirrelly.....

Like youself, I've built both types , both as home projects,
and as commercial products, for a long long time. In the
DC versions, if I use I/Q and combine them to form the
audio, the AGC is the same as with superhet SSB. And I generally
use PIN diodes before the front end for the first AGC stage...
But, that's just my own preference.....

Andy W4OAH

4279. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 21:15:38 UTC
From: john <jawod@fuse.net>
Message-ID: <8ef42$4501de4f$d844bd0c$17056@FUSE.NET>
Source record: 10680

radio_rookie wrote:
> Hello,
> I want to know the importance of intermediate frequency in any
> receivers. IF was used in Superhet transceivers. My question is why
> doesn't anyone use zero IF now a days. What is the problem of brining
> the RF signal directly to baseband? Does the IF stage conditions the
> incoming signal? What are the advantages of the IF stage?
>
> Just confused. Can anyone throw some light on this?
>
> Thanks.
>
Hey radio rookie,

Thanks for posting this excellent question.
The answers you received have taught me more than a few textbooks have.
Some very good minds have weighed in on your query.

Keep up the good work and welcome to ham radio.

To the respondents, I say "Thanks!" for approaching ideal NG activity!

Makes one proud to be a ham.

John
AB8O

4280. Re: Schematic drawing software?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 22:20:57 UTC
From: Dan Andersson <dan@andersson.co.uk>
Message-ID: <NqydncdMLaNUcZzYRVnyrg@eclipse.net.uk>
Source record: 10681

David Snyder Hale wrote:

> Bill Turner <noway@nohow.com> wrote:
>> longer have access to it. Can someone recommend a program to use at
>> home for creating schematic drawings? I don't care if it is payware as
>
>
> Try EAGLE, at www.cadsoft.de
>

Eagle is crippleware, but with lot of library symbols. Any PCB's will be limited to two layers and 100mm by 80mm size.

I also think there is a limitation on the hierarchy of schematic subdrawings.

Go get KiCad. GPL license, no limitations and runs on both Linux and Windooze. You find KiCad on the net for download.

//Cheers

Dan / M0DFI

4281. Re: Advice on Oscilloscopes Sought

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 22:25:02 UTC
From: Dan Andersson <dan@andersson.co.uk>
Message-ID: <NqydncZMLaMjcJzYRVnyrg@eclipse.net.uk>
Source record: 10682

jawod wrote:

> Being relatively new to ham radio, I am considering some form of
> oscilloscope. I am intrigued by PC-based systems (eg., BitScope Pocket
> Analyzer)
>
> I've read a few NG posts about used HP scopes and a few negative remarks
> about PC scopes.
>
> My question:
>
> Given my neophyte status and the likelihood that I would use a scope for
> anything more the basic / with learning, moderate/ complexity,
> ... is the PC-based scope a good choice for me?
> Cost is under $400, not incl. a $40 analog probe.
>
> John
> AB8O
>
> PS, apologies for cross-posting to two groups...just trying to get some
> good answers!

First, go to E-Bay and look for a decent analog scope. As you are referring to Dollars, you are probably in the US so you are better off looking for Tektronix scopes.

I suggest you split your money on a miniVNA and a Tek scope. This is an unbeatable combination!

Search for miniVNA on the net and the E-bay for the scope!.

Cheers

Dan / M0DFI

4282. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-08 22:27:03 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <t7o3g2p9ajr1qasppkbbefen5gnimgr5t6@4ax.com>
Source record: 10683

On Fri, 08 Sep 2006 22:04:06 +0200, "i3hev, mario held"
<marioheld@tiscali.it> wrote:

>nospam@nouce.bellatlantic.net wrote:
>
>> This is not that hard and there are tricks to do this over
>> very wide ranges. The easiest is create a fixed 90 degree
>> reference and down convert it.
>
>that's true but, imho, there's no meaning in removing the (moderate)
>complexities of the typical superhet receiver just to put (trickier)
>complexities in quadrature downconverting... apart from part count,
>controlling the reciprocal phase in two "identical" converters is in
>itself not an easy task, since just a single degree of dephasing is
>enough to degrade unwanted sideband rejection.

I disagree with trickier vs moderate. For a given level of
performance the two are comparable. The only context is
one may be familiar vs different as in new.

The phase of two converters is pretty easy to maintain, having
done it. However, creative part was down converting the LO
rather than the more critical small signal paths. Since the LO
would only at most require low pass (VFO at 70-124mhz with
fixed IQ generation at 70mhz would give a simple dc-54mhz LO)
to prevent the 70mhz and higher components. If passive DBMs
are used phase shifts from gain and added LCs can be avoided.
Also it's possible to put inline measurement of the resulting LOs
and feed back any phase error (found unneeded) for correction.

To build a superhet (ignore selectivity and overload performance for
the moment) to cover dc-54mhz you need upconversion and then down
conversion to IF and lots of filters along the way with switching.
Then you have the problem of various LOs and carrier osc (SSB/CW)
getting back into previous stages causing undesired tones. The more
conversions the greater the problem and the better shielding must be
to avoid it.

Having built both each has challenges and to do it as a high
performing reciever (or TX) requires a very similar effort even if
the areas where the effort need be applied differ.

The one big difference is that the image reject system is less
hardware between antenna and the baseband and that hardware
is more frequency agile. The best available analog answer is the
KK7B MiniR2 (or R2-PRO), base design uses SBL-1 mixers good

from 1-500mhz making generation of an 90degree LO the only real
work. As you go up in frequency a quadrature splitter will have
both phase and level bandwidth that increases making a
tuneable VHF or UHF IF practical. (FYI: accepable (under 1degree
and under 1db level variation) bandwidth at 14mhz is >1mhz.)

Of course the image reject detector system could exist at any fixed
frequency such as 66 mhz with a fixed LO. Then the upconverter only
needs a conventional LO of 66 to 120mhz still yeilds an RX that tunes
from DC to 54mhz and has few if any adjustments. This would yeild a
Single conversion RX with a VHF IF that is remarkably simple
and needs few filters.

If you take that to the next step using DSP at baseband where it's
cheap (using PS and soundcard) you have a very straightforward
high performing multimode radio. This is the current SDR approach.
When you consider a mainboard with ram, sound and other needed bits
running at 1+ ghz is dirt cheap (found free sometimes) and small this
is achieveable. Especially considering the software is already out
there. Also unused CPU cycles could also do the "glass front pannel"
and manage things like tuning the DDS or PLL.

>> ... Those two things
>> are not easy or cheap.. yet. But we are getting there.
>
>I'm sure we will get there soon enough, and it may
>well be that just a few years will suffice; but, as
>for now... they are not easy or cheap! :)

Actually it's progressing faster than you'd notice. The number of Ham
radios with IF DSP as the detection is considerable. Most of the
upper models of Tentec, Yaesu, Kenwood and others are already
doing it. Also the vendors of the DSP processors do have boards
for proto work to venture into this realm. With more people doing it
and plenty of alreay published work it may be more assembly
of components (be they hardware or software) than
construction.

While this wanders far from the IF question posted it's an example fo
how you can have IFs from baseband through UHF or higher.

Allison

4283. Re: FS: HP3586B Frequency selective level meter VLF receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 00:55:51 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <rioMg.28611$JO5.2541@tornado.tampabay.rr.com>
Source record: 10684

For Sale: HP3586B Frequency selective level meter VLF receiver

>
>
> This unit has the high stability oscillator and is excellent
> condition. No dents, no scratches, and no dust inside whatsoever. I
> believe it was rack mounted at an environmentally controlled site and
> seldom used. I don't have the feet and the small blank panels (where
> the rack ears normally go) but these are common size. This unit works
> fantastic and has a new NICAD memory battery installed. I replaced one
> of the jacks in front with a BNC (easily reversed mod that screwed
> in). I also put a nice black anodized aluminum spinner knob on the VFO
> shaft encoder for ease of tuning. It makes for a very sensitive VLF
> receiver and can measure extremely low levels with great accuracy. By
> the way, there is an RF output jack on rear which enables you to sweep
> filters etc.
>
> _The service manual is included._
>
> $495 plus shipping from central florida
>
> Description :
>
>
> HP 3586B Selective Level Meter 3586B: Meets North American Bell
> requirements, 50Hz to 32.5MHz frequency range with 75ohm unbalanced
> signal input, 4kHz to 1MHz frequency range with 124ohm balanced
> signal input, 4kHz to 1MHz frequency range with 135ohm balanced Input
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

4284. Re: Weller EC-2002-A

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 00:59:07 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <450213C0.4020307@nettally.com>
Source record: 10685

Thanks; I am going to check that capacitor out. I have suspected as much
as cap's are usually first things to wear out.

Tree wrote:

>On one I had there is a 10mf-25v cap that was leake and it didn't allow
>the display to work. This cap is in a circuit to produce a neg. voltage
>off one on the rectifier diodes.
>Thanks Dick wb7vyn
>g. beat wrote:
>
>
>>It really depends upon the control board that you have in the unit.
>>
>>The later EC2002 models were a completely different animal - and had a
>>microprocessor control (pic?) that could be programmed by an external
>>programmer (expensive) - for set-back , specific temperature, etc.
>>
>>This was used extensively for EC2002 stations used in production / assembly
>>lines (strict control of iron temperature and tip profiles).
>>
>>This is covered in the EC2002 manuals -- for these later models
>>
>>Here is the manual on BAMA (you may wish to try mirror site for downloads)
>>http://bama.sbc.edu/weller.htm
>>
>>
>>Greg
>>
>>==========
>>
>>From: **THE-RFI-EMI-GUY** <blank>
>>Subject: Re: Weller Tech Sheets
>>Date: Sun, 11 Jun 2006 02:23:33 GMT
>>
>>Do you have any tips on fixing a Weller EC-2002-A? It still regulates
>>and heats, but the temperature display is dead. When first turned on it
>>flashes "FFF" for a split second. I think maybe bad filter capacitor or
>>something. Any thoughts on fixing? This is a nice unit I had just bought
>>spare iron and tips for it. Tried another iron, and also measured proper
>>resistance on the thermistor.
>>
>>
>>
>>
>>

>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

4285. Overheating AA batteries

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 04:08:18 UTC
From: bart <here@there.com>
Message-ID: <tqe4g2hadr1e42ehb3nlida53gnt25d53d@4ax.com>
Source record: 10686
Cross-posted to: rec.crafts.metalworking,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

This evening the GF noticed that the remote control wasn't working & was hot.
I pulled out the extremely hot AA batteries.
It looks like the spring contact in the remote control, on the negative side had worn away the plastic covering on the side of the battery & shorted the side metal battery casing to the negative contact, thereby causing the overheating.
In my many years of battery dissection, I've never seen the side casing of a battery being positive before!
These were "Golden Power" alkaline batteries, made in China.
They were the original batteries that came with the remote (for a Shaw digital cable box).
Anyone ever seen a positive case AA battery before, or is this a new (dumb) idea?

4286. Re: Overheating AA batteries

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 04:31:05 UTC
From: bart <here@there.com>
Message-ID: <qig4g292ma2nravqlevc792bkdn7iu06j2@4ax.com>
Source record: 10687
Cross-posted to: rec.crafts.metalworking,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Sat, 09 Sep 2006 04:08:18 GMT, bart <here@there.com> wrote:

<snip>
>Anyone ever seen a positive case AA battery before, or is this a new (
>dumb) idea?
oops..my mistake ..it looks like Maxell amd Ikea (made in Germany)
alkaline batteries are all the same..a positive side casing.
When the hell did they stop making the old negative zinc sides?
Only with Alkalines? What a PITA!
My apologies.

4287. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 12:19:17 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <nvb5g2p2dl9upsmeuipprbogljm4hno714@4ax.com>
Source record: 10688

On 7 Sep 2006 13:17:19 -0700, "radio_rookie"
<phaneendra.piratla@gmail.com> wrote:

>Hello,
>I want to know the importance of intermediate frequency in any
>receivers. IF was used in Superhet transceivers. My question is why
>doesn't anyone use zero IF now a days.

<What is the problem of brining
>the RF signal directly to baseband?

Images of the same signal may be a source of interference.

>Does the IF stage conditions the incoming signal?

Yes, in many ways. The most significant are amplification
and selectivity.

>What are the advantages of the IF stage?

Less amplification needed at the recieved frequency.
Gain at a frequency removed from the recieved frequency.
Selectivity is easier to obtain at lower frequencies.
Gain control can be applied if needed.

Allison

4288. Re: Overheating AA batteries

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 12:31:10 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4502b6cf$0$26953$9b4e6d93@newsspool4.arcor-online.net>
Source record: 10689
Cross-posted to: rec.crafts.metalworking,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

BTW: Ikea batteries come from Varta. Better price than original Varta
labeled and the technical performance is good. Duracell is better - even
useable as AccuCell.

"bart" <here@there.com> schrieb im Newsbeitrag
news:qig4g292ma2nravqlevc792bkdn7iu06j2@4ax.com...
> On Sat, 09 Sep 2006 04:08:18 GMT, bart <here@there.com> wrote:
>
> <snip>
> >Anyone ever seen a positive case AA battery before, or is this a new (
> >dumb) idea?
> oops..my mistake ..it looks like Maxell amd Ikea (made in Germany)
> alkaline batteries are all the same..a positive side casing.
> When the hell did they stop making the old negative zinc sides?
> Only with Alkalines? What a PITA!
> My apologies.
>

4289. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 13:53:34 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4502c78c$0$5155$9b4e6d93@newsspool1.arcor-online.net>
Source record: 10690

> I don't disagree with anything you've said. However , i've
> found it a lot easier to make the final frequency adjustments
> in a superhet since it can be done at a lower frequency.
> Trying to sync up at 915 is more challenging than at 455 khz,
> obviously. And for systems like FSK and SSB, you gotta
> do it somewhere..... And with FM, since the beat formed
> by the carrier depends on the modulation index of the
> received signal, getting rid of it can be squirrelly.....

You mentioned FM. I have a general question about the Tayloe mixer. Is it possible to receive NBFM or FSK from VHF with it? I'm a little lost in the question how to use the for outgoing phases or I/Q to demodulate FM. All I found on the Net was doing shortwave SSB demodulation.
Are there other analog switches going higher than the mentioned 70MHz for FST3253 or 74HC4066? Perhaps video switches? What is better: Tayloe 4-phases or a switched mixer with one output only? In the latter case I would need a conventional IF filter after the switching mixer?

If I need a DSP at the baseband doing math with the phases or I/Q I would think of an www.wavefrontsemi.com DSP AL3101/2CG DSP-1K will suffice? Wolud it suffice? It is a little simple DSP mainly for doing FIR - but FAST and with 24-bits including audio AD converters ip to 50KHz. The DSP runs with 50MHz up to 1000 instructions long until it repeats the prog. The nice think is a very low pin-count package and cheap too.

There is maybe a middle way with a device like the www.cypress.com PSoC family of mixed-mode Microcontroller with programmable analog cells. There even exists a PSoC app note describing a heterodyne FSK receiver for 130KHz.

Maybe a www.microchip.com dsPIC is better?

Would it better having the IF not at zero but at a usually higher IF, say 25KHz (remember the NFBM!)?

regards -
Henry

4290. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 14:04:31 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <FRzMg.6$aw5.0@newsfe07.lga>
Source record: 10691

"john" <jawod@fuse.net> wrote in message
news:8ef42$4501de4f$d844bd0c$17056@FUSE.NET...
> radio_rookie wrote:

> Some very good minds have weighed in on your query.

I hate to sound "college professor-y", but you really need to be familiar with the literature.

One of the challenges with anything on the Internet is that anyone can say anything. That is one of the great advantages, too! The problem is, especially in a technical forum like this, you will get responses from folks who don't have a clue but want to sound knowledgable. What is perhaps surprising, is that sometimes, especially on this NG, some of the truly giant minds in the field will also weigh in. Unless you are familiar with who is who, you will have a tough time assessing the responses.

But if you review the books and magazine articles on the subject, and browse the archives of various other forums, you will see that some of the leading experts have posted here. Recognize that they might not sound too different than someone who is simply guessing, and be critical in your analysis of the responses you have received.

..

4291. Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 14:26:15 UTC
From: "nntp.aioe.org" <me@privacy.net>
Message-ID: <eduiu9ljh1@emma.aioe.org>
Source record: 10692
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

I suggest that it still lies in the areas of LC filters, resistor networks and individual transistor (or valve) operation.

Because, although the bulk of our circuit complexity will soon lie in a single DSP chip, the interfaces to that chip, to us at the baseband end and then to the antenna at the RF end, still depend upon traditional electronic (pre-IC) practice.

How, then, can it be possible to issue Ham Radio licences to those who cannot tell one end of a resistor from the other?

How, then, can it ever be possible to issue Ham Radio licences to those of 6 years of age who lack the mathematical capability to understand the evaluation of resistances in parallel?

The answer is, that it cannot be possible, and that licences issued to such people are CB licences, no more, no less.

Syllabi for Ham Radio exams should resort to the traditional subjects of familiarity with elemental electrical and electronic components together with a modernised examination of the ability to write software and understanding of DSP theory.

4292. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 14:38:34 UTC
From: G1LVN <gareth.paley@gmail.com>
Message-ID: <1157812714.688552.280330@i42g2000cwa.googlegroups.com>
Source record: 10693
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

nntp.aioe.org wrote:
>
> Syllabi for Ham Radio exams should resort to the traditional
> subjects of familiarity with elemental electrical and electronic
> components together with a modernised examination of the
> ability to write software and understanding of DSP theory.

Haven't we Bean through this already?

4293. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 14:46:01 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <8IadnYGC88EATp_YnZ2dnUVZ_sidnZ2d@web-ster.com>
Source record: 10694
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

G1LVN wrote:

> nntp.aioe.org wrote:
>
>>Syllabi for Ham Radio exams should resort to the traditional
>>subjects of familiarity with elemental electrical and electronic
>>components together with a modernised examination of the
>>ability to write software and understanding of DSP theory.
>
>
> Haven't we Bean through this already?
>
Someone forgot to take his meds.

It would be nice if my newsreader could pick out an author from the text
for automatic plonking, instead of having to chase behind catching up on
all of his aliases.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

4294. What Is Ham Radio?.....The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 14:47:42 UTC
From: "If M3 is the answer, it's a silly question!" <me@privacy.net>
Message-ID: <eduk6e$f94$1@emma.aioe.org>
Source record: 10695
Cross-posted to: uk.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.homebrew

A necessary preface.....

(It is becoming increasingly difficult to fly the flag for
decency and for civilised behaviour in Radio Hammery. Even
the Usenet newsgroups dedicated to the cause have degenerated
into a hotbed of abusive onslaughts by those who ought to know
better; the Nugatory Numpties who boast of an interest
exceeding 10, 20, 30, 40 or even 50 years and yet who have
proved themselves incapable of even meeting the trivial exam
standards set for 6-year-olds. However, there still exists
the fundamental basis on which Ham Radio is based, and
that will never die. This FAQ ("What Is Ham Radio?") will
be regularly published and will not be shouted or bullied
down. It is important that those of a technical bent, who
are the natural seed-corn of Radio Hammery and who
gravitate towards us to be the real novitiate, can
still find us, (and know that we are still here), their fellows.)

-----ooooo-----

So,.....What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then

operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults.

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are

sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then tries to classify himself as the equal of the Radio Ham when, in fact, he is nothing of the kind.

Ham Radio is not CB Radio and has no common ground with it! Ham Radio is _THE_ technical pursuit for gentlemen; CB Radio is the operating hobby for those who buy their rigs and equipment off the shelf.

-----ooooo-----

If you are the sort of person who is motivated by a technical interest in how things work; if you took apart malfunctioning clocks, toasters and the like and put them right despite never having seen them working, then a Ham Radio licence is your traditional route! There has never been a shortage of such people, and those who gravitate towards such an interest have always been welcomed into our shacks and their interests fostered. There is not today, nor has there ever been, a need to go out and encourage and press children, children who have never expressed an interest in Ham Radio, to come into our shacks. Such an activity should cause eyebrows to be raised - what normal well-adjusted adults seek the social acquaintance of children?!

-----ooooo-----

Please remember that this FAQ is a _POSITIVE EXHORTATION_ to you to exert yourselves to join our fraternity!

4295. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 14:52:09 UTC
From: jawod <jawod@fuse.net>
Message-ID: <4502D519.2080807@fuse.net>
Source record: 10696

xpyttl wrote:
> "john" <jawod@fuse.net> wrote in message
> news:8ef42$4501de4f$d844bd0c$17056@FUSE.NET...
>
>>radio_rookie wrote:
>
>
>>Some very good minds have weighed in on your query.
>
>
> I hate to sound "college professor-y", but you really need to be familiar
> with the literature.
>
> One of the challenges with anything on the Internet is that anyone can say
> anything. That is one of the great advantages, too! The problem is,
> especially in a technical forum like this, you will get responses from folks
> who don't have a clue but want to sound knowledgable. What is perhaps
> surprising, is that sometimes, especially on this NG, some of the truly
> giant minds in the field will also weigh in. Unless you are familiar with
> who is who, you will have a tough time assessing the responses.
>
> But if you review the books and magazine articles on the subject, and browse
> the archives of various other forums, you will see that some of the leading
> experts have posted here. Recognize that they might not sound too different
> than someone who is simply guessing, and be critical in your analysis of the
> responses you have received.
>
> ..
>
>
Your advice is taken. But, look thru the thread: there was reasonable
consensus and I recognized some "big hitters".

I didn't mean to suggest that one learns best on the NG. Rather, my
intent was to support and give kudos to those who bring the NG up to a
reasonably high standard: no flames, insults, diversions...you know, the
usual stuff.

Here are some of my "favorite" NG remarks
"Get help"
"You have serious issues"
"What's YOUR mensa number?"
"I spent xx years at xx and xx years building xx and have xx degrees, so
I know what I'm talking about"

As one monitors these NG's, one begins to "smell" the diff between the knowledgeable and the blow-hards. The only problem comes when they are one and the same. Luckily, this is uncommon.

I appreciate your advice, "Professor" :)

John
AB8O

4296. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 15:13:15 UTC
From: Hamateur <Hamateur@greeneggs.org>
Message-ID: <12g5mgb5ibbc60b@corp.supernews.com>
Source record: 10697

nospam@nouce.bellatlantic.net wrote:
>
> On 7 Sep 2006 13:17:19 -0700, "radio_rookie"
> <phaneendra.piratla@gmail.com> wrote:
>
> >Hello,
> >I want to know the importance of intermediate frequency in any
> >receivers. IF was used in Superhet transceivers. My question is why
> >doesn't anyone use zero IF now a days.
>
> <What is the problem of brining
> >the RF signal directly to baseband?
>
> Images of the same signal may be a source of interference.
>
> >Does the IF stage conditions the incoming signal?
>
> Yes, in many ways. The most significant are amplification
> and selectivity.
>
> >What are the advantages of the IF stage?
>
> Less amplification needed at the recieved frequency.
> Gain at a frequency removed from the recieved frequency.
> Selectivity is easier to obtain at lower frequencies.
> Gain control can be applied if needed.
>
> Allison

I can easily agree that an IF amp's job is to cleanly
and efficiently amplify a specific, modulated, carrier frequency
and to allow for gain control feedback.

But I don't see how "selectivity" should be considered a
function of an IF amp (other than they're not amplifying
what they shouldn't amplify).

It seems easier to think of "selectivity" as a property of
a tuner or several tuner stages.

It's hard for me to think of IF "stages" as improving tuner selectivity
when my homebrew 40m DC recvr seems to be selective enough
so that when I listen to CW the pitch will not change audibly.
The frequency may fluctuate a little, but certainly not enough to
loose a signal, and it does not drift monotonically enough to

worry about (except perhaps as a matter of pride).

The superhet's conversion mixers/filters/amps seem to be considered sub-steps of "IF stages", but I find it easier to think of the mixer/filter steps as "stages of tuners interlaced with IF amplifier stages".

Since the final conversion step may represent a detection, the idea of "selectivity" as being interlaced with IF amps has a more tidy representation in my mind.

Comments, criticisms, corrections, caveats - are always welcome.

4297. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 15:25:47 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <S1BMg.292$U32.158@newsfe06.lga>
Source record: 10598

"jawod" <jawod@fuse.net> wrote in message news:4502D519.2080807@fuse.net...

> Your advice is taken. But, look thru the thread: there was reasonable
> consensus and I recognized some "big hitters".

Yes, this particular thread seemed to gather surprisingly few space cadets

..

4298. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 15:29:33 UTC
From: "Mike Gathergood (G4KFK)" <mike@g4kfk.co.uk>
Message-ID: <1157815773.780242.211230@d34g2000cwd.googlegroups.com>
Source record: 10599
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

nntp.aioe.org wrote:
> How, then, can it be possible to issue Ham Radio licences
> to those who cannot tell one end of a resistor from the other?

Resistors may be inserted either way around :-)

4299. Re: What Is Ham Radio?.....The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 15:30:04 UTC
From: G1LVN <gareth.paley@gmail.com>
Message-ID: <1157815804.289251.212000@e3g2000cwe.googlegroups.com>
Source record: 10600
Cross-posted to: uk.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.homebrew

If M3 is the answer, it's a silly question! wrote:
>
I'd like to add a few frequently asked questions.

4300. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 15:33:43 UTC
From: litle ole me <"nobody \\@ nowhere.com">
Message-ID: <r9BMg.750$5i7.260@newsreading01.news.tds.net>
Source record: 10601

Hamateur wrote:
> nospam@nouce.bellatlantic.net wrote:
>> On 7 Sep 2006 13:17:19 -0700, "radio_rookie"
>> <phaneendra.piratla@gmail.com> wrote:
>>
>>> Hello,
>>> I want to know the importance of intermediate frequency in any
>>> receivers. IF was used in Superhet transceivers. My question is why
>>> doesn't anyone use zero IF now a days.
>> <What is the problem of brining
>>> the RF signal directly to baseband?
>> Images of the same signal may be a source of interference.
>>
>>> Does the IF stage conditions the incoming signal?
>> Yes, in many ways. The most significant are amplification
>> and selectivity.
>>
>>> What are the advantages of the IF stage?
>> Less amplification needed at the recieved frequency.
>> Gain at a frequency removed from the recieved frequency.
>> Selectivity is easier to obtain at lower frequencies.
>> Gain control can be applied if needed.
>>
>> Allison
>
> I can easily agree that an IF amp's job is to cleanly
> and efficiently amplify a specific, modulated, carrier frequency
> and to allow for gain control feedback.
>
> But I don't see how "selectivity" should be considered a
> function of an IF amp (other than they're not amplifying
> what they shouldn't amplify).
>
> It seems easier to think of "selectivity" as a property of
> a tuner or several tuner stages.
>
> It's hard for me to think of IF "stages" as improving tuner selectivity
> when my homebrew 40m DC recvr seems to be selective enough
> so that when I listen to CW the pitch will not change audibly.
> The frequency may fluctuate a little, but certainly not enough to
> loose a signal, and it does not drift monotonically enough to
> worry about (except perhaps as a matter of pride).
this is not selectivity, this is stability. selectivity is filtering
nearby strong signals, which direct conversion has more trouble with,

especially as they get closer.
the IF allows cheap, narrow, lower freq filters, which will have great
side skirts to remove the nearby
strong signals.
>
> The superhet's conversion mixers/filters/amps seem to be
> considered sub-steps of "IF stages", but I find it easier to
> think of the mixer/filter steps as "stages of tuners interlaced
> with IF amplifier stages".
ok, then.
>
> Since the final conversion step may represent a detection,
> the idea of "selectivity" as being interlaced with IF amps
> has a more tidy representation in my mind.
>
> Comments, criticisms, corrections, caveats - are always welcome.
>
>
>

4301. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 15:38:24 UTC
From: Steve <g8izy@blueyonder.co.uk>
Message-ID: <QdBMg.16258$r61.3611@text.news.blueyonder.co.uk>
Source record: 10602
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

nntp.aioe.org wrote:

> Because, although the bulk of our circuit complexity
> will soon lie in a single DSP chip, the interfaces to that chip,
> to us at the baseband end and then to the antenna at the RF end,
> still depend upon traditional electronic (pre-IC) practice.
>
> How, then, can it be possible to issue Ham Radio licences
> to those who cannot tell one end of a resistor from the other?

Gareth, would you please enlighten me. Apart from reading the value and,
for aesthetic reasons - what is the difference between the two ends?
>
>
> Syllabi for Ham Radio exams should resort to the traditional
> subjects of familiarity with elemental electrical and electronic
> components together with a modernised examination of the
> ability to write software and understanding of DSP theory.
>
>
WTF has software and DSP theory got to do with it? Apart from your
egotistical desire to score points that is. Though, on past form, you
don't seem to come out too well when you discuss your theories with
people that do know what they are talking about.

I might suggest that construction of aerials, amplifiers etc., and the
knowledge to predict propagation modes and then utilise that knowledge
to make contacts with people far away is just as valid as knowing one
end of a resistor from the other.

Or a multitude of other reasons why people become radio amateurs given
that this is such a diverse hobby.

Steve.

4302. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 15:39:17 UTC
From: G1LVN <gareth.paley@gmail.com>
Message-ID: <1157816357.447831.174300@m73g2000cwd.googlegroups.com>
Source record: 10603
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Mike Gathergood (G4KFK) wrote:
> nntp.aioe.org wrote:
> > How, then, can it be possible to issue Ham Radio licences
> > to those who cannot tell one end of a resistor from the other?
>
> Resistors may be inserted either way around :-)

Nah the gold end should always be reverse biased, stops the heat bands
by a couple of bottleBells ;-)

4303. Re: What Is Ham Radio?.....The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 16:15:04 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1157818504.532492.140990@i42g2000cwa.googlegroups.com>
Source record: 10604
Cross-posted to: uk.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Andy writes:

HAM RADIO is a way of legally putting stuff I design and
build on the air without having some dude with a clipboard
and a whistle show up on my doorstep....

That's the main reason I have been a ham for 45 years.

Andy W4OAH

4304. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 16:20:05 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <5mo5g2pqbnr61bdq306v3rtpvnrjrgdq2e@4ax.com>
Source record: 10605

On Sat, 09 Sep 2006 15:13:15 -0000, Hamateur <Hamateur@greeneggs.org>
wrote:

>nospam@nouce.bellatlantic.net wrote:
>>
>> On 7 Sep 2006 13:17:19 -0700, "radio_rookie"
>> <phaneendra.piratla@gmail.com> wrote:
>>
>> >Hello,
>> >I want to know the importance of intermediate frequency in any
>> >receivers. IF was used in Superhet transceivers. My question is why
>> >doesn't anyone use zero IF now a days.
>>
>> <What is the problem of brining
>> >the RF signal directly to baseband?
>>
>> Images of the same signal may be a source of interference.
>>
>> >Does the IF stage conditions the incoming signal?
>>
>> Yes, in many ways. The most significant are amplification
>> and selectivity.
>>
>> >What are the advantages of the IF stage?
>>
>> Less amplification needed at the recieved frequency.
>> Gain at a frequency removed from the recieved frequency.
>> Selectivity is easier to obtain at lower frequencies.
>> Gain control can be applied if needed.
>>
>> Allison
>
>I can easily agree that an IF amp's job is to cleanly
>and efficiently amplify a specific, modulated, carrier frequency
>and to allow for gain control feedback.
>
>But I don't see how "selectivity" should be considered a
>function of an IF amp (other than they're not amplifying
>what they shouldn't amplify).

First that last is the central description of what an IF should do.
And the word that defines what should or should not be amplified is
selectivity (or bandwidth).

That come from the former use of distributed selectivity in IF stages,
AKA those old IF cans. Since stages were coupled with tuned circuits
it was possible to add both gain and selectivity. However in modern
designs the IF is preceeded by a crystal filter giving lumped
selectivity. In the end the when people talk about an IF, gain, gain
control and selectivity are central parameters of that circuit block.

>It seems easier to think of "selectivity" as a property of
>a tuner or several tuner stages.

Usually image rejection is perfomed there. Selectivity as in 3khz
bandwidth would be difficult to do at 50mhz!

>It's hard for me to think of IF "stages" as improving tuner selectivity
>when my homebrew 40m DC recvr seems to be selective enough
>so that when I listen to CW the pitch will not change audibly.
>The frequency may fluctuate a little, but certainly not enough to
>loose a signal, and it does not drift monotonically enough to
>worry about (except perhaps as a matter of pride).

DC gets its slectivity at baseband using bandpass or peaking filters.
Also if it's not a image reject design it sees images making it's
selectivity effectively twice the bandpass filters width.

Example of DC at 7.1mhz... if the desired signal is 7.1 and
offending signals at 7.101 and 7.099 what do you hear?
That is where selectivity is important.

Drift is a seperate issue and with care very managable.

>The superhet's conversion mixers/filters/amps seem to be
>considered sub-steps of "IF stages", but I find it easier to
>think of the mixer/filter steps as "stages of tuners interlaced
>with IF amplifier stages".

I'd prefer to not hear that. It muddies the functional description of
what the stage does. It is better to think of RF, Mixer, IF and
detector as distinct systems with functional goals even though the
raw parts used could be very similar.

You use "tuners" in ways that are better described with different and
more specific terms.

For example a tuned circuits at 14.000mhz even with very good Q
will be broad compared to the desired signal. In fact it's barely
narrow enough if the IF is 455khz to suppress the images (lo at
13.545 and image at 13.090). However, at an IF of 455khz with
four tuned circuits of decent Q will give enough selectivity for an
AM signal but marginal for close spaced SSB signals.

>Since the final conversion step may represent a detection,
>the idea of "selectivity" as being interlaced with IF amps
>has a more tidy representation in my mind.

Valid and very traditional designs were exactly that. However
consider lumped gain used with crystal filters. Same effect
very different looking. Lumped vs distributed selctivity
and the same for gain.

Old tube designs would have multiple IF stages at moderate
gain with with multiple tuned circuits for selectivity.

Current solid state would use a ceramic or crystal filter
with lumped gain in the form of an IC or two following.

Both could be designed to provide the exact same gain
and slectivity profiles yet their topology is different. In the
we can use the same terms to talk about both as black boxes
but differing terms when discussing the content.

Allison

4305. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 16:27:45 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <5YBMg.8094$0i4.1285@newsfe4-win.ntli.net>
Source record: 10606
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

on 09/09/2006 15:26 Gareth Anus Evans slurred drunkenly:
< crap snipped >
> How, then, can it be possible to issue Ham Radio licences
> to those who cannot tell one end of a resistor from the other?
YAWN! STILL banging on about your polarised resistors?
>
> How, then, can it ever be possible to issue Ham Radio
> licences to those of 6 years of age who lack the mathematical
> capability to understand the evaluation of resistances in parallel?
>
> The answer is, that it cannot be possible, and that licences
> issued to such people are CB licences, no more, no less.
>
> Syllabi for Ham Radio exams should resort to the traditional
> subjects of familiarity with elemental electrical and electronic
> components together with a modernised examination of the
> ability to write software and understanding of DSP theory.
>
Beanie, if a twat like you can pass the RAE the average 6 year old
should have no problem at all. You did sit the RAE yourself, I assume?
...(_!_)...

4306. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 16:36:45 UTC
From: John <no@spam.tnx>
Message-ID: <6pedncsOPbFHcJ_YRVnytg@pipex.net>
Source record: 10607
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Mike Gathergood (G4KFK)" <mike@g4kfk.co.uk> wrote in message
news:1157815773.780242.211230@d34g2000cwd.googlegroups.com...
>
> nntp.aioe.org wrote:
>> How, then, can it be possible to issue Ham Radio licences
>> to those who cannot tell one end of a resistor from the other?
>
> Resistors may be inserted either way around :-)
>

Surely you must know that in Chippenham they have polarised Resistors.

Stupid Boy!

4307. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 17:49:20 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <A8DMg.23891$DB3.19312@newsfe6-gui.ntli.net>
Source record: 10608
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Steve" <g8izy@blueyonder.co.uk> wrote in message
news:QdBMg.16258$r61.3611@text.news.blueyonder.co.uk...

> I might suggest that construction of aerials, amplifiers etc., and the
> knowledge to predict propagation modes and then utilise that knowledge to
> make contacts with people far away is just as valid as knowing one end of
> a resistor from the other.
>
> Or a multitude of other reasons why people become radio amateurs given
> that this is such a diverse hobby.

Good advice Steve. There are even people who buy s/h homebrew equipment (eg
a QRP radio) at rallies and probably take great delight in using it.

--
73
Brian
www.g8osn.org.uk

4308. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 17:52:30 UTC
From: "If M3 is the answer, it's a silly question!" <me@privacy.net>
Message-ID: <eduv0ujqu1@emma.aioe.org>
Source record: 10609
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"nntp.aioe.org" <me@privacy.net> wrote in message
news:eduiu9ljh1@emma.aioe.org...
>I suggest that it still lies in the areas of LC filters, resistor
> networks and individual transistor (or valve) operation.
>

One traditional area that I did not mention, but perhaps should
have done, was the tradition of gentlemanly conduct, a tradition
that is seen to be lacking in _ALL_ those who have responded
to this thread.

All have responded as Childish Broadcasters (CBers) with
gratuitous and infantile personal remarks.

Shame on you all. You do nothing for the PR of Ham Radio.

4309. Re: What Is Ham Radio?.....The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 17:57:26 UTC
From: Aspiring _REAL_ Radio Ham <me@privacy.net>
Message-ID: <eduva6tso1@emma.aioe.org>
Source record: 10610
Cross-posted to: uk.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.homebrew

"AndyS" <andysharpe@juno.com> wrote in message
news:1157818504.532492.140990@i42g2000cwa.googlegroups.com...
> Andy writes:
>
> HAM RADIO is a way of legally putting stuff I design and
> build on the air without having some dude with a clipboard
> and a whistle show up on my doorstep....
>
> That's the main reason I have been a ham for 45 years.

Surely the _ONLY_ reason for anyone to be a Ham?

4310. Re: RFSim99 anomalies

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 18:23:33 UTC
From: Professor <briangriffey@sbcglobal.net>
Message-ID: <1157826213.298242.106000@b28g2000cwb.googlegroups.com>
Source record: 10611

K7ITM wrote:
> Hi all,
>
> Every once in a while I come across an anomaly in RFSim99. I'd be
> happy if someone could tell me that I'm doing something wrong in the
> following:
>
> Fire up the simulator. Tools-->Design-->Attenuator. Pi Section, 50R
> input impedance, 50R output impedance, 10dB attenuation. Simulate.
> !Current schematic will be overwritten; OK. Now note that the graphics
> window displays S11 as 2E+31dB.
>
> In the circuit window, edit the values of the two 96.25 ohm resistors;
> they have apparently been simulated to more decimal places than shown.
> Just manually enter 96.25 ohms for each. Now the magnitude of S11 and
> S22 show up as -102.69dB; that seems reasonable. The phases for S11,
> S12, S21 and S22 are all zero. Now, from the graphics window,
> File-->Save results as S Parameter File, and save the file in some
> convenient place, as type S parameter files (*.S2P).
>
> Now delete the resistors from the schematic and instantiate a two-port
> in their place. In the 2 port properties window that comes up, select
> "Load File" and load the file you just created from the attenuator
> simulation. Notice that the phase is 89.994 degrees for each of the S
> parameters, at each frequency. Or at least that's what I'm getting.
> Continue on and connect up the schematic and notice that it simulates
> as 89.994 degrees. Edit the .s2p file with your favorite text editor
> and notice that it really does have 89.994 degrees in it.
>
> Boy, I wish I could make a frequency-independent 90 degree phase
> shifter that easily in real life!
>
> More similar fun: create a 10dB 50 ohm attenuator as before and
> simulate it. Add an 80nH inductor across the top, from port 1 to port
> 2, and put a 32pF capacitor between the bottom of the two 96.25 ohm
> resistors (connected together) and ground. Simulating that should give
> you an S21 that's 0dB at low frequency, smoothly transitioning to -10dB
> at high frequency, with -5dB at about 120MHz. But S11 and S22 have
> strange magnitude and phase behaviour. Change the 96.25 ohm
> resistors to 96.2 ohms, and the S11 and S22 magnitudes behave OK,
> though their phases are still strange at very low frequencies. Save as
> an s-parameter file again. For convenience, start another copy of
> RFSim99 so you can compare the results of a new simulation with the one
> you just did. In the new window, instantiate a 2-port and load the

> file you just saved into it. Notice in the file that S11 and S22
> angles appear to match the simulation you just saved from; there's no
> 90 degree phase shift this time. But when you connect ports 1 and 2 to
> the 2-port you just placed and simulate it, you find the phase of S11
> and of S22 are all messed up. Huh?
>
> Has my copy of RFsim99 gotten corrupted, or do others see this
> behaviour too?
>
> Cheers,
> Tom

I have used that program... not to the exent that you have... and I
have seen some "funnies" on occation.

www.telstar-electronics.com

4311. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 18:42:12 UTC
From: Hamateur <Hamateur@greeneggs.org>
Message-ID: <12g62o4lb0ms45@corp.supernews.com>
Source record: 10612

> Hamateur wrote:
> > nospam@nouce.bellatlantic.net wrote:
> >> On 7 Sep 2006 13:17:19 -0700, "radio_rookie"
> >> <phaneendra.piratla@gmail.com> wrote:
> >>
> >>> Hello,
> >>> I want to know the importance of intermediate frequency in any
> >>> receivers. IF was used in Superhet transceivers. My question is why
> >>> doesn't anyone use zero IF now a days.
> >> <What is the problem of brining
> >>> the RF signal directly to baseband?
> >> Images of the same signal may be a source of interference.
> >>
> >>> Does the IF stage conditions the incoming signal?
> >> Yes, in many ways. The most significant are amplification
> >> and selectivity.
> >>
> >>> What are the advantages of the IF stage?
> >> Less amplification needed at the recieved frequency.
> >> Gain at a frequency removed from the recieved frequency.
> >> Selectivity is easier to obtain at lower frequencies.
> >> Gain control can be applied if needed.
> >>
> >> Allison
> >
> > I can easily agree that an IF amp's job is to cleanly
> > and efficiently amplify a specific, modulated, carrier frequency
> > and to allow for gain control feedback.
> >
> > But I don't see how "selectivity" should be considered a
> > function of an IF amp (other than they're not amplifying
> > what they shouldn't amplify).
> >
> > It seems easier to think of "selectivity" as a property of
> > a tuner or several tuner stages.
> >
> > It's hard for me to think of IF "stages" as improving tuner selectivity
> > when my homebrew 40m DC recvr seems to be selective enough
> > so that when I listen to CW the pitch will not change audibly.
> > The frequency may fluctuate a little, but certainly not enough to
> > loose a signal, and it does not drift monotonically enough to
> > worry about (except perhaps as a matter of pride).
>
> this is not selectivity, this is stability. selectivity is filtering

> nearby strong signals, which direct conversion has more trouble with,
> especially as they get closer.
> the IF allows cheap, narrow, lower freq filters, which will have great
> side skirts to remove the nearby
> strong signals.

I tend to think of "stability" more in terms of random fluctuations.
Instability may or may not effect selectivity. As long as my desired
selection remains decipherable, I would say that selectivity has
been accomplished regardless of whether there's any kind of instabilty.

Filtering strong nearby signals seems more about "exclusivity"
than "selectivity". I would rather say that IF stages maintain
selectivity while they are excluding undesired mixing products
and other signals.

As long as a recvr includes my desired frequency and it
does not drift out of my receiver's bandwidth requiring
me to retune, then I would say that the recvr is maintaining
selectivity even if I get *more* than what I want.

> >
> > The superhet's conversion mixers/filters/amps seem to be
> > considered sub-steps of "IF stages", but I find it easier to
> > think of the mixer/filter steps as "stages of tuners interlaced
> > with IF amplifier stages".
> ok, then.
> >
> > Since the final conversion step may represent a detection,
> > the idea of "selectivity" as being interlaced with IF amps
> > has a more tidy representation in my mind.
> >
> > Comments, criticisms, corrections, caveats - are always welcome.
>

4312. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 18:55:46 UTC
From: Steve <g8izy@blueyonder.co.uk>
Message-ID: <S6EMg.16395$r61.4814@text.news.blueyonder.co.uk>
Source record: 10613
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

If M3 is the answer, it's a silly question! wrote:
> "nntp.aioe.org" <me@privacy.net> wrote in message
> news:eduiu9ljh1@emma.aioe.org...
>
>>I suggest that it still lies in the areas of LC filters, resistor
>>networks and individual transistor (or valve) operation.
>>
>
>
> One traditional area that I did not mention, but perhaps should
> have done, was the tradition of gentlemanly conduct, a tradition
> that is seen to be lacking in _ALL_ those who have responded
> to this thread.

Considering your past form and your obvious desire to create argument, I think that all who have so far responded have done so in a measured and reasonable way. It seems that you are the odd one out (again).

You have not told me the difference between one end of a resistor and the other despite my polite, earnest, request for more information. To ignore a straightforward question like this is, IMO, very ungentlemanly and against the spirit of amateur radio - especially as you introduced the subject.
>
> All have responded as Childish Broadcasters (CBers) with
> gratuitous and infantile personal remarks.

Nothing childish about my question at all. Nothing gratuitous either. You as the "know it all" of amateur radio make rash statements then fall back to slagging off everyone who replies by abuse.
>
> Shame on you all. You do nothing for the PR of Ham Radio.
>
>
And what exactly is your input to the PR of amateur radio? Oh Sorry!, I forgot that you don't like to answer questions about your rash statements... I must have been having a Childish Broadcaster moment.

Steve

4313. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 19:05:08 UTC
From: Hamateur <Hamateur@greeneggs.org>
Message-ID: <12g6434e1s9ld58@corp.supernews.com>
Source record: 10614

nospam@nouce.bellatlantic.net wrote:
>
> On Sat, 09 Sep 2006 15:13:15 -0000, Hamateur <Hamateur@greeneggs.org>
> wrote:
>
> >nospam@nouce.bellatlantic.net wrote:
> >>
> >> On 7 Sep 2006 13:17:19 -0700, "radio_rookie"
> >> <phaneendra.piratla@gmail.com> wrote:
> >>
> >> >Hello,
> >> >I want to know the importance of intermediate frequency in any
> >> >receivers. IF was used in Superhet transceivers. My question is why
> >> >doesn't anyone use zero IF now a days.
> >>
> >> <What is the problem of brining
> >> >the RF signal directly to baseband?
> >>
> >> Images of the same signal may be a source of interference.
> >>
> >> >Does the IF stage conditions the incoming signal?
> >>
> >> Yes, in many ways. The most significant are amplification
> >> and selectivity.
> >>
> >> >What are the advantages of the IF stage?
> >>
> >> Less amplification needed at the recieved frequency.
> >> Gain at a frequency removed from the recieved frequency.
> >> Selectivity is easier to obtain at lower frequencies.
> >> Gain control can be applied if needed.
> >>
> >> Allison
> >
> >I can easily agree that an IF amp's job is to cleanly
> >and efficiently amplify a specific, modulated, carrier frequency
> >and to allow for gain control feedback.
> >
> >But I don't see how "selectivity" should be considered a
> >function of an IF amp (other than they're not amplifying
> >what they shouldn't amplify).
>
> First that last is the central description of what an IF should do.
> And the word that defines what should or should not be amplified is

> selectivity (or bandwidth).
>
> That come from the former use of distributed selectivity in IF stages,
> AKA those old IF cans. Since stages were coupled with tuned circuits
> it was possible to add both gain and selectivity. However in modern
> designs the IF is preceeded by a crystal filter giving lumped
> selectivity. In the end the when people talk about an IF, gain, gain
> control and selectivity are central parameters of that circuit block.
>
> >It seems easier to think of "selectivity" as a property of
> >a tuner or several tuner stages.
>
> Usually image rejection is perfomed there. Selectivity as in 3khz
> bandwidth would be difficult to do at 50mhz!
>
> >It's hard for me to think of IF "stages" as improving tuner selectivity
> >when my homebrew 40m DC recvr seems to be selective enough
> >so that when I listen to CW the pitch will not change audibly.
> >The frequency may fluctuate a little, but certainly not enough to
> >loose a signal, and it does not drift monotonically enough to
> >worry about (except perhaps as a matter of pride).
>
> DC gets its slectivity at baseband using bandpass or peaking filters.
> Also if it's not a image reject design it sees images making it's
> selectivity effectively twice the bandpass filters width.
>
> Example of DC at 7.1mhz... if the desired signal is 7.1 and
> offending signals at 7.101 and 7.099 what do you hear?
> That is where selectivity is important.
>
> Drift is a seperate issue and with care very managable.

I would say as long as the desired baseband signal remains within
the received bandwidth, selectivity has been accomplished.

I agree DC receivers tend to have poor resolution, but this
cannot be corrected by filtering the baseband signal by sending
it through a parametric audio equalizer. Any selectivity of
basebands has to be accomplished before detection. I'm sure
that's not what you meant- but what you said could be interpreted
that way. If I wanted 7.101 I wouldn't detect first and then
try to filter out 7.101 and 7.099.

I agree some DC receivers seem like Michaelangelo trying
to scuplt David with a sledge hammer. You may still receive
the message but it will be impressionistic and so contain
many other messages.

>
> >The superhet's conversion mixers/filters/amps seem to be
> >considered sub-steps of "IF stages", but I find it easier to

> >think of the mixer/filter steps as "stages of tuners interlaced
> >with IF amplifier stages".
>
> I'd prefer to not hear that. It muddies the functional description of
> what the stage does. It is better to think of RF, Mixer, IF and
> detector as distinct systems with functional goals even though the
> raw parts used could be very similar.
>
> You use "tuners" in ways that are better described with different and
> more specific terms.
>
> For example a tuned circuits at 14.000mhz even with very good Q
> will be broad compared to the desired signal. In fact it's barely
> narrow enough if the IF is 455khz to suppress the images (lo at
> 13.545 and image at 13.090). However, at an IF of 455khz with
> four tuned circuits of decent Q will give enough selectivity for an
> AM signal but marginal for close spaced SSB signals.

Q loses meaning when the desired frequency does not lie within
the relevant bandwidth. A tuned component can have a very high
Q and yet be very totally unselective of a desired frequency.

What you are talking about is not what I would call selectivity.
I would call it "exclusivity" since it is more about excluding
than about selecting. I can acknowledge that if the exclusions
aren't done correctly at any point in the chain then selectivity
could be be lost.

For me the difference between selectivity and exclusivity
seem alot like the difference between accuracy and precision.
I can be very precise but inaccurate at the same time,
I can be very accurate but imprecise at the same time.
So I find it easier to think that IF stages are more about
precision (exclusivity) than about accuracy (selectivity).

But I quibble and realize "selectivity" is often used
to mean both accuracy and precision. It just seems to
me that IF stages are more about precision than about
accuracy.

>
> >Since the final conversion step may represent a detection,
> >the idea of "selectivity" as being interlaced with IF amps
> >has a more tidy representation in my mind.
>
> Valid and very traditional designs were exactly that. However
> consider lumped gain used with crystal filters. Same effect
> very different looking. Lumped vs distributed selctivity
> and the same for gain.
>
> Old tube designs would have multiple IF stages at moderate
> gain with with multiple tuned circuits for selectivity.

>
> Current solid state would use a ceramic or crystal filter
> with lumped gain in the form of an IC or two following.
>
> Both could be designed to provide the exact same gain
> and slectivity profiles yet their topology is different. In the
> we can use the same terms to talk about both as black boxes
> but differing terms when discussing the content.
>
> Allison

4314. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 19:13:59 UTC
From: litle ole me <"nobody \\@ nowhere.com">
Message-ID: <XnEMg.758$5i7.727@newsreading01.news.tds.net>
Source record: 10615

ok, call these things whatever you want, but you are making up new names
for existing specs.
I have never seen an 'exclusivity' db rating for a radio, and your
desired signal remaining in the passband has little to do with selectivity:
try listening to a weak signal next to a SW broadcaster, then you find
selectivity. It is invisible until you need it.

<end>

Hamateur wrote:
>> Hamateur wrote:
>>> nospam@nouce.bellatlantic.net wrote:
>>>> On 7 Sep 2006 13:17:19 -0700, "radio_rookie"
>>>> <phaneendra.piratla@gmail.com> wrote:
>>>>
>>>>> Hello,
>>>>> I want to know the importance of intermediate frequency in any
>>>>> receivers. IF was used in Superhet transceivers. My question is why
>>>>> doesn't anyone use zero IF now a days.
>>>> <What is the problem of brining
>>>>> the RF signal directly to baseband?
>>>> Images of the same signal may be a source of interference.
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>>>>> Does the IF stage conditions the incoming signal?
>>>> Yes, in many ways. The most significant are amplification
>>>> and selectivity.
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>>>>> What are the advantages of the IF stage?
>>>> Less amplification needed at the recieved frequency.
>>>> Gain at a frequency removed from the recieved frequency.
>>>> Selectivity is easier to obtain at lower frequencies.
>>>> Gain control can be applied if needed.
>>>>
>>>> Allison
>>> I can easily agree that an IF amp's job is to cleanly
>>> and efficiently amplify a specific, modulated, carrier frequency
>>> and to allow for gain control feedback.
>>>
>>> But I don't see how "selectivity" should be considered a
>>> function of an IF amp (other than they're not amplifying
>>> what they shouldn't amplify).
>>>
>>> It seems easier to think of "selectivity" as a property of
>>> a tuner or several tuner stages.
>>>

>>> It's hard for me to think of IF "stages" as improving tuner selectivity
>>> when my homebrew 40m DC recvr seems to be selective enough
>>> so that when I listen to CW the pitch will not change audibly.
>>> The frequency may fluctuate a little, but certainly not enough to
>>> loose a signal, and it does not drift monotonically enough to
>>> worry about (except perhaps as a matter of pride).
>> this is not selectivity, this is stability. selectivity is filtering
>> nearby strong signals, which direct conversion has more trouble with,
>> especially as they get closer.
>> the IF allows cheap, narrow, lower freq filters, which will have great
>> side skirts to remove the nearby
>> strong signals.
>
> I tend to think of "stability" more in terms of random fluctuations.
> Instability may or may not effect selectivity. As long as my desired
> selection remains decipherable, I would say that selectivity has
> been accomplished regardless of whether there's any kind of instabilty.
>
> Filtering strong nearby signals seems more about "exclusivity"
> than "selectivity". I would rather say that IF stages maintain
> selectivity while they are excluding undesired mixing products
> and other signals.
>
> As long as a recvr includes my desired frequency and it
> does not drift out of my receiver's bandwidth requiring
> me to retune, then I would say that the recvr is maintaining
> selectivity even if I get *more* than what I want.
>
>
>>> The superhet's conversion mixers/filters/amps seem to be
>>> considered sub-steps of "IF stages", but I find it easier to
>>> think of the mixer/filter steps as "stages of tuners interlaced
>>> with IF amplifier stages".
>> ok, then.
>>> Since the final conversion step may represent a detection,
>>> the idea of "selectivity" as being interlaced with IF amps
>>> has a more tidy representation in my mind.
>>>
>>> Comments, criticisms, corrections, caveats - are always welcome.
>
>

4315. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 19:37:22 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <SJEMg.8917$TF5.6799@newsfe1-win.ntli.net>
Source record: 10616
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

on 09/09/2006 18:52 Gareth Anus Evans under yet another silly sock puppet said the following:
> One traditional area that I did not mention, but perhaps should
> have done, was the tradition of gentlemanly conduct, a tradition
> that is seen to be lacking in _ALL_ those who have responded
> to this thread.
>
> All have responded as Childish Broadcasters (CBers) with
> gratuitous and infantile personal remarks.
>
> Shame on you all. You do nothing for the PR of Ham Radio.
>
>
OK Beanie, check this out for 'PR' :

FOAD, TWAT

...(_!_)...

4316. Re: What Is Ham Radio?.....The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 19:37:40 UTC
From: MadDawg <mingram1234@alltel.net>
Message-ID: <1157830660.230842.254580@d34g2000cwd.googlegroups.com>
Source record: 10617
Cross-posted to: uk.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.homebrew

I have great respect for the amateur license, but NOT EVERYONE BUYS A
COW JUST TO GET A GALLON OF MILK A WEEK.

If M3 is the answer, it's a silly question! wrote:
> A necessary preface.....
>
> (It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery. Even
> the Usenet newsgroups dedicated to the cause have degenerated
> into a hotbed of abusive onslaughts by those who ought to know
> better; the Nugatory Numpties who boast of an interest
> exceeding 10, 20, 30, 40 or even 50 years and yet who have
> proved themselves incapable of even meeting the trivial exam
> standards set for 6-year-olds. However, there still exists
> the fundamental basis on which Ham Radio is based, and
> that will never die. This FAQ ("What Is Ham Radio?") will
> be regularly published and will not be shouted or bullied
> down. It is important that those of a technical bent, who
> are the natural seed-corn of Radio Hammery and who
> gravitate towards us to be the real novitiate, can
> still find us, (and know that we are still here), their fellows.)
>
> -----ooooo-----
>
> So,.....What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>
> Ham Radio awakens in its aficionados a whole-life
> fascination with all things technical and gives
> an all-abiding curiosity to improve one's scientific
> knowledge. It's a great swimming pool, please dive in!
>
> This excitement causes a wish to share the experience
> with ones fellow man, and shows itself in the
> gentlemanly traditions of Ham Radio.
>
> Radio Hams are in a unique privileged position in that

> they can construct and operate their own equipment! No-one
> else has this privilege. Users, such as broadcasters,
> the po lice and armed farces, CBers and mobile phone
> users have to purchase ready-made gear. Manufacturers
> are not licensed to operate their gear. Radio Hams
> are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment. This is a privilege well worth the effort
> to gain, and one to be jealously guarded.
>
> The excitement that drives a Radio Ham starts with
> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to
> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.
>
> -----OOOOO----
>
> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;
> they are free with rather silly personal insults.
>
>
> -----ooooo-----
>
> One infallible way to disambiguate the CB Radio Hobbyist
> from the _REAL_ Radio Ham is to solicit their view of the
> difference between CB Radio and Ham Radio. A Radio Ham will
> perceive Ham Radio to be a technical pursuit and will
> perceive CB Radio to be a social communications facility

> no different in essence to a land-line telephone or a
> GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
> could also hold a CB licence safe in the knowledge that
> such a licence says no more about him than having a land-line
> telephone, whilst continuing to regard Ham Radio as a separate
> technical pursuit.
>
> A CB Radio hobbyist, on the other hand, sees no difference between
> a Ham Radio licence and a CB Radio licence. To him, they are
> sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
> tries to classify himself as the equal of the Radio
> Ham when, in fact, he is nothing of the kind.
>
> Ham Radio is not CB Radio and has no common ground with it!
> Ham Radio is _THE_ technical pursuit for gentlemen; CB Radio
> is the operating hobby for those who buy their rigs and
> equipment off the shelf.
>
> -----ooooo-----
>
> If you are the sort of person who is motivated by
> a technical interest in how things work; if you took apart
> malfunctioning clocks, toasters and the like and put them
> right despite never having seen them working, then
> a Ham Radio licence is your traditional route! There has
> never been a shortage of such people, and those who gravitate
> towards such an interest have always been welcomed into
> our shacks and their interests fostered. There is not today,
> nor has there ever been, a need to go out and encourage
> and press children, children who have never expressed an
> interest in Ham Radio, to come into our shacks. Such an
> activity should cause eyebrows to be raised - what
> normal well-adjusted adults seek the social acquaintance
> of children?!
>
> -----ooooo-----
>
> Please remember that this FAQ is a _POSITIVE EXHORTATION_
> to you to exert yourselves to join our fraternity!

4317. Re: Overheating AA batteries

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 20:11:20 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <EdFMg.30957$ry2.6768@bignews3.bellsouth.net>
Source record: 10618
Cross-posted to: rec.crafts.metalworking,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

bart wrote:
> This evening the GF noticed that the remote control wasn't working &
> was hot.
> I pulled out the extremely hot AA batteries.
> It looks like the spring contact in the remote control, on the
> negative side had worn away the plastic covering on the side of the
> battery & shorted the side metal battery casing to the negative
> contact, thereby causing the overheating.
> In my many years of battery dissection, I've never seen the side
> casing of a battery being positive before!
> These were "Golden Power" alkaline batteries, made in China.
> They were the original batteries that came with the remote (for a
> Shaw digital cable box).
> Anyone ever seen a positive case AA battery before, or is this a new (
> dumb) idea?
I've seen many Alkaline batteries with the outside casing connected to
the 'tit' on top as the positive and the bottom flat connector was
insulated from the body of the battery. alkaline batteries have
different chemistry from carbon zinc resulting in an inverted
construction. This may actually be the norm, but in the larger sizes
the plastic outer wrap hides the details. Just looked at a DuraCell
"D" and it is of the inverted construction, but the insulation of the
battery bottom (-) terminal from the case of the battery is hidden
under the plastic wrapping.

4318. Re: Overheating AA batteries

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 21:26:35 UTC
From: Mark Rand <randm@internettie.co.uk>
Message-ID: <34c6g2pv3c1iktjatf4sfsrfk1mkj69chg@4ax.com>
Source record: 10619
Cross-posted to: rec.crafts.metalworking,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Sat, 09 Sep 2006 16:11:20 -0400, ken scharf
<wa2mzeNOSPAMBOTS@bellsouth.net> wrote:

>bart wrote:
>> This evening the GF noticed that the remote control wasn't working &
>> was hot.
>> I pulled out the extremely hot AA batteries.
>> It looks like the spring contact in the remote control, on the
>> negative side had worn away the plastic covering on the side of the
>> battery & shorted the side metal battery casing to the negative
>> contact, thereby causing the overheating.
>> In my many years of battery dissection, I've never seen the side
>> casing of a battery being positive before!
>> These were "Golden Power" alkaline batteries, made in China.
>> They were the original batteries that came with the remote (for a
>> Shaw digital cable box).
>> Anyone ever seen a positive case AA battery before, or is this a new (
>> dumb) idea?
>I've seen many Alkaline batteries with the outside casing connected to
>the 'tit' on top as the positive and the bottom flat connector was
>insulated from the body of the battery. alkaline batteries have
>different chemistry from carbon zinc resulting in an inverted
>construction. This may actually be the norm, but in the larger sizes
>the plastic outer wrap hides the details. Just looked at a DuraCell
>"D" and it is of the inverted construction, but the insulation of the
>battery bottom (-) terminal from the case of the battery is hidden
>under the plastic wrapping.

Since it's the cathode that gets eaten in whichever reaction is used for the
battery type, it might make sense to have the anode as the case.

I could have done with this 25 years ago when I got sent abroad for work for
three of months and came back to find that the transistor radio batteries had
leaked all over one of my (expensive) loudspeakers :-(

Mark Rand
RTFM

4319. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 22:24:40 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12g6fpdr033gn81@corp.supernews.com>
Source record: 10620

Hamateur wrote:
> . . .
> I tend to think of "stability" more in terms of random fluctuations.
> Instability may or may not effect selectivity. As long as my desired
> selection remains decipherable, I would say that selectivity has
> been accomplished regardless of whether there's any kind of instabilty.
>
> Filtering strong nearby signals seems more about "exclusivity"
> than "selectivity". I would rather say that IF stages maintain
> selectivity while they are excluding undesired mixing products
> and other signals.
> . . .

You're certainly free to make up interpretations of words any way you choose. But if you want to communicate with others, that is, to have them understand what you're saying and for you to understand what they're saying, it's necessary to use common terms in the way they're widely understood to mean.

In this context, "selectivity" is universally understood to mean the ability to pass some signals and reject others, on the basis of their frequencies, and is quite independent of stability. If this isn't what you mean by "selectivity", you should use some other word or make up a new one and define it, if your objective is to understand and be understood.

In a superhet receiver, most of the selectivity is achieved in the IF stages, for a number of good reasons. One of the reasons is that it prevents off-frequency signals from being amplified to a high level where they can cause intermodulation and other problems. In a direct conversion receiver, all the selectivity (other than relatively broad selectivity from any bandpass filtering ahead of the mixer) is achieved by audio filtering. Properly done, this filtering is near the input of the high gain audio amplifier. Neither is inherently better than the other at the basic job of providing selectivity.

Roy Lewallen, W7EL

4320. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 22:55:43 UTC
From: MadEngineer <glenn.b.dixon@gmail.com>
Message-ID: <1157842543.577546.103170@m73g2000cwd.googlegroups.com>
Source record: 10621

Henry Kiefer wrote:

> You mentioned FM. I have a general question about the Tayloe mixer. Is it
> possible to receive NBFM or FSK from VHF with it? I'm a little lost in the
> question how to use the for outgoing phases or I/Q to demodulate FM. All I
> found on the Net was doing shortwave SSB demodulation.

Provided you implement the Tayloe mixer with sufficient baseband
bandwidth (probably about 20 KHz for NBFM), you can mix, say, a 2 meter
FM signal to baseband and demodulate it with an audio discriminator
(some sort of audio frequency to voltage conversion scheme). Mix the
signal to be either exclusively in the upper or lower sideband of the
output. So, for example, a NBFM sig at 146.000 MHz mix with the Tayloe
mixer set to 145.990 MHz and select the upper sideband. The upper or
lower sidebands are, as you probably know, selected by phase shifting
and summing circuits following the Tayloe mixer (implemented in
software in SDRs). Note that SDRs like the Flex-Radio SDR 1000 do not
process incoming signals near 0 Hz anyway, but mix the desired signal
centered around about 11 KHz (I think).

> Are there other analog switches going higher than the mentioned 70MHz for
> FST3253 or 74HC4066? Perhaps video switches? What is better: Tayloe 4-phases
> or a switched mixer with one output only? In the latter case I would need a
> conventional IF filter after the switching mixer?
>

The Tayloe mixer is a passive mixer terminated in large capacitors, and
similar performance can be obtained at VHF, UHF and microwaves with two
FET ring mixers driven with quadrature signals and also terminated with
capacitors (that is, no wideband transformer on the mixer outputs, but
capacitors followed by HiZ input differential audio amps). I've done
this with the Peregrine Semiconductor FET mixers.

> If I need a DSP at the baseband doing math with the phases or I/Q I would
> think of an www.wavefrontsemi.com DSP AL3101/2CG DSP-1K will suffice? Wolud
> it suffice? It is a little simple DSP mainly for doing FIR - but FAST and
> with 24-bits including audio AD converters ip to 50KHz. The DSP runs with
> 50MHz up to 1000 instructions long until it repeats the prog. The nice think
> is a very low pin-count package and cheap too.
>
> There is maybe a middle way with a device like the www.cypress.com PSoC
> family of mixed-mode Microcontroller with programmable analog cells. There
> even exists a PSoC app note describing a heterodyne FSK receiver for 130KHz.
>
> Maybe a www.microchip.com dsPIC is better?

Only familiar with the dsPIC, though the others sound okay. The dsPIC would work, though its 12 bit A/D doesn't give a lot of dynamic range. Plenty for NBFM though, especially since you can run the signal(s) through a limiter first. For NBFM sixteen bit DSP is sufficient.

Regards,
Glenn

4321. Basic info needed (longish)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-09 23:31:37 UTC
From: Twiddler <twiddledee@jotjet.net>
Message-ID: <1157844696.952683.201960@i42g2000cwa.googlegroups.com>
Source record: 10622

My brother-in-law was a radio hobbyist and passed away a few months ago. I am helping my sister sell his equipment but I am not very knowledgable and I want to understand more so I can get what it is worth for her. He had no life insurance and she has two children to support. I am worried that I will not describe the equipment fully and not sell it for its true value.

He had several Icom IC-W2A hand-held radios. From what I've read these are fairly old but I think they may be desirable because you can enable them (via the keypad) to scan a wider range of frequences (800 ~ 900+). I think that newer radios have this capability disabled? He also had an AOR AR 1500 that I think has similar unrestricted RX frequencies. Is it legal for me to advertise these exteneded ranges on Ebay listings? There seems to be some secrecy to this kind of thing as I try to research it.

The IC-W2A radios can also be set up as as dual band repeaters. I don't really understand why you would want to do this unless you are providing a repeater service to other people? This seems odd for a hand-held radio.

I have also seen mods for these radios that enable MARS/CAP. He was a very accomplished electronics technician so I would expect he has modified these radios. Besides taking them apart, can I check to see if they have been modified some other way -- maybe tuning to a particual frequency and listening? Again, is it legal to advertise this feature if they have been modified? There doesn't seem to me that there would be much activity on Military Amatuer and Civil Air Patrol but there seems to be a lot of references to MARS/CAP modifications around. He had an Icom IC-207H with a label of "MARS/CAP" on it. It was on his bench and connected to one of five large roof-mounted antennas. I think this was probably one of the radios he used the most. Are there other mods I should look for on it?

He had several GMRS hand helds (Radio Shack and Maxon 210+3) and CB radios (Radio Shack and Uniden). Is there any unique enhancements I should invesigate on these? The Maxon 210+3 radios (he had several of these) also are older models but they push 5 watts. Is that unique to the older radios? Since he had several of this one model I think there must be something unique about them.

He also had a Magnavox D2999 PLL World Receiver. He had modified it for an external (roof mount) antenna. I was thinking about re-connecting the built-in antenna on it before selling. Anything else I should look for on it?

I would appreciate any help or advice you folks can provide. If you have any questions or any tests you can walk me through on these radios I will be glad to give them a shot.

Thanks,
Twiddler

4322. Re: Using the Virtual Ionosphere

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-10 02:11:08 UTC
From: sailtamarack@yahoo.ca
Message-ID: <1157854268.777122.158050@m73g2000cwd.googlegroups.com>
Source record: 10623

>
> It aint radio - but then, are the current generation out of the box
> radios either - or just another piece of disposable consumer junk?
>
> Andrew VK3BFA.

I agree - QsoNet isn't ham radio - it's a software simulator for the "next generation" ham. The list of users is growing as we speak. See http://www.qsonet.com/qbb/memberlist.php They are even advertising on eham.net!! It makes me wonder where we are going with ham radio when "hams" are signing up for something like this.

The "out of the box" radios do not require the construction skills and knowledge necessary for homebrew designs or kits but one still needs an understanding of radio propagation, antenna construction and assembling a station. Experimentation and the satisfaction of making a real contact "over the air" are still part of the experience.

Roger

4323. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-10 02:50:26 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <irt6g2556f14qn9vr7f3lhakk62l7oq1oo@4ax.com>
Source record: 10624

On Sat, 09 Sep 2006 19:05:08 -0000, Hamateur <Hamateur@greeneggs.org>
wrote:

>nospam@nouce.bellatlantic.net wrote:
>>
>> On Sat, 09 Sep 2006 15:13:15 -0000, Hamateur <Hamateur@greeneggs.org>
>> wrote:
>>
>> >nospam@nouce.bellatlantic.net wrote:
>> >>
>> >> On 7 Sep 2006 13:17:19 -0700, "radio_rookie"
>> >> <phaneendra.piratla@gmail.com> wrote:
>> >>
>> >> >Hello,
>> >> >I want to know the importance of intermediate frequency in any
>> >> >receivers. IF was used in Superhet transceivers. My question is why
>> >> >doesn't anyone use zero IF now a days.
>> >>
>> >> <What is the problem of brining
>> >> >the RF signal directly to baseband?
>> >>
>> >> Images of the same signal may be a source of interference.
>> >>
>> >> >Does the IF stage conditions the incoming signal?
>> >>
>> >> Yes, in many ways. The most significant are amplification
>> >> and selectivity.
>> >>
>> >> >What are the advantages of the IF stage?
>> >>
>> >> Less amplification needed at the recieved frequency.
>> >> Gain at a frequency removed from the recieved frequency.
>> >> Selectivity is easier to obtain at lower frequencies.
>> >> Gain control can be applied if needed.
>> >>
>> >> Allison
>> >>
>> >I can easily agree that an IF amp's job is to cleanly
>> >and efficiently amplify a specific, modulated, carrier frequency
>> >and to allow for gain control feedback.
>> >
>> >But I don't see how "selectivity" should be considered a
>> >function of an IF amp (other than they're not amplifying
>> >what they shouldn't amplify).

>>
>> First that last is the central description of what an IF should do.
>> And the word that defines what should or should not be amplified is
>> selectivity (or bandwidth).
>>
>> That come from the former use of distributed selectivity in IF stages,
>> AKA those old IF cans. Since stages were coupled with tuned circuits
>> it was possible to add both gain and selectivity. However in modern
>> designs the IF is preceeded by a crystal filter giving lumped
>> selectivity. In the end the when people talk about an IF, gain, gain
>> control and selectivity are central parameters of that circuit block.
>>
>> >It seems easier to think of "selectivity" as a property of
>> >a tuner or several tuner stages.
>>
>> Usually image rejection is perfomed there. Selectivity as in 3khz
>> bandwidth would be difficult to do at 50mhz!
>>
>> >It's hard for me to think of IF "stages" as improving tuner selectivity
>> >when my homebrew 40m DC recvr seems to be selective enough
>> >so that when I listen to CW the pitch will not change audibly.
>> >The frequency may fluctuate a little, but certainly not enough to
>> >loose a signal, and it does not drift monotonically enough to
>> >worry about (except perhaps as a matter of pride).
>>
>> DC gets its slectivity at baseband using bandpass or peaking filters.
>> Also if it's not a image reject design it sees images making it's
>> selectivity effectively twice the bandpass filters width.
>>
>> Example of DC at 7.1mhz... if the desired signal is 7.1 and
>> offending signals at 7.101 and 7.099 what do you hear?
>> That is where selectivity is important.
>>
>> Drift is a seperate issue and with care very managable.
>
>I would say as long as the desired baseband signal remains within
>the received bandwidth, selectivity has been accomplished.

Your misapplying standard terms to describe RF system behavour.

>I agree DC receivers tend to have poor resolution, but this

Again, if anything ther is no reolution issue unless you applying it
to the frequency dial/display being used to tune in a signal.
An example of poor resolution would be a dial that reads to the
nearest Khz when you need to read to the nearest .01khz (10 cycles).

>cannot be corrected by filtering the baseband signal by sending
>it through a parametric audio equalizer. Any selectivity of
>basebands has to be accomplished before detection. I'm sure
>that's not what you meant- but what you said could be interpreted

>that way. If I wanted 7.101 I wouldn't detect first and then
>try to filter out 7.101 and 7.099.

Assume a DC RX. Lo at 7.100 for a CW tone of 1khz what frequency is
the recieved signal? It could be 7.101 or 7.099!

>I agree some DC receivers seem like Michaelangelo trying
>to scuplt David with a sledge hammer. You may still receive
>the message but it will be impressionistic and so contain
>many other messages.

Not at all and bad example at best.

>> >The superhet's conversion mixers/filters/amps seem to be
>> >considered sub-steps of "IF stages", but I find it easier to
>> >think of the mixer/filter steps as "stages of tuners interlaced
>> >with IF amplifier stages".
>>
>> I'd prefer to not hear that. It muddies the functional description of
>> what the stage does. It is better to think of RF, Mixer, IF and
>> detector as distinct systems with functional goals even though the
>> raw parts used could be very similar.
>>
>> You use "tuners" in ways that are better described with different and
>> more specific terms.
>>
>> For example a tuned circuits at 14.000mhz even with very good Q
>> will be broad compared to the desired signal. In fact it's barely
>> narrow enough if the IF is 455khz to suppress the images (lo at
>> 13.545 and image at 13.090). However, at an IF of 455khz with
>> four tuned circuits of decent Q will give enough selectivity for an
>> AM signal but marginal for close spaced SSB signals.
>
>Q loses meaning when the desired frequency does not lie within
>the relevant bandwidth. A tuned component can have a very high
>Q and yet be very totally unselective of a desired frequency.

You do not understand what Q means then.

> A tuned component can have a very high
>Q and yet be very totally unselective of a desired frequency.

Meaningless misstatement!

A tuned component can have a very high
Q and yet be insufficiently selective of a desired frequency.

Would be a correct application.

>What you are talking about is not what I would call selectivity.
>I would call it "exclusivity" since it is more about excluding
>than about selecting. I can acknowledge that if the exclusions
>aren't done correctly at any point in the chain then selectivity

>could be be lost.

Selectivity is measured in bandwidth and DB. These terms are standard
and meaningful. Exclusivity is marking hype at best and never applied
when refering to selectivity.

>For me the difference between selectivity and exclusivity
>seem alot like the difference between accuracy and precision.
>I can be very precise but inaccurate at the same time,
>I can be very accurate but imprecise at the same time.
>So I find it easier to think that IF stages are more about
>precision (exclusivity) than about accuracy (selectivity).

Get a dictionary.

>But I quibble and realize "selectivity" is often used
>to mean both accuracy and precision. It just seems to
>me that IF stages are more about precision than about
>accuracy.

It means neither. Precision is tied to resolution as a concept.
Acccuracy is a matter of calibration or using the same scale.
Selectivity is a matter of what is in or out and the measurements
for radios includes a in or out by how much.

For example a filter with 3khz bandwidth at 6db down with a shape
factor (usually measured at 6 and 60db on the slopes) 2:1 is
6khz wide at -60db. A filter that is 2 khz wide at 6db down with a
shape factor of 3 is also 6khz wide at -60db. However, they will
not sound the same in a given radio nor will the rejection of
undesired signals be the same. This is one of the metrics of
how radios are specified and discussed. To do so any other
way is like specifing the speed of you car in furlongs per fortnight.

A lack of accuracy in language will alway reduce the precision
in the discussion.

Allison

4324. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-10 08:26:03 UTC
From: Aspiring _REAL_ Radio Ham <me@privacy.net>
Message-ID: <ee0i6q$vh7$1@emma.aioe.org>
Source record: 10625
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"If M3 is the answer, it's a silly question!" <me@privacy.net> wrote in
message news:eduv0ujqu1@emma.aioe.org...
> "nntp.aioe.org" <me@privacy.net> wrote in message
> news:eduiu9ljh1@emma.aioe.org...
>>I suggest that it still lies in the areas of LC filters, resistor
>> networks and individual transistor (or valve) operation.
>>
>
> One traditional area that I did not mention, but perhaps should
> have done, was the tradition of gentlemanly conduct, a tradition
> that is seen to be lacking in _ALL_ those who have responded
> to this thread.
>
> All have responded as Childish Broadcasters (CBers) with
> gratuitous and infantile personal remarks.
>
> Shame on you all. You do nothing for the PR of Ham Radio.

An example of "gratuitous and infantile personal remarks" is the litany
of rudeness coming from the pen of G8IZY. I do not know this
person, and have not dealt with him before,and yet he has
originated a tirade of abusive remarks that are unrelated
to this thread, and unrelated to any behaviour of mine

Gratuitous use of "WTF" is indicative of a _VERY_ childish outburst.

Shame on him...

"WTF has software and DSP theory got to do with it? Apart from your
egotistical desire to score points that is. Though, on past form, you
don't seem to come out too well when you discuss your theories with
people that do know what they are talking about.

-----ooooo-----

Considering your past form and your obvious desire to create argument, I
think that all who have so far responded have done so in a measured and
reasonable way. It seems that you are the odd one out (again).

-----ooooo-----

You have not told me the difference between one end of a resistor and
the other despite my polite, earnest, request for more information. To
ignore a straightforward question like this is, IMO, very ungentlemanly
and against the spirit of amateur radio - especially as you introduced
the subject.

-----00000-----

You as the "know it all" of amateur radio make rash statements then fall back to slagging off everyone who replies by abuse.

-----ooooo-----

And what exactly is your input to the PR of amateur radio? Oh Sorry!, I forgot that you don't like to answer questions about your rash statements... I must have been having a Childish Broadcaster moment. "

4325. Re: Basic info needed (longish)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-10 08:37:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12g7jlhm06uhj72@corp.supernews.com>
Source record: 10626

It's hard to do anything like this very well by email or newsgroup. I suggest that you contact a local amateur radio club. They should be able to recommend a number of amateurs who are familiar with the equipment and the market for it, who can help you. If you'll tell us your general location, chances are that someone reading this group lives nearby and can recommend a club (or perhaps help in person). Or, you can contact the ARRL, which is the national organization of radio amateurs, who will be glad to help. You can email clubs@arrl.org to find clubs affiliated with the ARRL, or call the ARRL at the number listed at their web site http://www.arrl.org and explain what you need.

Roy Lewallen, W7EL

Twiddler wrote:
> My brother-in-law was a radio hobbyist and passed away a few months
> ago. I am helping my sister sell his equipment but I am not very
> knowledgable and I want to understand more so I can get what it is
> worth for her. He had no life insurance and she has two children to
> support. I am worried that I will not describe the equipment fully and
> not sell it for its true value.
> . . .

4326. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-10 08:41:23 UTC
From: Aspiring _REAL_ Radio Ham <me@privacy.net>
Message-ID: <ee0j3i$p4i$2@emma.aioe.org>
Source record: 10627
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Aspiring _REAL_ Radio Ham" <me@privacy.net> wrote in message
news:ee0i6q$vh7$1@emma.aioe.org...
> -----ooooo-----
>
> You have not told me the difference between one end of a resistor and
> the other despite my polite, earnest, request for more information. To
> ignore a straightforward question like this is, IMO, very ungentlemanly
> and against the spirit of amateur radio - especially as you introduced
> the subject.
>
> -----00000-----

G8IZY seems to be asking me why I fail to respond to questions that are put
to me by those whose style is indicative of a childish disposition wishing
to
cause insult. I think the answer to that seeming question is in the question
itself.

Such childish outbursts do nothng for the PR of Ham Radio and should
be ignored.

4327. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-10 09:41:10 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <V4RMg.39723$aJ.14372@attbi_s21>
Source record: 10628
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

In addition to the properties and usage of basic discrete components (still very important) and the appreciation of fundamental principles (from an introductory mathematical perspective) of electronics, there is an increasing interest in the use of integrated circuits, especially at low and intermediate signal levels. It is seldom necessary to be an expert at the inner workings of these ICs, but the ability to understand their data sheets and how to employ and interconnect them is a skill that is very useful.

We probably could be tested a little regarding the basic usage of certain kinds of ICs such as opamp, multiplier and DSP types.

Bill W0IYH

"nntp.aioe.org" <me@privacy.net> wrote in message
news:eduiu9$1jh$1@emma.aioe.org...
>I suggest that it still lies in the areas of LC filters, resistor
> networks and individual transistor (or valve) operation.
>
> Because, although the bulk of our circuit complexity
> will soon lie in a single DSP chip, the interfaces to that chip,
> to us at the baseband end and then to the antenna at the RF end,
> still depend upon traditional electronic (pre-IC) practice.
>
> How, then, can it be possible to issue Ham Radio licences
> to those who cannot tell one end of a resistor from the other?
>
> How, then, can it ever be possible to issue Ham Radio
> licences to those of 6 years of age who lack the mathematical
> capability to understand the evaluation of resistances in parallel?
>
> The answer is, that it cannot be possible, and that licences
> issued to such people are CB licences, no more, no less.
>
> Syllabi for Ham Radio exams should resort to the traditional
> subjects of familiarity with elemental electrical and electronic
> components together with a modernised examination of the
> ability to write software and understanding of DSP theory.
>
>

4328. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-10 09:47:55 UTC
From: matt vk3zmw <nospam@nospam.ever>
Message-ID: <fbRMg.26620$rP1.10004@news-server.bigpond.net.au>
Source record: 10629
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Mostly at the local cemetery.

4329. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-10 10:10:47 UTC
From: huLLy <villageidiot@sheepandmeths.co.uk>
Message-ID: <vuKdnYx0hYc3eZ7YRVnyvw@giganews.com>
Source record: 10630
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Aspiring _REAL_ Radio Ham wrote:

>
> And what exactly is your input to the PR of amateur radio? Oh Sorry!,
> I forgot that you don't like to answer questions about your rash
> statements... I must have been having a Childish Broadcaster moment. "

I'm confused - has the Court ordered that you bottom post?
--
huLLy
Tel: 07976 123278
villageidiot(at)sheepandmeths.co.uk
ICQ 136-987-925

4330. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-10 10:23:34 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <GIRMg.12316$Mh2.8892@newsfe6-win.ntli.net>
Source record: 10631
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

on 10/09/2006 11:10 huLLy said the following:
> Aspiring _REAL_ Radio Ham wrote:
>
>> And what exactly is your input to the PR of amateur radio? Oh Sorry!,
>> I forgot that you don't like to answer questions about your rash
>> statements... I must have been having a Childish Broadcaster moment. "
>
> I'm confused - has the Court ordered that you bottom post?
Since he's known as The Anus (among many other things) he has a duty to
bottom post.
--
;-)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

4331. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-10 10:34:58 UTC
From: Steve <g8izy@blueyonder.co.uk>
Message-ID: <mTRMg.16629$r61.9542@text.news.blueyonder.co.uk>
Source record: 10632
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

huLLy wrote:
> Aspiring _REAL_ Radio Ham wrote:
>
>
>>And what exactly is your input to the PR of amateur radio? Oh Sorry!,
>>I forgot that you don't like to answer questions about your rash
>>statements... I must have been having a Childish Broadcaster moment. "
>
>
> I'm confused - has the Court ordered that you bottom post?

Bottom posted or top posted, it's still the same old garbage ;-)

Steve

4332. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-10 10:59:30 UTC
From: Steve <g8izy@blueyonder.co.uk>
Message-ID: <meSMg.16647$r61.15929@text.news.blueyonder.co.uk>
Source record: 10633
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Aspiring _REAL_ Radio Ham wrote:
> "Aspiring _REAL_ Radio Ham" <me@privacy.net> wrote in message
> news:ee0i6q$vh7$1@emma.aioe.org...
>
>>-----ooooo-----
>>
>>You have not told me the difference between one end of a resistor and
>>the other despite my polite, earnest, request for more information. To
>>ignore a straightforward question like this is, IMO, very ungentlemanly
>>and against the spirit of amateur radio - especially as you introduced
>>the subject.
>>
>>-----00000-----
>
>
> G8IZY seems to be asking me why I fail to respond to questions that are put
> to me by those whose style is indicative of a childish disposition wishing
> to
> cause insult. I think the answer to that seeming question is in the question
> itself.
>
> Such childish outbursts do nothng for the PR of Ham Radio and should
> be ignored.
>
>
>
I repeat my question word for word;

"Gareth, would you please enlighten me. Apart from reading the value
and, for aesthetic reasons - what is the difference between the two ends?"

That seems like a reasonable question to me. Perhaps you are unable to
answer it because you don't know the answer despite your statement;

> How, then, can it be possible to issue Ham Radio licences
> to those who cannot tell one end of a resistor from the other?

I'm still waiting.

Steve

4333. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-10 11:20:01 UTC
From: Aspiring _REAL_ Radio Ham <me@privacy.net>
Message-ID: <ee0sd0$1v4$1@emma.aioe.org>
Source record: 10634
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Indeed so. It is the interest and understanding of how devices
of all types function and how to interact with their interfaces
that is the fundamental skill of Ham Radio; a fundamental skill
that is markedly lacking in the CB-like licences issued today,
in particular the M3/CB Fools' Licence of Britland.

When the man-in-the-street can buy an off the shelf radio enabling
him to talk to the whole world, a GSM phone, what difference is
to be perceived from a Radio Ham who seems to do the same -
buys his rigs off-the-shelf and returns them to the shop if needing
repair?

I believe that it is very necessary that we revert the qualifications
for Ham Radio to an understandng of technical matters before
we become perceived as just another consumerist pastime by
the powers-that-be, and our jealously gained privileges are lost.

"William E. Sabin" <w.sabin@mchsi.com> wrote in message
news:V4RMg.39723$aJ.14372@attbi_s21...
> In addition to the properties and usage of basic discrete components
> (still very important) and the appreciation of fundamental principles
> (from an introductory mathematical perspective) of electronics, there is
> an increasing interest in the use of integrated circuits, especially at
> low and intermediate signal levels. It is seldom necessary to be an
> expert at the inner workings of these ICs, but the ability to understand
> their data sheets and how to employ and interconnect them is a skill that
> is very useful.
>
> We probably could be tested a little regarding the basic usage of certain
> kinds of ICs such as opamp, multiplier and DSP types.
>
> Bill W0IYH
>
> "nntp.aioe.org" <me@privacy.net> wrote in message
> news:eduiu9ljh1@emma.aioe.org...
>>I suggest that it still lies in the areas of LC filters, resistor
>> networks and individual transistor (or valve) operation.
>>
>> Because, although the bulk of our circuit complexity
>> will soon lie in a single DSP chip, the interfaces to that chip,
>> to us at the baseband end and then to the antenna at the RF end,
>> still depend upon traditional electronic (pre-IC) practice.
>>
>> How, then, can it be possible to issue Ham Radio licences

>> to those who cannot tell one end of a resistor from the other?
>>
>> How, then, can it ever be possible to issue Ham Radio
>> licences to those of 6 years of age who lack the mathematical
>> capability to understand the evaluation of resistances in parallel?
>>
>> The answer is, that it cannot be possible, and that licences
>> issued to such people are CB licences, no more, no less.
>>
>> Syllabi for Ham Radio exams should resort to the traditional
>> subjects of familiarity with elemental electrical and electronic
>> components together with a modernised examination of the
>> ability to write software and understanding of DSP theory.
>>
>>
>
>

4334. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-10 11:26:04 UTC
From: John <no@spam.tnx>
Message-ID: <2bidnaVpHM4da57YRVnyrA@pipex.net>
Source record: 10635
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Aspiring _REAL_ Radio Ham" <me@privacy.net> wrote in message
news:ee0sd0$1v4$1@emma.aioe.org...

Crap cut.

Has anyone noticed how he has become an "Aspiring _REAL_ Radio Ham"

That means he is not a " _REAL_ Radio Ham"

4335. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-10 11:30:04 UTC
From: John <no@spam.tnx>
Message-ID: <3o2dne-5ffLtap7YRVnysQ@pipex.net>
Source record: 10636
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"John" <no@spam.tnx> wrote in message
news:2bidnaVpHM4da57YRVnyrA@pipex.net...
>
> "Aspiring _REAL_ Radio Ham" <me@privacy.net> wrote in message
> news:ee0sd0$1v4$1@emma.aioe.org...
>
>
> Crap cut.
>
>
> Has anyone noticed how he has become an "Aspiring _REAL_ Radio Ham"
>
> That means he is not a " _REAL_ Radio Ham"

Of course many would say that an M3 is an "Aspiring _REAL_ Radio Ham".

I can only assume that Gareth has decided to become a FL Holder.

Well done Gareth - scored another home goal!

4336. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-10 11:40:48 UTC
From: Aspiring _REAL_ Radio Ham <me@privacy.net>
Message-ID: <ee0tk0jth1@emma.aioe.org>
Source record: 10637
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

I feel that I must apologise for the crocodile of immature
and abusive children who dog my every effort on Usenet,
and in particular who have tried to reduce this thread to
an issuance from the cess-pit.

I have been on Usenet since 1994. In that time I have contributed
many articles on my stance towards maintaining the technical and
gentlemanly traditions of Ham Radio. For my pains I have
picked up a series of unpleasant individuals (who illustrate
very well the unacceptable decline in standards?) who resort
to the most grossly offensive and gratuitously insulting outbursts
unrelated to anything that I have ever said or done.

I have _NEVER_ originated any personal attacks on anybody. I am,
however, only human, and have replied on occasion, but only in
defensive indignance.

I have _NEVER_ published any articles intended to annoy people
or to provoke them. Everything that I have published has been
a sincere expression of my stance on a number of areas, liberalism,
republicanism, pacifism, poetry, atheism, anti-plod violence, Ham Radio.

I have never claimed to be omniscient; indeed, when there have areas
in which I have been unable to understand things, I have posted
queries.

I have on several occasions chastised those who use an international
forum such as Usenet to publish infantile insulting tirades. I shall
continue to do so.

"William E. Sabin" <w.sabin@mchsi.com> wrote in message
news:V4RMg.39723$aJ.14372@attbi_s21...
> In addition to the properties and usage of basic discrete components
> (still very important) and the appreciation of fundamental principles
> (from an introductory mathematical perspective) of electronics, there is
> an increasing interest in the use of integrated circuits, especially at
> low and intermediate signal levels. It is seldom necessary to be an
> expert at the inner workings of these ICs, but the ability to understand
> their data sheets and how to employ and interconnect them is a skill that
> is very useful.
>
> We probably could be tested a little regarding the basic usage of certain
> kinds of ICs such as opamp, multiplier and DSP types.
>
> Bill W0IYH

>
> "nntp.aioe.org" <me@privacy.net> wrote in message
> news:eduiu9ljh1@emma.aioe.org...
>>I suggest that it still lies in the areas of LC filters, resistor
>> networks and individual transistor (or valve) operation.
>>
>> Because, although the bulk of our circuit complexity
>> will soon lie in a single DSP chip, the interfaces to that chip,
>> to us at the baseband end and then to the antenna at the RF end,
>> still depend upon traditional electronic (pre-IC) practice.
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>> How, then, can it be possible to issue Ham Radio licences
>> to those who cannot tell one end of a resistor from the other?
>>
>> How, then, can it ever be possible to issue Ham Radio
>> licences to those of 6 years of age who lack the mathematical
>> capability to understand the evaluation of resistances in parallel?
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>>
>> Syllabi for Ham Radio exams should resort to the traditional
>> subjects of familiarity with elemental electrical and electronic
>> components together with a modernised examination of the
>> ability to write software and understanding of DSP theory.
>>
>>
>
>

4337. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-10 14:23:03 UTC
From: Jim GM4DHJ <jim.gm4dhj@ntlworld.com>
Message-ID: <bdVMg.11370$SH2.10029@newsfe4-gui.ntli.net>
Source record: 10638
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Singing on air
Starting silly clubs
Buying black boxes
Swearing on air
Feeling persecuted
inventing new ways of spelling
inventing new Grammar styles
using CB lingo on the former ham bands

4338. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-10 14:40:37 UTC
From: deBaser <a1debaser@ntlworld.com>
Message-ID: <FtVMg.12479$TF5.5216@newsfe1-win.ntli.net>
Source record: 10639
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Jim GM4DHJ" <jim.gm4dhj@ntlworld.com> wrote in message
news:bdVMg.11370$SH2.10029@newsfe4-gui.ntli.net...
> Singing on air
> Starting silly clubs
> Buying black boxes
> Swearing on air
> Feeling persecuted
> inventing new ways of spelling
> inventing new Grammar styles
> using CB lingo on the former ham bands
>

Are you describing your own condition Jim?

Andy

4339. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-10 16:04:09 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <VHWMg.17376$Ca4.12885@bignews7.bellsouth.net>
Source record: 10640

i3hev, mario held wrote:
> Dave Platt wrote:
>
>> As I understand it, in order to do SSB via direct conversion, you must
>> use a modern version of the old IQ phasing technique. ...
>
> that's correct :)
> the problem here is that you need a phasing filter offering a constant
> (and precise) 90 degrees phase shift all over the receiver band, and
> that can be tricky to do...
>
>> These days, of course, you can apply the phase shift by converting the
>> two baseband signals to digital format...
>
> well, you're opening doors to digital radio :)
> But, AFAIK, the actually attainable dynamics does
> not seem to incite enthusiastic greetings... ;)
>
IQ phasing detection (AKA image reject mixers) are only necessary
if you want to build a single signal receiver (a good idea).
Many modern DDS chips provide a way to generate perfect quaditure
outputs and by using DSP you can combine the resulting quaditure
af outputs into a single signal. One way to do this on the cheap
is to have a pc sound card sample the two signals.

4340. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-10 18:24:50 UTC
From: Bowman <bowman@aol.ei>
Message-ID: <4mj3joF6dhaoU1@individual.net>
Source record: 10641
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Aspiring _REAL_ Radio Ham" <me@privacy.net> wrote in message
news:ee0tk0jth1@emma.aioe.org...
> I have _NEVER_ published any articles intended to annoy people
> or to provoke them.
Oh really, what about your remarks on the Soham tragedy...and your gloating
at the deaths of servicemen of the very country that pay your
benefits...think again you sick and twisted individual.

4341. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-10 19:12:16 UTC
From: G1LVN <gareth.paley@gmail.com>
Message-ID: <1157915536.496615.275700@i3g2000cwc.googlegroups.com>
Source record: 10642
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Bowman wrote:
> "Aspiring _REAL_ Radio Ham" <me@privacy.net> wrote in message
> news:ee0tk0jth1@emma.aioe.org...
> > I have _NEVER_ published any articles intended to annoy people
> > or to provoke them.

Accusing me by name in a post subject line of cancelling his amateur
radio licence on-line....

4342. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-10 19:27:11 UTC
From: huLLy <villageidiot@sheepandmeths.co.uk>
Message-ID: <DYCdnVOkYoSM-pnYnZ2dnUVZ8qWdnZ2d@giganews.com>
Source record: 10643
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

G1LVN wrote:
> Bowman wrote:
>> "Aspiring _REAL_ Radio Ham" <me@privacy.net> wrote in message
>> news:ee0tk0jth1@emma.aioe.org...
>>> I have _NEVER_ published any articles intended to annoy people
>>> or to provoke them.
>
> Accusing me by name in a post subject line of cancelling his amateur
> radio licence on-line....

Always wondered who that was ;)
--
huLLy
Tel: 07976 123278
villageidiot(at)sheepandmeths.co.uk
ICQ 136-987-925

4343. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-11 02:31:48 UTC
From: PhattyMo <PhattyMo@nospam.gmail>
Message-ID: <4504ca0f$0$34078$815e3792@news.qwest.net>
Source record: 10644
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

nntp.aioe.org wrote:
> I suggest that it still lies in the areas of LC filters, resistor
> networks and individual transistor (or valve) operation.
>
> Because, although the bulk of our circuit complexity
> will soon lie in a single DSP chip, the interfaces to that chip,
> to us at the baseband end and then to the antenna at the RF end,
> still depend upon traditional electronic (pre-IC) practice.
>
> How, then, can it be possible to issue Ham Radio licences
> to those who cannot tell one end of a resistor from the other?
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> How, then, can it ever be possible to issue Ham Radio
> licences to those of 6 years of age who lack the mathematical
> capability to understand the evaluation of resistances in parallel?
>
> The answer is, that it cannot be possible, and that licences
> issued to such people are CB licences, no more, no less.
>
> Syllabi for Ham Radio exams should resort to the traditional
> subjects of familiarity with elemental electrical and electronic
> components together with a modernised examination of the
> ability to write software and understanding of DSP theory.
>
>

From the posts I've seen all over the 'net lately,I'd suggest the
expertise is in having pissing contests,and name calling. The "radio"
aspect seems to have been completely forgotten,it's all about how many
different names you can call people on the internet.

4344. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-11 06:24:52 UTC
From: Jim GM4DHJ <jim.gm4dhj@ntlworld.com>
Message-ID: <Ui7Ng.16297$wo3.14526@newsfe7-gui.ntli.net>
Source record: 10645
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"deBaser" <a1debaser@ntlworld.com> wrote in message
news:FtVMg.12479$TF5.5216@newsfe1-win.ntli.net...
>
> "Jim GM4DHJ" <jim.gm4dhj@ntlworld.com> wrote in message
> news:bdVMg.11370$SH2.10029@newsfe4-gui.ntli.net...
>> Singing on air
>> Starting silly clubs
>> Buying black boxes
>> Swearing on air
>> Feeling persecuted
>> inventing new ways of spelling
>> inventing new Grammar styles
>> using CB lingo on the former ham bands
>>
>
> Are you describing your own condition Jim?
>
> Andy
>
no...don't be silly....

4345. Re: Advice on Oscilloscopes Sought

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-11 11:48:22 UTC
From: Telstar Electronics <briangriffey@sbcglobal.net>
Message-ID: <1157975302.442046.4460@i3g2000cwc.googlegroups.com>
Source record: 10646

jawod wrote:
> Being relatively new to ham radio, I am considering some form of
> oscilloscope. I am intrigued by PC-based systems (eg., BitScope Pocket
> Analyzer)
>
> I've read a few NG posts about used HP scopes and a few negative remarks
> about PC scopes.
>
> My question:
>
> Given my neophyte status and the likelihood that I would use a scope for
> anything more the basic / with learning, moderate/ complexity,
> ... is the PC-based scope a good choice for me?
> Cost is under $400, not incl. a $40 analog probe.
>
> John
> AB8O
>
> PS, apologies for cross-posting to two groups...just trying to get some
> good answers!

I think I'd also opt for a used analog scope. I think It's better from
a portability viewpoint, since I'm unsure if they make the data
aquisition cards for laptops.

www.telstar-electronics.com

4346. Re: Tenna Pyramid Phase III Model PS-12

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-11 16:37:06 UTC
From: Skipp says hello <spamtheotherguynotme@yahoo.com>
Message-ID: <ee43bi$8i$1@skeeter.ucdavis.edu>
Source record: 10647

You are one lucky guy today Bob. I have a copy the Pyramid Power
Supply already scanned in. I've fixed one or two in my day. The diagram
might be of a slightly different model/size but you can easily use it
to fix your same type supply.

I'll email a copy of my pdf scan to your email address below. If you
don't receive it (about 1MB file size) drop me a note direct at the
email links found on the web page.
www.radiowrench.com/sonic

good luck with your repairs...

skipp
skipp025 at yahoo.com

: BobEmerson <bob.remerson@gmail.com> wrote:
: Good Day All,

: I have recently come into possession of a Tenna Pyramid Phase III Model
: PS-12 and guess what? It does not work. I am inquiring as to the
: availability of a copy of a schematic for this device. If someone could
: email me a copy of it, I would be grateful.

: Thanks
: Bob Emerson
: bob.remerson@gmail.com

4347. Re: selecting bias inductors for amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-11 16:42:59 UTC
From: Skipp says hello <spammenot@yahoo.com>
Message-ID: <ee43mj$8i$2@skeeter.ucdavis.edu>
Source record: 10498

A great time to plug the yahoo rfamplifiers group where various
members would reply to your questions.

http://groups.yahoo.com/group/rfamplifiers/

cheers,
skipp

: hq105862@hotmail.com wrote:
: Hi,

: I've been sleceting inductors for chip amplifiers based on the
: datasheets, but I would really like to understand what I should be
: doing.

: If I am designing an amplifer that is to operate over say 3.4 to
: 4.2GHz, should I be looking for an inductor with self resonance above
: that band, or at centre frequency, and why?

: (I know that at self resonance, the inductor will be resistive, below
: inductive, and above capacitive, but I don't know what I should be
: looking for.)

: Should I be looking for high Q or low Q, and for what reasons would I
: choose each.

: What numerical values actually equate to High Q and Low Q?

: Is Q of 9 low, and Q of 35 high, for example?

: thanks

4348. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-11 17:31:00 UTC
From: Leroy <nota.ham@never.will.be>
Message-ID: <pan.2006.09.11.17.30.55.544407@never.will.be>
Source record: 10499
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On Sun, 10 Sep 2006 12:40:48 +0100, Aspiring _REAL_ Radio Ham wrote:

> I feel that I must apologise for the crocodile of immature and abusive
> children who dog my every effort on Usenet, and in particular who have
> tried to reduce this thread to an issuance from the cess-pit.
>
> I have been on Usenet since 1994. In that time I have contributed many
> articles on my stance towards maintaining the technical and gentlemanly
> traditions of Ham Radio. For my pains I have picked up a series of
> unpleasant individuals (who illustrate very well the unacceptable decline
> in standards?) who resort to the most grossly offensive and gratuitously
> insulting outbursts unrelated to anything that I have ever said or done.
>
> I have _NEVER_ originated any personal attacks on anybody. I am, however,
> only human, and have replied on occasion, but only in defensive
> indignance.
>
> I have _NEVER_ published any articles intended to annoy people or to
> provoke them. Everything that I have published has been a sincere
> expression of my stance on a number of areas, liberalism, republicanism,
> pacifism, poetry, atheism, anti-plod violence, Ham Radio.
>
> I have never claimed to be omniscient; indeed, when there have areas in
> which I have been unable to understand things, I have posted queries.
>
> I have on several occasions chastised those who use an international forum
> such as Usenet to publish infantile insulting tirades. I shall continue to
> do so.

I started to respond to your "FAQ" and then changed my mind, but your persistence compels me to respond. I too have been using the 'net for a considerable time, and FidoNet before that.

Thirty-some odd years ago I became interested in becoming a "ham". Several years earlier I had built my first receiver and became interested in electricity at an age when most kids are still trying to get their heads around "See Spot run."

I met an old ham who gave me stacks of "CQ" magazine and ARRL handbooks, most of which I read cover to cover. But, things change and I didn't get my ticket. Eventually I wound up in the Army, working on radar systems (among other things). I am technically inclined and currently work with computer hardware.

I never lost interest in radio and have always been involved, one way or another. Over the last few years I again entertained thoughts about getting my ticket. But, things seem to have changed...and not necessarilly for the better.

It seems to me that qualifications have been relaxed. Is this an attempt to increase participation in an area with declining interest? I don't know. But I do know a few current hams, and I started reading the rec.radio.amateur.homebrew newsgroup, going back to Dec. of 2005.

I am sure that there are still many helpful hams who are good people to know, I've read a number of them in this particular group. Unfortunately, there seems to also be an increasing number of people whose attitudes are repellant...including yours.

You rant about "childish insults", and immediately proceed to insult others in the same manner. You have *your* opinion of what "ham radio" is (or ought to be), and you announce that you are going to jam it down everyone's throats whether they like it or not. Frankly, I really don't see a whole lot of difference between your behaviour and that of some of those dislikeable individuals on the 11 meter band (which you denigrate as a whole with your repeated remarks about "Childish Broadcasters"). In fact, your insistence that your "FAQ" "will not be shouted down" reminds me very much of the individuals who lock down the key and proclaim "Nobody is going to talk over me" and proceed to repeat a bunch of gibberish which serves only to restrict and interfere with civilized conversation.

Though I tend not to participate in the nonsense which occurs in the "normal" portion of 11 meters there are some good people there, as there are in other areas of the spectrum and with whom I communicate. And, despite your assertion to the contrary, there are many of us in and outside of 11 meters who are interested in how radios work, and who build/modify and operate our own equipment.

You also assert that "A Ham Radio licence is such a desirable thing to have...". If it is so "desireable", then why are the standards being relaxed so as to lower the barrier to entry? In your own "FAQ" you you say that the standards are now "trivial" and "set for six-year-olds". What other reason for this could there be besides a declining level of interest?

>they are free with rather silly personal insults.

Pot? Kettle? Black?

> One infallible way to disambiguate the CB Radio Hobbyist from the _REAL_
> Radio Ham is to solicit their view of the difference between CB Radio
> and Ham Radio. A Radio Ham will perceive Ham Radio to be a technical
> pursuit and will perceive CB Radio to be a social communications
> facility

What makes you think that *your* opinion is the only valid opinion? Or, indeed, that it is valid at all?

Strictly a technical pursuit? Surely you jest. Even in the past when technical knowledge and code skills were of greater importance, even "ham" radio was a "social communications facility". The fact that much of the communication may have been technical in nature in no way lessens the "social communication" aspect.

> There is not today, nor has there ever been, a need to go out
> and encourage and press children, children who have never expressed an
> interest in Ham Radio, to come into our shacks. Such an activity should
> cause eyebrows to be raised - what normal well-adjusted adults seek the
> social acquaintance of children?!

What? I'm not even sure how to respond to *this*, except to say that were it not for adults introducing me to various technical pursuits and encouraging me to get involved, and teaching me, I would not have accomplished a fraction of the things I have done over the years.

> Please remember that this FAQ is a _POSITIVE EXHORTATION_ to you to
> exert yourselves to join our fraternity!

If that is your intent, I think you are falling far short of the mark. In fact, you have reduced my interest in obtaining an amateur license practically to zero. Was it Groucho Marx that said "I wouldn't be a member of any club that would have me"? I think I'll take a "pass" on joining *your* "fraternity". You've even got me to thinking that maybe the government(s) should stop wasting money on regulating the amateur bands, open them up to anyone who cares to operate on them, without restrictions, and abandon them them, much as they have done with the "CB" band in the US.

I'll continue to operate my radios but I see little point in expending the effort to get a ham ticket just to encounter the same sort of people that I can run into on 11 meters with no effort at all.

Say, how are you doing with that question of which end of a resistor is which? When you get that worked out, perhaps you'd care to comment on the feasibility of using a tuneable Klystron oscillator to drive a magnetron in a high-power pulsed RF application.

4349. Re: Schematic drawing software?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-11 17:40:34 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12gb7sk9rbmscde@corp.supernews.com>
Source record: 10500

"Dan Andersson" <dan@andersson.co.uk> wrote in message
news:NqydncdMLaNUcZzYRVnyrg@eclipse.net.uk...
> David Snyder Hale wrote:
>> Bill Turner <noway@nohow.com> wrote:
>>> longer have access to it. Can someone recommend a program to use at
>>> home for creating schematic drawings? I don't care if it is payware as
>> Try EAGLE, at www.cadsoft.de
> Eagle is crippleware

Only the free version!

> Go get KiCad. GPL license, no limitations and runs on both Linux and
> Windooze. You find KiCad on the net for download.

Certainly worth checking out, but I'd be surprised if most people felt that KiCad and EAGLE with "roughly comparable" -- most people would definitely tend to prefer one over the other.

4350. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-11 19:49:18 UTC
From: G1LVN <gareth.paley@gmail.com>
Message-ID: <1158004158.695580.113450@d34g2000cwd.googlegroups.com>
Source record: 10501
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

huLLy wrote:
> G1LVN wrote:
> > Bowman wrote:
> >> "Aspiring _REAL_ Radio Ham" <me@privacy.net> wrote in message
> >> news:ee0tk0jth1@emma.aioe.org...
> >>> I have _NEVER_ published any articles intended to annoy people
> >>> or to provoke them.
> >
> > Accusing me by name in a post subject line of cancelling his amateur
> > radio licence on-line....
>
> Always wondered who that was ;)

I rather think it might have been G8DXY ;-)

4351. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-11 20:43:33 UTC
From: huLLy <villageidiot@sheepandmeths.co.uk>
Message-ID: <OvCdnaY9sqzqV5jYnZ2dnUVZ8qKdnZ2d@giganews.com>
Source record: 10502
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

G1LVN wrote:
>
> I rather think it might have been G8DXY ;-)

Let's face it, it could have been any of the 3000 posters that have been
Beaned
--
huLLy
Tel: 07976 123278
villageidiot(at)sheepandmeths.co.uk
ICQ 136-987-925

4352. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-11 21:16:43 UTC
From: G1LVN <gareth.paley@gmail.com>
Message-ID: <1158009402.985334.189020@q16g2000cwq.googlegroups.com>
Source record: 10503
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

huLLy wrote:
> G1LVN wrote:
> >
> > I rather think it might have been G8DXY ;-)
>
> Let's face it, it could have been any of the 3000 posters that have been
> Beaned
> --
> huLLy
> Tel: 07976 123278
> villageidiot(at)sheepandmeths.co.uk
> ICQ 136-987-925

not really, only G8DXY would have access to the Ref number on Beanies
Validation Document.

4353. Re: Overheating AA batteries

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 02:54:11 UTC
From: scrook <dingiswayo324_at_yahoo.com>
Message-ID: <mJqdnayywZfPvJvYnZ2dnUVZ_r2dnZ2d@comcast.com>
Source record: 10504
Cross-posted to: rec.crafts.metalworking,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Positive can/case is standard alkaline cell construction. The correct
question would be "has anyone ever seen a negative cased alkaline cell?"

"Mark Rand" <randm@internettie.co.uk> wrote in message
news:34c6g2pv3c1iktjatf4sfsrfk1mkj69chg@4ax.com...
> On Sat, 09 Sep 2006 16:11:20 -0400, ken scharf
> <wa2mzeNOSPAMBOTS@bellsouth.net> wrote:
>
>>bart wrote:
>>> This evening the GF noticed that the remote control wasn't working &
>>> was hot.
>>> I pulled out the extremely hot AA batteries.
>>> It looks like the spring contact in the remote control, on the
>>> negative side had worn away the plastic covering on the side of the
>>> battery & shorted the side metal battery casing to the negative
>>> contact, thereby causing the overheating.
>>> In my many years of battery dissection, I've never seen the side
>>> casing of a battery being positive before!
>>> These were "Golden Power" alkaline batteries, made in China.
>>> They were the original batteries that came with the remote (for a
>>> Shaw digital cable box).
>>> Anyone ever seen a positive case AA battery before, or is this a new (
>>> dumb) idea?
>>I've seen many Alkaline batteries with the outside casing connected to
>>the 'tit' on top as the positive and the bottom flat connector was
>>insulated from the body of the battery. alkaline batteries have
>>different chemistry from carbon zinc resulting in an inverted
>>construction. This may actually be the norm, but in the larger sizes
>>the plastic outer wrap hides the details. Just looked at a DuraCell
>>"D" and it is of the inverted construction, but the insulation of the
>>battery bottom (-) terminal from the case of the battery is hidden
>>under the plastic wrapping.
>
>
> Since it's the cathode that gets eaten in whichever reaction is used for
> the
> battery type, it might make sense to have the anode as the case.
>
> I could have done with this 25 years ago when I got sent abroad for work
> for
> three of months and came back to find that the transistor radio batteries
> had
> leaked all over one of my (expensive) loudspeakers :-(

>
> Mark Rand
> RTFM

4354. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 06:33:41 UTC
From: Gareth Alun Evans <me@privacy.net>
Message-ID: <ee5kc8$914$1@emma.aioe.org>
Source record: 10505
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Aspiring _REAL_ Radio Ham wrote:
>>
>> Shame on you all. You do nothing for the PR of Ham Radio.

Yes, none of you have tried shouting CQ through the bars of a cell with a blanket on your head.

I made lots of contacts, mostly boots to the head and handcuff marks to the wrists.

73's G4SDW

4355. Re: What Is Ham Radio?.....The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 11:59:59 UTC
From: Joe Ninetee <j90@hotmail.com>
Message-ID: <3jxNg.16211$E02.6200@newsb.telia.net>
Source record: 10506
Cross-posted to: uk.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.homebrew

> So,.....What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.

You mean a sort of unique club for the elite?
With secret hamonic handshakes?
With members who are all "upper class" school educated?

Ok. I get the picture, good buddy.

4356. Re: What Is Ham Radio?.....The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 12:13:04 UTC
From: Fred Spectrum <fred@spectrum.com>
Message-ID: <ee67tr$3r7$1@emma.aioe.org>
Source record: 10507
Cross-posted to: uk.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Oh dear, don't start Mr Evans on one of his rants about the masons :-(

"Joe Ninetee" <j90@hotmail.com> wrote in message
news:3jxNg.16211$E02.6200@newsb.telia.net...
> With secret hamonic handshakes?

4357. Re: What Is Ham Radio?.....The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 12:24:14 UTC
From: Joe Ninetee <j90@hotmail.com>
Message-ID: <OFxNg.16212$E02.6364@newsb.telia.net>
Source record: 10508
Cross-posted to: uk.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Sorry! Then I guess he's not yet invented the "hamon"!
My only **real** comment is that we are all **radio
amateurs**, who hold **experimenters licences**. At
least that's what they called them when they were
invented, to keep them seperated from the
professionals.

> Oh dear, don't start Mr Evans on one of his
> rants about the masons :-(

> > With secret hamonic handshakes?

4358. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 13:43:17 UTC
From: Fred Spectrum <fred@spectrum.com>
Message-ID: <ee6d70$rm1$1@emma.aioe.org>
Source record: 10509
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

A real QRPer would have used 2 blankets :-)

"Gareth Alun Evans" <me@privacy.net> wrote in message
news:ee5kc8$914$1@emma.aioe.org...
> Yes, none of you have tried shouting CQ through the bars of a cell with a
> blanket on your head.

4359. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 18:04:20 UTC
From: "BOB (Bog Off Beanie)" <me@privacy.net>
Message-ID: <ee6sr4$9g3$1@emma.aioe.org>
Source record: 10510
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Gareth Alun Evans" <me@privacy.net> wrote in message
news:ee5kc8$914$1@emma.aioe.org...
> Aspiring _REAL_ Radio Ham wrote:
>>>
>>> Shame on you all. You do nothing for the PR of Ham Radio.
>
> Yes, none of you have tried shouting CQ through the bars of a cell with a
> blanket on your head.
>
> I made lots of contacts, mostly boots to the head and handcuff marks to
> the wrists.
>
> 73's G4SDW
>
ROTFLMAO

4360. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 18:37:31 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <450703aa$0$18483$9b4e6d93@newsspool3.arcor-online.net>
Source record: 10511

Thanks for responding Glenn!

> Provided you implement the Tayloe mixer with sufficient baseband
> bandwidth (probably about 20 KHz for NBFM), you can mix, say, a 2 meter
> FM signal to baseband and demodulate it with an audio discriminator
> (some sort of audio frequency to voltage conversion scheme). Mix the
> signal to be either exclusively in the upper or lower sideband of the
> output. So, for example, a NBFM sig at 146.000 MHz mix with the Tayloe
> mixer set to 145.990 MHz and select the upper sideband. The upper or
> lower sidebands are, as you probably know, selected by phase shifting
> and summing circuits following the Tayloe mixer (implemented in
> software in SDRs). Note that SDRs like the Flex-Radio SDR 1000 do not
> process incoming signals near 0 Hz anyway, but mix the desired signal
> centered around about 11 KHz (I think).
So the phase shifter is NOT for flatten the group delay variance (source is
the Tayloe mixer low-pass)?

Is multiplying I with Q enougth to demodulate FM as in a quadrature
demodulator?
I cannot find a suitable theory page to look for.

>
> The Tayloe mixer is a passive mixer terminated in large capacitors, and
> similar performance can be obtained at VHF, UHF and microwaves with two
> FET ring mixers driven with quadrature signals and also terminated with
> capacitors (that is, no wideband transformer on the mixer outputs, but
> capacitors followed by HiZ input differential audio amps). I've done
> this with the Peregrine Semiconductor FET mixers.
Thank you for given the link to Peregrine. I read the datasheet. How do you
mix it?
At the moment I prefer the Tayloe mixer because of it's simplicity.
BTW: They have a nice low-power consumption PLL being compatible to
National.

At TI I found nice tinylogic capable of switching like a 4066 down to 500ps
...
Should be possible to run the mixer at 150MHz with it.

> Only familiar with the dsPIC, though the others sound okay. The dsPIC
> would work, though its 12 bit A/D doesn't give a lot of dynamic range.
> Plenty for NBFM though, especially since you can run the signal(s)
> through a limiter first. For NBFM sixteen bit DSP is sufficient.
How much dynamic range do I need? I thought about 100dB?
If I recall theory I loss 2dB if limiting the signal to remove AM sensitivy.

regards -
Henry

4361. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 19:38:02 UTC
From: "Mike Gathergood (G4KFK)" <mike@g4kfk.co.uk>
Message-ID: <1158089882.406609.112010@p79g2000cwp.googlegroups.com>
Source record: 10512
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

BOB (Bog Off Beanie) wrote:
> ROTFLMAO

This aioe.org server seems to be doing overtime in this ng :-)

4362. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 20:24:34 UTC
From: Gareth Alun Evans <me@privacy.net>
Message-ID: <ee7525dqs1@emma.aioe.org>
Source record: 10513
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Mike Gathergood (G4KFK) wrote:
> BOB (Bog Off Beanie) wrote:
>> ROTFLMAO
>
> This aioe.org server seems to be doing overtime in this ng :-)

That is a very Cheap Bastard (CB) point - you know I don't work!

4363. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 20:34:58 UTC
From: MadEngineer <glenn.b.dixon@gmail.com>
Message-ID: <1158093298.251749.110820@e3g2000cwe.googlegroups.com>
Source record: 10514

Henry Kiefer wrote:

> So the phase shifter is NOT for flatten the group delay variance (source is
> the Tayloe mixer low-pass)?
If I understand your question correctly, that is true. The IQ output
from the Tayloe mixer (or any IQ mixer) is not upper and lower
sideband. To get those you must do further signal processing, which
usually involves shifting the I and Q channels ninety
degress with respect to each other then summing or subtracting the
channels depending on which sideband you want.

>Is multiplying I with Q enougth to demodulate FM as in a quadrature
>demodulator?
>I cannot find a suitable theory page to look for.

I can't either. The IQ signals multiplied do not make an FM quadrature
detector as the phase does not really shift much over the NBFM
bandwidth. There may be a clever way to extract FM more direcly from
the IQ channels without first detecting a sideband, but I don't know
it.

> Thank you for given the link to Peregrine. I read the datasheet. How do you
> mix it?

Maybe the wrong part? I'm talking about the PE4140 FET ring mixer.
You use two, driven with LOs ninety degress out of phase with respect
to each other.

> At the moment I prefer the Tayloe mixer because of it's simplicity.
> BTW: They have a nice low-power consumption PLL being compatible to
> National.
>
> At TI I found nice tinylogic capable of switching like a 4066 down to 500ps
> ...
> Should be possible to run the mixer at 150MHz with it.

Yeah--digital just keeps getting better. Good luck.

> How much dynamic range do I need? I thought about 100dB?
> If I recall theory I loss 2dB if limiting the signal to remove AM sensitivy.techniques,

You need good dynamic range up to the limiter. This can be done with
analog circuits as discussed. After the limiter an A/D converter is
not even needed in theory--a fast-running timer hooked to a digital
port could do the trick. I don't remember any loss by removing AM in
the limiter (since all the the information is contained in the
frequency of the signal), but my theory is in the distant past, back

when FM meant 'funny math'.

Regards,
Glenn

4364. My homepage

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 21:39:58 UTC
From: jean@pisem.net
Message-ID: <ee79fe$3g5$1@news.lublin.pl>
Source record: 10515

Great work!
[url=http://klhkdujt.com/kzfm/pycz.html]My homepage[/url] |
[url=http://pmgalzry.com/fgkq/qhay.html]Cool site[/url]

4365. My homepage

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 21:40:02 UTC
From: wendy@pisem.net
Message-ID: <ee79fi$3gg$1@news.lublin.pl>
Source record: 10516

Great work!
My homepage | <a
href="http://catsaffb.com/shql/dmod.html">Please visit

4366. My homepage

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 21:40:09 UTC
From: lee@pismo.com
Message-ID: <ee79fp$3gm$1@news.lublin.pl>
Source record: 10517

Great work!
http://klhkdujt.com/kzfm/pycz.html | http://ycceorhp.com/ggqr/echt.html

4367. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 21:41:00 UTC
From: "BOB (Bog Off Beanie)" <me@privacy.net>
Message-ID: <ee79hf$lq4$1@emma.aioe.org>
Source record: 10518
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Mike Gathergood (G4KFK)" <mike@g4kfk.co.uk> wrote in message
news:1158089882.406609.112010@p79g2000cwp.googlegroups.com...
>
> BOB (Bog Off Beanie) wrote:
>> ROTFLMAO
>
> This aioe.org server seems to be doing overtime in this ng :-)
>
and just think, it's all thanks to Beanie.

4368. Re: Overheating AA batteries

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 21:51:53 UTC
From: Bob May <bobmay@nethere.com>
Message-ID: <sK6dncYRL5WYtprYnZ2dnUVZ_q2dnZ2d@nethere.com>
Source record: 10519
Cross-posted to: rec.crafts.metalworking,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I thought all of the carbon/zinc type batteries had negative cases. The little button on the top is the positive contact for the battery and the other end is essentially flat on most batteries today with some having a stamped bottom and sides in contact.

--
Yeppie, Bush is such an idiot that He usually outwits
everybody else. How dumb!

4369. My homepage

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 22:31:32 UTC
From: jason@pismo.com
Message-ID: <ee7cfp$6d3$1@news.lublin.pl>
Source record: 10520

Nice site!
[url=http://glckwesh.com/ejlo/vrrx.html]My homepage[/url] |
[url=http://ugwlsvgm.com/xows/cuab.html]Cool site[/url]

4370. My homepage

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 22:31:37 UTC
From: raymond@pismo.com
Message-ID: <ee7cg9$6db$1@news.lublin.pl>
Source record: 10521

Thank you!
My homepage | <a
href="http://vkcvuyxz.com/vdmv/zwko.html">Please visit

4371. My homepage

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 22:31:45 UTC
From: dean@mail.com
Message-ID: <ee7cgh$6dg$1@news.lublin.pl>
Source record: 10522

Great work!
http://glckwesh.com/ejlo/vrrx.html | http://jarvtuvk.com/rxpn/rila.html

4372. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 22:51:43 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <d3deg2p0grmis0bq8cectig0s82dqork6u@4ax.com>
Source record: 10523

On 12 Sep 2006 13:34:58 -0700, "MadEngineer" <glenn.b.dixon@gmail.com>
wrote:

>
>Henry Kiefer wrote:
>
>> So the phase shifter is NOT for flatten the group delay variance (source is
>> the Tayloe mixer low-pass)?
>If I understand your question correctly, that is true. The IQ output
>from the Tayloe mixer (or any IQ mixer) is not upper and lower
>sideband. To get those you must do further signal processing, which
>usually involves shifting the I and Q channels ninety
>degress with respect to each other then summing or subtracting the
>channels depending on which sideband you want.
>
>>Is multiplying I with Q enougth to demodulate FM as in a quadrature
>>demodulator?
>>I cannot find a suitable theory page to look for.
>
>I can't either. The IQ signals multiplied do not make an FM quadrature
>detector as the phase does not really shift much over the NBFM
>bandwidth. There may be a clever way to extract FM more direcly from
>the IQ channels without first detecting a sideband, but I don't know
>it.

FM the problem is not responding to amplitude changes but frequency
changes. So any system that can count and measure frequency and
render a pattern based on changing frequency.

Synthetic PLL or simple a software PLL. would do it.
The synthethetic PLL approach means a software oscillator locked
to a varying frequency external signal. The error word generated is
the demodulated signal (apply to D/A or use raw).

>> How much dynamic range do I need? I thought about 100dB?
>> If I recall theory I loss 2dB if limiting the signal to remove AM sensitivy.techniques,

Dynamic range is one of those the more the better but, many things
like noise eat away at it. These days a radio with >80db is good
and >90DB excellent, 100 Db is attainable.

>You need good dynamic range up to the limiter.

You need good dynamic range up to the first selectivity that can
remove offending close in signals.

Then you can limit hard. If you limit before or without adaquate
selectivity you will have intermodulation problems.

> This can be done with
>analog circuits as discussed. After the limiter an A/D converter is
>not even needed in theory--a fast-running timer hooked to a digital
>port could do the trick. I don't remember any loss by removing AM in
>the limiter (since all the the information is contained in the
>frequency of the signal), but my theory is in the distant past, back
>when FM meant 'funny math'.

If the signal is limited then zero crossings are enough. That could
be expressed as 1bit. Your now working in the time/frequency
domain.

Allison

4373. 4-400 on 6 meters ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 23:16:20 UTC
From: SNOWDEN <snowden@peoplepc.com>
Message-ID: <8dHNg.6868$v%4.777@newsread1.news.pas.earthlink.net>
Source record: 10524

Anyone been successful in building an amplifier at 6 meters? I have a couple and was thinking about trying it.

Doug N4IJ

4374. My homepage

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 23:32:00 UTC
From: tammy@pochta.com
Message-ID: <ee7g1g$9sq$1@news.lublin.pl>
Source record: 10525

Nice site!
[url=http://chumqthp.com/wctv/idof.html]My homepage[/url] |
[url=http://wmtiqbgv.com/vijt/kvsy.html]Cool site[/url]

4375. My homepage

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 23:32:21 UTC
From: roy@pisem.net
Message-ID: <ee7g25$9tc$1@news.lublin.pl>
Source record: 10526

Great work!
My homepage | <a
href="http://dfidzvpt.com/iowh/zbmo.html">Please visit

4376. My homepage

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-12 23:32:25 UTC
From: dawn@yahoo.com
Message-ID: <ee7g29$9tj$1@news.lublin.pl>
Source record: 10527

Great work!
http://chumqthp.com/wctv/idof.html | http://foomkgig.com/hupt/pbyu.html

4377. Re: Overheating AA batteries

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 00:49:01 UTC
From: JJ <jamesevns75@hotmail.com>
Message-ID: <4507557D.5090901@hotmail.com>
Source record: 10528
Cross-posted to: rec.crafts.metalworking,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Sorry, but I JUST have to ask, Are you the Bob May who was on that
TV show (in that "suit") in the late 1960's??

73

Bob May wrote:

>I thought all of the carbon/zinc type batteries had negative cases. The
>little button on the top is the positive contact for the battery and the
>other end is essentially flat on most batteries today with some having a
>stamped bottom and sides in contact.
>
>--
>Yeppie, Bush is such an idiot that He usually outwits
>everybody else. How dumb!
>
>
>
>

4378. Re: 4-400 on 6 meters ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 02:17:36 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <45076A40.2030602@bloomer.net>
Source record: 10529

Should work just fine. I haven't done it, but I do have a 4-400 and am thinking about just what you propose.

See:
http://www.g8wrb.org/data/Eimac/4-400A.pdf

Scott
N0EDV

SNOWDEN wrote:
> Anyone been successful in building an amplifier at 6 meters? I have a
> couple and was thinking about trying it.
>
> Doug N4IJ
>
>
>

4379. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 02:28:23 UTC
From: "Roger (K8RI)" <ValidAddress@my.com>
Message-ID: <m0qeg2hficu5obq3ifdn05i7q21bdpbpcl@4ax.com>
Source record: 10530
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On Sat, 09 Sep 2006 17:49:20 GMT, "Brian Reay" <see@website.invalid>
wrote:

>
>"Steve" <g8izy@blueyonder.co.uk> wrote in message
>news:QdBMg.16258$r61.3611@text.news.blueyonder.co.uk...
>
>> I might suggest that construction of aerials, amplifiers etc., and the
>> knowledge to predict propagation modes and then utilise that knowledge to
>> make contacts with people far away is just as valid as knowing one end of
>> a resistor from the other.

That's simple. One end is the goesinto while the other is the
goesouttta unless you hook it up backwards. Then due to great
foresight from the engineers the two ends will automatically swap
functions making the device appear to be bidirectional.

>>
>> Or a multitude of other reasons why people become radio amateurs given
>> that this is such a diverse hobby.
Some of us use it for exercise:
http://www.rogerhalstead.com/ham_files/Tower29.htm

Or the whole project http://www.rogerhalstead.com/ham_files/tower.htm

Although I've been known to use the exercise excuse so I can put up
more antennas. Unfortunatley I have to get the 144 and 440 arrays
down. I already have the mast down to about the 6-meter yagi and have
rebuilt the PST-61 rotator.
>
>Good advice Steve. There are even people who buy s/h homebrew equipment (eg
>a QRP radio) at rallies and probably take great delight in using it.

Lets see... My first home brew rig was about 90 Watts with a pair of
6L6s and a 6AG7 oscillator. Not exactly QRP. The next home brew
projct was a 6C21 HF amp (those things are big) and then a pair of
813s. on HF. Both home brew but a long way from QRP with the exception
of the time when I blew the plate out of a 6C21 and it turned into a
dummy load. I wish I still had that thing if for nothing more than a
conversation piece.

OTOH there is a fair amount of HF QRP around this area (Central
Michigan) with some of the rigs getting fairly sophisticated.

There is a lot of developmet work going on in digital here. The local
system can broadcast the latest RADAR to the laptops of those of us

out storm chasing. APRS (if set up in the car) gives your coordinates back to the EOC. They are working on a portable TV Repeater for a number of reasons in addition to being used for damage assesment.

There's also the networking of packet, repeaters, and the internet.

We have ham stations in both the EOC and the mobile EOC unit. There was talk of adding HF ham stations to both locations.
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com

4380. Re: 4-400 on 6 meters ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 02:33:39 UTC
From: "Roger (K8RI)" <ValidAddress@my.com>
Message-ID: <0creg2tuibc85e4bfant4vv04huof5rjf2@4ax.com>
Source record: 10531

On Tue, 12 Sep 2006 23:16:20 GMT, "SNOWDEN" <snowden@peoplepc.com>
wrote:

>Anyone been successful in building an amplifier at 6 meters? I have a
>couple and was thinking about trying it.

I've not seen a 4-400 amp on six,, but they are rated to 110 MHz and
the book shows just shy of the legal limit out at 75 MHz.

I don't know how difficult the'd be to neutralize.
Sounds like fun and I think they'd be a better tube for six than
3-400s or 3-500s.

Good luck,

>
>Doug N4IJ
>
>
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com

4381. Re: Overheating AA batteries

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 02:55:26 UTC
From: dnichols@d-and-d.com
Message-ID: <ee7ruu02ggg@news3.newsguy.com>
Source record: 10532
Cross-posted to: rec.crafts.metalworking,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

According to Bob May <bobmay@nethere.com>:
> I thought all of the carbon/zinc type batteries had negative cases.

Most did -- but the zinc/carbon individual cells are relatively
rare now. An example of the zinc-carbon ones without a negative case
are the ones which were used to make high voltage batteries (even the 9V
ones) were a wax ring (shaped sort of like a tire) with a zinc plate at
one end and carbon at the other, with the sal-ammoniac (IIRC) in
between. All of the wax rings were joined end to end by melting the
wax, and this connected all the cells in series.

> The
> little button on the top is the positive contact for the battery and the
> other end is essentially flat on most batteries today with some having a
> stamped bottom and sides in contact.

The "little button on the top" was a metal cap over the end of
the central carbon rod which was the actual positive terminal.

However, the Alkaline cells use a different chemistry (I'm not
sure of the details -- but it could be looked up), and the positive
terminal makes the case -- which requires a strange form factor to deal
with all the equipment designed to orient the button properly as a
positive terminal. A standard flashlight would not care, but most
electronic stuff powered by batteries does care, which is why they
continue to shape things so the button is positive, even if it is
connected to the case. The common coin cells are different, because
there were never any of those with the button as positive.

Enjoy,
DoN.
--
Email: <dnichols@d-and-d.com> | Voice (all times): (703) 938-4564
(too) near Washington D.C. | http://www.d-and-d.com/dnichols/DoN.html
--- Black Holes are where God is dividing by zero ---

4382. HP8405A source

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 07:18:45 UTC
From: David <websales@orbitcoms.com>
Message-ID: <phONg.28121$rP1.3577@news-server.bigpond.net.au>
Source record: 10533

Anyone know where I might get HP8405A vector voltmeter
in Australia or nearby ?

Or alternate meter for measuring impedance to 500 MHz

Thanks

Regards

David

4383. Re: 4-400 on 6 meters ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 12:09:43 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <Co2dnYDQlpOaaJrYRVnyrQ@pipex.net>
Source record: 10534

Roger (K8RI) wrote:
> On Tue, 12 Sep 2006 23:16:20 GMT, "SNOWDEN" <snowden@peoplepc.com>
> wrote:
>
>> Anyone been successful in building an amplifier at 6 meters? I have a
>> couple and was thinking about trying it.
>
> I've not seen a 4-400 amp on six,, but they are rated to 110 MHz and
> the book shows just shy of the legal limit out at 75 MHz.
>
> I don't know how difficult the'd be to neutralize.
> Sounds like fun and I think they'd be a better tube for six than
> 3-400s or 3-500s.
==========
Up to the mid 1970s type 4-400 transmitting valves (tubes) were used in
the UK in Band 1 (approx 45-65 MHz)TV transmitters.
For a 7 kWatts area transmitter there were 7 chassis of 2 valves each.
So they should be excellent for the 50 MHz amateur band.

A very early design can be found in QST March 1967 ,pages 11 - 15.
Titled : Six-Meter Kilowatt with 4-400As or4-125As.

The design involves 2 valves (tubes) in push-pull config.

Although push pull RF Power Amps are nowadays no longer or not
frequently used , I feel it is still interesting reading and might give
some ideas for a homebrew amplifier.

If you can't find the article , I can send you a scanned copy of the 5
pages.

To email me remove the obvious chars from the above address.

Frank GM0CSZ / KN6WH

4384. PayPal horror stories

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 15:05:15 UTC
From: Rodnay <purple5golftee@yahoo.nosp.com>
Message-ID: <1f7e0$45082966$d1cc5956$22166@snip.allthenewsgroups.com>
Source record: 10535
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

A new site with dozens of horror stories from
people who've done business using Paypal

http://www.paypalwarning.com/

PayPal is just like POISON IVY --------> don't touch it with a 12' pole.

4385. Coax Connectors & Adapters - High Quality@ Low Cost

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 16:43:32 UTC
From: AAA RF Products <sales@aaarfproducts.com>
Message-ID: <mxWNg.20259$RD.1342@fed1read08>
Source record: 10536
Cross-posted to: alt.ham-radio,rec.boats.electronics,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Please see www.aaarfproducts.com

4386. woger try http://www.mipsor.state.mi.us/mipsor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 17:29:45 UTC
From: "kb9rqz-2@hotmail.com" <kb9rqz-2@hotmail.com>
Message-ID: <1158168585.357161.64530@p79g2000cwp.googlegroups.com>
Source record: 10537
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

Rodnay wrote:
>
just burying the spam

4387. Re: PayPal horror stories

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 17:41:55 UTC
From: Mark@kb9rqz.com
Message-ID: <450835dc$0$19696$88260bb3@free.teranews.com>
Source record: 10538
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

"Rodnay" <purple5golftee@yahoo.nosp.com> wrote in message
news:1f7e0$45082966$d1cc5956$22166@snip.allthenewsgroups.com...
>A new site with dozens of horror stories from
> people who've done business using Paypal
>
> http://www.paypalwarning.com/
>
> PayPal is just like POISON IVY --------> don't touch it with a 12' pole.
>
with the punce gotcha he wonders why I simple don't bother to ty impoving my
spelling do u hav anyting cognet two say?

--
Posted via a free Usenet account from http://www.teranews.com

4388. Re: PayPal horror stories

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 17:51:49 UTC
From: NoMoreSpam <Disgustedham@qrparci.org>
Message-ID: <3OCdnYbr1s_T2JXYnZ2dnUVZ_v-dnZ2d@comcast.com>
Source record: 10539
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

Rodnay wrote:
> A new site with dozens of horror stories from
> people who've done business using Paypal
>
> http://www.paypalwarning.com/
>
> PayPal is just like POISON IVY --------> don't touch it with a 12' pole.

That site would be more convincing if it wasn't a come-on to use THEIR version
of "Paypal." Paypal is OK, IF you use common sense.

4389. Re: Coax Connectors & Adapters - High Quality@ Low Cost

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 18:32:30 UTC
From: Larry <noone@home.com>
Message-ID: <Xns983D9409F222noonehomecom@208.49.80.253>
Source record: 10540
Cross-posted to: alt.ham-radio,rec.boats.electronics,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"AAA RF Products" <sales@aaarfproducts.com> wrote in news:mxWNg.20259
$RD.1342@fed1read08:

> Please see www.aaarfproducts.com
>
>

Path: be02!atl-c01.usenetserver.com!news.usenetserver.com!atl-
c02.usenetserver.com!news.usenetserver.com!peer01.cox.net!cox.net!p01!
fed1read08.POSTED!53ab2750!not-for-mail
From: "AAA RF Products" <sales@aaarfproducts.com>
Newsgroups: alt.ham-
radio,rec.boats.electronics,rec.radio.amateur.antenna,rec.radio.amateur.h
omebrew
Subject: Coax Connectors & Adapters - High Quality@ Low Cost
Lines: 3
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
X-RFC2646: Format=Flowed; Original
Message-ID: <mxWNg.20259$RD.1342@fed1read08>
Date: Wed, 13 Sep 2006 09:43:32 -0700
NNTP-Posting-Host: 64.58.166.244
X-Complaints-To: abuse@cox.net
X-Trace: fed1read08 1158165714 64.58.166.244 (Wed, 13 Sep 2006 12:41:54
EDT)
NNTP-Posting-Date: Wed, 13 Sep 2006 12:41:54 EDT
Organization: Cox Communications
Xref: usenetserver.com alt.ham-radio:118307 rec.boats.electronics:161754
rec.radio.amateur.antenna:332702 rec.radio.amateur.homebrew:199125
X-Received-Date: Wed, 13 Sep 2006 12:41:55 EDT (be02)

Please see www.aaarfproducts.com

Here's some information from Cox Communications you should be interested
in, shortly:

"Newsgroups. Messages posted to newsgroups must comply with the written
charters or FAQs for those newsgroups. Advertisements, solicitations, or
other commercial messages should be posted only in those newsgroups whose
charters or FAQs explicitly permit them. You are responsible for
determining the policies of a given newsgroup before posting to it.
Posting or cross-posting the same or substantially similar messages to
more than eight newsgroups is prohibited. Our news software will

automatically cancel any messages posted to nine or more newsgroups.

Binary files may not be posted to newsgroups not specifically named for that purpose. Users posting binary files to groups with policies concerning the permissible daily volume of posted files are required to observe those limitations.

You may not attempt to "flood" or disrupt Usenet newsgroups. Disruption is defined as posting a large number of messages to a newsgroup, which contain no substantive content, to the extent that normal discussion in the group is significantly hindered. Examples of disruptive activities include, but are not limited to, posting multiple messages with no text in the body, or posting many follow-ups to messages with no new text. Messages may not be canceled, except by the author or by official newsgroup moderators performing their duties. "

This is from their AUP on:
http://www.cox.com/policy/#Acceptable_Use_Policy

You'll find none of the newsgroups you spammed with this post allow commercial spam in their FAQs.....

Cox has our reports....This ISN'T your free advertising medium....

Your IP is easy to find:
NNTP-Posting-Host: 64.58.166.244
X-Complaints-To: abuse@cox.net
X-Trace: fed1read08 1158165714 64.58.166.244 (Wed, 13 Sep 2006 12:41:54 EDT)
NNTP-Posting-Date: Wed, 13 Sep 2006 12:41:54 EDT

Thank you for making this your LAST spam post!

--
There's amazing intelligence in the Universe.
You can tell because none of them ever called Earth.

4390. Re: PayPal horror stories

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 18:38:36 UTC
From: Unrevealed Source <unrevealed_source@nospam.com>
Message-ID: <AfYNg.57$wK4.27@newsfe03.lga>
Source record: 10541
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

Never had a problem with Paypal. Ever. In fact, I generally don't bid on
auctions UNLESS the seller takes Paypal.

Is it just a coincidence that this collection of horror stories is selling
an alternative?

"Rodnay" <purple5golftee@yahoo.nosp.com> wrote in message
news:1f7e0$45082966$d1cc5956$22166@snip.allthenewsgroups.com...
>A new site with dozens of horror stories from
> people who've done business using Paypal
>
> http://www.paypalwarning.com/
>
> PayPal is just like POISON IVY --------> don't touch it with a 12' pole.

4391. Carl and Jerry adventures, 1964 Pop Electronics

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 20:41:13 UTC
From: billb@eskimo.com
Message-ID: <1158180072.943155.211630@e3g2000cwe.googlegroups.com>
Source record: 10542
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.physics

This from those guys who were making an online archive of old Popular
Electronics mags:

Carl and Jerry stories (J. Frye, Pop Electronics 1954 - 1964)
http://home.gwi.net/~jdebell/pe/cj/cnjindex.htm

example:

"The Girl Detector"
http://home.gwi.net/~jdebell/pe/cj/v20-1.htm

Also another PE archive:

Pop. Electronics magazine covers and various projects, jpeg

http://www.swtpc.com/mholley/PopularElectronics/Popular_Electronics.htm

((((((((((((((((((((((((o)))))))))))))))))))))))
William J. Beaty http://staff.washington.edu/wbeaty/
Research Engineer UW Chem Dept, Bagley Hall RM74
beaty@chem.washington.edu Box 351700, Seattle, WA 98195-1700
ph:206-543-6195 fax:206-685-8665

4392. Re: PayPal horror stories

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 20:48:54 UTC
From: "ve3..." <ve3iut@hotmail.com>
Message-ID: <1158180534.610502.290400@i42g2000cwa.googlegroups.com>
Source record: 10543
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

Unrevealed Source wrote:
> Never had a problem with Paypal. Ever. In fact, I generally don't bid on
> auctions UNLESS the seller takes Paypal.
>
> Is it just a coincidence that this collection of horror stories is selling
> an alternative?
"""

Because of phishing, trojans, and other very smart crooks trying to get
into my account, and also because of Paypal complaints that are legion,
there is no way I would link up my main bank account with Paypal. When
I sell something on ebay, I request payment by a money order, when I
buy something on ebay I pay by money order. If the seller wants Paypal
only, I move on to the next listing. I have noticed that more and more
sellers are glad to accept money orders, especially individuals who are
selling their own stuff. I have had no problems with Paypal but there
are just too many really clever scammers working the internet. I
maintain a tiny account in a different bank to handle fees: if I do get
hit by a crook, or by Paypal, the loot would only be about $5.00. In
addition, in Canada, interbank money transfers are safe and inexpensive.

4393. Re: Carl and Jerry adventures, 1964 Pop Electronics

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 20:58:18 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <ee9rda$pl1$1@puck.litech.org>
Source record: 10544
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.physics

In rec.radio.amateur.homebrew billb@eskimo.com wrote:

> This from those guys who were making an online archive of old Popular
> Electronics mags:

> Carl and Jerry stories (J. Frye, Pop Electronics 1954 - 1964)
> http://home.gwi.net/~jdebell/pe/cj/cnjindex.htm

> example:

> "The Girl Detector"
> http://home.gwi.net/~jdebell/pe/cj/v20-1.htm

> Also another PE archive:

> Pop. Electronics magazine covers and various projects, jpeg

> http://www.swtpc.com/mholley/PopularElectronics/Popular_Electronics.htm

OUTStanding!

Thanks very much indeed.

--
" ... the spammers are out there breeding like methamphetamine-crazed
rats on Viagra ... ."
-- Steve VanDevender, in the Monastery

4394. Re: PayPal horror stories

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 21:37:40 UTC
From: "Richard W. Solomon, W1KSZ" <w1ksz@earthlink.net>
Message-ID: <6eugg2lhifqpomku6q6dpeol34h76n88rs@4ax.com>
Source record: 10545
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

One compelling reason to ONLY fund PayPal with a Credit Card that
will charge-back unauthorized activity and to request a check if you
have more than $20 in your account.
They cannot take what they don't have.

RS

On Wed, 13 Sep 2006 11:05:15 -0400, "Rodnay"
<purple5golftee@yahoo.nosp.com> wrote:

>A new site with dozens of horror stories from
>people who've done business using Paypal
>
>http://www.paypalwarning.com/
>
>PayPal is just like POISON IVY --------> don't touch it with a 12' pole.

4395. Re: PayPal horror stories

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 21:39:04 UTC
From: Mark@kb9rqz.com
Message-ID: <45086d6e$0$19712$88260bb3@free.teranews.com>
Source record: 10546
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

"ve3..." <ve3iut@hotmail.com> wrote in message
news:1158180534.610502.290400@i42g2000cwa.googlegroups.com...
>
> Unrevealed Source wrote:
>> Never had a problem with Paypal. Ever. In fact, I generally don't bid
>> on
>> auctions UNLESS the seller takes Paypal.
>>
>> Is it just a coincidence that this collection of horror stories is
>> selling
>> an alternative?
>
"""

> Because of phishing, trojans, and other very smart crooks trying to get
> into my account, and also because of Paypal complaints that are legion,
> there is no way I would link up my main bank account with Paypal. When
> I sell something on ebay, I request payment by a money order, when I
> buy something on ebay I pay by money order. If the seller wants Paypal
> only, I move on to the next listing. I have noticed that more and more
> sellers are glad to accept money orders, especially individuals who are
> selling their own stuff. I have had no problems with Paypal but there
> are just too many really clever scammers working the internet. I
> maintain a tiny account in a different bank to handle fees: if I do get
> hit by a crook, or by Paypal, the loot would only be about $5.00. In
> addition, in Canada, interbank money transfers are safe and inexpensive.
>
with the punce gotcha he wonders why I simple don't bother to ty impoving my
spelling do u hav anyting cognet two say?

--
Posted via a free Usenet account from http://www.teranews.com

4396. Re: 4-400 on 6 meters ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 22:44:22 UTC
From: "Roger (K8RI)" <ValidAddress@my.com>
Message-ID: <a52hg2pciqpu03gpq8hqqmd3sipoee0kfl@4ax.com>
Source record: 10547

On Wed, 13 Sep 2006 13:09:43 +0100, Highland Ham
<abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:

>Roger (K8RI) wrote:
>> On Tue, 12 Sep 2006 23:16:20 GMT, "SNOWDEN" <snowden@peoplepc.com>
>> wrote:
>>
>>> Anyone been successful in building an amplifier at 6 meters? I have a
>>> couple and was thinking about trying it.
>>
>> I've not seen a 4-400 amp on six,, but they are rated to 110 MHz and
>> the book shows just shy of the legal limit out at 75 MHz.
>>
>> I don't know how difficult the'd be to neutralize.
>> Sounds like fun and I think they'd be a better tube for six than
>> 3-400s or 3-500s.
>==========
>Up to the mid 1970s type 4-400 transmitting valves (tubes) were used in
>the UK in Band 1 (approx 45-65 MHz)TV transmitters.
>For a 7 kWatts area transmitter there were 7 chassis of 2 valves each.
>So they should be excellent for the 50 MHz amateur band.
>
>A very early design can be found in QST March 1967 ,pages 11 - 15.
>Titled : Six-Meter Kilowatt with 4-400As or4-125As.
>
>The design involves 2 valves (tubes) in push-pull config.
>
>Although push pull RF Power Amps are nowadays no longer or not
>frequently used , I feel it is still interesting reading and might give
>some ideas for a homebrew amplifier.
>

Many years ago, there was an article in QST (I think) that used a pair
of 6C21 radar pulse modulators in Push pull with copper pipe for a
tank circuit. I don't remember what they used for a link but I think
it was just a u-shaped piece of smaller tubing.

That thing would put out today's legal limit with a sneeze. Even more
if you turned the driver on.

Unfortunately 6C21s are big (bout 16" tall), difficult to find, and
expensive. I used to pay $5 USD each.

>If you can't find the article , I can send you a scanned copy of the 5
>pages.
>

>To email me remove the obvious chars from the above address.
>
>Frank GM0CSZ / KN6WH
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com

4397. Re: PayPal horror stories

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 23:11:35 UTC
From: Mark@kb9rqz.com
Message-ID: <k04hg2h09marl25i26vmk47e3vn9r0pej7@4ax.com>
Source record: 10548
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

On Wed, 13 Sep 2006 17:39:04 -0400, <Mark@kb9rqz.com> wrote:

forgery woger
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4398. Re: 4-400 on 6 meters ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-13 23:45:38 UTC
From: Roger Leone <raleoneTAKEOUT@sbcglobal.net>
Message-ID: <CK0Og.921$GR.727@newssvr29.news.prodigy.net>
Source record: 10549

Doug:

It was the wide use of these tubes (along with others like the 4-250 and 4-1000) in the TV and FM broadcasting industry that made them so plentiful and allowed "used pulls" to be so readily available to hams. Amp designs using them have been around for decades. I just looked in the 1965 ARRL handbook and they have a 4-250 amp for 6 meters. A little homework should turn up many more.

Good luck,

Roger K6XQ

4399. Re: Carl and Jerry adventures, 1964 Pop Electronics

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 00:00:03 UTC
From: Sam Wormley <swormley1@mchsi.com>
Message-ID: <7Y0Og.186303$1i1.65874@attbi_s72>
Source record: 10550
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.physics

billb@eskimo.com wrote:
> This from those guys who were making an online archive of old Popular
> Electronics mags:
>
> Carl and Jerry stories (J. Frye, Pop Electronics 1954 - 1964)
> http://home.gwi.net/~jdebell/pe/cj/cnjindex.htm
>
> example:
>
> "The Girl Detector"
> http://home.gwi.net/~jdebell/pe/cj/v20-1.htm
>
>
>
> Also another PE archive:
>
> Pop. Electronics magazine covers and various projects, jpeg
>
> http://www.swtpc.com/mholley/PopularElectronics/Popular_Electronics.htm
>
>
> ((((((((((((((((((((((((o)))))))))))))))))))))))
> William J. Beaty http://staff.washington.edu/wbeaty/
> Research Engineer UW Chem Dept, Bagley Hall RM74
> beaty@chem.washington.edu Box 351700, Seattle, WA 98195-1700
> ph:206-543-6195 fax:206-685-8665
>

Thank You!

4400. Re: Carl and Jerry adventures, 1964 Pop Electronics

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 00:15:58 UTC
From: Bill Beaty <billb@eskimo.com>
Message-ID: <1158192958.918418.299530@e63g2000cwd.googlegroups.com>
Source record: 10551
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.physics

Mike Andrews wrote:

> _OUTStanding_!
>
> Thanks very much indeed.

Stolen from http://makezine.com/blog/

http://www.makezine.com/blog/archive/2006/08/carl_jerry_adventure_in_electr.html

Carl & Jerry were way before my time, but one summer vacation I ran out
of science books in our library's children section. So I got
permission to start reading all the back issues of Pop Electronics on
microfilm. Found lots of cool stuff from back before I was born!

((((((((((((((((((((((((o)))))))))))))))))))))))
William J. Beaty http://staff.washington.edu/wbeaty/
Research Engineer UW Chem Dept, Bagley Hall RM74
beaty@chem.washington.edu Box 351700, Seattle, WA 98195-1700
ph:206-543-6195 fax:206-685-8665

4401. Re: RFSim99 anomalies

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 00:26:41 UTC
From: Ted <kilocycles**@**yahoo.com>
Message-ID: <gh7hg2hnptgp18lbptt0tk9ung6v6hevu8@4ax.com>
Source record: 10552

On 9 Sep 2006 11:23:33 -0700, "Professor" <briangriffey@sbcglobal.net>
wrote:

>
>K7ITM wrote:
>> Hi all,
>>
>> Every once in a while I come across an anomaly in RFSim99. I'd be
>> happy if someone could tell me that I'm doing something wrong in the
>> following:
>>
>> Fire up the simulator. Tools-->Design-->Attenuator. Pi Section, 50R
>> input impedance, 50R output impedance, 10dB attenuation. Simulate.
>> !Current schematic will be overwritten; OK. Now note that the graphics
>> window displays S11 as 2E+31dB.
>>
>> In the circuit window, edit the values of the two 96.25 ohm resistors;
>> they have apparently been simulated to more decimal places than shown.
>> Just manually enter 96.25 ohms for each. Now the magnitude of S11 and
>> S22 show up as -102.69dB; that seems reasonable. The phases for S11,
>> S12, S21 and S22 are all zero. Now, from the graphics window,
---snip---

Aarrgg! This is very disappointing! I usually check at least my
values for LC circuits against the LADPAC programs In "Experimental
Methods in RF Design", however. By the way, when I click on
Tools/DesignAttenuator, the schematic that is in the pop-up window for
default 10 dB shows the three resistor values as 71.151 and 96.248.
When I go through the process you did, I get the same results. I
saved the file, and closed and reopened the program. Then, I loaded
the saved 10dBAtten.cct file, and of course got the same -102.69 dB
for S11. Then, I Tuned the values back to 71.151 (which immediately
displayed only 71.15), and tuned the other two to 96.248, (which
displayed 96.25). When I simulated, S11 was now -107 dB!

Regards,
Ted KX4OM

4402. Re: RFSim99 anomalies

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 00:49:10 UTC
From: Ted <kilocycles**@**yahoo.com>
Message-ID: <g49hg2dsslmn4a1u248a5k3popg9ir8gng@4ax.com>
Source record: 10553

On Wed, 13 Sep 2006 20:26:41 -0400, Ted <kilocycles**@**yahoo.com>
wrote:

>On 9 Sep 2006 11:23:33 -0700, "Professor" <briangriffey@sbcglobal.net>
>wrote:
>
>>
>>K7ITM wrote:
>>> Hi all,
>>>
>>> Every once in a while I come across an anomaly in RFSim99. I'd be
>>> happy if someone could tell me that I'm doing something wrong in the
>>> following:
>>>
>>> Fire up the simulator. Tools-->Design-->Attenuator. Pi Section, 50R
>>> input impedance, 50R output impedance, 10dB attenuation. Simulate.
>>> !Current schematic will be overwritten; OK. Now note that the graphics
>>> window displays S11 as 2E+31dB.
>>>
>>> In the circuit window, edit the values of the two 96.25 ohm resistors;
>>> they have apparently been simulated to more decimal places than shown.
>>> Just manually enter 96.25 ohms for each. Now the magnitude of S11 and
>>> S22 show up as -102.69dB; that seems reasonable. The phases for S11,
>>> S12, S21 and S22 are all zero. Now, from the graphics window,
>---snip---
>
>Aarrgg! This is very disappointing! I usually check at least my
>values for LC circuits against the LADPAC programs In "Experimental
>Methods in RF Design", however. By the way, when I click on
>Tools/DesignAttenuator, the schematic that is in the pop-up window for
>default 10 dB shows the three resistor values as 71.151 and 96.248.
>When I go through the process you did, I get the same results. I
>saved the file, and closed and reopened the program. Then, I loaded
>the saved 10dBAtten.cct file, and of course got the same -102.69 dB
>for S11. Then, I Tuned the values back to 71.151 (which immediately
>displayed only 71.15), and tuned the other two to 96.248, (which
>displayed 96.25). When I simulated, S11 was now -107 dB!
>
>Regards,
>Ted KX4OM

I just ran the simulation in the LADPAC programs. I first built the
attenuator in Ladbuild, with the resistors rounded off to two decimal
places, and saved the result. In GPLA, I got (after resetting the
scale to -120 dB) S11= -107.3. Then I edited the values to the 3

decimal place values from the original attenuator pop-up window of RFSim99, and got S11=-121.67.

The circuit review feature of GPLA still showed 2 decimal places, rounded off, but saving that version of the attenuator and opening the saved program in Ladbuild showed three decimal place values when clicking on the component.

It's surprising how a couple of thousandths of an ohm can change the S parameters that much.

Ted KX4OM

4403. Re: Carl and Jerry adventures, 1964 Pop Electronics

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 00:55:43 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2006.09.14.00.55.21.26563@example.net>
Source record: 10554
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.physics

On Wed, 13 Sep 2006 13:41:13 -0700, billb wrote:

> This from those guys who were making an online archive of old Popular
> Electronics mags:
>
> Carl and Jerry stories (J. Frye, Pop Electronics 1954 - 1964)
> http://home.gwi.net/~jdebell/pe/cj/cnjindex.htm
>

Dewd! I recognized the title of this one:
http://home.gwi.net/~jdebell/pe/cj/v18-3.htm
"Succoring a Soroban", and within two sentences I split a gut.

They probably wouldn't be allowed to publish such politically incorrect
stuff these days. ;-)

Cheers!
Rich

4404. Re: Carl and Jerry adventures, 1964 Pop Electronics

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 01:19:18 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <H62Og.50$UZ3.18451@news.sisna.com>
Source record: 10555
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.physics

I'd give a lot to get a copy of a PE article that ran in the (I believe)
58-60 time period regarding a "Game of 21" that was played with a telephone
stepping relay, where it was "you against the computer". I'd like to do a
discrete digital version for my freshman students as a lab project.

Designing the logic is simple; giving out a copy of "how we did it in the
'50s" is priceless.

Jim

<billb@eskimo.com> wrote in message
news:1158180072.943155.211630@e3g2000cwe.googlegroups.com...
>
> This from those guys who were making an online archive of old Popular
> Electronics mags:

4405. Re: Carl and Jerry adventures, 1964 Pop Electronics

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 01:38:32 UTC
From: Homer J Simpson <nobody@nowhere.com>
Message-ID: <so2Og.9308$bf5.6739@edtnps90>
Source record: 10556
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.physics

"RST Engineering" <jim@rstengineering.com> wrote in message
news:H62Og.50$UZ3.18451@news.sisna.com...

> I'd give a lot to get a copy of a PE article that ran in the (I believe)
> 58-60 time period regarding a "Game of 21" that was played with a
> telephone stepping relay, where it was "you against the computer". I'd
> like to do a discrete digital version for my freshman students as a lab
> project.
>
> Designing the logic is simple; giving out a copy of "how we did it in the
> '50s" is priceless.

See http://groups.yahoo.com/group/friendsofdigicomp/

4406. Re: Coax Connectors & Adapters - High Quality@ Low Cost

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 06:46:54 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4508FAB8.1543AE22@earthlink.net>
Source record: 10557
Cross-posted to: alt.ham-radio,rec.boats.electronics,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

AAA RF Products wrote:
>
> Please see www.aaarfproducts.com

Its a great site if you want no name connectors and coax so bad that
radio shack would be ashamed to sell it. I see that he no longer posts
his e-mail address in his spam. He's a foul mouthed pain in the ass.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

4407. QRP-ARCI

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 15:16:41 UTC
From: NoMoreSpam <Disgustedham@qrparci.org>
Message-ID: <k8-dnako2r3s75TYnZ2dnUVZ_sWdnZ2d@comcast.com>
Source record: 10558
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur,alt.ham.radio,rec.ham-radio

For a disgusting example of what happens when a small minded petty group decides to have a vendetta against a member.

http://w2agn/qrparci.html

Also what happens when we allow any foreign power, including the British, to take over an American institution.

4408. Re: QRP-ARCI

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 15:50:19 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <zfSdnTperaTN55TYnZ2dnUVZ_o2dnZ2d@rcn.net>
Source record: 10559
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur,alt.ham.radio,rec.ham-radio

NoMoreSpam wrote:
> For a disgusting example of what happens when a small minded petty group
> decides to have a vendetta against a member.
>
> http://w2agn/qrparci.html
>
> Also what happens when we allow any foreign power, including the
> British, to take over an American institution.

Your righteous indignation would probably have worked better if you
had provided a valid URL.

-Chuck

4409. Re: QRP-ARCI

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 16:58:59 UTC
From: NoMoreSpam <Disgustedham@qrparci.org>
Message-ID: <45098A53.4000707@qrparci.org>
Source record: 10560
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur,alt.ham.radio,rec.ham-radio

Chuck Harris wrote:
> NoMoreSpam wrote:
>> For a disgusting example of what happens when a small minded petty
>> group decides to have a vendetta against a member.
>>
>> http://w2agn/qrparci.html
>>
>> Also what happens when we allow any foreign power, including the
>> British, to take over an American institution.
>
> Your righteous indignation would probably have worked better if you
> had provided a valid URL.
>
> -Chuck

You are correct. That's what happens when one gets freally p*ssed off! The URL should be:

http://w2agn.net/qrparci.html

Thanks Chuck!

4410. Re: QRP-ARCI

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 16:59:44 UTC
From: NoMoreSpam <Disgustedham@qrparci.org>
Message-ID: <45098A80.4040501@qrparci.org>
Source record: 10561
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur,alt.ham.radio,rec.ham-radio

Chuck Harris wrote:
> NoMoreSpam wrote:
>> For a disgusting example of what happens when a small minded petty
>> group decides to have a vendetta against a member.
>>
>> http://w2agn/qrparci.html
>>
>> Also what happens when we allow any foreign power, including the
>> British, to take over an American institution.
>
> Your righteous indignation would probably have worked better if you
> had provided a valid URL.
>
> -Chuck

You are correct. That's what happens when one gets really p*ssed off! The URL should be:

http://w2agn.net/qrparci.html

Thanks Chuck!

4411. Re: QRP-ARCI

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 17:00:10 UTC
From: NoMoreSpam <Disgustedham@qrparci.org>
Message-ID: <FKWdnbvQZqksF5TYnZ2dnUVZ_uqdnZ2d@comcast.com>
Source record: 10562
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur,alt.ham.radio,rec.ham-radio

Chuck Harris wrote:
> NoMoreSpam wrote:
>> For a disgusting example of what happens when a small minded petty
>> group decides to have a vendetta against a member.
>>
>> http://w2agn/qrparci.html
>>
>> Also what happens when we allow any foreign power, including the
>> British, to take over an American institution.
>
> Your righteous indignation would probably have worked better if you
> had provided a valid URL.
>
> -Chuck

You are correct. That's what happens when one gets really p*ssed off! The URL should be:

http://w2agn.net/qrparci.html

Thanks Chuck!

4412. Re: RFSim99 anomalies

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 17:16:09 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1158254169.568943.140220@p79g2000cwp.googlegroups.com>
Source record: 10563

Hey, thanks for verifying my results, Ted.

It shouldn't be surprising that tiny variations in resistance cause large dB changes. Remember, you're essentially unbalancing a bridge, and looking at the unbalance over 100dB down from full "un-balance." That is, -100dB represents a one part in 10^5 unbalance. 40dB return loss is really quite good, and something you expect only in a pretty carefully controlled setup.

This same sort of thing reaches out and grabs you if you try to make a direct conversion receiver with I and Q paths to balance out the unwanted sideband. You need balance of not worse than ten parts per million to get 100dB sideband suppression, and the components you are using probably have, at BEST, temperature coefficients that can make things worse than that with only a one degree C change.

On the up side, it's exactly this sensitivity that is a strong plus for bridge measurements.

Also, I'm not about to throw RFSim99 out of my toolkit. I just need to be aware of its anomalies, and I'll be very cautious about saving results as an S-parameter file for sure. I see that even an attenuator that's detuned enough that it has only 60dB return loss still gives 90 degree phase shifts! But if I add even 1fF of capacitance across the 71.151 ohm resistor (in the 10dB attenuator, as designed by the attenuator tool), the saved S-parameter file is OK. S12 and S21 are zero degrees (till you get out to really high frequencies). S11 and S22 still show -90 degrees phase, but with a capacitive load (every so slightly capacitive), that seems like the right answer.

By the way, a trick that seems to work to get very accurate component values is to put parts in parallel or series. For example, to simulate a 57.6325nH inductance (ridiculous though it is in practice), invoke a 57.00nH inductance in series with a 632.5pH. Unfortunately, that doesn't work for sub-ohm resistances; milliohms are converted to ohms, and only two decimal places. Double-checking to see that the 57.6325nH inductance simulates correctly, I resonated it with 1nF. I expect resonance at 20.964591MHz, and RFSim with 401 points displayed from 20.965 to 20.967, shows resonance at 20.96460. Changing the simulated inductance by 0.1pH changes the resonance as expected.

Cheers,
Tom

Ted wrote:
> On Wed, 13 Sep 2006 20:26:41 -0400, Ted <kilocycles**@**yahoo.com>

> wrote:
>
> >On 9 Sep 2006 11:23:33 -0700, "Professor" <briangriffey@sbcglobal.net>
> >wrote:
> >
> >>
> >>K7ITM wrote:
> >>> Hi all,
> >>>
> >>> Every once in a while I come across an anomaly in RFSim99. I'd be
> >>> happy if someone could tell me that I'm doing something wrong in the
> >>> following:
> >>>
> >>> Fire up the simulator. Tools-->Design-->Attenuator. Pi Section, 50R
> >>> input impedance, 50R output impedance, 10dB attenuation. Simulate.
> >>> !Current schematic will be overwritten; OK. Now note that the graphics
> >>> window displays S11 as 2E+31dB.
> >>>
> >>> In the circuit window, edit the values of the two 96.25 ohm resistors;
> >>> they have apparently been simulated to more decimal places than shown.
> >>> Just manually enter 96.25 ohms for each. Now the magnitude of S11 and
> >>> S22 show up as -102.69dB; that seems reasonable. The phases for S11,
> >>> S12, S21 and S22 are all zero. Now, from the graphics window,
> >>---snip---
> >
> >Aarrgg! This is very disappointing! I usually check at least my
> >values for LC circuits against the LADPAC programs In "Experimental
> >Methods in RF Design", however. By the way, when I click on
> >Tools/DesignAttenuator, the schematic that is in the pop-up window for
> >default 10 dB shows the three resistor values as 71.151 and 96.248.
> >When I go through the process you did, I get the same results. I
> >saved the file, and closed and reopened the program. Then, I loaded
> >the saved 10dBAtten.cct file, and of course got the same -102.69 dB
> >for S11. Then, I Tuned the values back to 71.151 (which immediately
> >displayed only 71.15), and tuned the other two to 96.248, (which
> >displayed 96.25). When I simulated, S11 was now -107 dB!
> >
> >Regards,
> >Ted KX4OM
>
> I just ran the simulation in the LADPAC programs. I first built the
> attenuator in Ladbuild, with the resistors rounded off to two decimal
> places, and saved the result. In GPLA, I got (after resetting the
> scale to -120 dB) S11= -107.3. Then I edited the values to the 3
> decimal place values from the original attenuator pop-up window of
> RFSim99, and got S11=-121.67.
>
> The circuit review feature of GPLA still showed 2 decimal places,
> rounded off, but saving that version of the attenuator and opening the
> saved program in Ladbuild showed three decimal place values when

> clicking on the component.
>
> It's surprising how a couple of thousandths of an ohm can change the S
> parameters that much.
>
> Ted KX4OM

4413. Re: Overheating AA batteries

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 17:27:20 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1158254840.360428.316620@k70g2000cwa.googlegroups.com>
Source record: 10564
Cross-posted to: rec.crafts.metalworking,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Chemistry lesson for the day:

Be careful what you call the cathode and what you call the anode.
Oxidation ALWAYS occurs at the Anode, and reduction always occurs at
the cathode. The oxidation process results in a chemical losing
electrons, and the reduction process results in a chemical gaining
electrons. (Mnemonics: "oxidation" and "anode" both start with
vowels; "reduction" and "cathode" both start with consonants. "LEO sez
GER": Loss of Electrons is Oxidation. Gain of Electrons is
Reduction.) In a cell delivering power, the ANODE is the NEGATIVE
terminal--the electrons given up in the oxidation chemical reaction
come out there. If you re-charge the cell, the roles of anode and
cathode are reversed. You feed electrons into the negative terminal,
and (with luck) cause a reduction reaction where the chemical at that
pole picks up the electrons and is converted back to what it was when
the battery was freshly charged.

Cheers,
Tom

Mark Rand wrote:
> On Sat, 09 Sep 2006 16:11:20 -0400, ken scharf
> <wa2mzeNOSPAMBOTS@bellsouth.net> wrote:
>
> >bart wrote:
> >> This evening the GF noticed that the remote control wasn't working &
> >> was hot.
> >> I pulled out the extremely hot AA batteries.
> >> It looks like the spring contact in the remote control, on the
> >> negative side had worn away the plastic covering on the side of the
> >> battery & shorted the side metal battery casing to the negative
> >> contact, thereby causing the overheating.
> >> In my many years of battery dissection, I've never seen the side
> >> casing of a battery being positive before!
> >> These were "Golden Power" alkaline batteries, made in China.
> >> They were the original batteries that came with the remote (for a
> >> Shaw digital cable box).
> >> Anyone ever seen a positive case AA battery before, or is this a new (
> >> dumb) idea?
> >I've seen many Alkaline batteries with the outside casing connected to
> >the 'tit' on top as the positive and the bottom flat connector was
> >insulated from the body of the battery. alkaline batteries have
> >different chemistry from carbon zinc resulting in an inverted
> >construction. This may actually be the norm, but in the larger sizes

> >the plastic outer wrap hides the details. Just looked at a DuraCell
> >"D" and it is of the inverted construction, but the insulation of the
> >battery bottom (-) terminal from the case of the battery is hidden
> >under the plastic wrapping.
>
>
> Since it's the cathode that gets eaten in whichever reaction is used for the
> battery type, it might make sense to have the anode as the case.
>
> I could have done with this 25 years ago when I got sent abroad for work for
> three of months and came back to find that the transistor radio batteries had
> leaked all over one of my (expensive) loudspeakers :-(
>
> Mark Rand
> RTFM

4414. Re: Where does the expertise of today's Radio Ham lie?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 17:39:04 UTC
From: John <no@spam.4.me>
Message-ID: <eec465$9ok$1@emma.aioe.org>
Source record: 10565
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Roger (K8RI)" <ValidAddress@my.com> wrote in message >

> Or the whole project http://www.rogerhalstead.com/ham_files/tower.htm
>

I love the photo

http://www.rogerhalstead.com/ham_files/Tower28_files/P9306146S.jpg

A _REAL_ DX Cat!

4415. Re: QRP-ARCI

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 19:06:22 UTC
From: Mark@kb9rqz.com
Message-ID: <45099b25$0$19646$88260bb3@free.teranews.com>
Source record: 10566
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur,alt.ham.radio,rec.ham-radio

"NoMoreSpam" <Disgustedham@qrparci.org> wrote in message
news:FKWdnbvQZqksF5TYnZ2dnUVZ_uqdnZ2d@comcast.com...
> Chuck Harris wrote:
>> NoMoreSpam wrote:
>>> For a disgusting example of what happens when a small minded petty group
>>> decides to have a vendetta against a member.
>>>
>>> http://w2agn/qrparci.html
>>>
>>> Also what happens when we allow any foreign power, including the
>>> British, to take over an American institution.
>>
>> Your righteous indignation would probably have worked better if you
>> had provided a valid URL.
>>
>> -Chuck
>
> You are correct. That's what happens when one gets really p*ssed off! The
> URL
> should be:
>
> http://w2agn.net/qrparci.html
>
> Thanks Chuck!
>
quit floding teh gruop with ur off tpoic nonsance you post it trhee times
you sppamming fool.

with the punce gotcha he wonders why I simple don't bother to ty impoving my
spelling do u hav anyting cognet two say?

--
Posted via a free Usenet account from http://www.teranews.com

4416. Re: QRP-ARCI

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 19:52:24 UTC
From: NoMoreSpam <Disgustedham@qrparci.org>
Message-ID: <-t6dnWUPOfCSLpTYnZ2dnUVZ_oydnZ2d@comcast.com>
Source record: 10567
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur,alt.ham.radio,rec.ham-radio

Mark@kb9rqz.com wrote:

>>
> quit floding teh gruop with ur off tpoic nonsance you post it trhee times
> you sppamming fool.

> with the punce gotcha he wonders why I simple don't bother to ty impoving my
> spelling do u hav anyting cognet two say?
>
>
>

Are you really that stupid, or do you just play a moron on Usenet?

4417. Re: QRP-ARCI

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 20:21:22 UTC
From: Mark@kb9rqz.com
Message-ID: <4509acb9$0$19724$88260bb3@free.teranews.com>
Source record: 10568
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur,alt.ham.radio,rec.ham-radio

"NoMoreSpam" <Disgustedham@qrparci.org> wrote in message
news:-t6dnWUPOfCSLpTYnZ2dnUVZ_oydnZ2d@comcast.com...
> Mark@kb9rqz.com wrote:
>
>>>
>> quit floding teh gruop with ur off tpoic nonsance you post it trhee times
>> you sppamming fool.
>
>> with the punce gotcha he wonders why I simple don't bother to ty impoving
>> my spelling do u hav anyting cognet two say?
>>
>>
>>
>
> Are you really that stupid, or do you just play a moron on Usenet?
>
no it has to do with beignthe victum of a no punce no class radio ops

with the punce gotcha he wonders why I simple don't bother to ty impoving my
spelling do u hav anyting cognet two say?

--
Posted via a free Usenet account from http://www.teranews.com

4418. Re: QRP-ARCI

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 20:30:20 UTC
From: Mark@kb9rqz.com
Message-ID: <4509aed3$0$19639$88260bb3@free.teranews.com>
Source record: 10569
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur,alt.ham.radio,rec.ham-radio

"NoMoreSpam" <Disgustedham@qrparci.org> wrote in message
news:-t6dnWUPOfCSLpTYnZ2dnUVZ_oydnZ2d@comcast.com...
> Mark@kb9rqz.com wrote:
>
>>>
>> quit floding teh gruop with ur off tpoic nonsance you post it trhee times
>> you sppamming fool.
>
>> with the punce gotcha he wonders why I simple don't bother to ty impoving
>> my spelling do u hav anyting cognet two say?
>>
>>
>>
>
> Are you really that stupid, or do you just play a moron on Usenet?
>
you show yourself as Robeson or one of clones by YOUR obession with sex
as if you aren't getting any

do yourself a favor get alife or get laid you will enjoy life more

with the punce gotcha he wonders why I simple don't bother to ty impoving my
spelling do u hav anyting cognet two say?

--
Posted via a free Usenet account from http://www.teranews.com

4419. Re: QRP-ARCI

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 20:39:00 UTC
From: NoMoreSpam <Disgustedham@qrparci.org>
Message-ID: <_6edna0lioxmlJTYnZ2dnUVZ_vmdnZ2d@comcast.com>
Source record: 10570
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur,alt.ham.radio,rec.ham-radio

Mark@kb9rqz.com wrote:
> "NoMoreSpam" <Disgustedham@qrparci.org> wrote in message
> news:-t6dnWUPOfCSLpTYnZ2dnUVZ_oydnZ2d@comcast.com...
>> Mark@kb9rqz.com wrote:
>>
>>> quit floding teh gruop with ur off tpoic nonsance you post it trhee times
>>> you sppamming fool.
>>> with the punce gotcha he wonders why I simple don't bother to ty impoving
>>> my spelling do u hav anyting cognet two say?
>>>
>>>
>>>
>> Are you really that stupid, or do you just play a moron on Usenet?
>>
> you show yourself as Robeson or one of clones by YOUR obession with sex
> as if you aren't getting any
>
> do yourself a favor get alife or get laid you will enjoy life more

Sex? I didn't see any reference to sex. I did, however, look at your "blog," etc., and found the answer to my question.

You are not only a moron, but possibly a dangerous psychotic one.

You are going into the "delete without reading" filter.

4420. Re: QRP-ARCI

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 20:45:33 UTC
From: Mark@kb9rqz.com
Message-ID: <4509b263$0$19693$88260bb3@free.teranews.com>
Source record: 10571
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur,alt.ham.radio,rec.ham-radio

"NoMoreSpam" <Disgustedham@qrparci.org> wrote in message
news:_6edna0IioxmIJTYnZ2dnUVZ_vmdnZ2d@comcast.com...
> Mark@kb9rqz.com wrote:
>> "NoMoreSpam" <Disgustedham@qrparci.org> wrote in message
>> news:-t6dnWUPOfCSLpTYnZ2dnUVZ_oydnZ2d@comcast.com...
>>> Mark@kb9rqz.com wrote:
>>>
>>>> quit floding teh gruop with ur off tpoic nonsance you post it trhee
>>>> times you sppamming fool.
>>>> with the punce gotcha he wonders why I simple don't bother to ty
>>>> impoving my spelling do u hav anyting cognet two say?
>>>>
>>>>
>>>>
>>> Are you really that stupid, or do you just play a moron on Usenet?
>>>
>> you show yourself as Robeson or one of clones by YOUR obession with sex
>> as if you aren't getting any
>>
>> do yourself a favor get alife or get laid you will enjoy life more
>
>
> Sex? I didn't see any reference to sex. I did, however, look at your
> "blog," etc., and found the answer to my question.
>
> You are not only a moron, but possibly a dangerous psychotic one.
>
> You are going into the "delete without reading" filter.
>
that you would like me and any that dares disagreewithyou to get off
the nets yes I know what you want robeson or Robeson clone
http://kb9rqz.blogspot.com/

with the punce gotcha he wonders why I simple don't bother to ty impoving my
spelling do u hav anyting cognet two say?
you are pretty dumb loousely translated it mean "fuck you"

--
Posted via a free Usenet account from http://www.teranews.com

4421. Re: PayPal horror stories

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 20:50:50 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12gjg5c7v745776@corp.supernews.com>
Source record: 10572
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

"Richard W. Solomon, W1KSZ" <w1ksz@earthlink.net> wrote in message
news:6eugg2lhifqpomku6q6dpeol34h76n88rs@4ax.com...
> One compelling reason to ONLY fund PayPal with a Credit Card that
> will charge-back unauthorized activity and to request a check if you
> have more than $20 in your account.
> They cannot take what they don't have.

No, but PayPal has always maintained that the "service" they provide is merely transferring money around, so if you have your bank charge-back something that went through PayPal they *will* dispute the chargeback, and since they can demonstrate that they transferred the money from you to a seller, it's highly unlikely the bank will side with you. As far as the bank is concerned, you sent Paypal some money and they then sent it on to someone else -- unless you can dispute *that*, you're out of luck. The bank doesn't care what "someone else" might have done with the money subsequently.

That being said, PayPal does have their own fraud protection system these days. IMO, dealing with PayPal isn't as safe as buying directly with a credit card, but it's *much* safer than sending a check, money order, etc.

---Joel

4422. Re: QRP-ARCI

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 22:15:51 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <C12F22A7.4329E%dbowey@comcast.net>
Source record: 10573
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur,alt.ham.radio,rec.ham-radio

On 9/14/06 1:45 PM, in article 4509b263$0$19693$88260bb3@free.teranews.com,
"Mark@kb9rqz.com" <Mark@kb9rqz.com> wrote:

>
> "NoMoreSpam" <Disgustedham@qrparci.org> wrote in message
> news:_6edna0IioxmIJTYnZ2dnUVZ_vmdnZ2d@comcast.com...
>> Mark@kb9rqz.com wrote:
>>> "NoMoreSpam" <Disgustedham@qrparci.org> wrote in message
>>> news:-t6dnWUPOfCSLpTYnZ2dnUVZ_oydnZ2d@comcast.com...
>>>> Mark@kb9rqz.com wrote:
>>>>
>>>>> quit floding teh gruop with ur off tpoic nonsance you post it trhee
>>>>> times you sppamming fool.
>>>>> with the punce gotcha he wonders why I simple don't bother to ty
>>>>> impoving my spelling do u hav anyting cognet two say?
>>>>>
>>>>>
>>>>>
>>>> Are you really that stupid, or do you just play a moron on Usenet?
>>>>
>>> you show yourself as Robeson or one of clones by YOUR obession with sex
>>> as if you aren't getting any
>>>
>>> do yourself a favor get alife or get laid you will enjoy life more
>>
>>
>> Sex? I didn't see any reference to sex. I did, however, look at your
>> "blog," etc., and found the answer to my question.
>>
>> You are not only a moron, but possibly a dangerous psychotic one.
>>
>> You are going into the "delete without reading" filter.
>>
> that you would like me and any that dares disagreewithyou to get off
> the nets yes I know what you want robeson or Robeson clone
> http://kb9rqz.blogspot.com/
>
>
> with the punce gotcha he wonders why I simple don't bother to ty impoving my
> spelling do u hav anyting cognet two say?
> you are pretty dumb loousely translated it mean "fuck you"
>
>

Clearly you are an ignorant, vulgar fool.

4423. Re: Overheating AA batteries

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 22:18:19 UTC
From: Mark Rand <randm@internettie.co.uk>
Message-ID: <h5ljg29i5gc3s4hjo3bcgns9qfi8gkbill@4ax.com>
Source record: 10574
Cross-posted to: rec.crafts.metalworking,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On 14 Sep 2006 10:27:20 -0700, "K7ITM" <k7itm@msn.com> wrote:

>Chemistry lesson for the day:
>
>Be careful what you call the cathode and what you call the anode.
>Oxidation ALWAYS occurs at the Anode, and reduction always occurs at
>the cathode. The oxidation process results in a chemical losing
>electrons, and the reduction process results in a chemical gaining
>electrons. (Mnemonics: "oxidation" and "anode" both start with
>vowels; "reduction" and "cathode" both start with consonants. "LEO sez
>GER": Loss of Electrons is Oxidation. Gain of Electrons is
>Reduction.) In a cell delivering power, the ANODE is the NEGATIVE
>terminal--the electrons given up in the oxidation chemical reaction
>come out there. If you re-charge the cell, the roles of anode and
>cathode are reversed. You feed electrons into the negative terminal,
>and (with luck) cause a reduction reaction where the chemical at that
>pole picks up the electrons and is converted back to what it was when
>the battery was freshly charged.
>
>Cheers,
>Tom
>
>

Guilty as charged (groan).
It's just like my account with the bank where debits remove money instead of
adding money like they should do :-)

Mark Rand
RTFM

4424. Re: QRP-ARCI

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 22:42:07 UTC
From: Mark@kb9rqz.com
Message-ID: <4509cdb7$0$19699$88260bb3@free.teranews.com>
Source record: 10575
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur,alt.ham.radio,rec.ham-radio

"Don Bowey" <dbowey@comcast.net> wrote in message
news:C12F22A7.4329E%dbowey@comcast.net...
> On 9/14/06 1:45 PM, in article
> 4509b263$0$19693$88260bb3@free.teranews.com,
> "Mark@kb9rqz.com" <Mark@kb9rqz.com> wrote:
>
>>
>> "NoMoreSpam" <Disgustedham@qrparci.org> wrote in message
>> news:_6edna0IioxmIJTYnZ2dnUVZ_vmdnZ2d@comcast.com...
>>> Mark@kb9rqz.com wrote:
>>>> "NoMoreSpam" <Disgustedham@qrparci.org> wrote in message
>>>> news:-t6dnWUPOfCSLpTYnZ2dnUVZ_oydnZ2d@comcast.com...
>>>>> Mark@kb9rqz.com wrote:
>>>>>
>>>>>> quit floding teh gruop with ur off tpoic nonsance you post it trhee
>>>>>> times you sppamming fool.
>>>>>> with the punce gotcha he wonders why I simple don't bother to ty
>>>>>> impoving my spelling do u hav anyting cognet two say?
>>>>>>
>>>>>>
>>>>>>
>>>>> Are you really that stupid, or do you just play a moron on Usenet?
>>>>>
>>>> you show yourself as Robeson or one of clones by YOUR obession with sex
>>>> as if you aren't getting any
>>>>
>>>> do yourself a favor get alife or get laid you will enjoy life more
>>>
>>>
>>> Sex? I didn't see any reference to sex. I did, however, look at your
>>> "blog," etc., and found the answer to my question.
>>>
>>> You are not only a moron, but possibly a dangerous psychotic one.
>>>
>>> You are going into the "delete without reading" filter.
>>>
>> that you would like me and any that dares disagreewithyou to get off
>> the nets yes I know what you want robeson or Robeson clone
>> http://kb9rqz.blogspot.com/
>>
>>
>> with the punce gotcha he wonders why I simple don't bother to ty impoving

>> my
>> spelling do u hav anyting cognet two say?
>> you are pretty dumb loousely translated it mean "fuck you"
>>
>>
> Clearly you are an ignorant, vulgar fool.
>
I don't like Homophobes but even worse than Homophobes are thoose the
use gay bashing selctively for own ends. I can respect a homophobe that
is consistant and honest about it but these hypocrites

with the punce gotcha he wonders why I simple don't bother to ty impoving my
spelling do u hav anyting cognet two say?

--
Posted via a free Usenet account from http://www.teranews.com

4425. Re: QRP-ARCI

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 22:42:56 UTC
From: Mark@kb9rqz.com
Message-ID: <fmmjg2laaarrs3njl0fkbjak1riattqjo0@4ax.com>
Source record: 10576
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur,alt.ham.radio,rec.ham-radio

On Thu, 14 Sep 2006 15:52:24 -0400, NoMoreSpam
<Disgustedham@qrparci.org> wrote:

>Mark@kb9rqz.com wrote:
>
>>>
>> quit floding teh gruop with ur off tpoic nonsance you post it trhee times
>> you sppamming fool.
>
>> with the punce gotcha he wonders why I simple don't bother to ty impoving my
>> spelling do u hav anyting cognet two say?
>>
>>
>>
>
>Are you really that stupid, or do you just play a moron on Usenet?
that is just mforger posting as as Me since some folks are so
frightened of me they have to try and discredit me
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4426. Re: QRP-ARCI

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 22:46:06 UTC
From: Mark@kb9rqz.com
Message-ID: <2smjg2h21phatsirabm71p7lm02ephvvfq@4ax.com>
Source record: 10577
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur,alt.ham.radio,rec.ham-radio

On Thu, 14 Sep 2006 18:42:07 -0400, <Mark@kb9rqz.com> wrote:

>
>"Don Bowey" <dbowey@comcast.net> wrote in message
>news:C12F22A7.4329E%dbowey@comcast.net...
>> On 9/14/06 1:45 PM, in article
>> 4509b263$0$19693$88260bb3@free.teranews.com,
>> "Mark@kb9rqz.com" <Mark@kb9rqz.com> wrote:

>> Clearly you are an ignorant, vulgar fool.
>>
>I don't like Homophobes but even worse than Homophobes are thoose the
>use gay bashing selctively for own ends. I can respect a homophobe that
>is consistant and honest about it but these hypocrites
interesting that some is stealing my lines to insert them into threads
where I haven't posted
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4427. Re: QRP-ARCI

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 23:45:06 UTC
From: Lloyd Morgan <lloyd@no.spammmmm>
Message-ID: <HMPLE7833.2458F8789@tarrnews.net>
Source record: 10578
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur,alt.ham.radio,rec.ham-radio

On Thu, 14 Sep 2006 18:42:07 -0400, Mark@kb9rqz.com <Mark@kb9rqz.com> wrote:
>
> I don't like Homophobes but even worse than Homophobes are thoose the
> use gay bashing selctively for own ends. I can respect a homophobe that

And others don't like homophiles who walk around with a chip on their shoulder and get in everyone's face with their sexual preferences.

Homophilia is the other face of homophobia, and it appears that you suffer from the former malady. Stop looking at everyone else through the prism of your own sexual tension, and stop projecting your fears upon those who are different from you.

Your untrue and fearful cries of "homophobe" are a way of absolving yourself from any responsibility for your own life situation. It is the same thing that blacks do when they overuse the term of "racist," and most of us can see right through that kind of rhetoric no matter who uses it.

You, sir, are playing the blame game, but it doesn't work any longer. It's been worn out long ago. Come up with something real, or else continue to remain a newsgroup fool.

In message <1150581379.052544.216200@r2g2000cwb.googlegroups.com>,
Mark Morgan replied "yes I did. your point?" when accused of
confessing publicly to having beer enemas.

4428. Re: PayPal horror stories

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-14 23:57:34 UTC
From: Caveat Lector <CL@nowhere.com>
Message-ID: <D%lOg.16604$c07.4284@fed1read04>
Source record: 10579
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

Interesting threads

What about setting up two checking accounts (main and secondary) - the secondary is not linked to anything (overdraft, credit card, savings, etc)

Then keep a small amount in the secondary account ($5 or zero)

Now when some one sends you funds - tell Paypal to send it to the secondary account - when received quickly transfer to your main account.

When you buy thru Palpal -- quickly deposit the required amount in the secondary fund

In both case -- keep track of things until the transaction is complete

Whatta ya think ??

CL -- been doing that for some time now

4429. Re: PayPal horror stories

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-15 00:23:28 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <eecrj6$c5e$1@news2.kornet.net>
Source record: 10580
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

```
--
Say no to institutionalized interference.
Just say NO to HD/IBOC!
"Caveat Lector" <CL@nowhere.com> wrote in message
news:D%lOg.16604$c07.4284@fed1read04...
> Interesting threads
>
> What about setting up two checking accounts (main and secondary) - the
> secondary is not linked to anything (overdraft, credit card, savings, etc)
>
> Then keep a small amount in the secondary account ($5 or zero)
>
> Now when some one sends you funds - tell Paypal to send it to the
> secondary account - when received quickly transfer to your main account.
>
> When you buy thru Palpal -- quickly deposit the required amount in the
> secondary fund
>
> In both case -- keep track of things until the transaction is complete
>
> Whatta ya think ??
>
> CL -- been doing that for some time now

Problem is that if PayPal tries to take funds out of the account that aren't
there, YOU get charge with NSF, including whatever outrageous fee your bank
charges for NSF checks, and in some states (Idaho comes to mind) you can
actually be charged with a felony.
```

4430. Re: PayPal horror stories

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-15 02:15:07 UTC
From: Caveat Lector <CL@nowhere.com>
Message-ID: <A0oOg.16621$c07.10868@fed1read04>
Source record: 10581
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

"Brenda Ann" <brendad@shinbiro.com> wrote in message
news:eecrj6$c5e$1@news2.kornet.net...
>
>
> --
> Say no to institutionalized interference.
> Just say NO to HD/IBOC!
> "Caveat Lector" <CL@nowhere.com> wrote in message
> news:D%lOg.16604$c07.4284@fed1read04...
>> Interesting threads
>>
>> What about setting up two checking accounts (main and secondary) - the
>> secondary is not linked to anything (overdraft, credit card, savings,
>> etc)
>>
>> Then keep a small amount in the secondary account ($5 or zero)
>>
>> Now when some one sends you funds - tell Paypal to send it to the
>> secondary account - when received quickly transfer to your main account.
>>
>> When you buy thru Palpal -- quickly deposit the required amount in the
>> secondary fund
>>
>> In both case -- keep track of things until the transaction is complete
>>
>> Whatta ya think ??
>>
>> CL -- been doing that for some time now
>
> Problem is that if PayPal tries to take funds out of the account that
> aren't there, YOU get charge with NSF, including whatever outrageous fee
> your bank charges for NSF checks, and in some states (Idaho comes to mind)
> you can actually be charged with a felony.
>Golly Brenda Ann'
That could happen on your main account if you aren't careful (joint checking
accounts get really messy with two folks writing checks.)

The secondary account is strictly for Paypal - nothing else.
I said open up a ligit secondary account
I said when you use Paypal to purchase
First transfer the money to your secondary account
Both the money and the account are legit and there waiting for paypal
Of course you must give Paypal your legit account humber for the secondary

account

In other words - I don't want any one (not even my wife - we have separate accounts - keeps things in order) to have access to my Main account.

CL -- works so far. Crossing typing fingers.

4431. Re: PayPal horror stories

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-15 03:33:45 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1158291225.890645.27670@d34g2000cwd.googlegroups.com>
Source record: 10582
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

```
And be sent to a collection agency...and have your credit rating
trashed.

Happens all the time.

TMT

Brenda Ann wrote:
> --
> Say no to institutionalized interference.
> Just say NO to HD/IBOC!
> "Caveat Lector" <CL@nowhere.com> wrote in message
> news:D%lOg.16604$c07.4284@fed1read04...
> > Interesting threads
> >
> > What about setting up two checking accounts (main and secondary) - the
> > secondary is not linked to anything (overdraft, credit card, savings, etc)
> >
> > Then keep a small amount in the secondary account ($5 or zero)
> >
> > Now when some one sends you funds - tell Paypal to send it to the
> > secondary account - when received quickly transfer to your main account.
> >
> > When you buy thru Palpal -- quickly deposit the required amount in the
> > secondary fund
> >
> > In both case -- keep track of things until the transaction is complete
> >
> > Whatta ya think ??
> >
> > CL -- been doing that for some time now
>
> Problem is that if PayPal tries to take funds out of the account that aren't
> there, YOU get charge with NSF, including whatever outrageous fee your bank
> charges for NSF checks, and in some states (Idaho comes to mind) you can
> actually be charged with a felony.
```

4432. Re: PayPal horror stories

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-15 15:40:46 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <450AC969.AEA1EE0C@earthlink.net>
Source record: 10583
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

Too_Many_Tools wrote:
>
> And be sent to a collection agency...and have your credit rating
> trashed.
>
> Happens all the time.

What's a credit rating? I haven't used credit for anything for over
20 years. Its been cash up front, or nothing.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

4433. Re: PayPal horror stories

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-15 16:23:39 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1158337419.720905.167230@p79g2000cwp.googlegroups.com>
Source record: 10584
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

You might not care about your credit rating but you will care when a
lien is placed against your home.

And if you were as financially astute as you like to think you are, you
would know that companies and the Government use your credit report to
decide whether they will hire you, give you a security clearance,
determine the rates they charge you...and many other issues that affect
you.

Your credit rating matters.

And I also note that many of those who are bad credit risks deal in
cash only...because it is the only way others will deal with them.

TMT
Michael A. Terrell wrote:
> Too_Many_Tools wrote:
> >
> > And be sent to a collection agency...and have your credit rating
> > trashed.
> >
> > Happens all the time.
>
>
> What's a credit rating? I haven't used credit for anything for over
> 20 years. Its been cash up front, or nothing.
>
>
> --
> Service to my country? Been there, Done that, and I've got my DD214 to
> prove it.
> Member of DAV #85.
>
> Michael A. Terrell
> Central Florida

4434. Re: PayPal horror stories

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-15 16:32:54 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12glldnl1mdsn5c@corp.supernews.com>
Source record: 10585
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

Hi Michael,

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
news:450AC969.AEA1EE0C@earthlink.net...
> What's a credit rating? I haven't used credit for anything for over
> 20 years. Its been cash up front, or nothing.

Ironically, your credit rating will actually be "less than perfect" then! :-)

Assuming you don't need a new mortgage any time soon, I suppose you're set.

Do you have a credit card? I know it's possible, but it sure seems like a
pain to live without one these days... especially for things like renting
cars.

---Joel

4435. Re: PayPal horror stories

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-15 16:41:28 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12glltpbjdmk85@corp.supernews.com>
Source record: 10586
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1158337419.720905.167230@p79g2000cwp.googlegroups.com...
> And if you were as financially astute as you like to think you are, you
> would know that companies and the Government use your credit report to
> decide whether they will hire you, give you a security clearance,
> determine the rates they charge you...and many other issues that affect
> you.

I'm hoping it'll soon be illegal for companies to use credit reports in determining whether or not they want to hire people. I'm pretty conservative myself, and I have excellent credit, but making it harder for someone who has bad credit to *get a job* strikes me as absurd: Sure, most people have bad credit due to spending too much on HDTVs or fancy cars or whatever and *not* on baby formula and generic brand blue jeans, but even so, the humanitarian in me says it's better to let these people at least get a job and *try* to get their monetary affairs in order than keeping them jobless and forcing them onto the welfare rolls. From an economic point of view, I'd rather have individual companies bear the purported risk that those with bad credit are supposedly more likely to steal, defraud the employer, etc. than foist all those people onto the taxpayer's teat.

For security clearances looking at credit reports seems reasonable... I'm told that for security clearances at a high enough level the feds go all the way back to your childhood to dig up dirt on you that could be used in a blackmail setup.

For interest rates... well... hard to say; I can see more of a legitimate risk there than with hiring.

---Joel Kolstad

4436. Second hand RF equipment wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-16 01:40:17 UTC
From: David <websales@orbitcoms.com>
Message-ID: <5CIOg.29557$rP1.13317@news-server.bigpond.net.au>
Source record: 10587

I am looking for the following items if someone has any of them for sale.

HP8405A Vector Voltmeter
Sinad Meter or Audio Distortion meter
AC audio voltmeter
RF volt/millivolt meter (to 500 MHz)
VSWR bridge that works up to 500MHz (low power that can be driven from a sig gen)
Tracking generator to suit HP8659B spec analyzer

I am in Australia but will consider purchasing from almost any location.

Thanks

Regards

David Huisman

4437. Re: What is hamradio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-17 11:01:32 UTC
From: Hairy Lethal <oeieio@hootmail.com>
Message-ID: <gW9Pg.16842$E02.6151@newsb.telia.net>
Source record: 10588

>... Thus a Radio Ham
>could also hold a CB licence safe in the knowledge that
>such a licence says no more about him than having a land-line
>telephone, whilst continuing to regard Ham Radio as a separate
>technical pursuit.

If a professional radio engineer gets an amateur radio licence,
then is he not "slumming" in exactly the same way?

4438. Rewinding a rheostat to make it a variable iunductor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-17 11:58:06 UTC
From: dselwa@gmail.com
Message-ID: <1158494285.997392.51590@k70g2000cwa.googlegroups.com>
Source record: 10589

I came up with this idea to make a tiny antenna tuner. Thought maybe I could remove the wire on a rheostat and rewind it with copper wire so I can make a long wire antenna tuner .

Dennis W6EH

4439. Re: Rewinding a rheostat to make it a variable iunductor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-17 13:49:16 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <4ckqg2tipknu0u70bb1ggqnmde26q5a3eu@4ax.com>
Source record: 10590

On 17 Sep 2006 04:58:06 -0700, dselwa@gmail.com wrote:

>I came up with this idea to make a tiny antenna tuner. Thought maybe I
>could remove the wire on a rheostat and rewind it with copper wire so I
>can make a long wire antenna tuner .
>
>Dennis W6EH

Check a back issues of QST. Someone did it (miracal antenna)
in a construction article.

They wrapped a ferrite toroid (large one) and use the wiper and
bearing from a Wire wound rheostat to select taps on it. I tried it
for a very small Pi tuner and it was decent.

Allison

4440. Re: QRP-ARCI

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-17 14:44:42 UTC
From: Mark@kb9rqz.com
Message-ID: <450d524c$0$19651$88260bb3@free.teranews.com>
Source record: 10591
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur,alt.ham.radio,rec.ham-radio

```
<Mark@kb9rqz.com> wrote in message news:...
>
> "Don Bowey" <dbowey@comcast.net> wrote in message
> news:C12F22A7.4329E%dbowey@comcast.net...
>> On 9/14/06 1:45 PM, in article
>> 4509b263$0$19693$88260bb3@free.teranews.com,
>> "Mark@kb9rqz.com" <Mark@kb9rqz.com> wrote:
>>
>>>
>>> "NoMoreSpam" <Disgustedham@qrparci.org> wrote in message
>>> news:_6edna0IioxmIJTYnZ2dnUVZ_vmdnZ2d@comcast.com...
>>>> Mark@kb9rqz.com wrote:
>>>>> "NoMoreSpam" <Disgustedham@qrparci.org> wrote in message
>>>>> news:-t6dnWUPOfCSLpTYnZ2dnUVZ_oydnZ2d@comcast.com...
>>>>>> Mark@kb9rqz.com wrote:
>>>>>>
>>>>>>> quit floding teh gruop with ur off tpoic nonsance you post it trhee
>>>>>>> times you sppamming fool.
>>>>>>> with the punce gotcha he wonders why I simple don't bother to ty
>>>>>>> impoving my spelling do u hav anyting cognet two say?
>>>>>>>
>>>>>>>
>>>>>>>
>>>>>> Are you really that stupid, or do you just play a moron on Usenet?
>>>>>>
>>>>> you show yourself as Robeson or one of clones by YOUR obession with
>>>>> sex
>>>>> as if you aren't getting any
>>>>>
>>>>> do yourself a favor get alife or get laid you will enjoy life more
>>>>
>>>>
>>>> Sex? I didn't see any reference to sex. I did, however, look at your
>>>> "blog," etc., and found the answer to my question.
>>>>
>>>> You are not only a moron, but possibly a dangerous psychotic one.
>>>>
>>>> You are going into the "delete without reading" filter.
>>>>
>>> that you would like me and any that dares disagreewithyou to get off
>>> the nets yes I know what you want robeson or Robeson clone
>>> http://kb9rqz.blogspot.com/
```

>>>
>>>
>>> with the punce gotcha he wonders why I simple don't bother to ty
>>> impoving my
>>> spelling do u hav anyting cognet two say?
>>> you are pretty dumb loousely translated it mean "fuck you"
>>>
>>>
>> Clearly you are an ignorant, vulgar fool.
>>
I don't like Homophobes but even worse than Homophobes are thoose the
use gay bashing selctively for own ends. I can respect a homophobe that
is consistant and honest about it but these hypocrites
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with the punce gotcha he wonders why I simple don't bother to ty impoving
my

spelling do u hav anyting cognet two say?

>

--
Posted via a free Usenet account from http://www.teranews.com

4441. SolderSmoke #32: HW101 (clutch) FT-101, CONNECTORS, 3RD ORDER, ENIGMA,

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-17 17:46:21 UTC
From: bill.meara@gmail.com
Message-ID: <1158515181.447997.53890@m73g2000cwd.googlegroups.com>
Source record: 10592
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,sci.electronics.basics

SolderSmoke!
A SHOW FOR ELECTRONICS HOMEBREWERS!

http://www.soldersmoke.com

Listen at: http://www.soldersmoke.com

SolderSmoke #32 (September 16, 2006) is now available
on http://www.soldersmoke.com

Topics covered in #32:

-- HW-101 FT101 Hybrid Rigs.
-- BNC and RCA phono connectors.
-- Changing the clutch and oil on an HW-101.
-- Third order intercept rules of thumb.
-- Modular circuit boards.
-- Babbage difference engine.
-- Hardware to crack enigma.
-- Bills video of his DSB rig.
-- MAILBAG: KC2IGJ, G4GOY, WL7M, D. Gaskill, Gary
Beach

Tired of listening to Led Zepplin or NPR on your
I-Pod? Wouldn't you like to be able to carry with
you the kinds of ham radio conversations that you
listen to while in your radio shack?
Mike, KL7R, in Juneau, Alaska, and Bill, M0HBR, in
London, England meet regularly on the ECHOLINK system
to discuss their homebrew radio projects. We are
making them available as PODCASTS.

RSS FEED: You can subscribe to the program, have
them downloaded to your MP-3 player, and listen to
them at your convenience. To subscribe, just cut and
paste this URL into your I-poder (or similar)
software.
http://www.soldersmoke.com/soldersmoke.rss

If you don't have an MP3 player you can just go to the
site below and listen to the latest program (and
earlier editions) using the audio software on your
computer.

http://www.soldersmoke.com

All our programs are available here.

We hope you enjoy the program. Please send us feedback.

73 from London
Bill M0HBR N2CQR CU2JL
http://www.gadgeteer.us

4442. Re: SolderSmoke #32: HW101 (clutch) FT-101, CONNECTORS, 3RD ORDER, ENIGMA,

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-17 18:10:28 UTC
From: The Professor <telstarelectronics@yahoo.com>
Message-ID: <eek32o$1fuo$1@registered.motzarella.org>
Source record: 10593
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,sci.electronics.basics

stop spamming the group asshole.

www.telstar-electronics.com

<bill.meara@gmail.com> wrote in message
news:1158515181.447997.53890@m73g2000cwd.googlegroups.com...
> SolderSmoke!
> A SHOW FOR ELECTRONICS HOMEBREWERS!
>
> http://www.soldersmoke.com
>
> Listen at: http://www.soldersmoke.com
>
> SolderSmoke #32 (September 16, 2006) is now available
> on http://www.soldersmoke.com
>
> Topics covered in #32:
>
> -- HW-101 FT101 Hybrid Rigs.
> -- BNC and RCA phono connectors.
> -- Changing the clutch and oil on an HW-101.
> -- Third order intercept rules of thumb.
> -- Modular circuit boards.
> -- Babbage difference engine.
> -- Hardware to crack enigma.
> -- Bills video of his DSB rig.
> -- MAILBAG: KC2IGJ, G4GOY, WL7M, D. Gaskill, Gary
> Beach
>
> Tired of listening to Led Zepplin or NPR on your
> I-Pod? Wouldn't you like to be able to carry with
> you the kinds of ham radio conversations that you
> listen to while in your radio shack?
> Mike, KL7R, in Juneau, Alaska, and Bill, M0HBR, in
> London, England meet regularly on the ECHOLINK system
> to discuss their homebrew radio projects. We are
> making them available as PODCASTS.
>
> RSS FEED: You can subscribe to the program, have
> them downloaded to your MP-3 player, and listen to
> them at your convenience. To subscribe, just cut and
> paste this URL into your I-poder (or similar)

> software.
> http://www.soldersmoke.com/soldersmoke.rss
>
> If you don't have an MP3 player you can just go to the
> site below and listen to the latest program (and
> earlier editions) using the audio software on your
> computer.
>
> http://www.soldersmoke.com
>
> All our programs are available here.
>
> We hope you enjoy the program. Please send us
> feedback.
>
> 73 from London
> Bill M0HBR N2CQR CU2JL
> http://www.gadgeteer.us
>

4443. Re: SolderSmoke #32: HW101 (clutch) FT-101, CONNECTORS, 3RD ORDER, ENIGMA,

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-17 18:31:02 UTC
From: Homer J Simpson <nobody@nowhere.com>
Message-ID: <GvgPg.19538$cz3.10943@edtnps82>
Source record: 10594
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,sci.electronics.basics

"The Professor" <telstarelectronics@yahoo.com> wrote in message news:eek32o$1fuo$1@registered.motzarella.org...

> stop spamming the group asshole.

Why is it spamming?

4444. Re: SolderSmoke #32: HW101 (clutch) FT-101, CONNECTORS, 3RD ORDER, ENIGMA,

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-17 18:50:58 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <qOgPg.35$k74.23@newsfe06.lga>
Source record: 10595
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,sci.electronics.basics

"Homer J Simpson" <nobody@nowhere.com> wrote in message
news:GvgPg.19538$cz3.10943@edtnps82...
>
> "The Professor" <telstarelectronics@yahoo.com> wrote in message
> news:eek32o$1fuo$1@registered.motzarella.org...
>
>> stop spamming the group asshole.
>
> Why is it spamming?

Bill included rec.radio.amateur.misc in the list of newsgroups he posted the original message to. Since rram seems to be reserved for flames, discussion of amateur radio is evidently off-topic.

..

4445. Re: SolderSmoke #32: HW101 (clutch) FT-101, CONNECTORS, 3RD ORDER, ENIGMA,

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-17 18:53:51 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <QJqdnTS1Md8pBJDYnZ2dnUVZ8t2dnZ2d@pipex.net>
Source record: 10596
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,sci.electronics.basics

The Professor wrote:
> stop spamming the group asshole.
>
> www.telstar-electronics.com <------------- !!!!!!

> <bill.meara@gmail.com> wrote in message
> news:1158515181.447997.53890@m73g2000cwd.googlegroups.com...
>> SolderSmoke!
>> A SHOW FOR ELECTRONICS HOMEBREWERS!
etc etc
==========
Oh ,I see, the Professor is selling (partly illegal)CB Power amplifiers.
Probably no solder smoke on his premises ......just carton boxes filled
with equipment ,ready for shipment to truckers' watering holes.

Bill , I enjoy listening to your podcasts ....keep up the good work.
Just ignore the above junk seller ,who apparently is NOT capable to
produce any civilised and intelligent response.

Frank GM0CSZ / KN6WH

4446. Re: SolderSmoke #32: HW101 (clutch) FT-101, CONNECTORS, 3RD ORDER, ENIGMA,

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-17 21:46:40 UTC
From: Lloyd Resinsmoke <lloyd@no.spammmmm>
Message-ID: <RSMKE17833.245889@tarrnews.net>
Source record: 10597
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,sci.electronics.basics

On Sun, 17 Sep 2006 14:50:58 -0400, xpyttl <xpyttl_NOSPAM@earthling.net> wrote:
> "Homer J Simpson" <nobody@nowhere.com> wrote in message
> news:GvgPg.19538$cz3.10943@edtnps82...
> >
> > "The Professor" <telstarelectronics@yahoo.com> wrote in message
> > news:eek32o$1fuo$1@registered.motzarella.org...
> >
> >> stop spamming the group asshole.
> >
> > Why is it spamming?
>
> Bill included rec.radio.amateur.misc in the list of newsgroups he posted the
> original message to. Since rram seems to be reserved for flames, discussion
> of amateur radio is evidently off-topic.

Every on-topic post helps rram, even if only a little bit. Keep these
posts up. I added soldersmoke to my bashpodder list, and will be
listening to the podcast to see what it's all about. Number 32 sounds
very interesting so far.

4447. Re: SolderSmoke #32: HW101 (clutch) FT-101, CONNECTORS, 3RD ORDER, ENIGMA,

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-17 23:01:16 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <450DD383.D8B8883B@earthlink.net>
Source record: 10448
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,sci.electronics.basics

xpyttl wrote:
>
> "Homer J Simpson" <nobody@nowhere.com> wrote in message
> news:GvgPg.19538$cz3.10943@edtnps82...
> >
> > "The Professor" <telstarelectronics@yahoo.com> wrote in message
> > news:eek32o$1fuo$1@registered.motzarella.org...
> >
> >> stop spamming the group asshole.
> >
> > Why is it spamming?
>
> Bill included rec.radio.amateur.misc in the list of newsgroups he posted the
> original message to. Since rram seems to be reserved for flames, discussion
> of amateur radio is evidently off-topic.
>
> ..

The crap on news:sci.electronics.misc is crossposted from
news:sci.electronics.policy, which is a watering hole for the biggest
idiots on usenet.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

4448. Re: SolderSmoke #32: HW101 (clutch) FT-101, CONNECTORS, 3RD ORDER, ENIGMA,

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-17 23:05:25 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <450DD47B.8E451A1A@earthlink.net>
Source record: 10449
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,sci.electronics.basics

The Professor wrote:
>
> stop spamming the group asshole.
>
> www.telstar-electronics.com
>

Thanks for your spam, Professor. I forwarded it to: FCCINFO@fcc.gov
to see what they think of your CB linears.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

4449. Re: Rewinding a rheostat to make it a variable iunductor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-18 01:37:00 UTC
From: sailtamarack@yahoo.ca
Message-ID: <1158543420.140434.58630@m73g2000cwd.googlegroups.com>
Source record: 10450

nospam@nouce.bellatlantic.net wrote:
> On 17 Sep 2006 04:58:06 -0700, dselwa@gmail.com wrote:
>
> >I came up with this idea to make a tiny antenna tuner. Thought maybe I
> >could remove the wire on a rheostat and rewind it with copper wire so I
> >can make a long wire antenna tuner .
> >
> >Dennis W6EH
>
> Check a back issues of QST. Someone did it (miracal antenna)
> in a construction article.
>
> They wrapped a ferrite toroid (large one) and use the wiper and
> bearing from a Wire wound rheostat to select taps on it. I tried it
> for a very small Pi tuner and it was decent.
>
> Allison

ARRL members can download the article @
http://www.arrl.org/members-only/tis/info/pdf/0107032.pdf

This ideas was commercialized by the author and is now sold as the
Miracle Whip
See http://www.miracleantenna.com/ for details

Roger

4450. K5JHF Morse Code Device, 3.2/3.3

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-18 03:32:06 UTC
From: Tom Coates <tecoatesHatesSpam@comcast.net>
Message-ID: <buudnX0TCrMjjpPYnZ2dnUVZ_s6dnZ2d@comcast.com>
Source record: 10451

Does anyone have experience with this portable Morse training device, or others like it?

It's depicted here:
http://home.austin.rr.com/jfisher2/MCD.htm
K5JHF told me that no inventory remains and he does not plan to make any more. I am curious about how useful it proved to be for gaining and improving Morse proficiency.

Portability seems like an advantage, enabling the device to be used while driving, exercising, etc.

Tom, N3IJ

4451. Anyone got ancient ARRL books and equipment or junk boxes to donate?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-18 07:26:36 UTC
From: eternalsquire@comcast.net
Message-ID: <1158564396.521511.149980@e3g2000cwe.googlegroups.com>
Source record: 10452

All,

One of my neighbors in the principal of a middle school that is
interested in incorporating amateur radio as part of it's science club.
This is located near the Navajo reservation.
I'd like to train the members to be Tech+ and focus on the Novice CW
bands, because for these kids brass pounding across the country is
where the 'wow' factor is.

Anyone interested in donating books, equipment, or junk boxes? It
would be tax deductable.

Thanks in advance,

The Eternal Squire

4452. Connectors for MFJ-269

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-18 15:18:39 UTC
From: "ve2ghi@gmail.com" <ve2ghi@gmail.com>
Message-ID: <1158592719.702229.69950@i3g2000cwc.googlegroups.com>
Source record: 10453

Hello all of you,
I am using my MFJ-269 now more frequently.
The more I use it the more I have questions.
What kind of connection do you use when you want to measure inductor
or capacitor or to check the impedance of a resistor ?
I have use the cable of my scope and a homebrew pl259 with wire and
aligator grip with various result.

Happy day
72 de Jean (VE2GHI)

4453. Re: SolderSmoke #32: HW101 (clutch) FT-101, CONNECTORS, 3RD ORDER, ENIGMA,

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-18 16:12:51 UTC
From: The Professor <telstarelectronics@yahoo.com>
Message-ID: <eemgi9$74s$1@registered.motzarella.org>
Source record: 10454
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,sci.electronics.basics

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
news:450DD47B.8E451A1A@earthlink.net...
> The Professor wrote:
>>
>> stop spamming the group asshole.
>>
>> www.telstar-electronics.com
>>
>
>
> Thanks for your spam, Professor. I forwarded it to: FCCINFO@fcc.gov
> to see what they think of your CB linears.
>
>
You are the most clueless asshole in the group and you didn't forward
anything to anyone you whiner.

It's a 10 meter amp if you must know..... LOL
> --
> Service to my country? Been there, Done that, and I've got my DD214
>
Go swab the dick asshole.

4454. Re: Connectors for MFJ-269

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-18 18:33:25 UTC
From: jgboyles@aol.com
Message-ID: <1158604405.231617.155540@b28g2000cwb.googlegroups.com>
Source record: 10455

ve2ghi@gmail.com wrote:
> Hello all of you,
> I am using my MFJ-269 now more frequently.
> The more I use it the more I have questions.
> What kind of connection do you use when you want to measure inductor
> or capacitor or to check the impedance of a resistor ?
> I have use the cable of my scope and a homebrew pl259 with wire and
> aligator grip with various result.
>
> Happy day
> 72 de Jean (VE2GHI)

Hi Jean, I use a PL259 and a couple of short pig tails (6cm) with an minature alligator clip.

If you are measuring L or C, their Reactance is frequency dependent. The frequency at which you measure must be such that Xl or Xc is less than 650 ohms. (the MFJ takes the reactance and the frequency and converts that to L or C). Sometimes the frequency will be high enough that the stray L or C of the pig tails will affect your reading. Up above 20-25 Mhz I measure the L and C without the component hooked up and subtract that reading from the one I get with the component connected. Hopefully that takes some of the error introduced by the long leads out.

Gary N4AST

4455. Re: SolderSmoke #32: HW101 (clutch) FT-101, CONNECTORS, 3RD ORDER, ENIGMA,

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-18 19:20:14 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <450EF113.A5BAA06D@earthlink.net>
Source record: 10456
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,sci.electronics.basics

The Professor wrote:
>
> It's a 10 meter amp if you must know..... LOL

Not when its advertised to 30 MHz

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

4456. Re: SolderSmoke #32: HW101 (clutch) FT-101, CONNECTORS, 3RD ORDER, ENIGMA,

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-18 19:40:53 UTC
From: Brian Hill <good@it.net>
Message-ID: <2DCPg.33$_h1.15@newsfe04.lga>
Source record: 10457
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,sci.electronics.basics

"The Professor" <telstarelectronics@yahoo.com> wrote in message
news:eemgi9$74s$1@registered.motzarella.org...
>
> "Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
> news:450DD47B.8E451A1A@earthlink.net...
>> The Professor wrote:
>>>
>>> stop spamming the group asshole.
>>>
>>> www.telstar-electronics.com
>>>
>>
>>
>> Thanks for your spam, Professor. I forwarded it to: FCCINFO@fcc.gov
>> to see what they think of your CB linears.
>>
>>
> You are the most clueless asshole in the group and you didn't forward
> anything to anyone you whiner.
>
> It's a 10 meter amp if you must know..... LOL
>> --
>> Service to my country? Been there, Done that, and I've got my DD214
>>
> Go swab the dick asshole.
>

Griffey! Why are you always such a socially inept spaz?

BH

4457. Re: K5JHF Morse Code Device, 3.2/3.3

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-18 20:31:29 UTC
From: Rex <me@hutmail.invalid>
Message-ID: <c20ug29tmg8kh0n71j7i38tkuuirj6dm5l@4ax.com>
Source record: 10458

On Sun, 17 Sep 2006 23:32:06 -0400, "Tom Coates"
<tecoatesHatesSpam@comcast.net> wrote:

>Does anyone have experience with this portable Morse training device, or
>others like it?
>
>It's depicted here:
>http://home.austin.rr.com/jfisher2/MCD.htm
>K5JHF told me that no inventory remains and he does not plan to make any
>more. I am curious about how useful it proved to be for gaining and
>improving Morse proficiency.
>
>Portability seems like an advantage, enabling the device to be used while
>driving, exercising, etc.
>
>Tom, N3IJ
>

You can check out my free program:
http://www.xertech.net/Projects/CPwin.html

or scroll down the page to a set of zipped pre-recorded mp3 files.

I wrote it so I could record sessions and practice with a cheap personal
audio player. Key feature is audio voice prompt of what was sent in cw.
I think the idea works, but I need to keep at it myself. I never seem to
keep at it long enough to improve.

-Rex, KK6MK

4458. Re: K5JHF Morse Code Device, 3.2/3.3

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-18 21:12:57 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <iO2dnfMMCMVXlpLYRVny2w@pipex.net>
Source record: 10459

> You can check out my free program:
> http://www.xertech.net/Projects/CPwin.html
>
> or scroll down the page to a set of zipped pre-recorded mp3 files.
>
> I wrote it so I could record sessions and practice with a cheap personal
> audio player. Key feature is audio voice prompt of what was sent in cw.
> I think the idea works, but I need to keep at it myself. I never seem to
> keep at it long enough to improve.
>
> -Rex, KK6MK
++++++++++++++++++++++++++++++++++++
Rex , Thanks for making this prog. freely available , it works very
well. Congrats.
The large character display & voice feedback is excellent for visually
impaired users.

I have passed the prog on to other hams.

Frank GM0CSZ / KN6WH north of Scotland UK

4459. Re: SolderSmoke #32: HW101 (clutch) FT-101, CONNECTORS, 3RD ORDER, ENIGMA,

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-18 21:31:34 UTC
From: dplatt@radagast.org
Message-ID: <12gu41mbpofch59@corp.supernews.com>
Source record: 10460
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,sci.electronics.basics

In article <450EF113.A5BAA06D@earthlink.net>,
Michael A. Terrell <mike.terrell@earthlink.net> wrote:
>The Professor wrote:
>>
>> It's a 10 meter amp if you must know..... LOL
>
>
> Not when its advertised to 30 MHz

And, it appears not to comply with several specific FCC regulations:

- It has gain through the CB frequencies (violates 97.317 (b)) and is thus not eligible for certification, which is required for amps operating below 144 MHz. The FCC may be about to relax or eliminate the 97.317 rules about external amps operating in this frequency range, but for the moment this reg is still part of the law.

- Its second- and third-harmonic distortion levels are roughly 10 dB too high to meet the -43 dBc requirement (violates 97.307 (d)).

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4460. Recommended Method for PCB mounting of Toroidal Coils

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-18 22:07:16 UTC
From: Jim Flanagan <jflan@tampabay.rr.com>
Message-ID: <oMEPg.20$%y3.6@tornado.tampabay.rr.com>
Source record: 10461

Hi..
In the past, I've always mounted my coils vertically but
this time around, I need to mount some horizontally. I was
simply going to glue them to the pcb but wanted first to get
input as to other home brewer's method of mounting toroids to
a pcb. The toroids will be FT-37-43 type wide band transformers
in the 10MHz range. Your input is welcome. Take care.

-jim
WB5KYE

4461. Re: SolderSmoke #32: HW101 (clutch) FT-101, CONNECTORS, 3RD ORDER, ENIGMA,

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-18 22:45:23 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <450F2121.F7C249B2@earthlink.net>
Source record: 10462
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,sci.electronics.basics

```
Brian Hill wrote:
>
> "The Professor" <telstarelectronics@yahoo.com> wrote in message
> news:eemgi9$74s$1@registered.motzarella.org...
> >
> > "Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
> > news:450DD47B.8E451A1A@earthlink.net...
> >> The Professor wrote:
> >>>
> >>> stop spamming the group asshole.
> >>>
> >>> www.telstar-electronics.com
> >>>
> >>
> >>
> >> Thanks for your spam, Professor. I forwarded it to: FCCINFO@fcc.gov
> >> to see what they think of your CB linears.
> >>
> >>
> > You are the most clueless asshole in the group and you didn't forward
> > anything to anyone you whiner.
> >
> > It's a 10 meter amp if you must know..... LOL
> >> --
> >> Service to my country? Been there, Done that, and I've got my DD214
> >>
> > Go swab the dick asshole.
> >
>
> Griffey! Why are you always such a socially inept spaz?
>
> BH

20 generations of imbreeding tend to do that to rednecks.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida
```

4462. Re: SolderSmoke #32: HW101 (clutch) FT-101, CONNECTORS, 3RD ORDER, ENIGMA,

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-18 22:47:32 UTC
From: Homer J Simpson <nobody@nowhere.com>
Message-ID: <8mFPg.24256$cz3.6399@edtnps82>
Source record: 10463
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,sci.electronics.basics

"Dave Platt" <dplatt@radagast.org> wrote in message
news:12gu41mbpofch59@corp.supernews.com...

> And, it appears not to comply with several specific FCC regulations:
>
> - It has gain through the CB frequencies (violates 97.317 (b)) and is
> thus not eligible for certification, which is required for amps
> operating below 144 MHz. The FCC may be about to relax or eliminate
> the 97.317 rules about external amps operating in this frequency
> range, but for the moment this reg is still part of the law.
>
> - Its second- and third-harmonic distortion levels are roughly
> 10 dB too high to meet the -43 dBc requirement (violates 97.307
> (d)).

Perhaps it's designed for IPods? Most everything seems to be!

4463. Re: Recommended Method for PCB mounting of Toroidal Coils

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-18 22:57:51 UTC
From: jgboyles@aol.com
Message-ID: <1158620271.004381.39690@e3g2000cwe.googlegroups.com>
Source record: 10464

Jim Flanagan wrote:
> Hi..
> In the past, I've always mounted my coils vertically but
> this time around, I need to mount some horizontally. I was
> simply going to glue them to the pcb but wanted first to get
> input as to other home brewer's method of mounting toroids to
> a pcb. The toroids will be FT-37-43 type wide band transformers
> in the 10MHz range. Your input is welcome. Take care.
>
> -jim
> WB5KYE

Hi Jim, I guess the first thing I would consider is differences with the leads getting to pads. Horizontal is more stable than vertical, but takes up more space. I guess the big factor would be the space requirement. I would never mount one vertical if there were space for horizontal. That determination would be dependent on the layout of your circuit board. Good luck.
Gary N4AST

4464. RF Connectors & Adapter Info

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-18 23:02:27 UTC
From: Don Hendrix <sales@aaarfproducts.com>
Message-ID: <7AFPg.10450$rE5.2466@tornado.socal.rr.com>
Source record: 10465

Please visit www.AAARFProducts.com

4465. Re: K5JHF Morse Code Device, 3.2/3.3

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-19 03:48:03 UTC
From: Rex <me@hutmail.invalid>
Message-ID: <92qug2t2kmggh596voab2puq3veo2hfair@4ax.com>
Source record: 10466

On Mon, 18 Sep 2006 22:12:57 +0100, Highland Ham
<abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:

>Rex , Thanks for making this prog. freely available , it works very
>well. Congrats.
>The large character display & voice feedback is excellent for visually
>impaired users.
>
>I have passed the prog on to other hams.
>
>
>Frank GM0CSZ / KN6WH north of Scotland UK

You are quite welcome. There are links on my page to other programs and
information that I found really good too.

-Rex, KK6MK

4466. Re: Recommended Method for PCB mounting of Toroidal Coils

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-19 03:54:09 UTC
From: Rex <me@hutmail.invalid>
Message-ID: <caqug2tgupnd2t9njlthra60h9vb8ck0u4@4ax.com>
Source record: 10467

On Mon, 18 Sep 2006 22:07:16 GMT, Jim Flanagan <jflan@tampabay.rr.com>
wrote:

>Hi..
>In the past, I've always mounted my coils vertically but
>this time around, I need to mount some horizontally. I was
>simply going to glue them to the pcb but wanted first to get
>input as to other home brewer's method of mounting toroids to
>a pcb. The toroids will be FT-37-43 type wide band transformers
>in the 10MHz range. Your input is welcome. Take care.
>
>-jim
>WB5KYE

Yeah. A touch of silicon adhesive or hot melt seems obvious. Can't think
what more is needed unless you find something that seems to not be
working as expected.

4467. ARC-5 Tuning Shaft Adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-19 04:03:02 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1158638582.419376.97510@k70g2000cwa.googlegroups.com>
Source record: 10468

Does anyone have or can they direct me to a couple of "splined"
tuning shaft adapters that fit the ARC-5 Command Set receivers?
I'd like to adapt some of the ganged variable capacitors from
those sets into some homebuilt equipment...lovely antibacklash
gear reduction on them.

Been trying to search the 'web (at the usual suspects such as
Fair Radio, Toronto Sales, etc.) but no joy. Yes, I know that
some consumer radio plastic knobs will fit, but those also
break very easy making the MTBFs very low indeed.

I would suppose that there is a mechanical description for the
splines and diameters but, alas, I ain't one of those. I've a feeling
that several mechanical hardware suppliers have them in stock.

Will appreciate any info, will trade assorted items for a couple of
metal adapters to metal shafts.

LenAnderson@ieee.org

4468. Re: Recommended Method for PCB mounting of Toroidal Coils

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-19 12:28:02 UTC
From: MadEngineer <glenn.b.dixon@gmail.com>
Message-ID: <1158668882.910357.278880@m73g2000cwd.googlegroups.com>
Source record: 10469

Jim Flanagan wrote:
> Hi..
> In the past, I've always mounted my coils vertically but
> this time around, I need to mount some horizontally. I was
> simply going to glue them to the pcb but wanted first to get
> input as to other home brewer's method of mounting toroids to
> a pcb. The toroids will be FT-37-43 type wide band transformers
> in the 10MHz range. Your input is welcome. Take care.
>
> -jim
> WB5KYE

Here's what Doug Hendricks recommends:

http://www.qrpkits.com/buildertip01.html

Regards,
Glenn Dixon

4469. Re: Recommended Method for PCB mounting of Toroidal Coils

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-19 12:56:41 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <pORPg.781$_h1.330@newsfe04.lga>
Source record: 10470

"Jim Flanagan" <jflan@tampabay.rr.com> wrote in message
news:oMEPg.20$%y3.6@tornado.tampabay.rr.com...
> Hi..
> In the past, I've always mounted my coils vertically but
> this time around, I need to mount some horizontally. I was
> simply going to glue them to the pcb but wanted first to get
> input as to other home brewer's method of mounting toroids to

Several kits drill a hole in the PCB and use a nylon screw

..

4470. Re: Recommended Method for PCB mounting of Toroidal Coils

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-19 13:40:59 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <LrSPg.195474$1i1.53858@attbi_s72>
Source record: 10471

Place a thick plastic washer between the toroid and the board to reduce
stray magnetic and capacitive coupling between coil and metallic surface.
Toroid coils are not completely devoid of coupling to nearby external
objects and surfaces.

Bill W0IYH

"xpyttl" <xpyttl_NOSPAM@earthling.net> wrote in message
news:pORPg.781$_h1.330@newsfe04.lga...
> "Jim Flanagan" <jflan@tampabay.rr.com> wrote in message
> news:oMEPg.20$%y3.6@tornado.tampabay.rr.com...
>> Hi..
>> In the past, I've always mounted my coils vertically but
>> this time around, I need to mount some horizontally. I was
>> simply going to glue them to the pcb but wanted first to get
>> input as to other home brewer's method of mounting toroids to
>
> Several kits drill a hole in the PCB and use a nylon screw
>
> ..
>
>

4471. Re: Recommended Method for PCB mounting of Toroidal Coils

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-19 14:14:50 UTC
From: budgie <me@privacy.net>
Message-ID: <3muvg2pe7q80p4mu8sscnh9vr8mikf9i04@4ax.com>
Source record: 10472

On Mon, 18 Sep 2006 22:07:16 GMT, Jim Flanagan <jflan@tampabay.rr.com> wrote:

>Hi..
>In the past, I've always mounted my coils vertically but
>this time around, I need to mount some horizontally. I was
>simply going to glue them to the pcb but wanted first to get
>input as to other home brewer's method of mounting toroids to
>a pcb. The toroids will be FT-37-43 type wide band transformers
>in the 10MHz range. Your input is welcome. Take care.

I've always mounted smaller toroids (<1" OD with copper) vertically. For larger ones, either a pair of cable ties of some neutral cure silicone adhesive works for me.

4472. Re: Recommended Method for PCB mounting of Toroidal Coils

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-19 15:55:48 UTC
From: Jim Flanagan <jflan@tampabay.rr.com>
Message-ID: <8qUPg.194$jf2.17@tornado.tampabay.rr.com>
Source record: 10473

MadEngineer wrote:
> Jim Flanagan wrote:
>> Hi..
>> In the past, I've always mounted my coils vertically but
>> this time around, I need to mount some horizontally. I was
>> simply going to glue them to the pcb but wanted first to get
>> input as to other home brewer's method of mounting toroids to
>> a pcb. The toroids will be FT-37-43 type wide band transformers
>> in the 10MHz range. Your input is welcome. Take care.
>>
>> -jim
>> WB5KYE
>
> Here's what Doug Hendricks recommends:
>
> http://www.qrpkits.com/buildertip01.html
>
> Regards,
> Glenn Dixon
>
Hi Glenn..
I checked this out and I LIKE it.. This is the
way that I am going to do it for now on..
Thanks.
jim

4473. Re: Recommended Method for PCB mounting of Toroidal Coils

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-19 16:00:13 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12h050d8nr3vbe2@corp.supernews.com>
Source record: 10474

>> Here's what Doug Hendricks recommends:
>> http://www.qrpkits.com/buildertip01.html

Hmm... that doesn't really seem that much easier than just using a glue gun in the first place, is it?

Personally I'd also worry about detuning due to having the coil sitting right on top of the ground plane like that, but I suppose that if he's manually aligning everything anyway it doesn't really matter.

4474. Re: RFSim99 anomalies

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-19 19:51:04 UTC
From: Ted <kilocycles**@**yahoo.com>
Message-ID: <q0h0h2d8qqnd1ogh63h2mgi14gukl310um@4ax.com>
Source record: 10475

Tom,
One other odditiy I found after replying was that with the 10dB basic pad loaded in in RFSim99, giving the bogus S parameter, by clicking on the up or down arrow for tolerance in the simulation mode, it would give what appeared to be reasonable results. However, clicking on the button to return it to normal gave the bogus value again. I guess I was optimistically thinking that after the tolerance iterations, it would see the error of its ways and give a realist value. Obviously, the software is not "self-healing", ala the topic of the recent IEEE Spectrum article.

What you say about extreme sensitivity is on the mark. I later experimented with GPLA and saw the same effect. I hadn't thought of it in the balanced bridge context.

The main reason I haven't homebrewed one of Rick Campbell's IQ designs is the need for those tight parameters, which translates to relatively high cost in the parts required... :(Some of the inductors for one of them, the IQ DC receiver, I think, are no longer available when I checked Mouser and Digi-Key. I suppose AADE still has the stock, but building from scratch is obviously cheaper if you can get a direct source.

One femtoFarad? Wow! I'll have to play around with this some more, and your idea of paralleling (or series-ing, I guess, as well), sounds interesting. It could be an indicator that the results are valid, I should hope.

I really like RFSim99 as a first-cut design tool. Very simple and straightforward. It's very nice for L-networks. As with the AADE filter designer, I typically then run any design through at least one other tool for confirmation. I've had some problems on occasion with crystal filter design for certain configurations using XLAD, so I've done the design using another tool, such as the AADE design tool, and then entered the values in LadBuild, and continued to tweak in GPLA.

We're very fortunate to have such programs at our disposal.

73,
Ted KX4OM

14 Sep 2006 10:16:09 -0700, "K7ITM" <k7itm@msn.com> wrote:

>Hey, thanks for verifying my results, Ted.
>
>It shouldn't be surprising that tiny variations in resistance cause
>large dB changes. Remember, you're essentially unbalancing a bridge,

>and looking at the unbalance over 100dB down from full "un-balance."
>That is, -100dB represents a one part in 10^5 unbalance. 40dB return
>loss is really quite good, and something you expect only in a pretty
>carefully controlled setup.
>
>This same sort of thing reaches out and grabs you if you try to make a
>direct conversion receiver with I and Q paths to balance out the
>unwanted sideband. You need balance of not worse than ten parts per
>million to get 100dB sideband suppression, and the components you are
>using probably have, at BEST, temperature coefficients that can make
>things worse than that with only a one degree C change.
>
>On the up side, it's exactly this sensitivity that is a strong plus for
>bridge measurements.
>
>Also, I'm not about to throw RFSim99 out of my toolkit. I just need to
>be aware of its anomalies, and I'll be very cautious about saving
>results as an S-parameter file for sure. I see that even an attenuator
>that's detuned enough that it has only 60dB return loss still gives 90
>degree phase shifts! But if I add even 1fF of capacitance across the
>71.151 ohm resistor (in the 10dB attenuator, as designed by the
>attenuator tool), the saved S-parameter file is OK. S12 and S21 are
>zero degrees (till you get out to really high frequencies). S11 and
>S22 still show -90 degrees phase, but with a capacitive load (every so
>slightly capacitive), that seems like the right answer.
>
>By the way, a trick that seems to work to get very accurate component
>values is to put parts in parallel or series. For example, to simulate
>a 57.6325nH inductance (ridiculous though it is in practice), invoke a
>57.00nH inductance in series with a 632.5pH. Unfortunately, that
>doesn't work for sub-ohm resistances; milliohms are converted to ohms,
>and only two decimal places. Double-checking to see that the 57.6325nH
>inductance simulates correctly, I resonated it with 1nF. I expect
>resonance at 20.964591MHz, and RFSim with 401 points displayed from
>20.965 to 20.967, shows resonance at 20.96460. Changing the simulated
>inductance by 0.1pH changes the resonance as expected.
>
>Cheers,
>Tom
>
>
>Ted wrote:
>> On Wed, 13 Sep 2006 20:26:41 -0400, Ted <kilocycles**@**yahoo.com>
>> wrote:
>>
>> >On 9 Sep 2006 11:23:33 -0700, "Professor" <briangriffey@sbcglobal.net>
>> >wrote:
>> >
>> >>
>> >>K7ITM wrote:

>> >>> Hi all,
>> >>>
>> >>> Every once in a while I come across an anomaly in RFSim99. I'd be
>> >>> happy if someone could tell me that I'm doing something wrong in the
>> >>> following:
>> >>>
>> >>> Fire up the simulator. Tools-->Design-->Attenuator. Pi Section, 50R
>> >>> input impedance, 50R output impedance, 10dB attenuation. Simulate.
>> >>> !Current schematic will be overwritten; OK. Now note that the graphics
>> >>> window displays S11 as 2E+31dB.
>> >>>
>> >>> In the circuit window, edit the values of the two 96.25 ohm resistors;
>> >>> they have apparently been simulated to more decimal places than shown.
>> >>> Just manually enter 96.25 ohms for each. Now the magnitude of S11 and
>> >>> S22 show up as -102.69dB; that seems reasonable. The phases for S11,
>> >>> S12, S21 and S22 are all zero. Now, from the graphics window,
>> >---snip---
>> >
>> >Aarrgg! This is very disappointing! I usually check at least my
>> >values for LC circuits against the LADPAC programs In "Experimental
>> >Methods in RF Design", however. By the way, when I click on
>> >Tools/DesignAttenuator, the schematic that is in the pop-up window for
>> >default 10 dB shows the three resistor values as 71.151 and 96.248.
>> >When I go through the process you did, I get the same results. I
>> >saved the file, and closed and reopened the program. Then, I loaded
>> >the saved 10dBAtten.cct file, and of course got the same -102.69 dB
>> >for S11. Then, I Tuned the values back to 71.151 (which immediately
>> >displayed only 71.15), and tuned the other two to 96.248, (which
>> >displayed 96.25). When I simulated, S11 was now -107 dB!
>> >
>> >Regards,
>> >Ted KX4OM
>>
>> I just ran the simulation in the LADPAC programs. I first built the
>> attenuator in Ladbuild, with the resistors rounded off to two decimal
>> places, and saved the result. In GPLA, I got (after resetting the
>> scale to -120 dB) S11= -107.3. Then I edited the values to the 3
>> decimal place values from the original attenuator pop-up window of
>> RFSim99, and got S11=-121.67.
>>
>> The circuit review feature of GPLA still showed 2 decimal places,
>> rounded off, but saving that version of the attenuator and opening the
>> saved program in Ladbuild showed three decimal place values when
>> clicking on the component.
>>
>> It's surprising how a couple of thousandths of an ohm can change the S
>> parameters that much.
>>
>> Ted KX4OM

4475. Re: Coax Connectors & Adapters - High Quality@ Low Cost

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-19 19:58:26 UTC
From: Ted <kilocycles**@**yahoo.com>
Message-ID: <cni0h2tvk4o0141nv2k37k6kmg8p8g4urs@4ax.com>
Source record: 10476

Mike,
Tell us how you *really* feel! ;-) .

I didn't see any BNC bulkhead connectors, which is what I typically use for price comparisons, since I seem to use so many of them. I haven't ordered from this vendor, but I'm tired of having the insulator melt on some of the ones I've bought for about a buck.

On Thu, 14 Sep 2006 06:46:54 GMT, "Michael A. Terrell" <mike.terrell@earthlink.net> wrote:

>AAA RF Products wrote:
>>
>> Please see www.aaarfproducts.com
>
>
> Its a great site if you want no name connectors and coax so bad that
>radio shack would be ashamed to sell it. I see that he no longer posts
>his e-mail address in his spam. He's a foul mouthed pain in the ass.

4476. Re: Rewinding a rheostat to make it a variable iunductor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-19 20:03:36 UTC
From: Ted <kilocycles**@**yahoo.com>
Message-ID: <f1j0h2dsmvadaetdnrg926hu22hlcme3kp@4ax.com>
Source record: 10477

Hmmm...not a bad idea. I have no use for a Miracle Whip antenna, but
I think I'll try that approach as another alternative to Phil Salas,
AD5X's portable vertical base matching techniques. It might even be
feasible for the tuneable component of a center loading coil. I'm
gonna do some experimentin'!

73,
On 17 Sep 2006 04:58:06 -0700, dselwa@gmail.com wrote:

>I came up with this idea to make a tiny antenna tuner. Thought maybe I
>could remove the wire on a rheostat and rewind it with copper wire so I
>can make a long wire antenna tuner .
>
>Dennis W6EH

4477. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-19 23:18:02 UTC
From: Chris Jones <lugnut808@nospam.yahoo.com>
Message-ID: <12h0r1eghq3sje8@corp.supernews.com>
Source record: 10478

radio_rookie wrote:

> Hello,
> I want to know the importance of intermediate frequency in any
> receivers. IF was used in Superhet transceivers. My question is why
> doesn't anyone use zero IF now a days. What is the problem of brining
> the RF signal directly to baseband? Does the IF stage conditions the
> incoming signal? What are the advantages of the IF stage?
>
> Just confused. Can anyone throw some light on this?
>
> Thanks.

Direct conversion is used in nearly all modern mobile phones, because it is cheaper (no IF filters), and because the baseband amplifiers use less current than the old IF amplifiers used to. The RF performance is not necessarily as good as a well designed superhet.

It is difficult to make the receiver immune to "AM detection" which is a problem caused by receiving a strong interfering signal with amplitude modulation on it, at a frequency other than the one that you are trying to receive, but which somehow gets turned into a baseband frequency signal coming out of the mixer, even though it shouldn't. There are plenty of reasons why this can happen, such as second-order nonlinearity in the mixer, meaning that a strong interferer coming into the RF port of the receiver can mix with itself in your mixer and end up on top of the wanted signal. Another cause could be if there is coupling between the LO generation circuit and the RF input (in either direction, both are bad.) Also it is common to get large DC offsets coming out of direct conversion receivers, and for some modulation formats where you're interested in frequencies down to DC, that can be a pain. People have pretty much solved these problems in phones, after a lot of work.

Chris

4478. Re: ARC-5 Tuning Shaft Adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 03:05:38 UTC
From: safemale <safemale@earthlink.cum>
Message-ID: <pqb1h216hhtgf7h5n7fq4984rn26luq482@4ax.com>
Source record: 10479

you mite be about 50 years late
good luck
seel a used arc5 recver on ebay
ken uhrick
On 18 Sep 2006 21:03:02 -0700, "LenAnderson@ieee.org"
<LenAnderson@ieee.org> wrote:

>Does anyone have or can they direct me to a couple of "splined"
>tuning shaft adapters that fit the ARC-5 Command Set receivers?
>I'd like to adapt some of the ganged variable capacitors from
>those sets into some homebuilt equipment...lovely antibacklash
>gear reduction on them.
>
>Been trying to search the 'web (at the usual suspects such as
>Fair Radio, Toronto Sales, etc.) but no joy. Yes, I know that
>some consumer radio plastic knobs will fit, but those also
>break very easy making the MTBFs very low indeed.
>
>I would suppose that there is a mechanical description for the
>splines and diameters but, alas, I ain't one of those. I've a feeling
>that several mechanical hardware suppliers have them in stock.
>
>Will appreciate any info, will trade assorted items for a couple of
>metal adapters to metal shafts.
>
>LenAnderson@ieee.org

4479. Re: ARC-5 Tuning Shaft Adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 09:32:08 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1158744728.499428.47000@k70g2000cwa.googlegroups.com>
Source record: 10480

LenAnderson@ieee.org wrote:
> Does anyone have or can they direct me to a couple of "splined"
> tuning shaft adapters that fit the ARC-5 Command Set receivers?
> I'd like to adapt some of the ganged variable capacitors from
> those sets into some homebuilt equipment...lovely antibacklash
> gear reduction on them.

Hi Len,
nope - rare as rocking horse manure. I machined ones from brass rod -
receiver end, a press fit on the splines, other end, quarter inch for
knob.

Andrew VK3BFA.

4480. 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 11:38:06 UTC
From: Jim Flanagan <jflan@tampabay.rr.com>
Message-ID: <yK9Qg.1384$K02.6@tornado.tampabay.rr.com>
Source record: 10481

Guys..
Does anyone have any better method for stripping small, enameled
wire, other than using sandpaper or an exacto knife (scrapping)?
There used to be a chemical stripper called 'Xvar', years ago.
This stuff worked great. Nasty stuff as you can imagine and has
been EPA'd years ago. Is there anything comparable, today?

Also, a retired technician that I once knew had a pair of ingenious
'stripper pliers' that he had acquired back in the '60s that did
a fabulous job. These pliers had special jaws that would scrape the
enamel off without nicking the wire. They worked GREAT. Supposedly,
this tool originated from a mfg in Germany. I have never seen this tool
since. Anyone have a lead on something similar?

Thanks and take care.
-jim
WB5KYE

4481. Re: 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 12:53:33 UTC
From: jawod <jawod@fuse.net>
Message-ID: <451139CD.9000300@fuse.net>
Source record: 10482

Jim Flanagan wrote:
> Guys..
> Does anyone have any better method for stripping small, enameled
> wire, other than using sandpaper or an exacto knife (scrapping)?
> There used to be a chemical stripper called 'Xvar', years ago.
> This stuff worked great. Nasty stuff as you can imagine and has
> been EPA'd years ago. Is there anything comparable, today?
>
> Also, a retired technician that I once knew had a pair of ingenious
> 'stripper pliers' that he had acquired back in the '60s that did
> a fabulous job. These pliers had special jaws that would scrape the
> enamel off without nicking the wire. They worked GREAT. Supposedly,
> this tool originated from a mfg in Germany. I have never seen this tool
> since. Anyone have a lead on something similar?
>
> Thanks and take care.
> -jim
> WB5KYE
I've heard about that tool, also. My only experience with enameled wire
is melting/burning it off, then sanding off the little remaining crud.

I know, probably "Been there, Done that".

John
AB8O

4482. Re: 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 17:26:16 UTC
From: Telstar Electronics <briangriffey@sbcglobal.net>
Message-ID: <1158773176.250834.257790@e3g2000cwe.googlegroups.com>
Source record: 10483

Jim Flanagan wrote:
> Guys..
> Does anyone have any better method for stripping small, enameled
> wire, other than using sandpaper or an exacto knife (scrapping)?
> There used to be a chemical stripper called 'Xvar', years ago.
> This stuff worked great. Nasty stuff as you can imagine and has
> been EPA'd years ago. Is there anything comparable, today?
>
> Also, a retired technician that I once knew had a pair of ingenious
> 'stripper pliers' that he had acquired back in the '60s that did
> a fabulous job. These pliers had special jaws that would scrape the
> enamel off without nicking the wire. They worked GREAT. Supposedly,
> this tool originated from a mfg in Germany. I have never seen this tool
> since. Anyone have a lead on something similar?
>
> Thanks and take care.
> -jim
> WB5KYE

These work great, but maybe a bit pricey for your needs...
http://www.eraser.com/catpdf.cgi/Magnet.pdf?mode=download&catpdf_id=11

www.telstar-electronics.com

4483. Re: 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 17:37:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12h2v3ie5b8mqe8@corp.supernews.com>
Source record: 10484

For a long time, I've used heat-strippable wire which I got surplus. It can be stripped just by heating at 750-800 degrees for a minute or so with a soldering iron. The trade name, I believe, is "Solder-eze", but a web search doesn't reveal a ready source. (I did find a number of people asking where it could be found, but no responses.) Hopefully a reader knows of a source and can tell us. A nice summary of various ways to strip heat-strippable wire is at http://www.ac6rm.net/mailarchive/html/elecraft-list/2005-10/msg00598.html.

While searching for information on heat-strippable wire, I came across the suggestion for stripping conventional enameled wire with paint stripper. Apparently it takes a few minutes, but does work. It's nasty stuff to work with, though.

Roy Lewallen, W7EL

Jim Flanagan wrote:
> Guys..
> Does anyone have any better method for stripping small, enameled
> wire, other than using sandpaper or an exacto knife (scrapping)?
> There used to be a chemical stripper called 'Xvar', years ago.
> This stuff worked great. Nasty stuff as you can imagine and has
> been EPA'd years ago. Is there anything comparable, today?
>
> Also, a retired technician that I once knew had a pair of ingenious
> 'stripper pliers' that he had acquired back in the '60s that did
> a fabulous job. These pliers had special jaws that would scrape the
> enamel off without nicking the wire. They worked GREAT. Supposedly,
> this tool originated from a mfg in Germany. I have never seen this tool
> since. Anyone have a lead on something similar?
>
> Thanks and take care.
> -jim
> WB5KYE

4484. Re: ARC-5 Tuning Shaft Adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 17:55:50 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1158774950.297816.34630@b28g2000cwb.googlegroups.com>
Source record: 10485

Andrew VK3BFA wrote:
> LenAnderson@ieee.org wrote:
> > Does anyone have or can they direct me to a couple of "splined"
> > tuning shaft adapters that fit the ARC-5 Command Set receivers?
> > I'd like to adapt some of the ganged variable capacitors from
> > those sets into some homebuilt equipment...lovely antibacklash
> > gear reduction on them.
>
> Hi Len,
> nope - rare as rocking horse manure. I machined ones from brass rod -
> receiver end, a press fit on the splines, other end, quarter inch for
> knob.
>
> Andrew VK3BFA.

Thanks, Andrew...I got that impression after several hours of web surfing. :-) :-(

My 1948-acquired Command Set surplus stock has slowly withered away ($6 for receivers, $12 for transmitters, $18 for antenna tuning unit-modulator-Tx dynamotor at that time). I'd gotten 4 of the tuning "knob" adapters back then, 2 got traded-sold, 1 remains on a 6-9 MHz receiver, and 1 is lost somewhere unknown.

Beautiful anti-backlash worm drive on those ganged capacitors. Would be good for tuning anything.

Not being a machinist I was hoping someone would come up with the correct words to describe the splined whatsis so that I could haunt a few mechanical parts suppliers for something that would mate smoothly with it. I tried some copper tubing (pressed over splines) with marginal success (several diameters, easy to get at do-it-yourself stores for various small water piping uses) but those bend rather easily. [it's not too swift when one's home machine shop consists of a Big Lots table top drill press...:-)]

I did come across a Magnificent website with Great pictures of WW2 radio equipment in US military aviation: http://aafradio.org Now there is a Collector! [and a consultant at the Smithsonian Air and Space Museum]

LenAnderson@ieee.org

4485. Re: 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 18:10:04 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1158775804.834335.33300@h48g2000cwc.googlegroups.com>
Source record: 10486

Roy Lewallen wrote:
> For a long time, I've used heat-strippable wire which I got surplus. It
> can be stripped just by heating at 750-800 degrees for a minute or so
> with a soldering iron. The trade name, I believe, is "Solder-eze", but a
> web search doesn't reveal a ready source. (I did find a number of people
> asking where it could be found, but no responses.) Hopefully a reader
> knows of a source and can tell us. A nice summary of various ways to
> strip heat-strippable wire is at
> http://www.ac6rm.net/mailarchive/html/elecraft-list/2005-10/msg00598.html.
>
> While searching for information on heat-strippable wire, I came across
> the suggestion for stripping conventional enameled wire with paint
> stripper. Apparently it takes a few minutes, but does work. It's nasty
> stuff to work with, though.
>
> Roy Lewallen, W7EL
>
> Jim Flanagan wrote:
> > Guys..
> > Does anyone have any better method for stripping small, enameled
> > wire, other than using sandpaper or an exacto knife (scrapping)?
> > There used to be a chemical stripper called 'Xvar', years ago.
> > This stuff worked great. Nasty stuff as you can imagine and has
> > been EPA'd years ago. Is there anything comparable, today?
> >
> > Also, a retired technician that I once knew had a pair of ingenious
> > 'stripper pliers' that he had acquired back in the '60s that did
> > a fabulous job. These pliers had special jaws that would scrape the
> > enamel off without nicking the wire. They worked GREAT. Supposedly,
> > this tool originated from a mfg in Germany. I have never seen this tool
> > since. Anyone have a lead on something similar?
> >
> > Thanks and take care.
> > -jim
> > WB5KYE

I mentioned a commercial paint-stripper in here, have tried another
brand. Wayyyy slow. Having used commercial paint strippers in
days before EPA had declared nearly everything "toxic, harmful to
health" those paint stripper compounds were a lot stronger. It
works, sort of, but one can use up a half roll of paper towels to
make a dozen-plus toroid inductors' end-stripping. [okay, some
exaggeration there] It is messy and usually takes a second
application of goo to clean it off good enough for soldering.

GONE is good old General Cement "Strip-X" (company says it
has no plans for anything similar in future) and the "Solder-Eze"
is relegated to "old stock." Since "magnet wire" is still used
in industry, hobbyists need a hint or three from those working
in that area now.

LenAnderson@ieee.org

4486. Re: Recommended Method for PCB mounting of Toroidal Coils

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 18:21:27 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1158776485.810631.41010@k70g2000cwa.googlegroups.com>
Source record: 10487

Jim Flanagan wrote:
> Hi..
> In the past, I've always mounted my coils vertically but
> this time around, I need to mount some horizontally. I was
> simply going to glue them to the pcb but wanted first to get
> input as to other home brewer's method of mounting toroids to
> a pcb. The toroids will be FT-37-43 type wide band transformers
> in the 10MHz range. Your input is welcome. Take care.
>
> -jim
> WB5KYE

With FT-37-43 toroidal cores, the outer diameter of the form
is 3/8 inch, right?

There should be very little change in inductance by simply
gluing that small an inductor to a non-conductive spacer
at least 1/8 inch thick...such as most any plastic material.
I've used two-part epoxy from the hardware store, a silicone
RTV goopy stuff (from same store), even my wife's glue
gun for craft work (lots of TLC involved in such persuasion),
all worked well. I'd judge that the two-part epoxy would be
the most long-lasting on fiberglass-epoxy substrate boards.

LenAnderson@ieee.org

4487. Re: Bluetooth Headset w/Ham HT - is it possible?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 18:30:02 UTC
From: gsm@mendelson.com
Message-ID: <slrneh322o.rn7.gsm@cable.mendelson.com>
Source record: 10488

Jim wrote:
> Anyone know if there is any articles on adapting a BLUETOOTH headset
> as used with cellphones for use with an Amateur HT? It would be nice
> to adapt one of the motorcycle Bluetooth helmet headsets to work with
> an amateur HT while cycling. I'm sure it's been done before, and if
> anyone knows of a source of info it would be appreciated.

It would be fairly difficult to do it on it's own. Using a pocket PC or
some similar device, you could do it easily. The problem is finding a
device that could do it that would not cost more than the HT.

Basicly what you need is some sort of system that accepts connections
from bluetooth devices and plays the digital sound to a digital to
analog converter. Since a pocket PC has the bluetooth and a "sound card",
it would be simple under Linux. It might be simple under WINCE, but
I only know about building handheld Linux devices.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 Fax ONLY: 972-2-648-1443 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

4488. Re: 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 19:05:51 UTC
From: dplatt@radagast.org
Message-ID: <12h348fq0doab58@corp.supernews.com>
Source record: 10489

>Guys..
> Does anyone have any better method for stripping small, enameled
>wire, other than using sandpaper or an exacto knife (scrapping)?
>There used to be a chemical stripper called 'Xvar', years ago.
>This stuff worked great. Nasty stuff as you can imagine and has
>been EPA'd years ago. Is there anything comparable, today?

Depending on your location you _might_ still be able to buy a quantity of MEK (methyl ethyl ketone) at a paint or hardware store. This is a strong and effective stripper for many insulations, and may very well have been the primary ingredient in the Xvar stripper you mention. As you say, it's bog-nasty stuff, and should be used with serious caution.

Some people just flame the end of the wire briefly - long enough to scorch the insulation but not long enough to oxidize the wire. It makes scraping off the insulation much easier... but takes practice.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

4489. Re: Bluetooth Headset w/Ham HT - is it possible?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 19:08:11 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12h34cs4glc0re7@corp.supernews.com>
Source record: 10490

"Jim" <wdxp@cox.net> wrote in message
news:7ov2h293kql33cj5ukcrn4ljj9cs9i9r0n@4ax.com...
> Anyone know if there is any articles on adapting a BLUETOOTH headset
> as used with cellphones for use with an Amateur HT?

Not marketed as such, but there *are* Bluetooth adapters out there for devices
that use "standard" headphones and microphones, such as cell phones (e.g.,
http://www.amazon.com/Jabra-A210-Bluetooth-Adapter-2-5-Universal-Headset-Jack/dp/B0006HES2
I/sr=8-1/qid=1158779198).
Adapting that to an HT is, I expect, no more than perhaps a bit of level
matching an connectorization.

---Joel Kolstad

4490. Re: 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 19:08:56 UTC
From: dplatt@radagast.org
Message-ID: <12h34e8isnso813@corp.supernews.com>
Source record: 10491

In article <12h2v3ie5b8mqe8@corp.supernews.com>,
Roy Lewallen <w7el@eznec.com> wrote:

>For a long time, I've used heat-strippable wire which I got surplus. It
>can be stripped just by heating at 750-800 degrees for a minute or so
>with a soldering iron. The trade name, I believe, is "Solder-eze", but a
>web search doesn't reveal a ready source. (I did find a number of people
>asking where it could be found, but no responses.)

Another variety of this is Belden "Beldsol", which seems to be widely
available... Mouser, Newark, RS Electronics list it.

And, an eBay search on "solderable magnet wire" will probably turn up
some supplies of this sort of wire.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4491. Re: 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 19:16:05 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12h34rmq7ns9jc4@corp.supernews.com>
Source record: 10492

Roy,

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:12h2v3ie5b8mqe8@corp.supernews.com...
> Hopefully a reader knows of a source and can tell us.

I've purchased some from RoadRunner in the past:
http://www.rrunner.co.uk/wire/qse.htm ... probably not particularly
cost-effective, being overseas, but if you only need small quantities it's OK.
Another UK company, Vero, has it as well:
http://www.verotl.com/products/index.cfm?content_id=7846BCBE-F067-441A-9F53A51D8E4CC6B3 -
- never dealth with them personally.

---Joel

4492. Re: ARC-5 Tuning Shaft Adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 19:50:09 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <oK2dneao4uTDBozYnZ2dnUVZ8qSdnZ2d@pipex.net>
Source record: 10493

Len Anderson wrote :
> Not being a machinist I was hoping someone would come up
> with the correct words to describe the splined whatsis so that
> I could haunt a few mechanical parts suppliers for something
> that would mate smoothly with it. I tried some copper tubing
> (pressed over splines) with marginal success (several
> diameters, easy to get at do-it-yourself stores for various
> small water piping uses) but those bend rather easily. [it's not
> too swift when one's home machine shop consists of a Big Lots
> table top drill press...:-)]
==========
Not knowing the equipment being discussed ,I could suggest the following general method of extending a 6 -6.35 mm shaft . (6.35mm equals 1/4 inch)

Take 2 (if possible identical) non metallic knobs for the shaft diameter concerned ,for example the push-on potmeter knobs found on almost any VDU or older TV and BC radio sets , used to push onto splined potmeters . Equipment from Asian origin is always metric ,hence shafts dias are 6 mm . Fit the 2 knobs concentrically piggy back ,with either epoxy or 2 or 3 bolts /nuts either metallic or non-metallic (say nylon).

Push/fix 1 knob onto the splined shaft to be extended.
Fit tubular/solid extension shaft into other side.

If alignment with front panel opening is a problem , glue flexible material (for example rubber ,dense foam or expanded polystyrene)in between the 2 knobs . Of course all this provided there is enough space in the enclosure.

This method is also very suitable for applications involving components with a rotary shaft which should be kept free from ground ,like in antenna matching units (tuners) .

If the to be driven shaft has a 1/4 inch diameter the mating knob must suit this ,but the other knob can be for a 6mm dia shaft and final front panel knob There is a lot of flexibility.

Frank GM0CSZ / KN6WH

4493. Re: ARC-5 Tuning Shaft Adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 20:43:34 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <WJhQg.153293$FQ1.12695@attbi_s71>
Source record: 10494

> Len Anderson wrote :
>> Not being a machinist I was hoping someone would come up
>> with the correct words to describe the splined whatsis so that
>> I could haunt a few mechanical parts suppliers for something
>> that would mate smoothly with it. I tried some copper tubing
>> (pressed over splines) with marginal success (several
>> diameters, easy to get at do-it-yourself stores for various
>> small water piping uses) but those bend rather easily. [it's not
>> too swift when one's home machine shop consists of a Big Lots
>> table top drill press...:-)]

Len, today is your lucky day. I have ONE splined whatsis, the tuning knob that was included in every maintenance kit for the BCxxx series. Steel with a heavily knurled 1/2 inch knob.

Send me your snail mail address, pretty sure I'm not going to be using it.

W4ZCB

4494. Re: Bluetooth Headset w/Ham HT - is it possible?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 20:51:02 UTC
From: gsm@mendelson.com
Message-ID: <slrneh3aai.39n.gsm@cable.mendelson.com>
Source record: 10495

Joel Kolstad wrote:
> Not marketed as such, but there *are* Bluetooth adapters out there for devices
> that use "standard" headphones and microphones, such as cell phones (e.g.,
> http://www.amazon.com/Jabra-A210-Bluetooth-Adapter-2-5-Universal-Headset-Jack/dp/B0006HES2I/sr=8-1/qid=1158779198).
> Adapting that to an HT is, I expect, no more than perhaps a bit of level
> matching an connectorization.

Only if the HT has a VOX function.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 Fax ONLY: 972-2-648-1443 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

4495. Re: 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 21:20:04 UTC
From: Dan Andersson <dan@andersson.co.uk>
Message-ID: <8e-dnYP_HZgaLYzYRVnyiw@eclipse.net.uk>
Source record: 10496

LenAnderson@ieee.org wrote:

> Roy Lewallen wrote:
>> For a long time, I've used heat-strippable wire which I got surplus. It
>> can be stripped just by heating at 750-800 degrees for a minute or so
>> with a soldering iron. The trade name, I believe, is "Solder-eze", but a
>> web search doesn't reveal a ready source. (I did find a number of people
>> asking where it could be found, but no responses.) Hopefully a reader
>> knows of a source and can tell us. A nice summary of various ways to
>> strip heat-strippable wire is at
>>
http://www.ac6rm.net/mailarchive/html/elecraft-list/2005-10/msg00598.html.
>>
>> While searching for information on heat-strippable wire, I came across
>> the suggestion for stripping conventional enameled wire with paint
>> stripper. Apparently it takes a few minutes, but does work. It's nasty
>> stuff to work with, though.
>>
>> Roy Lewallen, W7EL
>>
>> Jim Flanagan wrote:
>> > Guys..
>> > Does anyone have any better method for stripping small, enameled
>> > wire, other than using sandpaper or an exacto knife (scrapping)?
>> > There used to be a chemical stripper called 'Xvar', years ago.
>> > This stuff worked great. Nasty stuff as you can imagine and has
>> > been EPA'd years ago. Is there anything comparable, today?
>> >
>> > Also, a retired technician that I once knew had a pair of ingenious
>> > 'stripper pliers' that he had acquired back in the '60s that did
>> > a fabulous job. These pliers had special jaws that would scrape the
>> > enamel off without nicking the wire. They worked GREAT. Supposedly,
>> > this tool originated from a mfg in Germany. I have never seen this
>> > tool
>> > since. Anyone have a lead on something similar?
>> >
>> > Thanks and take care.
>> > -jim
>> > WB5KYE
>
> I mentioned a commercial paint-stripper in here, have tried another
> brand. Wayyyy slow. Having used commercial paint strippers in
> days before EPA had declared nearly everything "toxic, harmful to
> health" those paint stripper compounds were a lot stronger. It

> works, sort of, but one can use up a half roll of paper towels to
> make a dozen-plus toroid inductors' end-stripping. [okay, some
> exaggeration there] It is messy and usually takes a second
> application of goo to clean it off good enough for soldering.
>
> GONE is good old General Cement "Strip-X" (company says it
> has no plans for anything similar in future) and the "Solder-Eze"
> is relegated to "old stock." Since "magnet wire" is still used
> in industry, hobbyists need a hint or three from those working
> in that area now.
>
> LenAnderson@ieee.org

Years ago, working with "Litz wire", I used Red Spirit and a small burner or a small blow torch. We dipped the wire in the spirit and then burned it.

I'm not entirely sure if the Litz wires we used had secondary lacquer isolation but I think so and that was the major pain with that wire.

A quick heating up and a swipe with a cloth should do it. Red Spirit was originally almost clean Ethanol (While doing my military service in the Signal Corps ages ago, we used to nick it and mix it with coke or tonic water on Friday evenings...)

Cheers

Dan / M0DFI

dan.andersson@ieee.org

4496. Re: Bluetooth Headset w/Ham HT - is it possible?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 21:25:57 UTC
From: Dan Andersson <dan@andersson.co.uk>
Message-ID: <qbidncmhyKp1LIzYRVnyiA@eclipse.net.uk>
Source record: 10497

Jim wrote:

> Anyone know if there is any articles on adapting a BLUETOOTH headset
> as used with cellphones for use with an Amateur HT? It would be nice
> to adapt one of the motorcycle Bluetooth helmet headsets to work with
> an amateur HT while cycling. I'm sure it's been done before, and if
> anyone knows of a source of info it would be appreciated.
>
> THanks,
>
> Jim

You can buy a cheap BT adapter for a couple of Dollars. You also need to add a simple VOX to be really happy. However!!! I do recommend you getting one of these throat/vibration mic headsets with a thing plastic tupe as earpiece. Replace the original BT mic+earpiece and you have a solution that actually works.
BT headsets are notoriously bad as they pick up to much noise. A throat mic is just so much better. Also, these throatmic headsrets comes with a neat ptt on a vcable. Vox just doesmn't work properly on a bike unless you have it low sensitivity and really shout at it for tx...

Cheers

Dan / M0DFI

4497. Re: 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 21:54:12 UTC
From: ve3ab <ve3ab@personainternet.com>
Message-ID: <1158789252.815826.301400@d34g2000cwd.googlegroups.com>
Source record: 10398

Where I once worked..we used a chemical stripper that we brushed on
fine enamel wire.
The insulating enamel would then wipe off. Earl VE3AB
Jim Flanagan wrote:
> Guys..
> Does anyone have any better method for stripping small, enameled
> wire, other than using sandpaper or an exacto knife (scrapping)?
> There used to be a chemical stripper called 'Xvar', years ago.
> This stuff worked great. Nasty stuff as you can imagine and has
> been EPA'd years ago. Is there anything comparable, today?
>
> Also, a retired technician that I once knew had a pair of ingenious
> 'stripper pliers' that he had acquired back in the '60s that did
> a fabulous job. These pliers had special jaws that would scrape the
> enamel off without nicking the wire. They worked GREAT. Supposedly,
> this tool originated from a mfg in Germany. I have never seen this tool
> since. Anyone have a lead on something similar?
>
> Thanks and take care.
> -jim
> WB5KYE

4498. Re: 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 22:07:04 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <cYiQg.60441$aJ.21666@attbi_s21>
Source record: 10399

Solder strippable wire is also called "Bicelflux wire" and it's a polyurethane enamelled heat removeable insulation. Long ago, I bought several small putups from a no longer remembered US supplier, however, among others, it's available from:

http://www.greenweld.co.uk/acatalog/Shop_Enamelled_49.html

in a variety of wire sizes.

When the insulation is removed with a dollop of molten solder, a toxic gas is released (in small quantities to be sure) and it ought to be done with good ventilation in the workplace.

W4ZCB

4499. Re: 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-20 22:07:05 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <dYiQg.60442$aJ.3400@attbi_s21>
Source record: 10400

Solder strippable wire is also called "Bicelflux wire" and it's a polyurethane enamelled heat removeable insulation. Long ago, I bought several small putups from a no longer remembered US supplier, however, among others, it's available from:

http://www.greenweld.co.uk/acatalog/Shop_Enamelled_49.html

in a variety of wire sizes.

When the insulation is removed with a dollop of molten solder, a toxic gas is released (in small quantities to be sure) and it ought to be done with good ventilation in the workplace.

W4ZCB

4500. Looking for additional texts on basic receiver design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-21 01:16:55 UTC
From: jawod <jawod@fuse.net>
Message-ID: <f07a0$4511e89e$4831cd39$17095@FUSE.NET>
Source record: 10401

Hi,

I am reading the ARRL Handbook on Receiver Design and frankly, I find it's a bit out of my league. The writing assumes some knowledge of circuitry that I am weak on. Eg., I think I can I can see from the schematic that an RC circuit is shifting phase in a quadrature amplifier stage but it's not mentioned in the text as such.

Hopefully, someone out there can get a sense of where I am on the learning curve and can suggest an appropriate text (not TOO basic, I guess).

Thanks!

John
AB8O

4501. Ten Tec part needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-21 03:48:07 UTC
From: KU4YP <ku4yp@peoplepc.com>
Message-ID: <XXnQg.301$o71.183@newsread3.news.pas.earthlink.net>
Source record: 10402

hello all,

i need the rf board from a ten tec 509 rig. i had one follow me home but the rf board is missing. i called ten tec and they have all the parts for the board, they just no longer have the board. i am planning to build the final on perf board if i can not find one from a parts rig. the board or rig does not need to be working. i'll fix the board, just wanted to save a little time. any help appreciatred. 73 mike ku4yp

4502. Re: K5JHF Morse Code Device, 3.2/3.3

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-21 04:26:55 UTC
From: Tom Coates <tecoatesHatesSpam@comcast.net>
Message-ID: <MuGdnVapE7KEil_YnZ2dnUVZ_tudnZ2d@comcast.com>
Source record: 10403

Very interesting. A valuable idea that I never thought of. Thanks!
"Rex" <me@hutmail.invalid> wrote in message
news:92qug2t2kmggh596voab2puq3veo2hfair@4ax.com...
> On Mon, 18 Sep 2006 22:12:57 +0100, Highland Ham
> <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:
>
> >Rex , Thanks for making this prog. freely available , it works very
> >well. Congrats.
> >The large character display & voice feedback is excellent for visually
> >impaired users.
> >
> >I have passed the prog on to other hams.
> >
> >
> >Frank GM0CSZ / KN6WH north of Scotland UK
>
> You are quite welcome. There are links on my page to other programs and
> information that I found really good too.
>
> -Rex, KK6MK
>

4503. Re: ARC-5 Tuning Shaft Adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-21 05:48:54 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1158817734.182477.196020@h48g2000cwc.googlegroups.com>
Source record: 10404

Highland Ham wrote:
> Len Anderson wrote :
> > Not being a machinist I was hoping someone would come up
> > with the correct words to describe the splined whatsis so that
> > I could haunt a few mechanical parts suppliers for something
> > that would mate smoothly with it. I tried some copper tubing
> > (pressed over splines) with marginal success (several
> > diameters, easy to get at do-it-yourself stores for various
> > small water piping uses) but those bend rather easily. [it's not
> > too swift when one's home machine shop consists of a Big Lots
> > table top drill press...:-)]
> ============================
> Not knowing the equipment being discussed ,I could suggest the following
> general method of extending a 6 -6.35 mm shaft . (6.35mm equals 1/4 inch)
>
> Take 2 (if possible identical) non metallic knobs for the shaft diameter
> concerned ,for example the push-on potmeter knobs found on almost any
> VDU or older TV and BC radio sets , used to push onto splined potmeters .
> Equipment from Asian origin is always metric ,hence shafts dias are 6 mm .
> Fit the 2 knobs concentrically piggy back ,with either epoxy or 2 or 3
> bolts /nuts either metallic or non-metallic (say nylon).
>
> Push/fix 1 knob onto the splined shaft to be extended.
> Fit tubular/solid extension shaft into other side.
>
> If alignment with front panel opening is a problem , glue flexible
> material (for example rubber ,dense foam or expanded polystyrene)in
> between the 2 knobs . Of course all this provided there is enough
> space in the enclosure.
>
> This method is also very suitable for applications involving components
> with a rotary shaft which should be kept free from ground ,like in
> antenna matching units (tuners) .
>
> If the to be driven shaft has a 1/4 inch diameter the mating knob must
> suit this ,but the other knob can be for a 6mm dia shaft and final front
> panel knob There is a lot of flexibility.
>
> Frank GM0CSZ / KN6WH

Good tip, Frank! Thanks but I've tried that before. Depends on the
polymer of the knobs...some can take moderate flexure (usually
polypropylene?) but others (polystyrene) can't.

LenAnderson@ieee.org

4504. Re: 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-21 06:02:46 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1158818566.167463.52730@i42g2000cwa.googlegroups.com>
Source record: 10405

Dan Andersson wrote:
> LenAnderson@ieee.org wrote:
>
> > Roy Lewallen wrote:
> >> For a long time, I've used heat-strippable wire which I got surplus. It
> >> can be stripped just by heating at 750-800 degrees for a minute or so
> >> with a soldering iron. The trade name, I believe, is "Solder-eze", but a
> >> web search doesn't reveal a ready source. (I did find a number of people
> >> asking where it could be found, but no responses.) Hopefully a reader
> >> knows of a source and can tell us. A nice summary of various ways to
> >> strip heat-strippable wire is at
> >>
> http://www.ac6rm.net/mailarchive/html/elecraft-list/2005-10/msg00598.html.
> >>
> >> While searching for information on heat-strippable wire, I came across
> >> the suggestion for stripping conventional enameled wire with paint
> >> stripper. Apparently it takes a few minutes, but does work. It's nasty
> >> stuff to work with, though.
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> >> Roy Lewallen, W7EL
> >>
> >> Jim Flanagan wrote:
> >> > Guys..
> >> > Does anyone have any better method for stripping small, enameled
> >> > wire, other than using sandpaper or an exacto knife (scrapping)?
> >> > There used to be a chemical stripper called 'Xvar', years ago.
> >> > This stuff worked great. Nasty stuff as you can imagine and has
> >> > been EPA'd years ago. Is there anything comparable, today?
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> >> > Also, a retired technician that I once knew had a pair of ingenious
> >> > 'stripper pliers' that he had acquired back in the '60s that did
> >> > a fabulous job. These pliers had special jaws that would scrape the
> >> > enamel off without nicking the wire. They worked GREAT. Supposedly,
> >> > this tool originated from a mfg in Germany. I have never seen this
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> >> > since. Anyone have a lead on something similar?
> >> >
> >> > Thanks and take care.
> >> > -jim
> >> > WB5KYE
> >
> > I mentioned a commercial paint-stripper in here, have tried another
> > brand. Wayyyy slow. Having used commercial paint strippers in
> > days before EPA had declared nearly everything "toxic, harmful to

> > health" those paint stripper compounds were a lot stronger. It
> > works, sort of, but one can use up a half roll of paper towels to
> > make a dozen-plus toroid inductors' end-stripping. [okay, some
> > exaggeration there] It is messy and usually takes a second
> > application of goo to clean it off good enough for soldering.
> >
> > GONE is good old General Cement "Strip-X" (company says it
> > has no plans for anything similar in future) and the "Solder-Eze"
> > is relegated to "old stock." Since "magnet wire" is still used
> > in industry, hobbyists need a hint or three from those working
> > in that area now.
> >
> > LenAnderson@ieee.org
>
>
> Years ago, working with "Litz wire", I used Red Spirit and a small burner or
> a small blow torch. We dipped the wire in the spirit and then burned it.
>
> I'm not entirely sure if the Litz wires we used had secondary lacquer
> isolation but I think so and that was the major pain with that wire.
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> A quick heating up and a swipe with a cloth should do it. Red Spirit was
> originally almost clean Ethanol (While doing my military service in the
> Signal Corps ages ago, we used to nick it and mix it with coke or tonic
> water on Friday evenings...)
>
> Cheers
>
> Dan / M0DFI
>
> dan.andersson@ieee.org

Thank you Dan (you spell the surname correctly!). :-)

"Red Spirit?" Unfamiliar term to me on this side of the pond.

I've tried Toluene and MEK and found them lacking. Turns out
that (in varying percentages) are part of the paint stripper goop
sold in do-it-yourself stores over here. I can get Ethanol and
may try that.

In years past, the General Cement Company of Rockford, Illinois,
had a blackish goop they marketed for stripping magnet wire.
Worked extremely well, dip once, let it sit for a minute and the
enamel coating can be seen to actually lift off of the wire. One
wipe and the wire surface is free, ready to solder. Had a
definite acid content from the smell of it (sharp, acrid). The
tradename was either "Strip-X" or "Strip-Var," not sure which
now. :-(Mine was used up years ago, bottle tossed out.

LenAnderson@ieee.org

4505. Re: 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-21 06:29:18 UTC
From: dplatt@radagast.org
Message-ID: <12h4c9u6j146m26@corp.supernews.com>
Source record: 10406

In article <1158818566.167463.52730@i42g2000cwa.googlegroups.com>,
LenAnderson@ieee.org <LenAnderson@ieee.org> wrote:

> In years past, the General Cement Company of Rockford, Illinois,
> had a blackish goop they marketed for stripping magnet wire.
> Worked extremely well, dip once, let it sit for a minute and the
> enamel coating can be seen to actually lift off of the wire. One
> wipe and the wire surface is free, ready to solder. Had a
> definite acid content from the smell of it (sharp, acrid). The
> tradename was either "Strip-X" or "Strip-Var," not sure which
> now. :-(Mine was used up years ago, bottle tossed out.

GC Electronics "Strip-X", I assume? I found a MSDS which states that
it's 70% methylene chloride, 25% cresol (isomers of cresylic acid),
around 5% ammonia, plus some wax and thickening agents.

One poster stated that it was designed to work with Formvar
insulation, and might not work as well on the newer Polythermaleze
insulation.

I don't see it in their current catalog... probably gone where the
goblins go, yo ho!

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4506. Re: 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-21 07:17:34 UTC
From: Rex <me@hutmail.invalid>
Message-ID: <h7e4h2ht56ajvjjlk6vrtdfed5ed2efc3n@4ax.com>
Source record: 10407

On Wed, 20 Sep 2006 11:38:06 GMT, Jim Flanagan <jflan@tampabay.rr.com>
wrote:

>Guys..
> Does anyone have any better method for stripping small, enameled
>wire, other than using sandpaper or an exacto knife (scrapping)?
>There used to be a chemical stripper called 'Xvar', years ago.
>This stuff worked great. Nasty stuff as you can imagine and has
>been EPA'd years ago. Is there anything comparable, today?
>
>Also, a retired technician that I once knew had a pair of ingenious
>'stripper pliers' that he had acquired back in the '60s that did
>a fabulous job. These pliers had special jaws that would scrape the
>enamel off without nicking the wire. They worked GREAT. Supposedly,
>this tool originated from a mfg in Germany. I have never seen this tool
>since. Anyone have a lead on something similar?
>
>Thanks and take care.
>-jim
>WB5KYE

I had occasion recently to wind a couple coils. Checked my stash and
found two different kinds of 30 ga enameled wire. I thought I'd try
tinning the ends of the wires without stripping. One of the wires
soldered very easily in a few seconds so must have been
heat/self-stripping. The second sample didn't solder as easily, but I
kept the wire in ball of molten solder for 10's of seconds and
eventually the enamel melted off and formed sludge on the surface of the
solder ball. Cleaned the corrupted solder off the iron tip and the wire
tinned up ok.

Not sure if the second one was normal enamel or just a slower version of
self-strippable wire. Might be worth trying to just melt the enamel off
in a ball of solder like I did.

4507. Re: 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-21 07:19:57 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <gn8ZtfEd0jEFFAJD@ifwtech.co.uk>
Source record: 10408

Harold E. Johnson wrote:
>Solder strippable wire is also called "Bicelflux wire" and it's a
>polyurethane enamelled heat removeable insulation. Long ago, I bought
>several small putups from a no longer remembered US supplier, however, among
>others, it's available from:
>
>http://www.greenweld.co.uk/acatalog/Shop_Enamelled_49.html
>
>in a variety of wire sizes.
>
>When the insulation is removed with a dollop of molten solder, a toxic gas
>is released (in small quantities to be sure) and it ought to be done with
>good ventilation in the workplace.

There are two totally different families of enameled wire, and the
original question didn't say which one.

For the pretty-coloured polyurethane enamels, solder stripping is the
way to go. As Harold says, that is how they are designed to be stripped.
Professionals use a solder pot, while the rest of us make do with a big
bead of molten solder on the tip of the iron. Don't use a flame for
solder-strippable wire - it's too hot, and charred polyurethane enamel
sticks to the wire.

Heated for long enough at the right temperature, the enamel comes right
off with no scraping required. The decomposing enamel also acts as a
solder flux, so the stripped end is bright and ready-tinned.

The other type of enamel is usually brown - some of it is your
grandfather's brown lacquer, but the modern stuff is not.

The really old stuff can be charred in a spirit burner (chosen for its
cool flame which doesn't oxidize the copper) and the loose carbon
scrapes off easily. Note: this is the *only* kind of enamel that is
suitable for flame stripping.

The modern brown enamels are totally different. They are mainly intended
for motor and transformer windings, are often double-coated, and are
specifically designed to be heat-resistant and tough as old boots. They
are almost as tough as the copper underneath... and there's your problem
in stripping it.

This stuff laughs at molten solder and spirit burners. Heat stripping is
no good because flame temperatures high enough to decompose the enamel
will also oxidize the copper underneath. As far as I know, the only ways
to remove it are by scraping, sandpapering or filing... all of which are

difficult to do without nicking the copper wire.

So how do the professional winding shops do it?

--
73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

4508. Re: 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-21 11:20:21 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <VzuQg.154340$FQ1.138368@attbi_s71>
Source record: 10409

> This stuff laughs at molten solder and spirit burners. Heat stripping is
> no good because flame temperatures high enough to decompose the enamel
> will also oxidize the copper underneath. As far as I know, the only ways
> to remove it are by scraping, sandpapering or filing... all of which are
> difficult to do without nicking the copper wire.
>
> So how do the professional winding shops do it?
>
> --
> 73 from Ian GM3SEK

GM Ian, guess you're getting used to the Highlands by now. Had a great trip to Scotland for 3 weeks in June, Blair Athol to Glencoe. Not long enough though. Yes, Polythermaleze and heavy polythermaleze and Formvar are the chrome vanadium steel of insulations. If you want to wind wire tightly around a faceted diamond without damaging the insulation, those are what you use. Basically, One divided by Bicelflux.

Professional winding shops invest in a machine that looks and operates somewhat like an electric pencil sharpener. It abrades the insulation and is automatically set for each different wire size. Needless to say, they come a bit dear. (Not as dear as diesel fuel in Pitlochry, but dear!)

Regards
W4ZCB

4509. Re: 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-21 12:01:18 UTC
From: amdx <amdx@knology.net>
Message-ID: <d6993$45127f10$45011502$18395@KNOLOGY.NET>
Source record: 10410

"Jim Flanagan" <jflan@tampabay.rr.com> wrote in message
news:yK9Qg.1384$K02.6@tornado.tampabay.rr.com...
> Guys..
> Does anyone have any better method for stripping small, enameled
> wire, other than using sandpaper or an exacto knife (scrapping)?
> There used to be a chemical stripper called 'Xvar', years ago.
> This stuff worked great. Nasty stuff as you can imagine and has
> been EPA'd years ago. Is there anything comparable, today?
>
> Also, a retired technician that I once knew had a pair of ingenious
> 'stripper pliers' that he had acquired back in the '60s that did
> a fabulous job. These pliers had special jaws that would scrape the
> enamel off without nicking the wire. They worked GREAT. Supposedly,
> this tool originated from a mfg in Germany. I have never seen this tool
> since. Anyone have a lead on something similar?
>
> Thanks and take care.
> -jim
> WB5KYE

I posted a picture of a very useful hand stipper I have been using for
about 24 years, See it on alt.binaires.schematics.electronics under
"Wire stripper for RRAH".

4510. FYI: 21,000+ Calculators

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-21 14:55:52 UTC
From: Caveat Lector <CL@nowhere.com>
Message-ID: <MJxQg.1806$nm1.1606@fed1read04>
Source record: 10411

You folks will love this site
http://www.martindalecenter.com/Calculators.html

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ELECTRICAL ENGINEERING
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CYBERINFRASTRUCTURE SYSTEMS
& COMPUTER SCIENCE

4511. Re: Looking for additional texts on basic receiver design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-21 15:50:23 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1158853823.078243.28800@b28g2000cwb.googlegroups.com>
Source record: 10412

I suggest "Experimental methods in RF Design" if that is not the one
you are using... If it is the one, you need to start by building a few
of the basic blocks, RF amp, Mixer, IF amp, AGC, etc. one at a time and
then combining them...

denny / k8do

4512. Re: 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-21 16:04:16 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <fKyQg.92$%e4.44076@news.sisna.com>
Source record: 10413

Depends a lot on the type of "enamel" that you are dealing with. As noted elsewhere, some is fairly simple to do with hot solder and some is resistant to thermonuclear techniques.

I've been successful with one of two methods on most of the stuff.

As noted, a solder pot (fairly cheap, by electronics tool standards) will do the job nicely on 90% of enamel wire.

Or, a professional paint store (NOT HandyAndy) has a parTICularly nasty chemical paint stripper called "Aircraft Paint Stripper", mostly methylene chloride which is highly toxic. About five minutes soak in that would strip the chrome from a trailer hitch. Don't sit in a spill of the stuff or you'll be talking in a high squeaky voice for the rest of your life.

Jim

4513. Re: 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-21 16:04:48 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <NKyQg.93$Y55.194749@news.sisna.com>
Source record: 10414

Depends a lot on the type of "enamel" that you are dealing with. As noted elsewhere, some is fairly simple to do with hot solder and some is resistant to thermonuclear techniques.

I've been successful with one of two methods on most of the stuff.

As noted, a solder pot (fairly cheap, by electronics tool standards) will do the job nicely on 90% of enamel wire.

Or, a professional paint store (NOT HandyAndy) has a parTICularly nasty chemical paint stripper called "Aircraft Paint Stripper", mostly methylene chloride which is highly toxic. About five minutes soak in that would strip the chrome from a trailer hitch. Don't sit in a spill of the stuff or you'll be talking in a high squeaky voice for the rest of your life.

Jim

4514. Re: Looking for additional texts on basic receiver design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-21 20:50:24 UTC
From: jawod <jawod@fuse.net>
Message-ID: <51085$4512fb81$4831cd39$1050@FUSE.NET>
Source record: 10415

Denny wrote:
> I suggest "Experimental methods in RF Design" if that is not the one
> you are using... If it is the one, you need to start by building a few
> of the basic blocks, RF amp, Mixer, IF amp, AGC, etc. one at a time and
> then combining them...
>
> denny / k8do
>
Thanks, Denny. I just ordered it.

John
AB8O

4515. Re: Looking for additional texts on basic receiver design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-21 23:53:36 UTC
From: dkelly42@cox.net
Message-ID: <1158882816.046966.91860@i42g2000cwa.googlegroups.com>
Source record: 10416

FYI fellas,

http://groups.yahoo.com/group/emrfd/messages

K5UOS

> Denny wrote:
> > I suggest "Experimental methods in RF Design" if that is not the one
> > you are using... If it is the one, you need to start by building a few
> > of the basic blocks, RF amp, Mixer, IF amp, AGC, etc. one at a time and
> > then combining them...
> >
> > denny / k8do
> >
> Thanks, Denny. I just ordered it.
>
> John
> AB8O

4516. Re: Looking for additional texts on basic receiver design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-22 00:33:27 UTC
From: Tom Coates <tecoatesHatesSpam@comcast.net>
Message-ID: <D_SdnV67-Id7so7YnZ2dnUVZ_r6dnZ2d@comcast.com>
Source record: 10417

How about a website filled with practical wisdom?
http://www.shelbrook.com/~ve7ca/

Tom N3IJ

"jawod" <jawod@fuse.net> wrote in message
news:f07a0$4511e89e$4831cd39$17095@FUSE.NET...
> Hi,
>
> I am reading the ARRL Handbook on Receiver Design and frankly, I find
> it's a bit out of my league. The writing assumes some knowledge of
> circuitry that I am weak on. Eg., I think I can I can see from the
> schematic that an RC circuit is shifting phase in a quadrature amplifier
> stage but it's not mentioned in the text as such.
>
> Hopefully, someone out there can get a sense of where I am on the
> learning curve and can suggest an appropriate text (not TOO basic, I
guess).
>
> Thanks!
>
> John
> AB8O

4517. An IC-based stereo radio design...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-22 04:46:24 UTC
From: ungvichian <ungvichian@thaimail.com>
Message-ID: <1158900384.831923.204420@b28g2000cwb.googlegroups.com>
Source record: 10418

I dunno if anyone here is good enough to know, but it's worth giving a shot... I stumbled on a website (http://mikroelektronika.co.yu/english/product/books/rrbook/chapter4/chapter4a.htm)on how radios work, and how they can be made with various IC parts, I studied the IC parts in question (via datasheets and stuff), and came up with a plan for a radio that runs in stereo on both bands:

http://i9.photobucket.com/albums/a77/Rover_Wow/AMFM.png

I know the voltage is sound (4.5-6.0 V), but how good would it work, and how much would it cost to make?

4518. Re: Looking for additional texts on basic receiver design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-22 10:35:50 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1158921350.389212.254540@d34g2000cwd.googlegroups.com>
Source record: 10419

jawod wrote:
> Hi,
>
> I am reading the ARRL Handbook on Receiver Design and frankly, I find
> it's a bit out of my league. The writing assumes some knowledge of
> circuitry that I am weak on. Eg., I think I can I can see from the
> schematic that an RC circuit is shifting phase in a quadrature amplifier
> stage but it's not mentioned in the text as such.
>
> Hopefully, someone out there can get a sense of where I am on the
> learning curve and can suggest an appropriate text (not TOO basic, I guess).

Those writing "popular" (including ARRL) tech books are told not to
include any equations for better or worse. The ARRL books are not bad
as cookbooks but they skip a lot of steps leading up to understanding
why all those parts are there :-).

If you are looking for good readable books that build up from basics
and do not shirk at all from equations/analysis/calculus, try:

The Art of Electronics, Horowitz&Hill, for general electronics and a
tiny bit of radio. Begins to do noise analysis, PLL's, etc.

Communication Circuit Analysis and Design, Clark&Hess, for excellent
RF/mixer/modulator/demodulator stuff.

Tim.

4519. Re: Looking for additional texts on basic receiver design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-22 11:21:19 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1158924079.463051.181850@d34g2000cwd.googlegroups.com>
Source record: 10420

Wes Haywood and his buddy have forgotten more about working electronics
than many of the published authors will ever know... I have used and
modified parts of their circuits for decades... I still find somehting
new to play with everytime I dive into my dog eared copy... Enjoy...

denny

> >
> Thanks, Denny. I just ordered it.
>
> John
> AB8O

4520. Re: Looking for additional texts on basic receiver design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-22 13:40:15 UTC
From: "Dr. Jeff" <drjeff@optonline.net>
Message-ID: <1158932415.343329.114810@h48g2000cwc.googlegroups.com>
Source record: 10421

One of the best books, if you can find a copy, is "Solid State Design
For The Radio Amateur" that was published by the ARRL in 1977, written
by Doug DeMaw and Wes Hayword. It covers theory and modeling, as well
as practical hands on building of RF receivers and transmitters. (Why
the ARRL doesn't re-publish this great book is beyond me...)
On a simpler level, any of the the "Notebook" series of books by Doug
DeMaw is a good place to learn about practical RF circuits and radio
design.

Jeff

jawod wrote:
> Hi,
>
> I am reading the ARRL Handbook on Receiver Design and frankly, I find
> it's a bit out of my league. The writing assumes some knowledge of
> circuitry that I am weak on. Eg., I think I can I can see from the
> schematic that an RC circuit is shifting phase in a quadrature amplifier
> stage but it's not mentioned in the text as such.
>
> Hopefully, someone out there can get a sense of where I am on the
> learning curve and can suggest an appropriate text (not TOO basic, I guess).
>
> Thanks!
>
> John
> AB8O

4521. Re: Ten Tec part needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-22 16:40:16 UTC
From: pdrahn@coinet.com
Message-ID: <1158943216.805291.277860@e3g2000cwe.googlegroups.com>
Source record: 10422

Contact Ten-Tec again and see if they have the "Gerber" files archived
somewhere and will send them to you so you can have a board made. Send
the Gerber files to any of the board houses and they will make you a
board to match. May be a little costly for just one board.

Paul, KD7HB

KU4YP wrote:
> hello all,
>
> i need the rf board from a ten tec 509 rig. i had one follow me home but
> the rf board is missing. i called ten tec and they have all the parts for
> the board, they just no longer have the board. i am planning to build the
> final on perf board if i can not find one from a parts rig. the board or rig
> does not need to be working. i'll fix the board, just wanted to save a
> little time. any help appreciatred. 73 mike ku4yp

4522. Top Quality RF Connectors, Adapters, Cable Assemblies & More

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-22 20:02:14 UTC
From: Don Hendrix <sales@aaarfproducts.com>
Message-ID: <ajXQg.8205$xg7.7410@tornado.socal.rr.com>
Source record: 10423

Please visit AAARFProducts.com

4523. Re: Looking for additional texts on basic receiver design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-23 00:16:29 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1158970589.600451.287490@m73g2000cwd.googlegroups.com>
Source record: 10424

jawod wrote:
> Hi,
>
> I am reading the ARRL Handbook on Receiver Design and frankly, I find
> it's a bit out of my league. The writing assumes some knowledge of
> circuitry that I am weak on. Eg., I think I can I can see from the
> schematic that an RC circuit is shifting phase in a quadrature amplifier
> stage but it's not mentioned in the text as such.
>
> Hopefully, someone out there can get a sense of where I am on the
> learning curve and can suggest an appropriate text (not TOO basic, I guess).
>
> Thanks!
>
> John
> AB8O

I would suggest "Solid State Radio Engineering" by Herbert L.
Krauss, Charles W. Bostian, and Frederick H. Raab, John
Wiley & Sons, 1980. It covers radios for a lot of radio services,
isn't confined to amateur radio practice. Hardcover 534 pp.
Check used book listings on Amazon. Not one for Basic
Training but its not for PhD studies, either. Solid information
(no pun intended). It has nice illustrations. :-)

LenAnderson@ieee.org

4524. ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-23 04:14:50 UTC
From: Tom Coates <tecoatesHatesSpam@comcast.net>
Message-ID: <6rqdnWIbgvvaKInYnZ2dnUVZ_vmdnZ2d@comcast.com>
Source record: 10425

ARRL has announced a design competition that some of you may not have heard of. The objective is to produce a CW and SSB transceiver with at least 5 watts of output on 40 meters. Components must be commercially available. The total cost of all components (except key, mic and power supply) must not exceed $50. Any instruments beyond a multimeter must be in the $50. Complete information is at http://www.arrl.org/qst/hbc/. Credit for the original idea goes to N4AUP/9. All components of the entry must arrive at ARRL by next August. The winning entry will be the subject of a QST article.

I would hope that the winning entry would also appear in the ARRL Handbook and the "Now You're Talking" book. It would also be desirable for this contest repeat every two years, alternating with an SSB/CW transceiver for a single VHF or UHF band, or perhaps for two bands most suitable for working the low-orbit satellites: something worthwhile for new Technicians to build (such a competition might have a higher limit than $50).

The idea that new hams could again build their own stations using money earned after school is very appealing. That was a plausible objective in the 1960s, because of the availability of components from obsolete TVs.

Tom, N3IJ

4525. Re: Looking for additional texts on basic receiver design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-23 04:36:26 UTC
From: jawod <jawod@fuse.net>
Message-ID: <4514B9CA.7020402@fuse.net>
Source record: 10427

LenAnderson@ieee.org wrote:
> jawod wrote:
>
>>Hi,
>>
>>I am reading the ARRL Handbook on Receiver Design and frankly, I find
>>it's a bit out of my league. The writing assumes some knowledge of
>>circuitry that I am weak on. Eg., I think I can I can see from the
>>schematic that an RC circuit is shifting phase in a quadrature amplifier
>>stage but it's not mentioned in the text as such.
>>
>>Hopefully, someone out there can get a sense of where I am on the
>>learning curve and can suggest an appropriate text (not TOO basic, I guess).
>>
>>Thanks!
>>
>>John
>>AB8O
>
>
> I would suggest "Solid State Radio Engineering" by Herbert L.
> Krauss, Charles W. Bostian, and Frederick H. Raab, John
> Wiley & Sons, 1980. It covers radios for a lot of radio services,
> isn't confined to amateur radio practice. Hardcover 534 pp.
> Check used book listings on Amazon. Not one for Basic
> Training but its not for PhD studies, either. Solid information
> (no pun intended). It has nice illustrations. :-)
>
> LenAnderson@ieee.org
>
Thanks very much to all respondents. I now have a lot to peruse. You
guys are great!

John
AB8O

4526. OT - Knight KG-687 Sweep Generator

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-23 04:37:09 UTC
From: Paul P <paulREMOVE@REMOVEppinyotREMOVE.com>
Message-ID: <VR2Rg.397$KK.313@trnddc08>
Source record: 10426

Good morning all. I picked up a sweep generator at a local ham fest. A Knight KG-687 Sweep Generator. I figure that I would give it a try for some tough alignments beloved tube type equipment (e.g.. Hammarlund HX50 Transmitter). http://www.ppinyot.com/hammarlund.htm Restoring and aligning this beast is kicking my butt. Getting the RF amplifier and mixer stages balance ("linearized" or leveled across the dial) over the US allowable BW is very difficult. I am hoping a sweeper can aid me in this effort.

So I went and bought my self two sweepers. The above referenced Knight and an EICO. Both have identical control ranges and functions. But no schematics. Only a Knight Ops manual.

Any help would be appreciated. The Knight is not on BAMA (unless I missed something).

Thanks,
Paul P.

4527. Wanted: ICOM 756ProII Display

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-23 06:45:28 UTC
From: Rick Frazier <rickf@rickfrazier.com>
Message-ID: <rumdnTXIefB9SonYnZ2dnUVZ_umdnZ2d@hawaiiantel.net>
Source record: 10428
Cross-posted to: rec.radio.swap,alt.ham.radio.marketplace,rec.radio.amateur.homebrew

Subject says it all... (or nearly so)

Looking for a 756ProII display, as the one of my radios has a bad one (looks like horizontal sync has gone south...) Icom wanted a bundle and a half to replace it. Want to fix it myself, but don't have access to enough test equipment to debug the one in the radio at present, so looking for a replacement display. Would even consider a homebrew type of solution (currently using the radio as a computer controlled radio, but I'd really like the display to work too...) If someone has information on the actual display data stream so I could homebrew an adapter to convert to a vga or even a laptop display, I'd be grateful...

Barring that, am looking for other sources of the original display. Anyone got one, or a dysfunctional 756Proii that you'd sell cheap? Located in Hawaii, so can't get to the swap meets and such... Best shipping method to here is USPS Priority mail because it's not expensive and gets here in decent time.

Thanks
--Rick AH7H

4528. What's in a "wall wart" so-called "transformer"?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-23 15:03:52 UTC
From: mcalhoun@ksu.edu
Message-ID: <ef3ico$q5n@unix1.cc.ksu.edu>
Source record: 10429

I have a collection of "wall wart" (others may call them "transformers")
and I'd like to use one to cobble a little power supply. I've never
opened any to see what's really in them (and suspect it'll be quite a
chore), but I'm quite sure they are not ALL "transformers", because some
claim AC and some claim DC output, yet the first I grabbed out of the
junkbox claimed DC AND ALSO provided a HEALTHY AC output on the same
two wires! Furthermore, NONE of them seem to be voltage regulated!
(But if one says "X volts at Y milliamps", then loading it to Y mils
usually gives an output close to X volts.)

So what IS in them? Do the really light-weight ones, for example,
use a capacitor for relatively low-loss voltage dropping? And
why would one give *BOTH* AC and DC? Bad diode(s)?

--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
NRA Life Member and Rifle, Pistol, & Home Firearm Safety Certified Instructor
Certified Instructor for the Kansas Concealed-Carry Handgun license

4529. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-23 15:19:33 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <YNadnTruO-KWzYjYnZ2dnUVZ_qmdnZ2d@comcast.com>
Source record: 10430

Those TV's weren't obsolete -- they were "repurposed" -- and don't forget that you had to purloin your grandmother's a.m. radio for a 365mmF dual variable cap.

4530. Re: What's in a "wall wart" so-called "transformer"?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-23 15:55:02 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <ik1gu3-d14.ln1@mail.specsol.com>
Source record: 10431

mcalhoun@ksu.edu wrote:
> I have a collection of "wall wart" (others may call them "transformers")
> and I'd like to use one to cobble a little power supply. I've never
> opened any to see what's really in them (and suspect it'll be quite a
> chore), but I'm quite sure they are not ALL "transformers", because some
> claim AC and some claim DC output, yet the first I grabbed out of the
> junkbox claimed DC AND ALSO provided a HEALTHY AC output on the same
> two wires! Furthermore, NONE of them seem to be voltage regulated!
> (But if one says "X volts at Y milliamps", then loading it to Y mils
> usually gives an output close to X volts.)

> So what IS in them? Do the really light-weight ones, for example,
> use a capacitor for relatively low-loss voltage dropping? And
> why would one give *BOTH* AC and DC? Bad diode(s)?

> --
> --Myron A. Calhoun.
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> Certified Instructor for the Kansas Concealed-Carry Handgun license

It depends...

The AC ones are just a transformer.

The DC ones contain a transformer and diode(s).

The cheapies usually don't contain any capacitors or regulators, hence
there is significant AC on the DC.

--
Jim Pennino

Remove .spam.sux to reply.

4531. Re: Gee...What A Coincidence, Lennie...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-23 16:28:25 UTC
From: K4YZ <k4yz_02@yahoo.com>
Message-ID: <1159028905.204143.93480@k70g2000cwa.googlegroups.com>
Source record: 10432
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew

jawod wrote:
> K4YZ wrote:
> > LenAnderson@ieee.org wrote:

> >> BTW, this "Jawod" signed a message on rec.radio.amateur.homebrew
> >> as "AB8O." I found a blank on that call sign at QRZ.
> >
> > What a coincidence...I used QRZ's database search engine and found
> > a blank when I entered "Leonard H. Anderson".
> >
> > Funny, eh...?!?!
>
> I am not "Leonard H. Anderson"

I know you're not.

I was jabbing Lennie in the ribs about supposedly not finding
someone (you?) under a certain call when HE'S not in there either.
Never has been.

Sorry for the confusion.

Steve, K4YZ

4532. Re: What's in a "wall wart" so-called "transformer"?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-23 16:49:34 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <qPudnV7nxOMJ-IjYnZ2dnUVZ_tWdnZ2d@web-ster.com>
Source record: 10433

jimp@specsol.spam.sux.com wrote:

> mcalhoun@ksu.edu wrote:
>
>>I have a collection of "wall wart" (others may call them "transformers")
>>and I'd like to use one to cobble a little power supply. I've never
>>opened any to see what's really in them (and suspect it'll be quite a
>>chore), but I'm quite sure they are not ALL "transformers", because some
>>claim AC and some claim DC output, yet the first I grabbed out of the
>>junkbox claimed DC AND ALSO provided a HEALTHY AC output on the same
>>two wires! Furthermore, NONE of them seem to be voltage regulated!
>>(But if one says "X volts at Y milliamps", then loading it to Y mils
>>usually gives an output close to X volts.)
>
>
>>So what IS in them? Do the really light-weight ones, for example,
>>use a capacitor for relatively low-loss voltage dropping? And
>>why would one give *BOTH* AC and DC? Bad diode(s)?
>
>
>>--
>>--Myron A. Calhoun.
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>>NRA Life Member and Rifle, Pistol, & Home Firearm Safety Certified Instructor
>>Certified Instructor for the Kansas Concealed-Carry Handgun license
>
>
> It depends...
>
> The AC ones are just a transformer.
>
> The DC ones contain a transformer and diode(s).
>
> The cheapies usually don't contain any capacitors or regulators, hence
> there is significant AC on the DC.
>
>
And AFAIK most of them achieve current limiting by intentionally making
the windings lossy, so you can't burn down your house by shorting the
leads together.

--

Tim Wescott
Wescott Design Services

http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

4533. Re: ARC-5 Tuning Shaft Adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-23 17:38:22 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <q2sah2hpboogcb4d02ra66mo01ear2psrs@4ax.com>
Source record: 10434

ORIGINAL MESSAGE:

On 18 Sep 2006 21:03:02 -0700, "LenAnderson@ieee.org"
<LenAnderson@ieee.org> wrote:

>Does anyone have or can they direct me to a couple of "splined"
>tuning shaft adapters that fit the ARC-5 Command Set receivers?
>I'd like to adapt some of the ganged variable capacitors from
>those sets into some homebuilt equipment...lovely antibacklash
>gear reduction on them.

---------- REPLY FOLLOWS ----------

Agreed, those are among the best variable capacitors ever made.

My first radio in 1957 was an ARC-5 a friend gave me. It had a shaft made from a piece of 1/4 inch copper tubing, carefully drilled out so it was a very tight force fit. No glue, set screws or anything like that, just a very tight fit that had to be driven on with a hammer. I used that RX for a couple of years and the shaft performed perfectly.

Hope this helps.

Bill, W6WRT

4534. Re: What's in a "wall wart" so-called "transformer"?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-23 19:04:46 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <izfRg.981$fl2.496@trnddc02>
Source record: 10435

There are also some transformer-input types that produce well-regulated DC outputs using linear regulator technology, and a growing number of units that use switching regulator technology to make the transfoprmer so small that it's hard to tell from the outside that there's even a transformer in it.. The latter are easily distinguishable because they put out quite a bit of power, yet are smaller and much lighter in weight than traditional units with equivalent power capability.

Joe
W3JDR

<jimp@specsol.spam.sux.com> wrote in message
news:ik1gu3-d14.ln1@mail.specsol.com...
> mcalhoun@ksu.edu wrote:
>> I have a collection of "wall wart" (others may call them "transformers")
>> and I'd like to use one to cobble a little power supply. I've never
>> opened any to see what's really in them (and suspect it'll be quite a
>> chore), but I'm quite sure they are not ALL "transformers", because some
>> claim AC and some claim DC output, yet the first I grabbed out of the
>> junkbox claimed DC AND ALSO provided a HEALTHY AC output on the same
>> two wires! Furthermore, NONE of them seem to be voltage regulated!
>> (But if one says "X volts at Y milliamps", then loading it to Y mils
>> usually gives an output close to X volts.)
>
>> So what IS in them? Do the really light-weight ones, for example,
>> use a capacitor for relatively low-loss voltage dropping? And
>> why would one give *BOTH* AC and DC? Bad diode(s)?
>
>> --
>> --Myron A. Calhoun.
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>> cartridge
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>> Instructor
>> Certified Instructor for the Kansas Concealed-Carry Handgun license
>
> It depends...
>
> The AC ones are just a transformer.
>
> The DC ones contain a transformer and diode(s).
>
> The cheapies usually don't contain any capacitors or regulators, hence
> there is significant AC on the DC.
>

>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

4535. Re: What's in a "wall wart" so-called "transformer"?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-23 19:17:07 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <IKfRg.9008$zF5.3643@bignews1.bellsouth.net>
Source record: 10436

W3JDR wrote:
> There are also some transformer-input types that produce well-regulated DC
> outputs using linear regulator technology, and a growing number of units
> that use switching regulator technology to make the transfoprmer so small
> that it's hard to tell from the outside that there's even a transformer in
> it.. The latter are easily distinguishable because they put out quite a bit
> of power, yet are smaller and much lighter in weight than traditional units
> with equivalent power capability.
>
> Joe
> W3JDR
>
>
> <jimp@specsol.spam.sux.com> wrote in message
> news:ik1gu3-d14.ln1@mail.specsol.com...
>> mcalhoun@ksu.edu wrote:
>>> I have a collection of "wall wart" (others may call them "transformers")
>>> and I'd like to use one to cobble a little power supply. I've never
>>> opened any to see what's really in them (and suspect it'll be quite a
>>> chore), but I'm quite sure they are not ALL "transformers", because some
>>> claim AC and some claim DC output, yet the first I grabbed out of the
>>> junkbox claimed DC AND ALSO provided a HEALTHY AC output on the same
>>> two wires! Furthermore, NONE of them seem to be voltage regulated!
>>> (But if one says "X volts at Y milliamps", then loading it to Y mils
>>> usually gives an output close to X volts.)
>>> So what IS in them? Do the really light-weight ones, for example,
>>> use a capacitor for relatively low-loss voltage dropping? And
>>> why would one give *BOTH* AC and DC? Bad diode(s)?
>>> --
>>> --Myron A. Calhoun.
>>> Five boxes preserve our freedoms: soap, ballot, witness, jury, and
>>> cartridge
>>> NRA Life Member and Rifle, Pistol, & Home Firearm Safety Certified
>>> Instructor
>>> Certified Instructor for the Kansas Concealed-Carry Handgun license
>> It depends...
>>
>> The AC ones are just a transformer.
>>
>> The DC ones contain a transformer and diode(s).
>>
>> The cheapies usually don't contain any capacitors or regulators, hence
>> there is significant AC on the DC.
>>

>>
>> --
>> Jim Pennino
>>
>> Remove .spam.sux to reply.
>
>
Such units actually have a bridge rectifier across the AC mains and
supply DC to a switching regulator running at 20-50khz. There is an
isolation transformer running at this frequency (it's core is just a
small bit of lightweight ferrite). The output of the isolation
transformer feeds another bridge rectifier and filter (at ~40khz not
much of a filter is needed, small caps and chokes!). There may then
be a linear or switching regulator. If the later, it may actually
regulate by changing the switching frequency/duty cycle of the
original switcher at the AC mains input. In this case the feedback
is by means of an opto-isolator for safety.

4536. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-23 19:23:45 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <VQfRg.9010$zF5.4158@bignews1.bellsouth.net>
Source record: 10437

Tom Coates wrote:
> ARRL has announced a design competition that some of you may not have heard
> of. The objective is to produce a CW and SSB transceiver with at least 5
> watts of output on 40 meters. Components must be commercially available. The
> total cost of all components (except key, mic and power supply) must not
> exceed $50. Any instruments beyond a multimeter must be in the $50. Complete
> information is at http://www.arrl.org/qst/hbc/. Credit for the original idea
> goes to N4AUP/9. All components of the entry must arrive at ARRL by next
> August. The winning entry will be the subject of a QST article.
>
> I would hope that the winning entry would also appear in the ARRL Handbook
> and the "Now You're Talking" book. It would also be desirable for this
> contest repeat every two years, alternating with an SSB/CW transceiver for a
> single VHF or UHF band, or perhaps for two bands most suitable for working
> the low-orbit satellites: something worthwhile for new Technicians to build
> (such a competition might have a higher limit than $50).
>
> The idea that new hams could again build their own stations using money
> earned after school is very appealing. That was a plausible objective in the
> 1960s, because of the availability of components from obsolete TVs.
>
> Tom, N3IJ
>
>
I would take exception to the "windows" requirement for the PC. They
should allow a solution using both "MAC" and "Linux" based PC's
especially the later. Linux can run on a 'throw away' computer that is
now underpowered for current generation Windows OS. Also Linux is FREE
(perfect for a budget project!).

I don't run windows on my computer. Currently running Gentoo Linux, but
for non-computer gear heads I recommend Ubuntu, Kubuntu, or Xubuntu Linux.

4537. Anyone out there can help me with eprom programming?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-23 19:57:05 UTC
From: Atlanta-ham <swanradio@juno.com>
Message-ID: <1159041425.910341.124640@i42g2000cwa.googlegroups.com>
Source record: 10438

Years ago in 73, and other mags, programming an eprom for the Icom 22S was the rage.
I now have aquired a TransWorld transceiver that is programmed with diodes. I wish to build a BCD thumbwheel input, with an Eprom for data translation. It's no problem building a board, but it's a problem with me programming the eprom. I don't need anything fancy, no memory, no scanning, just using the thumbwheels to move frequency. I've never programmed an eprom before.

4538. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-23 19:57:42 UTC
From: notbob <notbob@nothome.com>
Message-ID: <ItidnbO3A4MrDIjYnZ2dnUVZ_qudnZ2d@comcast.com>
Source record: 10439

On 2006-09-23, ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net> wrote:

> I would take exception to the "windows" requirement for the PC. They
> should allow a solution using both "MAC" and "Linux" based PC's
> especially the later.

Evidently, you didn't read this requirement thoroughly.

"The software must run on a Windows based PC platform although multi
platform support is encouraged."

I assume this is to make sure a solution is not done soley on an apple or
linux box, thereby leaving out 95% of computer users. I'm a linux
user, but let's face it, not including Windoze would exclude way too
many people. Not good for promoting ARRL programs.

nb

4539. Re: Anyone out there can help me with eprom programming?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-23 21:23:37 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <xBhRg.1585$QF6.1102@newsfe02.lga>
Source record: 10440

Not too many folks fiddle with EPROMS anymore. Microcontrollers with onboard EEPROM are cheaper and easier to program, plus you get some logic that allows you to reduce the circuit complexity thrown in for the ride. Of course, these things grow ... with the logic, an encoder is cheaper and more pleasant to use than the thumbwheel, but now you would like to add a display .... and on and on. But still, I wouldn't be surprised if the micro, encoder and display wasn't still cheaper than the EEPROM and BCD switch.

..

"Atlanta-ham" <swanradio@juno.com> wrote in message news:1159041425.910341.124640@i42g2000cwa.googlegroups.com...
> Years ago in 73, and other mags, programming an eprom for the Icom 22S
> was the rage.
> I now have aquired a TransWorld transceiver that is programmed with
> diodes. I wish to build a BCD thumbwheel input, with an Eprom for data
> translation. It's no problem building a board, but it's a problem with
> me programming the eprom. I don't need anything fancy, no memory, no
> scanning, just using the thumbwheels to move frequency. I've never
> programmed an eprom before.
>

4540. Re: Anyone out there can help me with eprom programming?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-23 21:52:45 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <33bbh295hea2mb9m8k948l8bslhkqi95a1@4ax.com>
Source record: 10441

On Sat, 23 Sep 2006 17:23:37 -0400, "xpyttl"
<xpyttl_NOSPAM@earthling.net> wrote:

>Not too many folks fiddle with EPROMS anymore. Microcontrollers with

Error! There are plenty of people using eproms for systems and other
uses. I keep a programmer for such a reason.

>onboard EEPROM are cheaper and easier to program, plus you get some logic
>that allows you to reduce the circuit complexity thrown in for the ride. Of
>course, these things grow ... with the logic, an encoder is cheaper and more
>pleasant to use than the thumbwheel, but now you would like to add a display
>.... and on and on. But still, I wouldn't be surprised if the micro,
>encoder and display wasn't still cheaper than the EEPROM and BCD switch.

A micro like a PIC would likely be a lower cost solution and you can
then uses a cheaper switch and all. A programmer <really more of a
cable> for a PIC can be easily built for a PC parallel port.

Allison
>
>..
>
>
>"Atlanta-ham" <swanradio@juno.com> wrote in message
>news:1159041425.910341.124640@i42g2000cwa.googlegroups.com...
>> Years ago in 73, and other mags, programming an eprom for the Icom 22S
>> was the rage.
>> I now have aquired a TransWorld transceiver that is programmed with
>> diodes. I wish to build a BCD thumbwheel input, with an Eprom for data
>> translation. It's no problem building a board, but it's a problem with
>> me programming the eprom. I don't need anything fancy, no memory, no
>> scanning, just using the thumbwheels to move frequency. I've never
>> programmed an eprom before.
>>
>

4541. Re: Anyone out there can help me with eprom programming?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-23 22:59:29 UTC
From: Atlanta-ham <swanradio@juno.com>
Message-ID: <1159052369.525422.95440@i42g2000cwa.googlegroups.com>
Source record: 10442

nospam@nouce.bellatlantic.net wrote:
> On Sat, 23 Sep 2006 17:23:37 -0400, "xpyttl"
> <xpyttl_NOSPAM@earthling.net> wrote:
>
> >Not too many folks fiddle with EPROMS anymore. Microcontrollers with
>
> Error! There are plenty of people using eproms for systems and other
> uses. I keep a programmer for such a reason.
>
> >onboard EEPROM are cheaper and easier to program, plus you get some logic
> >that allows you to reduce the circuit complexity thrown in for the ride. Of
> >course, these things grow ... with the logic, an encoder is cheaper and more
> >pleasant to use than the thumbwheel, but now you would like to add a display
> >.... and on and on. But still, I wouldn't be surprised if the micro,
> >encoder and display wasn't still cheaper than the EEPROM and BCD switch.
>
> A micro like a PIC would likely be a lower cost solution and you can
> then uses a cheaper switch and all. A programmer <really more of a
> cable> for a PIC can be easily built for a PC parallel port.
>
> Allison
> >
> >..
> >
> >
> >"Atlanta-ham" <swanradio@juno.com> wrote in message
> >news:1159041425.910341.124640@i42g2000cwa.googlegroups.com...
> >> Years ago in 73, and other mags, programming an eprom for the Icom 22S
> >> was the rage.
> >> I now have aquired a TransWorld transceiver that is programmed with
> >> diodes. I wish to build a BCD thumbwheel input, with an Eprom for data
> >> translation. It's no problem building a board, but it's a problem with
> >> me programming the eprom. I don't need anything fancy, no memory, no
> >> scanning, just using the thumbwheels to move frequency. I've never
> >> programmed an eprom before.
> >>
> >I've looked around at PIC circuits, and understand I could program quite easily with my computer, however, I'm not that good at programming a PIC either! There's a control head that comes with this rig, that allows me to select twenty frequencies, along with power, squelch, and other things. I can probably get a board to use the PIC with, however, I know absolutely nothing about PIC programming! Last time I used BASIC was back in the early eighties! There as a project some time ago called the "Kendra Board" I believe in either 73, or CQ, using a PIC.

4542. Re: Gee...What A Coincidence, Lennie...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-23 23:55:13 UTC
From: jawod <jawod@fuse.net>
Message-ID: <4515C961.7050903@fuse.net>
Source record: 10443
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew

K4YZ wrote:
> jawod wrote:
>
>>K4YZ wrote:
>>
>>>LenAnderson@ieee.org wrote:
>
>
>>>> BTW, this "Jawod" signed a message on rec.radio.amateur.homebrew
>>>> as "AB8O." I found a blank on that call sign at QRZ.
>>>
>>> What a coincidence...I used QRZ's database search engine and found
>>>a blank when I entered "Leonard H. Anderson".
>>>
>>> Funny, eh...?!?!
>>
>>I am not "Leonard H. Anderson"
>
>
> I know you're not.
>
> I was jabbing Lennie in the ribs about supposedly not finding
> someone (you?) under a certain call when HE'S not in there either.
> Never has been.
>
> Sorry for the confusion.
>
> Steve, K4YZ
>
I'm not in hiding.

No worries.

73,

John
AB8O

4543. Re: PayPal horror stories

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-24 01:10:24 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4515DA99.3A371D66@earthlink.net>
Source record: 10444
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

Too_Many_Tools wrote:
>
> You might not care about your credit rating but you will care when a
> lien is placed against your home.
>
> And if you were as financially astute as you like to think you are, you
> would know that companies and the Government use your credit report to
> decide whether they will hire you, give you a security clearance,
> determine the rates they charge you...and many other issues that affect
> you.

I am 100% disabled. I can not get a job, so I don't have to worry
about a security clearance.

> Your credit rating matters.

In most cases, but not always.

> And I also note that many of those who are bad credit risks deal in
> cash only...because it is the only way others will deal with them.

I got in the habit of paying in cash about 35 years ago when I owned
a business, and my suppliers gave a 1.5% discount for paying cash within
10 days of the monthly statement being mailed. I paid cash for vehicles
whenever possible to save the finance charges. In 54 years I have
financed one new truck, and one home, 30 years ago. I have no need for
credit, because if I can't afford something, I'll do without it. The VA
takes care of all of my medical needs, and everything else is paid for.
I'm getting old and with my health problems I have no idea how long I'll
be around. Its not the big deal it was when I was 20 years old.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

4544. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-24 01:15:50 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <__kRg.8194$tT6.613@bignews7.bellsouth.net>
Source record: 10445

notbob wrote:
> On 2006-09-23, ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net> wrote:
>
>> I would take exception to the "windows" requirement for the PC. They
>> should allow a solution using both "MAC" and "Linux" based PC's
>> especially the later.
>
> Evidently, you didn't read this requirement thoroughly.
>
> "The software must run on a Windows based PC platform although multi
> platform support is encouraged."
>
> I assume this is to make sure a solution is not done soley on an apple or
> linux box, thereby leaving out 95% of computer users. I'm a linux
> user, but let's face it, not including Windoze would exclude way too
> many people. Not good for promoting ARRL programs.
>
> nb
Oh I read the requirements. I meant that I didn't agree with them, and
I wrote an email to ARRL with that opinion. They replied back to me
with your analysis, that they wanted a solution that would be applicable
to most computer users, but they also liked the idea of a multi-platform
project. Maybe they might open up a category for Linux.

The advantage of Linux is that the development tools are free, and Linux
will run on any computer that runs windows. You can also install Linux
on top of windows (on the same computer anyway) and dual boot, so you
can have your cake and eat it too (or have your poison and antidote too
in my opinion!).

4545. Re: PayPal horror stories

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-24 01:25:46 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4515DE32.CC9A7A8@earthlink.net>
Source record: 10446
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

Joel Kolstad wrote:
>
> Hi Michael,
>
> "Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
> news:450AC969.AEA1EE0C@earthlink.net...
> > What's a credit rating? I haven't used credit for anything for over
> > 20 years. Its been cash up front, or nothing.
>
> Ironically, your credit rating will actually be "less than perfect" then! :-)
>
> Assuming you don't need a new mortgage any time soon, I suppose you're set.
>
> Do you have a credit card? I know it's possible, but it sure seems like a
> pain to live without one these days... especially for things like renting
> cars.

I applied for a credit card in 1972 and was turned down because I
was an E2 in the US Army. You had to be an E6 with five years to
qualify, so I decided I was never going to waste my time applying
again. The credit card companies have probably spent more trying to get
me to apply for a card since them, than I would have used that Chevron
card for.

I really can't travel very far, so I have no need to rent a car. In
fact, my truck was out of commission for over a week before I was able
to crawl under it and cut the damaged exhaust system apart and fix it.
I asked the young man who volunteers for the "Computers for Disabled
Veterans" project get me a few groceries, but otherwise I didn't miss
the truck. He is learning computer repair, in exchange for helping me
finish more computers.

I have always lead a simple lifestyle. Sure there are lots of things
around, but I rarely buy anything new. Only when I can't fix something,
or build it from what I can find. Its very satisfying to look at
something you've built and have someone ask, Wow! Where did you buy
that? :)

I have picked up a couple truckloads of free angle iron bed frames to
build some work carts, but first, I have to build a welding table. I
have a lead on free reject sheets of plywood from a local mill to make
shelving out of. Any sheet that has a splice, or is missing any glue is
rejected. I want to build some shelving to store the spare computer
parts, and wood trays to hold Hard drives, CDROM drives and Floppy

drives. That way they can be sorted, tested, and ready to drop into a computer, as needed.

BTW, I was given another Compaq like yours with the VGA connector sheared off the motherboard. It works with a replacement AGP card, but you know me. I'm going to replace the connector so I can see if the onboard video is still ok. ;-)

--
Service to my country? Been there, Done that, and I've got my DD214 to prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

4546. Check Out Radio Pirates Forum

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-24 02:15:38 UTC
From: DJboutit <Recordking@Hotmail.com>
Message-ID: <eTlRg.4750$nX4.3068@tornado.texas.rr.com>
Source record: 10447

http://www.radiopirates.co.nr/ For Pirates to come and chat about the world of pirate radio also to get tips about how to start your now station.

4547. Re: Ten Tec part needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-24 06:11:17 UTC
From: KU4YP <ku4yp@peoplepc.com>
Message-ID: <9kpRg.5541$UG4.3077@newsread2.news.pas.earthlink.net>
Source record: 10248

tnx. didn't ask them that 73 mike ku4yp

<pdrahn@coinet.com> wrote in message
news:1158943216.805291.277860@e3g2000cwe.googlegroups.com...
> Contact Ten-Tec again and see if they have the "Gerber" files archived
> somewhere and will send them to you so you can have a board made. Send
> the Gerber files to any of the board houses and they will make you a
> board to match. May be a little costly for just one board.
>
> Paul, KD7HB
>
>
> KU4YP wrote:
>> hello all,
>>
>> i need the rf board from a ten tec 509 rig. i had one follow me home
>> but
>> the rf board is missing. i called ten tec and they have all the parts for
>> the board, they just no longer have the board. i am planning to build the
>> final on perf board if i can not find one from a parts rig. the board or
>> rig
>> does not need to be working. i'll fix the board, just wanted to save a
>> little time. any help appreciatred. 73 mike ku4yp
>

4548. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-24 13:26:24 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <9MvRg.3318$R%1.2615@newsfe05.lga>
Source record: 10249

"ken scharf" <wa2mzeNOSPAMBOTS@bellsouth.net> wrote in message
news:__kRg.8194$tT6.613@bignews7.bellsouth.net...

> The advantage of Linux is that the development tools are free, and Linux
> will run on any computer that runs windows.

Not entirely true. Linux doesn't always have the hardware support,
especially on newer boxes.

> You can also install Linux
> on top of windows (on the same computer anyway) and dual boot, so you
> can have your cake and eat it too (or have your poison and antidote too
> in my opinion!).

And why would you? Why would you suffer the complexity and frustration of
Linux if Windoze is working just fine for you?

Personally, I fully enjoy having Linux servers an Windoze desktops on my
home LAN, and with the magic of Cygwin, I can have Linux tools on my Windoze
box, and seamless access to my Linux apps, withough fully suffering the
clumsy Linux desktop.

But that is just me. Most folks want to use the applications, not the OS.
Most hams aren't going to write programs, and the features of Linux will be
lost on them, but the complexity sure won't. For them, all they want is a
little Digipan and email, why on earth would they subject themselves to yet
another set of stuff to learn? As far as i can tell, the only ham app on
Linux that is better than what is available on Windoze is gEDA. Everything
else is harder to use and less capable.

Now, I have a lot of ham apps on Linux that I have personally written.
These provide me with functions that aren't easily available on Windoze, and
the Linux environment makes it much easier. But I'm not most people. Not
too many hams are comfortable writing their own applications, or even if
they could, that isn't how they enjoy the hobby. For most people, including
most hams, Windoze serves the purpose.

Everyone has their own set of needs, and one size doesn't fit all. I
suspect there may even be some people for whom the Mac is the best answer,
although I can't imagine who they might be. But the getting in price for
Linux is still pretty high in terms of learning curve, and for most hams,
the return is close to zero. So why bother?

..

4549. Re: Anyone out there can help me with eprom programming?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-24 13:36:13 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <DQvRg.3320$R%1.1224@newsfe05.lga>
Source record: 10250

"Atlanta-ham" <swanradio@juno.com> wrote in message
news:1159052369.525422.95440@i42g2000cwa.googlegroups.com...

> I've looked around at PIC circuits, and understand I could program
> quite easily with my computer, however, I'm not that good at
> programming a PIC either!

You indicated you had no problem with the circuit. Programming a PIC is more like designing digital logic than it is like programming in BASIC. It may be a little weird, but it isn't the least little bit hard. Its mainly a question of getting over the fear. And as Allison pointed, out, a parallel port programmer is pretty simple. In fact, it's a pretty lame junk box that doesn't already have the stuff. OK, maybe you need to buy the DB25 and the IC socket, but the rest is just any old transistor, and a few resistors and diodes.

..

4550. Re: What's in a "wall wart" so-called "transformer"?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-24 14:46:35 UTC
From: Al <no.spam@wanted.com>
Message-ID: <no.spam-E1EFF6.10463424092006@news.verizon.net>
Source record: 10251

In article <ef3ico$q5n@unix1.cc.ksu.edu>, mcalhoun@ksu.edu wrote:

> I have a collection of "wall wart" (others may call them "transformers")
> and I'd like to use one to cobble a little power supply. I've never
> opened any to see what's really in them (and suspect it'll be quite a
> chore), but I'm quite sure they are not ALL "transformers", because some
> claim AC and some claim DC output, yet the first I grabbed out of the
> junkbox claimed DC AND ALSO provided a HEALTHY AC output on the same
> two wires! Furthermore, NONE of them seem to be voltage regulated!
> (But if one says "X volts at Y milliamps", then loading it to Y mils
> usually gives an output close to X volts.)
>
> So what IS in them? Do the really light-weight ones, for example,
> use a capacitor for relatively low-loss voltage dropping? And
> why would one give *BOTH* AC and DC? Bad diode(s)?

There are four types I have come across:

1: transformer only for AC
2: transformer and diode bridge for DC
3: transformer, diode bridge and linear regulator
4: switching regulator

The voltage output and the current output of the first two type depend upon the load. So for a type 2, for example, if the nameplate says 6 volts and 500 mA. That's exactly what it means. With a laod of 500 mA, the DC voltage will be 6 volts. a lighter load will result in a higher voltage, and a higher load will result in a lower voltage.

The last two will provide you with a fixed voltage for which they are rated. So, for 6 volts and 500 mA, the voltage will always be close to 6 volts as long as the current does not exceed 500 mA. Switchers may require a minimum current draw of about 10% of their maximum current rating. Thus one rated ate 500 mA needs a minmum load of 50 mA to provide the rated voltage output.

I have disassembled wall warts and used their guts for power supplies in projects. It works quite well. As our town's recycling center is full of old electronics, I have assemble quite a nice selection of wall warts that I use as PSs in projects. And the price is right, zero, except for your time.

Al

4551. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-24 14:58:22 UTC
From: Danny Richardson <n_group@k6mhe.com>
Message-ID: <kc6dh212cc3i4obbmgqu8ak9phvp58djc6@4ax.com>
Source record: 10252

On Sun, 24 Sep 2006 09:26:24 -0400, "xpyttl"
<xpyttl_NOSPAM@earthling.net> wrote:

>"ken scharf" <wa2mzeNOSPAMBOTS@bellsouth.net> wrote in message
>news:__kRg.8194$tT6.613@bignews7.bellsouth.net...
>
>> The advantage of Linux is that the development tools are free, and Linux
>> will run on any computer that runs windows.
>
>Not entirely true. Linux doesn't always have the hardware support,
>especially on newer boxes.
>
>> You can also install Linux
>> on top of windows (on the same computer anyway) and dual boot, so you
>> can have your cake and eat it too (or have your poison and antidote too
>> in my opinion!).
>
>And why would you? Why would you suffer the complexity and frustration of
>Linux if Windoze is working just fine for you?
>
>Personally, I fully enjoy having Linux servers an Windoze desktops on my
>home LAN, and with the magic of Cygwin, I can have Linux tools on my Windoze
>box, and seamless access to my Linux apps, withough fully suffering the
>clumsy Linux desktop.
>
>But that is just me. Most folks want to use the applications, not the OS.
>Most hams aren't going to write programs, and the features of Linux will be
>lost on them, but the complexity sure won't. For them, all they want is a
>little Digipan and email, why on earth would they subject themselves to yet
>another set of stuff to learn? As far as i can tell, the only ham app on
>Linux that is better than what is available on Windoze is gEDA. Everything
>else is harder to use and less capable.
>
>Now, I have a lot of ham apps on Linux that I have personally written.
>These provide me with functions that aren't easily available on Windoze, and
>the Linux environment makes it much easier. But I'm not most people. Not
>too many hams are comfortable writing their own applications, or even if
>they could, that isn't how they enjoy the hobby. For most people, including
>most hams, Windoze serves the purpose.
>
>Everyone has their own set of needs, and one size doesn't fit all. I
>suspect there may even be some people for whom the Mac is the best answer,
>although I can't imagine who they might be. But the getting in price for
>Linux is still pretty high in terms of learning curve, and for most hams,

>the return is close to zero. So why bother?
>
>..
Excellent response. I too have a Linux system on my shack computer dual-booting with Winders. I removed Linux from my main computer as after several months of searching I could never find a decent driver for my video card and wasn't about to buy another card when there was nothing wrong with one I have except there aren't any Linux drivers for it.

Plus setting the sucker up is a PITA. Kind of a cross between DOS and Window '98. Finding extensions, plugins, or what ever you may call them is some what like a scavenger hunt and takes a LOT of time and effort.

If one takes the time and endures the learning curve the results are often quite good. The system is very stable and works well.

73,
Danny, K6MHE

4552. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-24 16:15:09 UTC
From: Leroy <nota.ham@never.will.be>
Message-ID: <pan.2006.09.24.16.15.04.449486@never.will.be>
Source record: 10253

On Sun, 24 Sep 2006 09:26:24 -0400, xpyttl wrote:

> And why would you? Why would you suffer the complexity and frustration of
> Linux if Windoze is working just fine for you?

Linux- not just for geeks anymore. Mepis distro, even computer illiterates
can use it.

"This is your office app for letters and spreadsheets, this is
your web/file browser, this is your e-mail. Need anything else?"

"No, that looks easy enough."

You can even make it look and feel like "Windows" if they are hesitant to
use something that seems unfamiliar.

4553. Re: PayPal horror stories HEH! My 8 cents worth...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-24 16:51:33 UTC
From: Mr Fed UP <mrfedup@bellsouth.net>
Message-ID: <qIyRg.28910$vX5.18302@bignews8.bellsouth.net>
Source record: 10254
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

I had been on ebray since they billed via postal mail and gave $10.00 credit to start

you out.

Recently I had the wonderful experience of having paid my ebay via Payless Pal and when

I went to pay the small bill.. a few bucks. THEY made an 8 cent error in the

bill transfer and so I figured they would just bill it on the next months cycle.

BUT! What they did was to debit a closed bank account.

I had opened a checking account to get a Payless Pal account and closed

it so my real money was never in jeopardy. So what the idiots had done then was

to bill me an additional $15.00 for a bounced debit they should have never made.

In the mean time ebray has gotten so big I could not get any 'Real response from a

Real person' Like dealing with the government! I could find no Phone number to

call and explain THEIR ERROR.

I just kept getting junk Spam replies from ebray.

It makes them feel good telling me I can not use ebray. pftpftpft!

So I have since closed my ebray account.

AND my Payless Pal account a soon as I heard ebray had bought them.

For several months ebray kept billing me with additional "late charges"

HA HA ebray and Payless Pal get stuffed!

All over 8 cents they have lost a lot more than that in business since I am also

disabled and did shop over 100 items on ebray. It WAS convenient to use

and not walk through so many flea markets and hamfests. My rating WAS over 98%

Couldn't please everyone, and some sent me junk from trash cans smell and all . lol

Thanks for the vent.. off my soap box now and shopping elsewheres. :-p

4554. Re: PayPal horror stories HEH! My 8 cents worth...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-24 17:51:38 UTC
From: GG <gerty-gravel@hotmail.com>
Message-ID: <1159120297.806509.298230@m7g2000cwm.googlegroups.com>
Source record: 10255
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

You closed the bank account that the PP acount was baised on. That was
not in good faith.

GG

4555. Re: PayPal horror stories HEH! My 8 cents worth...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-24 19:36:48 UTC
From: Mike <no@where.man>
Message-ID: <12hdnig1qlbkt93@news.supernews.com>
Source record: 10256
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

"Mr Fed UP" <mrfedup@bellsouth.net> wrote in message
news:qIyRg.28910$vX5.18302@bignews8.bellsouth.net...
>I had been on ebray since they billed via postal mail and gave $10.00
>credit to start
>
> you out.
>
> Recently I had the wonderful experience of having paid my ebay via Payless
> Pal and when
>
> I went to pay the small bill.. a few bucks. THEY made an 8 cent error in
> the
>
> bill transfer and so I figured they would just bill it on the next months
> cycle.
>
> BUT! What they did was to debit a closed bank account.
>
> I had opened a checking account to get a Payless Pal account and closed

So you closed a bank account and didn't tell PayPal? This whole mess is
your fault.

eBay is the best. I've bought hundreds of items worth many thousands of
dollars. Most of it could never be found locally for the same price.
Anytime I'm looking to buy *anything*, I look at eBay first.

Mike

4556. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-24 20:39:34 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <_1CRg.16699$tT6.2732@bignews7.bellsouth.net>
Source record: 10257

Danny Richardson wrote:
> On Sun, 24 Sep 2006 09:26:24 -0400, "xpyttl"
> <xpyttl_NOSPAM@earthling.net> wrote:
>
>> "ken scharf" <wa2mzeNOSPAMBOTS@bellsouth.net> wrote in message
>> news:__kRg.8194$tT6.613@bignews7.bellsouth.net...
>>
>>> The advantage of Linux is that the development tools are free, and Linux
>>> will run on any computer that runs windows.
>> Not entirely true. Linux doesn't always have the hardware support,
>> especially on newer boxes.
>>
>>> You can also install Linux
>>> on top of windows (on the same computer anyway) and dual boot, so you
>>> can have your cake and eat it too (or have your poison and antidote too
>>> in my opinion!).
>> And why would you? Why would you suffer the complexity and frustration of
>> Linux if Windoze is working just fine for you?
>>
>> Personally, I fully enjoy having Linux servers an Windoze desktops on my
>> home LAN, and with the magic of Cygwin, I can have Linux tools on my Windoze
>> box, and seamless access to my Linux apps, withough fully suffering the
>> clumsy Linux desktop.
>>
>> But that is just me. Most folks want to use the applications, not the OS.
>> Most hams aren't going to write programs, and the features of Linux will be
>> lost on them, but the complexity sure won't. For them, all they want is a
>> little Digipan and email, why on earth would they subject themselves to yet
>> another set of stuff to learn? As far as i can tell, the only ham app on
>> Linux that is better than what is available on Windoze is gEDA. Everything
>> else is harder to use and less capable.
>>
>> Now, I have a lot of ham apps on Linux that I have personally written.
>> These provide me with functions that aren't easily available on Windoze, and
>> the Linux environment makes it much easier. But I'm not most people. Not
>> too many hams are comfortable writing their own applications, or even if
>> they could, that isn't how they enjoy the hobby. For most people, including
>> most hams, Windoze serves the purpose.
>>
>> Everyone has their own set of needs, and one size doesn't fit all. I
>> suspect there may even be some people for whom the Mac is the best answer,
>> although I can't imagine who they might be. But the getting in price for
>> Linux is still pretty high in terms of learning curve, and for most hams,
>> the return is close to zero. So why bother?

>>
>> ..
> Excellent response. I too have a Linux system on my shack computer
> dual-booting with Winders. I removed Linux from my main computer as
> after several months of searching I could never find a decent driver
> for my video card and wasn't about to buy another card when there was
> nothing wrong with one I have except there aren't any Linux drivers
> for it.
>
> Plus setting the sucker up is a PITA. Kind of a cross between DOS and
> Window '98. Finding extensions, plugins, or what ever you may call
> them is some what like a scavenger hunt and takes a LOT of time and
> effort.
>
> If one takes the time and endures the learning curve the results are
> often quite good. The system is very stable and works well.
>
> 73,
> Danny, K6MHE

Those of us that have gone through the trouble of getting there know the rewards of Linux. I agree, it's not something for everyone, but I would think that if you have the brains to get a ham ticket and build your own gear, you can figure it out. Also Ubuntu, Linspire (and Freespire) provide a brainless install that usually just works.

As for hardware support, it's much better than it used to be. Almost every sound card chipset found on today's motherboards are supported. Nvidia and Ati both have Linux drivers for their latest video cards (though they are binary drivers and must be downloaded and installed by the end user....complete instructions on the manufacturer's wwebsites). Intel's own graphics chips are supported directly by the kernel.

About the only thing I find lacking is Macromedia Flash support for Linux, though there is a GNU project to provide it (gnash).

4557. Re: What's in a "wall wart" so-called "transformer"?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-24 21:09:17 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <ef6s5tcjc1@theodyn.ncf.ca>
Source record: 10258

Al (no.spam@wanted.com) writes:
> I have disassembled wall warts and used their guts for power supplies in
> projects. It works quite well. As our town's recycling center is full of
> old electronics, I have assemble quite a nice selection of wall warts
> that I use as PSs in projects. And the price is right, zero, except for
> your time.
>
The ones I've opened up (mostly to see if the problem was fixable) have
never seemed too adaptable. The the transformers are too integrated
to the plug, or at the very least have no means of mounting them.

I admit that they are useful for projects unopened.

But I find consumer electronics (VCRs, radios, whatever) are often
a better source of small transformers. They at least come with mounting
holes. Of course, a fair number of VCRs I've opened up recently are
using switching supplies.

I tend to bring home switching supplies from computers I see lying
on the sidewalk waiting for the garbage truck to pick them up. But
ironically, I take out the switching supply board, and build analog
supplies inside, using parts I've salvaged from other equipment.
Rare is the time I actually need the current of a switching supply,
or the noise, yet the cases make quite nice boxes for analog supplies.
I leave the AC socket in place, and then just use one of those cords
that plug in, they now being in plentiful supply from other junk
I've collected.

They'd even make nice construction boxes, covering the back panel
with a piece of metal or circuit board.

On the other hand, when I got an older Powerbook some years back,
once I'd scraped up the details for the missing AC adaptor, I pulled
the switching supply out of an inkjet printer and it was the 24 volt
supply I needed, and I had the needed AC adaptor.

Michael VE2BVW

4558. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-24 21:12:03 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <ef6sb3cku1@theodyn.ncf.ca>
Source record: 10259

Leroy (nota.ham@never.will.be) writes:
> On Sun, 24 Sep 2006 09:26:24 -0400, xpyttl wrote:
>
>> And why would you? Why would you suffer the complexity and frustration of
>> Linux if Windoze is working just fine for you?
>
> Linux- not just for geeks anymore. Mepis distro, even computer illiterates
> can use it.
>
Given that this is about a contest about building a radio, in a newsgroup
devoted to the building of radios, I would expect a higher level of interest
in Linux.

But that said, at this point one could even distribute any needed software
along with an existing distribution. Put it on a Live distribution,
and people treat the whole thing like an application.

Michael VE2BVW

4559. Re: What's in a "wall wart" so-called "transformer"?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-24 21:29:23 UTC
From: PhattyMo <PhattyMo@nospam.gmail>
Message-ID: <4516f7b6$0$25777$815e3792@news.qwest.net>
Source record: 10260

mcalhoun@ksu.edu wrote:
> I have a collection of "wall wart" (others may call them "transformers")
> and I'd like to use one to cobble a little power supply. I've never
> opened any to see what's really in them (and suspect it'll be quite a
> chore), but I'm quite sure they are not ALL "transformers", because some
> claim AC and some claim DC output, yet the first I grabbed out of the
> junkbox claimed DC AND ALSO provided a HEALTHY AC output on the same
> two wires! Furthermore, NONE of them seem to be voltage regulated!
> (But if one says "X volts at Y milliamps", then loading it to Y mils
> usually gives an output close to X volts.)
>
> So what IS in them? Do the really light-weight ones, for example,
> use a capacitor for relatively low-loss voltage dropping? And
> why would one give *BOTH* AC and DC? Bad diode(s)?
>

Uhh,why a Transformer,of course..
The ones with the DC output will have a rectifier diode or two (or maybe
even a FWB,if you're lucky) and usually a filter cap,but not always,IME.

The AC ones are usually just the transformer,and that's it.

Some "wall warts" I've come across were actually really tiny SMPS's,you
can usually identify these fairly easily,they're really light compared
to the "iron core transformer" type.. These may be regulated,the
iron-core types above almost never are.

AC and DC output?
Are you sure you're not measuring the ripple? They usually have very
poor filtering,plus after time the cap(s) dry out,and make it even worse.
Or,it could be the diode(s),they've been known to fail aswell.

4560. Re: PayPal horror stories HEH! My 8 cents worth...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-24 23:19:20 UTC
From: Mr Fed UP <mrfedup@bellsouth.net>
Message-ID: <_uERg.22598$eW5.8809@bignews5.bellsouth.net>
Source record: 10261
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

"GG" <gerty-gravel@hotmail.com> wrote in message
news:1159120297.806509.298230@m7g2000cwm.googlegroups.com...
>
> You closed the bank account that the PP acount was baised on. That was
> not in good faith.
>
> GG

Nope... closed account ebray opened with that was used long ago.
Was active via Payless Pal till they made a mess of it all so I closed that
account
so they couldn't rob me just for THEIR 8 cents MISTAKE. Plus their
withdraw
penalty, plus their late fees. UGH!
Had they replied with an 8 cent request there was more than 8 cents in
my Payless pal account at the time. Just as reasonable as the Gvnmt LOL

Just the same as auto deposit from anyplace... they have access to get what
ever they want and you have to litigate it to get your own money back.
Being on SS disab' I'd starve before I got my money back if any were taken.
I never trust them with my whole paycheck.... I wonder why anyone does.
Oh!.... That's so they can get in the news by being e-robbed. Phished etc.

Good luck Y'all

I also keep my Norton AV etc up to date and turned on ALLWAYS

4561. Re: What's in a "wall wart" so-called "transformer"?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-24 23:46:44 UTC
From: mcalhoun@ksu.edu
Message-ID: <ef75d4$kuj@unix1.cc.ksu.edu>
Source record: 10262

PhattyMo <PhattyMo@nospam.gmail> writes:

>mcalhoun@ksu.edu wrote:
>> I have a collection of "wall wart" ....

>....[snip]....
>AC and DC output?
>Are you sure you're not measuring the ripple? They usually have very
>poor filtering,plus after time the cap(s) dry out,and make it even worse.
>Or,it could be the diode(s),they've been known to fail aswell.

Well, its "rating" is "9VDC 200MA",
but my Simpson 260 VOM gives it's output as 15V DC AND 15V AC.

I've NOT looked at the output with a 'scope (yet).

--Myron.
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
NRA Life Member and Rifle, Pistol, & Home Firearm Safety Certified Instructor
Certified Instructor for the Kansas Concealed-Carry Handgun license

4562. Radios and freebies from radio_programming group

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-25 00:16:08 UTC
From: "radio.programming.owner@gmail.com" <radio.programming.owner@gmail.com>
Message-ID: <1159143368.848700.111890@b28g2000cwb.googlegroups.com>
Source record: 10263

To all radio enthusiasts and members of the group,
Hey guys and gals, you are all invited to join the "radio_programming" group in yahoo groups. To subscribe, just sent an email to: radio_programming-owner@yahoogroups.com

I'm the group moderator and as a reward, I'm giving away some freebies here :)
http://groups.yahoo.com/group/radio_programming/files/
If what you are looking for is not in the list, don't hesitate to drop us an email. We might be able to point you in the right direction to get the latest software or programming utilities.

Also we have RADIOS FOR SALE ! We got radios from Kenwood (TK models), Icom (IC models) and Motorola (HT & XTS APCO-25 models)
Contact us at radio.programming.owner@gmail.com for all your programming needs and radio equipments!
Thank you for your time..

4563. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-25 00:20:49 UTC
From: Danny Richardson <n_group@k6mhe.com>
Message-ID: <dv7eh256tqpnlkbu09kh04hmj53pl31bbp@4ax.com>
Source record: 10264

On Sun, 24 Sep 2006 16:39:34 -0400, ken scharf
<wa2mzeNOSPAMBOTS@bellsouth.net> wrote:

>Danny Richardson wrote:
>> On Sun, 24 Sep 2006 09:26:24 -0400, "xpyttl"
>> <xpyttl_NOSPAM@earthling.net> wrote:
>>
>>> "ken scharf" <wa2mzeNOSPAMBOTS@bellsouth.net> wrote in message
>>> news:__kRg.8194$tT6.613@bignews7.bellsouth.net...
>>>
>>>> The advantage of Linux is that the development tools are free, and Linux
>>>> will run on any computer that runs windows.
>>> Not entirely true. Linux doesn't always have the hardware support,
>>> especially on newer boxes.
>>>
>>>> You can also install Linux
>>>> on top of windows (on the same computer anyway) and dual boot, so you
>>>> can have your cake and eat it too (or have your poison and antidote too
>>>> in my opinion!).
>>> And why would you? Why would you suffer the complexity and frustration of
>>> Linux if Windoze is working just fine for you?
>>>
>>> Personally, I fully enjoy having Linux servers an Windoze desktops on my
>>> home LAN, and with the magic of Cygwin, I can have Linux tools on my Windoze
>>> box, and seamless access to my Linux apps, withough fully suffering the
>>> clumsy Linux desktop.
>>>
>>> But that is just me. Most folks want to use the applications, not the OS.
>>> Most hams aren't going to write programs, and the features of Linux will be
>>> lost on them, but the complexity sure won't. For them, all they want is a
>>> little Digipan and email, why on earth would they subject themselves to yet
>>> another set of stuff to learn? As far as i can tell, the only ham app on
>>> Linux that is better than what is available on Windoze is gEDA. Everything
>>> else is harder to use and less capable.
>>>
>>> Now, I have a lot of ham apps on Linux that I have personally written.
>>> These provide me with functions that aren't easily available on Windoze, and
>>> the Linux environment makes it much easier. But I'm not most people. Not
>>> too many hams are comfortable writing their own applications, or even if
>>> they could, that isn't how they enjoy the hobby. For most people, including
>>> most hams, Windoze serves the purpose.
>>>
>>> Everyone has their own set of needs, and one size doesn't fit all. I
>>> suspect there may even be some people for whom the Mac is the best answer,

>>> although I can't imagine who they might be. But the getting in price for
>>> Linux is still pretty high in terms of learning curve, and for most hams,
>>> the return is close to zero. So why bother?
>>>
>>> ..
>> Excellent response. I too have a Linux system on my shack computer
>> dual-booting with Winders. I removed Linux from my main computer as
>> after several months of searching I could never find a decent driver
>> for my video card and wasn't about to buy another card when there was
>> nothing wrong with one I have except there aren't any Linux drivers
>> for it.
>>
>> Plus setting the sucker up is a PITA. Kind of a cross between DOS and
>> Window '98. Finding extensions, plugins, or what ever you may call
>> them is some what like a scavenger hunt and takes a LOT of time and
>> effort.
>>
>> If one takes the time and endures the learning curve the results are
>> often quite good. The system is very stable and works well.
>>
>> 73,
>> Danny, K6MHE
>Those of us that have gone through the trouble of getting there know
>the rewards of Linux. I agree, it's not something for everyone, but I
>would think that if you have the brains to get a ham ticket and build
>your own gear, you can figure it out. Also Ubuntu, Linspire (and
>Freespire) provide a brainless install that usually just works.

I really don't want to debate this but will add this comment: I did
not find that true with Ubuntu. Try playing videos or mp3s without
addding a bunch of stuff after the install. Its not a slam-dunk yet.

It really a choice thing and we don't all make the same choices. <G>

very 73,
Danny, K6MHE

[snip]

4564. Kenwood TS-940 Power Supply Voltage Regulation

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-25 03:02:09 UTC
From: KC2PIH@gmail.com
Message-ID: <1159153329.322897.293650@k70g2000cwa.googlegroups.com>
Source record: 10265

Hi,

My 940 was working good for while, but now the S-Meter lights and the VFO display have started to flicker. They flicker at random times very quickly (all at once). The LCD display bulbs don't flicker, but they have both burnt out now. And I just replaced them less than 2 years ago (with Kenwood factory replacements).

I checked the voltage to the power amp and it reads 28.6 volts. The S-Meter (lights) read 13.6 volts and when the flicker occurs the voltage very quickly varies from ~6 to 13 volts - never above 13.6 volts. Is this some kind of voltage regulation issue? I can't get it to do this by moving wires around and pushing on things. It does only seem to effect the lights the are controlled by the dimmer switch.

On a side note, I've been reading several posts about the 2N5885 that regulate the 28v supply for the power amp failing and wiping out the MRF-485 transistors that are no longer available. Does it make sense to preemptivly change the 2N5885 transistors to help prevent damage to those MRF-485? I use my 940 daily - and its on most of the day.

-Scott,WU2X

4565. Re: Gee...What A Coincidence, Lennie...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-25 04:10:08 UTC
From: Mark@kb9rqz.com
Message-ID: <37keh21upvfe5tblva043ploh1ojlabq0t@4ax.com>
Source record: 10266
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew

On Sat, 23 Sep 2006 19:55:13 -0400, jawod <jawod@fuse.net> wrote:

>K4YZ wrote:
>> jawod wrote:
>>
>>>K4YZ wrote:
>>>
>>>>LenAnderson@ieee.org wrote:
>>
>>
>>>>> BTW, this "Jawod" signed a message on rec.radio.amateur.homebrew
>>>>> as "AB8O." I found a blank on that call sign at QRZ.
>>>>
>>>> What a coincidence...I used QRZ's database search engine and found
>>>>a blank when I entered "Leonard H. Anderson".
>>>>
>>>> Funny, eh...?!?!
>>>
>>>I am not "Leonard H. Anderson"
>>
>>
>> I know you're not.
>>
>> I was jabbing Lennie in the ribs about supposedly not finding
>> someone (you?) under a certain call when HE'S not in there either.
>> Never has been.
>>
>> Sorry for the confusion.
>>
>> Steve, K4YZ
>>
>I'm not in hiding.
>
>No worries.
>
>73,
>
>John
>AB8O
funny
http://www.qrz.com/detail/AB8O
does support your claim of licensure
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4566. Re: Kenwood TS-940 Power Supply Voltage Regulation

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-25 07:05:25 UTC
From: "g. beat"
Message-ID: <CqWdndBcYu4o4orYnZ2dnUVZ_sednZ2d@comcast.com>
Source record: 10267

<KC2PIH@gmail.com> wrote in message
news:1159153329.322897.293650@k70g2000cwa.googlegroups.com...
> Hi,
>
> My 940 was working good for while, but now the S-Meter lights and the
> VFO display have started to flicker. They flicker at random times very
> quickly (all at once). The LCD display bulbs don't flicker, but they
> have both burnt out now. And I just replaced them less than 2 years ago
> (with Kenwood factory replacements).
>
> I checked the voltage to the power amp and it reads 28.6 volts. The
> S-Meter (lights) read 13.6 volts and when the flicker occurs the
> voltage very quickly varies from ~6 to 13 volts - never above 13.6
> volts. Is this some kind of voltage regulation issue? I can't get it
> to do this by moving wires around and pushing on things. It does only
> seem to effect the lights the are controlled by the dimmer switch.
>
> On a side note, I've been reading several posts about the 2N5885 that
> regulate the 28v supply for the power amp failing and wiping out the
> MRF-485 transistors that are no longer available. Does it make sense to
> preemptivly change the 2N5885 transistors to help prevent damage to
> those MRF-485? I use my 940 daily - and its on most of the day.
>
> -Scott,WU2X
>

Scott,

May I suggest the TS-940 web page? Jeff King ZL4AI / DU7 (N5IW also has
one)
One stop shopping for almost every issue, mod or change noted for the TS-940
The web page is so big -- it is in 2 parts!
http://homepages.ihug.co.nz/~jaking/TS-940_02.htm
http://www.jking.kol.co.nz/TS-940_02_part2.htm#_Toc146779962

The power supply, as you have noted, has been an issue for other operators.
http://www.jking.kol.co.nz/TS-940_02_part2.htm#_Toc146779932
===

Kenwood TS-940s AVR board, by N0XWR on February 28, 2006

You won't find an AVR board for sale new -- you should endeavor to fix the
one you have.

First, check regulator Q103. it is in the rear left corner of the rig as the
rig faces you. it is on the heatsink for the power supply. there are three

regulators side by side. it is the one on the far left. no matter whether you replace it or it is good, it is imperative that you cut the connector off of the three wire harness that plugs on to regulator Q103 and solder directly to it. this harness comes from plug-in #2 on the AVR.

Over time the connector overheats and fails and cannot carry the 20-30 volts to and from that regulator. I have seen the problem many, many times. when the connection to that regulator fails, it takes out Q6 on the AVR board, so check it next.

Clif at AAvid Electronics, (now back in repair business at http://www.avvid.com) helped me get through the problem. also check D3, D9 and D14 which are zener diodes on the AVR board. they can be checked right on the board with a multimeter. the board can be removed easily. as you unplug the wiring harness use a sharpie and number each connector so that you can reinstall it easily. make a diagram, too. use small long nose forceps to unplug the connectors to the AVR board.

Incidentally, Q103 is part # NTE377 available at Mouser. Q6 is part # NTE382 also available at Mouser.

I have the part numbers for the zeners if you need them.

73s Jerry N0XWR

4567. Re: 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-25 10:17:20 UTC
From: SamSvL <samsvl@nlr.nl>
Message-ID: <Xns98497D02C3DCAsamsvlnlrnl@192.87.166.15>
Source record: 10268

Jim Flanagan <jflan@tampabay.rr.com> wrote in news:yK9Qg.1384$K02.6
@tornado.tampabay.rr.com:

> Guys..
> Does anyone have any better method for stripping small, enameled
> wire, other than using sandpaper or an exacto knife (scrapping)?
> There used to be a chemical stripper called 'Xvar', years ago.
> This stuff worked great. Nasty stuff as you can imagine and has
> been EPA'd years ago. Is there anything comparable, today?
>
> Also, a retired technician that I once knew had a pair of ingenious
> 'stripper pliers' that he had acquired back in the '60s that did
> a fabulous job. These pliers had special jaws that would scrape the
> enamel off without nicking the wire. They worked GREAT. Supposedly,
> this tool originated from a mfg in Germany. I have never seen this
tool
> since. Anyone have a lead on something similar?
>
> Thanks and take care.
> -jim
> WB5KYE

I have had good results with formic acid.

Cheers,

Sam

4568. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-25 17:08:19 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12hg3848dbaav69@corp.supernews.com>
Source record: 10269

"ken scharf" <wa2mzeNOSPAMBOTS@bellsouth.net> wrote in message
news:__kRg.8194$tT6.613@bignews7.bellsouth.net...
> The advantage of Linux is that the development tools are free

Not true. A fairer statement would probably be something like "there are significantly more free development tools for Linux than there are for Windows." On Windows, the "express" editions of the Microsoft compilers are free, older Borland tools are free, GCC is free, etc. On Linux, there are plenty of commercial development suite, which in many cases are well worth the money.

> and Linux
> will run on any computer that runs windows.

Also not true. Especially with laptops, drivers for Linux are often non-existent. In fact, where I start thinking, "hmm... I should do something with Linux..." the *first* thing I have to consider is whether or not I have a PC around that'll have its hardware fully supported.

4569. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-25 18:16:25 UTC
From: Straydog <asd@panix.com>
Message-ID: <Pine.NEB.4.64.0609251354160.7978@panix3.panix.com>
Source record: 10270

On Mon, 25 Sep 2006, Joel Kolstad wrote:

> "ken scharf" <wa2mzeNOSPAMBOTS@bellsouth.net> wrote in message
> news:__kRg.8194$tT6.613@bignews7.bellsouth.net...
>> The advantage of Linux is that the development tools are free
>
> Not true. A fairer statement would probably be something like "there are
> significantly more free development tools for Linux than there are for
> Windows." On Windows, the "express" editions of the Microsoft compilers are
> free, older Borland tools are free, GCC is free, etc. On Linux, there are
> plenty of commercial development suite, which in many cases are well worth the
> money.

I'm not that aware of how many (and how good) developement tools are there
for Linux but...see bellow...

>> and Linux
>> will run on any computer that runs windows.
>
> Also not true. Especially with laptops, drivers for Linux are often
> non-existent. In fact, where I start thinking, "hmm... I should do something
> with Linux..." the *first* thing I have to consider is whether or not I have a
> PC around that'll have its hardware fully supported.

My little story....

I have been told that there are laptops out there, with Windows
pre-installed, that will not even run DOS or Win3.1 any more.

Laptop support for anything other than what software the laptop was
designed for is a major problem.

I have had vastly more success intalling the earlier versions of Linux on
"any" PC laying around. Just like Windoze, Linux has also tightened up its
hardware compatibility requirements and particularly in the driver
category.

I've had, and installed, from Red Hat 4.2 to 5.2, 6.2, 7.3 (problems with
7.4, very buggy GUIs in 7.1,7.2), and mostly failure with one of the
Workstation (Taroon, version 3.0) versions (based on the 3.5 inch
boot disk with included CD-ROM driver portfolio was changed from a small
number of prior CD-ROM drivers to new RAIDs, etc, and the new drivers
don't recognize anything older than about 4-5 years, now). And, I was
profoundly disappointed. Also, that same Linux (Taroon) required 256 MB of
ram to run. It would boot with less (32 mb), but barely get the GUI up.
Anything beyond that would run into the swap partition and be slow as
hell. Actually both 6.2 and 7.3 (which installed sucessfully less often

than 6.2 or 5.2) are pretty good (eg. drag and drop file manager, gFTP, automount-dismount drives, etc). StarOffice 5.1 & 5.2 installed well on 5.2 and 6.2. The problems with 7.3 and prior were the buggy web browsers or they would crash on moderate to advanced websites.

I never set up the firewalls, IP chains, or whatever, and some months after I was running it on the intenet, I got hacked (I actually witnessed it as it was happening: hard drive started cranking like mad, and lots of bytes were being downloaded (as could be seen on the download bytes/sec rate meter and graph). By the time I could get to the phone line to disconnect, the bugger downloaded a rootkit somewhere and every time I booted it up, I could see a package of outgoing data (red bars) leave my box (and without confirming green bars) to some unknown point on the internet. At a later point, I nuked the HD and re-installed.

As an aside, I still run DOS & Win3.1 for a lot of internet aps. At one time, www.securityspace.com ran free vulnerability tests with hack attacks (I think www.grc.com does too) and could not hack my Win3.1 with Netscape 2.01 dialer (probably because it has no ports for anything but email, ng, ftp, and http protocols), but it could hack my Linux and Win98SE boxes (without ZoneAlarm). Most of the time I access my shell account with a DOS terminal program (dialup terminal mode, not ppp). I think my home box is pretty safe that way (not much is going to cross from Unix to DOS, and I don't keep any vital info in files/folders on my shell directory.

>
>
>

4570. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-25 18:28:57 UTC
From: Leroy <nota.ham@never.will.be>
Message-ID: <pan.2006.09.25.18.28.52.539111@never.will.be>
Source record: 10271

On Sun, 24 Sep 2006 16:39:34 -0400, ken scharf wrote:

> About the only thing I find lacking is Macromedia Flash support for Linux,
> though there is a GNU project to provide it (gnash).

Flash working fine here on Mepis 3.4-3.

Even runs my LinkSys WPC54G wireless card when other distros wouldn't.

4571. Re: PayPal horror stories

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-25 20:39:05 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12hgfjb7ql3v3a3@corp.supernews.com>
Source record: 10272
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

Hi Michael,

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
news:4515DE32.CC9A7A8@earthlink.net...
> BTW, I was given another Compaq like yours with the VGA connector
> sheared off the motherboard. It works with a replacement AGP card, but
> you know me. I'm going to replace the connector so I can see if the
> onboard video is still ok. ;-)

Wow... someone probably just reefed on a video cable that was still screwed
into the connector and ripped it off?

I would wager that you'll find it will work just fine if you can successfully
re-attach a connector (and repair any damaged traces!)

---Joel

4572. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-25 20:56:18 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <jaCdnRvz0IfN34XYRVnyug@pipex.net>
Source record: 10273

```
>> About the only thing I find lacking is Macromedia Flash support for Linux,
>> though there is a GNU project to provide it (gnash).
>
> Flash working fine here on Mepis 3.4-3.
>
> Even runs my LinkSys WPC54G wireless card when other distros wouldn't.
==================================
Question : Do you run 'Simply Mepis' from a live CD or have you
installed that distro on your HD ?

'Simply Mepis' upgrades come hard and fast ; last month the Linux Format
magazine's DVD carried version 6.0

Frank GM0CSZ / KN6WH
```

4573. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-25 21:27:39 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnehgieb.23c7.bit-bucket@shell.config.com>
Source record: 10274

On Mon, 25 Sep 2006 21:56:18 +0100, Highland Ham wrote:
>>> About the only thing I find lacking is Macromedia Flash support for Linux,
>>> though there is a GNU project to provide it (gnash).
>>
>> Flash working fine here on Mepis 3.4-3.
>>
>> Even runs my LinkSys WPC54G wireless card when other distros wouldn't.
>==========
> Question : Do you run 'Simply Mepis' from a live CD or have you
> installed that distro on your HD ?
>
> 'Simply Mepis' upgrades come hard and fast ; last month the Linux Format
> magazine's DVD carried version 6.0

They shouldn't be coming "hard and fast" from here on out. Mepis is now
Debian-based and will follow that distro's roll-out schedule(s). There
can be/will be security updates -- which I believe is A Real Good Thing.
The updates are done with ease.

But new, full releases will appear less often. 'Tis said, as well, that
Mepis release's will each now come with "Long Term Support". Dunno what
that means in actuality, but I've gotten damn tired of Mandrake
deprecating my installations each time I finally get them fully fleshed
out, fine tuned, and stable. Then it is upheaval all over again.

I will be moving off the Mandrake ("Mandriva" - yeech!) distro (MDK 10.2
on my primary box), and I have recently installed Mepis 6.0 on my
'down-level' box (was MDK 9.1). Mepis 6.0 installed as slick as you'd
ever want an install to go.

Recommended.

Jonesy -- Mikro$oft free since 1991
--
Marvin L Jones | jonz | W3DHJ | linux
38.24N 104.55W | @ config.com | Jonesy | OS/2
*** Killfiling google posts: <http//jonz.net/ng.htm>

4574. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-25 23:28:05 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <YBZRg.9486$zF5.7514@bignews1.bellsouth.net>
Source record: 10275

Leroy wrote:
> On Sun, 24 Sep 2006 16:39:34 -0400, ken scharf wrote:
>
>
>> About the only thing I find lacking is Macromedia Flash support for Linux,
>> though there is a GNU project to provide it (gnash).
>
> Flash working fine here on Mepis 3.4-3.
>
> Even runs my LinkSys WPC54G wireless card when other distros wouldn't.
>
There are TWO different flash plugins. Macromedia is NOT supported
under linux. There is another pluging also called flash that is.

4575. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-25 23:30:30 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <eEZRg.9494$zF5.718@bignews1.bellsouth.net>
Source record: 10276

Danny Richardson wrote:
> On Sun, 24 Sep 2006 16:39:34 -0400, ken scharf
> <wa2mzeNOSPAMBOTS@bellsouth.net> wrote:
>
>> Danny Richardson wrote:
>>> On Sun, 24 Sep 2006 09:26:24 -0400, "xpyttl"
>>> <xpyttl_NOSPAM@earthling.net> wrote:
>>>
>>>> "ken scharf" <wa2mzeNOSPAMBOTS@bellsouth.net> wrote in message
>>>> news:__kRg.8194$tT6.613@bignews7.bellsouth.net...
>>>>
>>>>> The advantage of Linux is that the development tools are free, and Linux
>>>>> will run on any computer that runs windows.
>>>> Not entirely true. Linux doesn't always have the hardware support,
>>>> especially on newer boxes.
>>>>
>>>>> You can also install Linux
>>>>> on top of windows (on the same computer anyway) and dual boot, so you
>>>>> can have your cake and eat it too (or have your poison and antidote too
>>>>> in my opinion!).
>>>> And why would you? Why would you suffer the complexity and frustration of
>>>> Linux if Windoze is working just fine for you?
>>>>
>>>> Personally, I fully enjoy having Linux servers an Windoze desktops on my
>>>> home LAN, and with the magic of Cygwin, I can have Linux tools on my Windoze
>>>> box, and seamless access to my Linux apps, withough fully suffering the
>>>> clumsy Linux desktop.
>>>>
>>>> But that is just me. Most folks want to use the applications, not the OS.
>>>> Most hams aren't going to write programs, and the features of Linux will be
>>>> lost on them, but the complexity sure won't. For them, all they want is a
>>>> little Digipan and email, why on earth would they subject themselves to yet
>>>> another set of stuff to learn? As far as i can tell, the only ham app on
>>>> Linux that is better than what is available on Windoze is gEDA. Everything
>>>> else is harder to use and less capable.
>>>>
>>>> Now, I have a lot of ham apps on Linux that I have personally written.
>>>> These provide me with functions that aren't easily available on Windoze, and
>>>> the Linux environment makes it much easier. But I'm not most people. Not
>>>> too many hams are comfortable writing their own applications, or even if
>>>> they could, that isn't how they enjoy the hobby. For most people, including
>>>> most hams, Windoze serves the purpose.
>>>>
>>>> Everyone has their own set of needs, and one size doesn't fit all. I

>>>> suspect there may even be some people for whom the Mac is the best answer,
>>>> although I can't imagine who they might be. But the getting in price for
>>>> Linux is still pretty high in terms of learning curve, and for most hams,
>>>> the return is close to zero. So why bother?
>>>>
>>>> ..
>>> Excellent response. I too have a Linux system on my shack computer
>>> dual-booting with Winders. I removed Linux from my main computer as
>>> after several months of searching I could never find a decent driver
>>> for my video card and wasn't about to buy another card when there was
>>> nothing wrong with one I have except there aren't any Linux drivers
>>> for it.
>>>
>>> Plus setting the sucker up is a PITA. Kind of a cross between DOS and
>>> Window '98. Finding extensions, plugins, or what ever you may call
>>> them is some what like a scavenger hunt and takes a LOT of time and
>>> effort.
>>>
>>> If one takes the time and endures the learning curve the results are
>>> often quite good. The system is very stable and works well.
>>>
>>> 73,
>>> Danny, K6MHE
>> Those of us that have gone through the trouble of getting there know
>> the rewards of Linux. I agree, it's not something for everyone, but I
>> would think that if you have the brains to get a ham ticket and build
>> your own gear, you can figure it out. Also Ubuntu, Linspire (and
>> Freespire) provide a brainless install that usually just works.
>
> I really don't want to debate this but will add this comment: I did
> not find that true with Ubuntu. Try playing videos or mp3s without
> addding a bunch of stuff after the install. Its not a slam-dunk yet.
>
Ubuntu tries to be a totally free (as in freedom) distro so they don't
distribute closed source drivers and plugins by default. As you noticed
it's possible but requires user intervention. There are scripts
available to do this for your with one click.

> It really a choice thing and we don't all make the same choices. <G>
>
> very 73,
> Danny, K6MHE
>
> [snip]

Yes! choice is good!

4576. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-25 23:34:50 UTC
From: Leroy <nota.ham@never.will.be>
Message-ID: <pan.2006.09.25.23.34.44.342656@never.will.be>
Source record: 10277

On Mon, 25 Sep 2006 21:56:18 +0100, Highland Ham wrote:

>>> About the only thing I find lacking is Macromedia Flash support for
>>> Linux, though there is a GNU project to provide it (gnash).
>>
>> Flash working fine here on Mepis 3.4-3.
>>
>> Even runs my LinkSys WPC54G wireless card when other distros wouldn't.
> ==========
> Question : Do you run 'Simply Mepis' from a live CD or have you installed
> that distro on your HD ?
>
> 'Simply Mepis' upgrades come hard and fast ; last month the Linux Format
> magazine's DVD carried version 6.0

I originally ran it from a Live CD to test it. It found and set up all of my hardware without any messing about or configuring on my part. After a few days I wiped out Mandrake and installed it to the HD.

The only thing I really miss is Midnite Commander...and a partition that got munged when I disregarded previous experience and was bopping back and forth between Partition Magic and QTParted. I could re-write the partion table by hand with a hex editor but it's tedious work and I'm not sure that what's gone is worth the effort.

This machine is set up to dual-boot with Win 98, but the only reason I keep it is for one business app that manages my inventory and invoicing. I'm used to the way it works and too lazy to port it over or try to convert it to something else.

I have the Mepis 6.0 Live distro but this is working fine. It ain't broke, so I'm not going to "fix" it. But if I decide to build a new laptop with one of those nice 17" screens and a dual-core AMD CPU, that is most likely what will go on it.

4577. Proposal 1 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-25 23:59:07 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <f3_Rg.1386$Y24.662@newsread4.news.pas.earthlink.net>
Source record: 10278
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

No more automatic renewals. Individuals must retest and pass all elements required for their license class.

4578. Proposal 2 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-25 23:59:17 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <p3_Rg.1387$Y24.220@newsread4.news.pas.earthlink.net>
Source record: 10279
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

The passing score for written exams needs to be raised to 85%.

4579. Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-25 23:59:26 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <y3_Rg.1388$Y24.1262@newsread4.news.pas.earthlink.net>
Source record: 10280
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Code elements should be 13 wpm for General, and 20 wpm for Extra.

4580. Proposal 4 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-25 23:59:36 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <I3_Rg.1389$Y24.641@newsread4.news.pas.earthlink.net>
Source record: 10281
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Make the no-code license one year non-renewable.

4581. Re: Proposal 1 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 00:13:07 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12hgs4mjd8nk19c@corp.supernews.com>
Source record: 10282
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

I and other readers of rec.radio.amateur.antenna would really appreciate it if you'd leave that newsgroup off the lengthy list you post this sort of thing to.

If you're not willing to do that, perhaps some of the people who feel compelled to respond would be thoughtful enough to remove that newsgroup from the list receiving the responses.

Roy Lewallen, W7EL

Slow Code wrote:
> No more automatic renewals. Individuals must retest and pass all elements
> required for their license class.
>

4582. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 00:41:53 UTC
From: gkb <gkbrown@gwi.net>
Message-ID: <d-adnaLSJa6364XYnZ2dnUVZ_rednZ2d@gwi.net>
Source record: 10283
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

10 wpm novice, 20 wpm general and 35 wpm for extra class.

--
Regards,
Gary...WZ1M
"Slow Code" <my.mail@no.spam> wrote in message
news:y3_Rg.1388$Y24.1262@newsread4.news.pas.earthlink.net...
> Code elements should be 13 wpm for General, and 20 wpm for Extra.
>

4583. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 01:13:47 UTC
From: kludge@panix.com
Message-ID: <ef9usbore1@panix2.panix.com>
Source record: 10284
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

gkb <gkbrown@gwi.net> wrote:
>10 wpm novice, 20 wpm general and 35 wpm for extra class.

Well, this doesn't seem very relevant for folks here in
rec.radio.amateur.boatanchors. We think the requirements
should include being able to bench press a Collins R-390
and being tested on changing coupling capacitors with the
B+ live.

Other folks may consider other tests, for example testing
someone for the ability to hold down the key for ten minutes
straight while shouting "This is my channel, you don't own
this frequency" over and over again. This is a skill that
is becoming increasingly popular.
--scott

--
"C'est un Nagra. C'est suisse, et tres, tres precis."

4584. blow code blows it again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 01:34:18 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1159234458.361742.173830@h48g2000cwc.googlegroups.com>
Source record: 10285
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:
>
blow code blows it again

4585. blow code blows it again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 01:35:26 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1159234526.764072.104890@d34g2000cwd.googlegroups.com>
Source record: 10286
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:
>
blow code blows it again

4586. blow code blows it again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 01:36:18 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1159234578.082966.43100@m7g2000cwm.googlegroups.com>
Source record: 10287
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:
>
blow code blows it again

4587. blow code blows it again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 01:53:35 UTC
From: "kb9rqz-1@hotmail.com" <kb9rqz-1@hotmail.com>
Message-ID: <1159235615.748581.140030@m73g2000cwd.googlegroups.com>
Source record: 10288
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:
>
.blow code blows it again

4588. Propsal 5 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 02:27:36 UTC
From: jawod <jawod@fuse.net>
Message-ID: <4f51b$45189089$4831cd39$17928@FUSE.NET>
Source record: 10289

Proposal 5 is :

Only one line at a time when trolling.

4589. Re: What's in a "wall wart" so-called "transformer"?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 05:45:15 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1159249515.251206.43040@m7g2000cwm.googlegroups.com>
Source record: 10290

ken scharf wrote:
> W3JDR wrote:
> > There are also some transformer-input types that produce well-regulated DC
> > outputs using linear regulator technology, and a growing number of units
> > that use switching regulator technology to make the transfoprmer so small
> > that it's hard to tell from the outside that there's even a transformer in
> > it.. The latter are easily distinguishable because they put out quite a bit
> > of power, yet are smaller and much lighter in weight than traditional units
> > with equivalent power capability.
> >
> > Joe
> > W3JDR
...
> Such units actually have a bridge rectifier across the AC mains and
> supply DC to a switching regulator running at 20-50khz. There is an
> isolation transformer running at this frequency (it's core is just a
> small bit of lightweight ferrite). The output of the isolation
> transformer feeds another bridge rectifier and filter (at ~40khz not
> much of a filter is needed, small caps and chokes!). There may then
> be a linear or switching regulator. If the later, it may actually
> regulate by changing the switching frequency/duty cycle of the
> original switcher at the AC mains input. In this case the feedback
> is by means of an opto-isolator for safety.

In small ones (not a whole lot of power; things like 5V at 1A like I
have in front of me), the switcher is commonly a flyback type, and the
regulation is provided by monitoring how far the primary flies back.
The secondary side is a single rectifier diode feeding a filter cap.
Knowing the turns ratio and the expected losses in parts like the
secondary rectifier, you can achieve pretty decent regulation that way.
They commonly run at much higher than 50kHz these days. There are
some small ICs that make the job very easy. One characteristic of the
switchers is that they commonly run on 100-240V, 50-60Hz input, though
not always. It's rarely the case that a mains-frequency transformer
model will operate properly over such a wide voltage range. Wide input
range switchers do make travel to countries with different mains
voltages more convenient.

Cheers,
Tom

4590. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 08:03:17 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2006.09.26.08.03.15.26219@oceanfree.net>
Source record: 10291

On Mon, 25 Sep 2006 19:28:05 -0400, ken scharf wrote:

>
> There are TWO different flash plugins. Macromedia is NOT supported
> under linux. There is another pluging also called flash that is.

The Macromedia flash plugin works fine on my Linux box. You can get it
from:
http://fpdownload.macromedia.com/get/flashplayer/current/install_flash_player_7_linux.tar.
gz

or with this shorter URL: http://tinyurl.com/prmdd

I think it is closed-source, binary only, so it will probably only
work with X86 versions of Linux.

Note that Macromedia are called Adobe these days.

Anyway, thats enough OT for me. This is turning into a
Linux advocacy group :-)

73, Ed. EI9GQ.

--
Remove 'X' to reply by e-mail
Linux 2.6.17

4591. Help on General Microwave Bolometer 476

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 10:04:27 UTC
From: "Gian, I7SWX" <i7swx@yahoo.com>
Message-ID: <1159265067.757380.135840@m7g2000cwm.googlegroups.com>
Source record: 10292

Hi all,

a good friend of mine in IT9 (Sicily) has a very nice General Microwave
Bolometer model 476. By mistake he applied too much power and ...
voila' ... the "476 head" failed.
He has now at least 8dB error. He would like to repair replacing the
TFT element that now has 180 value versus the expected 150 ohm.

The Head is model 42040A ok for up to 20GHz.

Thanks for your help

73

Gian
I7SWX
W1-I7SWX
F5VGU

4592. SMD

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 12:00:21 UTC
From: "tony.swanborough" <tony.swanborough@ntlworld.com>
Message-ID: <pD8Sg.47149$7D6.36129@newsfe2-win.ntli.net>
Source record: 10293

Hi all, could some kind soul please help me !!

I live in the uk, looking to buy small amounts of SMD, ie

Resistors/capacitors etc Local (UK) if possible !

TIA
Tony

4593. Re: 'Stripping' Enamel Wire.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 13:40:26 UTC
From: carl <carl@gumby.com>
Message-ID: <45192DC9.317100DF@gumby.com>
Source record: 10294

try some laquer thinner or small amount of
nail polish remover (contains acetone).

carl

4594. Re: SMD

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 13:49:30 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <HZ6dnYvIz_1YsoTYRVnyhA@pipex.net>
Source record: 10295

tony.swanborough wrote:
> Hi all, could some kind soul please help me !!
>
> I live in the uk, looking to buy small amounts of SMD, ie
>
> Resistors/capacitors etc Local (UK) if possible !
>============================

Suggest you check with :

www.jabdog.com Birminham -UK

www.modecomponents.co.uk Birmingham -UK

www.bowood-electronics.co.uk Baslow -Derbyshire -UK

Good Luck

Frank GM0CSZ / KN6WH

4595. Re: blow code blows it again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 14:04:13 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <NoOdnd_7ZY6kroTYnZ2dnUVZ8tydnZ2d@pipex.net>
Source record: 10296

an_old_friend wrote:
> Slow Code wrote:
> blow code blows it again
==========
For the purpose of this reply I deleted a number of NGs since I only
subscribe to rec.radio.amateur.homebrew

The problem with Usenet is that you can post any messages to multiple
NGs with the consequence that the messages appear in non-related NGs
If this were NOT possible , NG-life would be so much more
effective/efficient and .... peaceful.

Frank GM0CSZ / KN6WH

4596. parting out an HP 8557A

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 14:58:41 UTC
From: Pete KE9OA <p.gianako@comcast.net>
Message-ID: <mOmdnbZ_V8aF3YTYnZ2dnUVZ_q-dnZ2d@comcast.com>
Source record: 10297

I know that this is off-topic, but since there are many homebrewer/designers on this group, I will mention it. I am parting out an HP 8557A. This is the one with the LED display.
I purchased it from a local hamfest and discovered that the sweep board had a problem. All of the other boards, including the front panel assembly with the attenuator should be ok.
Let me know if you are looking for any of the board/assemblies and we can work out a reasonable price.

Pete

4597. Re: 4-400 on 6 meters ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 16:02:11 UTC
From: Skipp says hello <spamsomeoneelseplease@yahoo.com>
Message-ID: <efbiu3ejk1@skeeter.ucdavis.edu>
Source record: 10348

Hi Doug,

I could load a diagram for an amplifier in the files or photos section of the yahoo rfamplifiers group if you'd like. Post a want over on the group and we'll help where possible. No problem putting a 4-400 on 50 MHz.

http://groups.yahoo.com/group/rfamplifiers/

cheers,
skipp

: SNOWDEN <snowden@peoplepc.com> wrote:
: Anyone been successful in building an amplifier at 6 meters? I have a
: couple and was thinking about trying it.
: Doug N4IJ

4598. Re: PayPal horror stories

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 16:05:30 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <45194FA0.79D139CD@earthlink.net>
Source record: 10349
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

Joel Kolstad wrote:
>
> Hi Michael,
>
> "Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
> news:4515DE32.CC9A7A8@earthlink.net...
> > BTW, I was given another Compaq like yours with the VGA connector
> > sheared off the motherboard. It works with a replacement AGP card, but
> > you know me. I'm going to replace the connector so I can see if the
> > onboard video is still ok. ;-)
>
> Wow... someone probably just reefed on a video cable that was still screwed
> into the connector and ripped it off?
>
> I would wager that you'll find it will work just fine if you can successfully
> re-attach a connector (and repair any damaged traces!)
>
> ---Joel

No damaged traces, but someone covered the exposed terminals with
black electrical tape over the HDE15 knockout. The 15 pins aren't too
hard, but removing the two spring loaded mounting clips is the bear. If
the onboard video is bad, I'll remove it and put one of the old DE-9
filler plates over the hole.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

4599. Want to buy: Ham Radio Outlet one-knob CW Keyer late 1970s

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 16:12:11 UTC
From: Skipp is looking for a cw keyer <skipp025@yahoo.com>
Message-ID: <efbjgrejk2@skeeter.ucdavis.edu>
Source record: 10350
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

Hello there,

Ham Radio Outlet sold a single knob cw keyer in the late 1970's and early 1980's. The front panel control was only the speed adjustment and power on/off. It's a small black painted box about the size of a sardine can and the rear exit wire connections are routed to an iambic style key. Runs of an internal 9 volt battery and has no side tone.

I'm looking to buy one in any condition (even parts of one).

Please just the described "HRO" or "Ham Radio Outlet" keyer is all I seek. I have other keyers in my collection already but this keyer is the missing link from an original ham station a friend and I used to operate. We'd like to duplicate that station now with the original equipment where possible.

Sell outright or trade..? your choice. Please contact me below if you have the mentioned keyer for sale. Please no other spam or solicitations.

thank you
skipp

skipp025 at yahoo.com

skipp025@yahoo.com
www.radiowrench.com/sonic

4600. Re: SMD

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 18:48:54 UTC
From: Leon <leon.heller@bulldoghome.com>
Message-ID: <1159296533.827440.306850@k70g2000cwa.googlegroups.com>
Source record: 10351

tony.swanborough wrote:
> Hi all, could some kind soul please help me !!
>
> I live in the uk, looking to buy small amounts of SMD, ie
>
> Resistors/capacitors etc Local (UK) if possible !
>
> TIA
> Tony

Rapid Electronics, Farnell and RS.

Leon

4601. Re: Help on General Microwave Bolometer 476

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 19:42:52 UTC
From: "Gian, I7SWX" <i7swx@yahoo.com>
Message-ID: <1159299772.655124.51570@h48g2000cwc.googlegroups.com>
Source record: 10352

The Bolometer Head is 4240A (and not 42040A)

Thanks and 73

Gian, I7SWX

wrote:
> Hi all,
>
> a good friend of mine in IT9 (Sicily) has a very nice General Microwave
> Bolometer model 476. By mistake he applied too much power and ...
> voila' ... the "476 head" failed.
> He has now at least 8dB error. He would like to repair replacing the
> TFT element that now has 180 value versus the expected 150 ohm.
>
> The Head is model 42040A ok for up to 20GHz.
>
> Thanks for your help
>
> 73
>
> Gian
> I7SWX
> W1-I7SWX
> F5VGU

4602. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 21:50:48 UTC
From: Count Floyd <CountFloyd@MonsterChillerHorrorTheater>
Message-ID: <g40vCXBzNU8x-pn2-xidDCXv10dGz@localhost>
Source record: 10353
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

On Tue, 26 Sep 2006 00:41:53 UTC, "gkb" <gkbrown@gwi.net> wrote:

> 10 wpm novice, 20 wpm general and 35 wpm for extra class.
Yes, that's the ticket, back to the past. As if enough people weren't abandoning ham radio already. I have never thought that code was essential. It is just another "hoop" that someone has to jump through. Once I passed the code test, I never used it again. Get real, this is 2006, and with all the innovations on the radio spectrum, code is the last thing on people's minds.

--
"What do you mean there's no movie?"

4603. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 22:02:15 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <C13EF177.44F17%dbowey@comcast.net>
Source record: 10354
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

On 9/26/06 2:50 PM, in article g40vCXBzNU8x-pn2-xidDCXv10dGz@localhost,
"Count Floyd" <CountFloyd@MonsterChillerHorrorTheater> wrote:

> On Tue, 26 Sep 2006 00:41:53 UTC, "gkb" <gkbrown@gwi.net> wrote:
>
>> 10 wpm novice, 20 wpm general and 35 wpm for extra class.
> Yes, that's the ticket, back to the past. As if enough people weren't
> abandoning ham radio already. I have never thought that code was
> essential. It is just another "hoop" that someone has to jump
> through. Once I passed the code test, I never used it again. Get
> real, this is 2006, and with all the innovations on the radio
> spectrum, code is the last thing on people's minds.
>

If there is ever a serious emergency, including no commercial
communications, guys like you who can't build a simple transmitter and
companion receiver, and can't do code, will be the first to scream for help.

What makes you think people are abandoning ham radio? I don't see that at
all, but I do see a reduction in new hams. But..... What goes around will
come around. Ham radio will grow again if the ARRL will quit mucking it up
with their friggin yuppy, elitist attitude.

Don

4604. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 22:18:34 UTC
From: Mark@kb9rqz.com
Message-ID: <4d9jh258etp5kgeat4k3v657i18ti50ksd@4ax.com>
Source record: 10355
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

On Tue, 26 Sep 2006 15:02:15 -0700, Don Bowey <dbowey@comcast.net>
wrote:

>On 9/26/06 2:50 PM, in article g40vCXBzNU8x-pn2-xidDCXv10dGz@localhost,
>"Count Floyd" <CountFloyd@MonsterChillerHorrorTheater> wrote:
>
>> On Tue, 26 Sep 2006 00:41:53 UTC, "gkb" <gkbrown@gwi.net> wrote:
>>
>>> 10 wpm novice, 20 wpm general and 35 wpm for extra class.
>> Yes, that's the ticket, back to the past. As if enough people weren't
>> abandoning ham radio already. I have never thought that code was
>> essential. It is just another "hoop" that someone has to jump
>> through. Once I passed the code test, I never used it again. Get
>> real, this is 2006, and with all the innovations on the radio
>> spectrum, code is the last thing on people's minds.
>>
>
>If there is ever a serious emergency, including no commercial
>communications, guys like you who can't build a simple transmitter and
>companion receiver, and can't do code, will be the first to scream for help.
when was the last such emergency BTW

For that matter I have built voice tranceivers am I admit
>
>What makes you think people are abandoning ham radio? I don't see that at
>all, but I do see a reduction in new hams. But..... What goes around will
>come around. Ham radio will grow again if the ARRL will quit mucking it up
>with their friggin yuppy, elitist attitude.
The ARRL trying to represent either the interests of its memebr (the
code forever crowd or those of the ARS would help
>
>Don
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4605. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 22:25:29 UTC
From: Count Floyd <CountFloyd@MonsterChillerHorrorTheater>
Message-ID: <g40vCXBzNU8x-pn2-sdIbdDc2ojns@localhost>
Source record: 10356
Cross-posted to: rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

On Tue, 26 Sep 2006 22:02:15 UTC, Don Bowey <dbowey@comcast.net>
wrote:

> On 9/26/06 2:50 PM, in article g40vCXBzNU8x-pn2-xidDCXv10dGz@localhost,
> "Count Floyd" <CountFloyd@MonsterChillerHorrorTheater> wrote:
>
> > On Tue, 26 Sep 2006 00:41:53 UTC, "gkb" <gkbrown@gwi.net> wrote:
> >
>> 10 wpm novice, 20 wpm general and 35 wpm for extra class.
> > Yes, that's the ticket, back to the past. As if enough people weren't
> > abandoning ham radio already. I have never thought that code was
> > essential. It is just another "hoop" that someone has to jump
> > through. Once I passed the code test, I never used it again. Get
> > real, this is 2006, and with all the innovations on the radio
> > spectrum, code is the last thing on people's minds.
> >
>
> If there is ever a serious emergency, including no commercial
> communications, guys like you who can't build a simple transmitter and
> companion receiver, and can't do code, will be the first to scream for help.

Where did you get the part that I cannot build a radio? I simply said
that I do not use code anymore! I have built many radios, repaired
them and use them to this day! This attitude is typical of
old-timers, and I am 54 myself! How may radios have you built pal?
>
What makes you think people are abandoning ham radio? I don't see
that at
> all, but I do see a reduction in new hams. But..... What goes around will
> come around. Ham radio will grow again if the ARRL will quit mucking it up
> with their friggin yuppy, elitist attitude.

I agree with you on the ARRL! They are the ones who constantly keep
pushing for "code" requirements to be raised! Check the figures on
hams around the country. At a recent South Florida hamfest, it seemed
that I was the youngest guy there!
> Don
>

--
"What do you mean there's no movie?"

4606. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 22:36:18 UTC
From: Mark@kb9rqz.com
Message-ID: <8dajh2h31up01bqf1v323s92vr864sct7f@4ax.com>
Source record: 10357
Cross-posted to: rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

On Tue, 26 Sep 2006 17:25:29 -0500, "Count Floyd"
<CountFloyd@MonsterChillerHorrorTheater> wrote:

>On Tue, 26 Sep 2006 22:02:15 UTC, Don Bowey <dbowey@comcast.net>
>wrote:
>
>> On 9/26/06 2:50 PM, in article g40vCXBzNU8x-pn2-xidDCXv10dGz@localhost,
>> "Count Floyd" <CountFloyd@MonsterChillerHorrorTheater> wrote:
>>
>> > On Tue, 26 Sep 2006 00:41:53 UTC, "gkb" <gkbrown@gwi.net> wrote:
>> >
>> >> 10 wpm novice, 20 wpm general and 35 wpm for extra class.
>> > Yes, that's the ticket, back to the past. As if enough people weren't
>> > abandoning ham radio already. I have never thought that code was
>> > essential. It is just another "hoop" that someone has to jump
>> > through. Once I passed the code test, I never used it again. Get
>> > real, this is 2006, and with all the innovations on the radio
>> > spectrum, code is the last thing on people's minds.
>> >
>>
>> If there is ever a serious emergency, including no commercial
>> communications, guys like you who can't build a simple transmitter and
>> companion receiver, and can't do code, will be the first to scream for help.
>
>Where did you get the part that I cannot build a radio? I simply said
>that I do not use code anymore! I have built many radios, repaired
>them and use them to this day! This attitude is typical of
>old-timers, and I am 54 myself! How may radios have you built pal?
>>
> What makes you think people are abandoning ham radio? I don't see
>that at
>> all, but I do see a reduction in new hams. But..... What goes around will
>> come around. Ham radio will grow again if the ARRL will quit mucking it up
>> with their friggin yuppy, elitist attitude.
>
>I agree with you on the ARRL! They are the ones who constantly keep
>pushing for "code" requirements to be raised! Check the figures on
>hams around the country. At a recent South Florida hamfest, it seemed
>that I was the youngest guy there!
I went to ham fest couple of months I was the youngest guy there at 42
no less my wife shal we is 29 was still the youngest and had the least
number of reps on that 29th birthday
>> Don

>>
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4607. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 22:46:20 UTC
From: kludge@panix.com
Message-ID: <efcajs$bt5$1@panix2.panix.com>
Source record: 10358
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

Count Floyd <CountFloyd@MonsterChillerHorrorTheater> wrote:
>Yes, that's the ticket, back to the past. As if enough people weren't
>abandoning ham radio already. I have never thought that code was
>essential. It is just another "hoop" that someone has to jump
>through. Once I passed the code test, I never used it again. Get
>real, this is 2006, and with all the innovations on the radio
>spectrum, code is the last thing on people's minds.

Well, if that's the case, why not test them on use of the new innovations?

How about making them demonstrate competence operating five different
modes of their choice? They can choose between HF SSB, VHF/UHF FM, CW,
SSTV, fax, RTTY, packet, what have you. That way folks who want to learn
code and might use code have an advantage, but folks who can type 130 wpm
also have an advantage...
--scott

--
"C'est un Nagra. C'est suisse, et tres, tres precis."

4608. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 23:12:32 UTC
From: Mark@kb9rqz.com
Message-ID: <htcjh2p53odojea84ngkm6i379ioftbojm@4ax.com>
Source record: 10359
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

On 26 Sep 2006 18:46:20 -0400, kludge@panix.com (Scott Dorsey) wrote:

>Count Floyd <CountFloyd@MonsterChillerHorrorTheater> wrote:
>>Yes, that's the ticket, back to the past. As if enough people weren't
>>abandoning ham radio already. I have never thought that code was
>>essential. It is just another "hoop" that someone has to jump
>>through. Once I passed the code test, I never used it again. Get
>>real, this is 2006, and with all the innovations on the radio
>>spectrum, code is the last thing on people's minds.
>
>Well, if that's the case, why not test them on use of the new innovations?
>
>How about making them demonstrate competence operating five different
>modes of their choice? They can choose between HF SSB, VHF/UHF FM, CW,
>SSTV, fax, RTTY, packet, what have you. That way folks who want to learn
>code and might use code have an advantage, but folks who can type 130 wpm
>also have an advantage...
>--scott

five direferent modes might eb a bi much but in any event it is
impractical
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4609. CW not CB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 23:15:37 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <twiSg.6707$UG4.5234@newsread2.news.pas.earthlink.net>
Source record: 10360
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Why are you people against having good hams?

SC

4610. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 23:15:49 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <FwiSg.6717$UG4.1286@newsread2.news.pas.earthlink.net>
Source record: 10361
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

"Count Floyd" <CountFloyd@MonsterChillerHorrorTheater> wrote in
news:g40vCXBzNU8x-pn2-xidDCXv10dGz@localhost:

> On Tue, 26 Sep 2006 00:41:53 UTC, "gkb" <gkbrown@gwi.net> wrote:
>
>> 10 wpm novice, 20 wpm general and 35 wpm for extra class.
> Yes, that's the ticket, back to the past. As if enough people weren't
> abandoning ham radio already. I have never thought that code was
> essential. It is just another "hoop" that someone has to jump
> through. Once I passed the code test, I never used it again. Get
> real, this is 2006, and with all the innovations on the radio
> spectrum, code is the last thing on people's minds.

Dumbing it down cheapened the license, making being a radio amateur
nothing special. No wonder they leaving.

SC

4611. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 23:22:19 UTC
From: Mark@kb9rqz.com
Message-ID: <8gdjh29fs9ri0al9b3shileq1uegc9o0bt@4ax.com>
Source record: 10362
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

On Tue, 26 Sep 2006 23:15:49 GMT, Slow Code <my.mail@no.spam> wrote:

>"Count Floyd" <CountFloyd@MonsterChillerHorrorTheater> wrote in
>news:g40vCXBzNU8x-pn2-xidDCXv10dGz@localhost:
>
>> On Tue, 26 Sep 2006 00:41:53 UTC, "gkb" <gkbrown@gwi.net> wrote:
>>
>>> 10 wpm novice, 20 wpm general and 35 wpm for extra class.
>> Yes, that's the ticket, back to the past. As if enough people weren't
>> abandoning ham radio already. I have never thought that code was
>> essential. It is just another "hoop" that someone has to jump
>> through. Once I passed the code test, I never used it again. Get
>> real, this is 2006, and with all the innovations on the radio
>> spectrum, code is the last thing on people's minds.
>
>
>Dumbing it down cheapened the license, making being a radio amateur
>nothing special. No wonder they leaving.
no SC Code tsting makes ham look stupid and anti tech that is why they
are coming
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4612. ARS is not CW

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-26 23:23:20 UTC
From: Mark@kb9rqz.com
Message-ID: <bidjh25avcr4gaivu303u0frpnfgu76kr5@4ax.com>
Source record: 10363
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Tue, 26 Sep 2006 23:15:37 GMT, Slow Code <my.mail@no.spam> wrote:

>Why are you people against having good hams?
>
who is against it

I am all for revoking your license for example
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4613. Re: parting out an HP 8557A

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 00:07:29 UTC
From: "g. beat"
Message-ID: <X92dnUIMY_dbXYTYnZ2dnUVZ_tqdnZ2d@comcast.com>
Source record: 10364
Body handling: HTML body converted to readable text

"Pete KE9OA" wrote in message
news:mOmdnbZ_V8aF3YTYnZ2dnUVZ_q-dnZ2d@comcast.com...
>I know that this is off-topic, but since there are many
>homebrewer/designers on this group, I will mention it. I am parting out an
>HP 8557A. This is the one with the LED display.
> I purchased it from a local hamfest and discovered that the sweep board
> had a problem. All of the other boards, including the front panel assembly
> with the attenuator should be ok.
> Let me know if you are looking for any of the board/assemblies and we can
> work out a reasonable price.
>
> Pete
This post appeared a few months ago, may be worth an e-mail (or if he parted
out his - and you can get his sweep board!)
http://www.gatago.com/sci/electronics/equipment/4078487.html

4614. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 00:47:45 UTC
From: Count Floyd <CountFloyd@MonsterChillerHorrorTheater>
Message-ID: <g40vCXBzNU8x-pn2-wIUbwxrUsY26@localhost>
Source record: 10365
Cross-posted to: rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

On Tue, 26 Sep 2006 22:46:20 UTC, kludge@panix.com (Scott Dorsey)
wrote:

> Count Floyd <CountFloyd@MonsterChillerHorrorTheater> wrote:
> >Yes, that's the ticket, back to the past. As if enough people weren't
> >abandoning ham radio already. I have never thought that code was
> >essential. It is just another "hoop" that someone has to jump
> >through. Once I passed the code test, I never used it again. Get
> >real, this is 2006, and with all the innovations on the radio
> >spectrum, code is the last thing on people's minds.
>
> Well, if that's the case, why not test them on use of the new innovations?
>
> How about making them demonstrate competence operating five different
> modes of their choice? They can choose between HF SSB, VHF/UHF FM, CW,
> SSTV, fax, RTTY, packet, what have you. That way folks who want to learn
> code and might use code have an advantage, but folks who can type 130 wpm
> also have an advantage...
> --scott
Scott,
I agree with you! It is organizations like ARRL who continue to
insist on Code! Keep up with the times and test over what is current
and actually being used. I have a restored 1940 Chrysler but I also
have a 2005 PT Cruiser with A/C and all the options. I enjoy the
1940, but I would not take it on a cross-country trip.

--
"What do you mean there's no movie?"

4615. MFJ-1278 software

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 04:24:39 UTC
From: Kerry Miller <kmiller01at@ticnet.com>
Message-ID: <d2nSg.5541$Go3.1040@dukeread05>
Source record: 10366

I've been off the air for several years and am getting back on finally. I have an MFJ-1278B TNC and have used it with a normal terminal program on Windows (hyperterm) and Linux (minicom) but don't have any software anymore that will run on XP or Linux. Is there any software out there that supports the other modes this TNC will do like wefax and sstv? I have used it for rtty, cw and packet but don't have anything that will work with the graphical modes.

Any suggestions? Will any of the sound card software work with a TNC instead of a soundcard?

Thanks,
Kerry, WD5ABC
kmiller01 at ticnet dot com

4616. Re: parting out an HP 8557A

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 05:20:19 UTC
From: Pete KE9OA <p.gianako@comcast.net>
Message-ID: <4bSdnSadEZmUl4fYnZ2dnUVZ_sCdnZ2d@comcast.com>
Source record: 10367
Body handling: HTML body converted to readable text

Thanks for the info.....I've already got an 8558B, so I am set. I just removed the knobs for some extras for my own unit. I don't have much tied up in this unit, and I have already scrapped it.

Pete

"g. beat >" <@ wrote in message news:X92dnUIMY_dbXYTYnZ2dnUVZ_tqdnZ2d@comcast.com...
> "Pete KE9OA" wrote in message
> news:mOmdnbZ_V8aF3YTYnZ2dnUVZ_q-dnZ2d@comcast.com...
>>I know that this is off-topic, but since there are many
>>homebrewer/designers on this group, I will mention it. I am parting out an
>>HP 8557A. This is the one with the LED display.
>> I purchased it from a local hamfest and discovered that the sweep board
>> had a problem. All of the other boards, including the front panel
>> assembly with the attenuator should be ok.
>> Let me know if you are looking for any of the board/assemblies and we can
>> work out a reasonable price.
>>
>> Pete
> This post appeared a few months ago, may be worth an e-mail (or if he
> parted out his - and you can get his sweep board!)
> http://www.gatago.com/sci/electronics/equipment/4078487.html
>

4617. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 10:29:26 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <y-udnZEJM6Ubz4fYnZ2dnUVZ8tydnZ2d@pipex.net>
Source record: 10368

> Dumbing it down cheapened the license, making being a radio amateur
> nothing special. No wonder they leaving.
==========
Why should anybody be 'special' for being a radio amateur .
AR is for most of us just a hobby ....a hobby involving lifelong
learning on a huge range of radio communications related topics.
It is a hobby for anybody interested in 'Communicating' by radio,
whatever the level of past education.

Sadly a number of AR licensees see the hobby as one reserved for the
'elite' and look down upon those with ,what they consider, a lower level
,even inferior , license.
I fail to understand why superior skills in receiving and or
transmitting Morse telegraphy would make anybody a better Ham
,considering the other aspects of the hobby ,like emergency comms
(mostly without Morse telegraphy), satellite comms , propagation study
,digital modes and ......homebrewing ,just to name a few.

The above referred elitist's attitude towards the hobby is not just
apparent in the USA but also in Britain and many other European
countries.

Frank GM0CSZ / KN6WH

4618. HHH Update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 13:24:37 UTC
From: Harry Lethall <oeieio@NOSPAAM.hotmail.com>
Message-ID: <efdu2m$kf1$1@news.al.sw.ericsson.se>
Source record: 10369

Hi all,
I have had a bit of a busy half-year, with sickness in the family and the like. But I have managed to add a few new projects that could be of interest to my homepages on http://web.telia.com/~u85920178

Have you ever wondered how these old IF-cans can be re-used? I have two different articles dedicated to them:
http://web.telia.com/~u85920178/begin/cans-0.htm (reusing IF cans)
http://web.telia.com/~u85920178/rx/tda7k-rx2.htm (TDA7000 for NBFM)
http://web.telia.com/~u85920178/blocks/if-txfmr_tube_00.htm (Making your own)

Last month someone asked me how I choose values for components, but "Can you add calculations". Ok, I did it, with a few over-simplifications, and for a crude project:
http://web.telia.com/~u85920178/begin/bug_calc.htm (FM Wireless Microphone)
http://web.telia.com/~u85920178/begin/calc-00.htm (Includes loads of useful calculators)

Earlier int he year I needed to throw together s quick VHF antenna for 446MHz, 432MHz, and again for 145MHz. When I had to do it for 105MHz I created this project:
http://web.telia.com/~u85920178/antennas/vpole0.htm (15-minute +2.5dBd antenna)

Where did those multi-gang tuning capacitors go? I needed one, so I etched it on a PCB, cheap:
http://web.telia.com/~u85920178/use/tuning_caps.htm (multi-gang - for HF/VHF)
http://web.telia.com/~u85920178/use/tuning_caps2.htm (PCB Preset capacitor)

If anyone can help me get the supplier and part number for "hobby time" I couild use a bunch if it ;-)

Best regards Harry

4619. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 14:34:17 UTC
From: kludge@panix.com
Message-ID: <efe259$jr2$1@panix2.panix.com>
Source record: 10370
Cross-posted to: rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Count Floyd <CountFloyd@MonsterChillerHorrorTheater> wrote:
>On Tue, 26 Sep 2006 22:46:20 UTC, kludge@panix.com (Scott Dorsey)
>wrote:
>>
>> How about making them demonstrate competence operating five different
>> modes of their choice? They can choose between HF SSB, VHF/UHF FM, CW,
>> SSTV, fax, RTTY, packet, what have you. That way folks who want to learn
>> code and might use code have an advantage, but folks who can type 130 wpm
>> also have an advantage...
>
>I agree with you! It is organizations like ARRL who continue to
>insist on Code! Keep up with the times and test over what is current
>and actually being used. I have a restored 1940 Chrysler but I also
>have a 2005 PT Cruiser with A/C and all the options. I enjoy the
>1940, but I would not take it on a cross-country trip.

Well, the argument is that you have to do _something_ to ensure that people
licensed are competent operators and have some usable skills. I think the
code requirement is not the best way of doing that, but it's better than
nothing. The only alternative I ever seen proposed is just that, nothing.

So, I am in favor of dropping the code requirement, IF it can be replaced
with something else that helps ensure licensed operators are competent and
skilled.
--scott

But then, I _would_ take a 1940 Chrysler cross-country.
--
"C'est un Nagra. C'est suisse, et tres, tres precis."

4620. Re: CW not CB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 14:57:03 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1159369023.093934.313340@i42g2000cwa.googlegroups.com>
Source record: 10371
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:
> Why are you people against having good hams?
>
> SC

As a confirmed CW op of 40+ years duration I am not against 'good
hams'... However, I find your barrage of postings to multiple groups to
be tiring, pointless, and senseless...

denny / k8do

4621. Re: CW not CB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 16:10:05 UTC
From: "R. Scott" <spamtrap@w7psk.net>
Message-ID: <J69E8q.Hyy@news.boeing.com>
Source record: 10372
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"Slow Code" <my.mail@no.spam> wrote in message
news:twiSg.6707$UG4.5234@newsread2.news.pas.earthlink.net...
> Why are you people against having good hams?
>
> SC

I'm not against having good hams, but can you tell me what your Inane
proposals have to do with that. Over 30 years I've seen tons of 20WPM Jerks
on the bands. CW has nothing to do with the people we get in.

4622. Re: CW not CB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 17:19:30 UTC
From: jakdedert <jakdedert@bellsouth.net>
Message-ID: <EqySg.18854$tT6.18444@bignews7.bellsouth.net>
Source record: 10373
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:
> Why are you people against having good hams?
>

Well...I quit eating red meat regularly about 20 some-odd years ago. I
feel much better now with all that out of my system.

I do enjoy a slab or two of good ham at Christmas, though.

jak

> SC
>

4623. Re: HHH Update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 17:50:38 UTC
From: Spajky <Spajky@##volja.net>
Message-ID: <7kdlh2dp1l9cqub33v9bf0sv4kebo4nr2t@4ax.com>
Source record: 10374

On Wed, 27 Sep 2006 15:24:37 +0200, "Harry Lethall"
<oeieio@NOSPAAM.hotmail.com> wrote:

>I have had a bit of a busy half-year, ...ad a few new projects that could be of interest
>to my homepages on http://web.telia.com/~u85920178

>http://web.telia.com/~u85920178/rx/tda7k-rx2.htm (TDA7000 for NBFM)

>Best regards Harry

I like when someone fiddles with that TDA7000 chip :-))
I did it time ago too ! :-)) ... you will get mail ! :-)

--
Regards , SPAJKY ®
mail addr. @ my site @ http://www.spajky.vze.com
4y - "Tualatin OC-ed / BX-Slot1 / inaudible setup!"

4624. Re: CW not CB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 18:13:31 UTC
From: MnMikew <mnmiikkew@aol.com>
Message-ID: <4nvtacFc77jhU1@individual.net>
Source record: 10375
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"Slow Code" <my.mail@no.spam> wrote in message
news:twiSg.6707$UG4.5234@newsread2.news.pas.earthlink.net...
> Why are you people against having good hams?
>
> SC

If you're one then it's already fucked.

4625. Re: CW not CB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 19:19:08 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1159384748.262629.177230@e3g2000cwe.googlegroups.com>
Source record: 10376
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

From: jakdedert on Wed, Sep 27 2006 10:19 am

>Slow Code wrote:

>> Why are you people against having good hams?
>
>Well...I quit eating red meat regularly about 20 some-odd years ago. I
>feel much better now with all that out of my system.
>
>I do enjoy a slab or two of good ham at Christmas, though.

My wife and I had aged ham at Easter. Tasted like chicken.

4626. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 19:32:22 UTC
From: bob_deep@yahoo.com
Message-ID: <1159385541.965825.190570@d34g2000cwd.googlegroups.com>
Source record: 10377
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

Slow Code wrote:
> Dumbing it down cheapened the license, making being a radio amateur
> nothing special. No wonder they leaving.
>

I'll bet that most of the folks "leaving" are simply not renewing being SK. Code is in a way a dying art quite literally. Which is a shame.

We have to face it, this hobby doesn't attract a lot of new blood and the existing stock is rapidly growing older. The advantage to me is that I can find old ham equipment at estate sales for next to nothing but that's not what I'm posting about.. :)

I don't think things are all that "unfair" with the maximum code speed we currently test being 5 WPM. Of course that's what I got tested at so you can charge bias if you want. I currently don't operate CW (heck, I don't operate at all right now) but all that spectrum space in the lower part of the bands is starting to beckon. I've got a code practice program and I work on my code from time to time so maybe someday...

So where do I fall in this debate? I certainly don't favor the removal of the code requirement for all license classes. Extra's surely need to be tested at the current 5 WPM. But the fact remains that the interest in this hobby as shown by the decline in the number of licenses needs some attention.

We don't need to "dumb" down the hobby to get more folks in it, but we do need to bring the requirements into the current age. Before the advent of the personal computer 20 years ago, it would have been very expensive to set up an automated CW send and receive station, but now you can do it for next to nothing. One can actually send and receive CW without ever learning it and get transmission rates much faster than just about anybody can copy by ear, just hook up your PC to the rig load the software and voila, the no code licensee is sending and receiving at 25 WPM the day after he failed the 5 WPM test.

On the other hand, you guys that struggled to get their code speed up to 20 WPM so they could get their Extra have my respect. I understand that lowering that requirement seems like we are dumbing down the hobby, but I hope you can understand that like AM, CW is being replaced by other modes that you and your generation have pioneered.

My greatest fear is that the FCC will totally do away with code in it's testing requirements, which will logically lead to a mass spectrum

reassignment to make more room for voice and we will likely loose our valuable spectrum space in the process. But once the last license goes to SK what's to stop the FCC from giving it all away?

May code never die, there are times it's the only option, but we have to keep the hobby relevant or it will all go away when the hobby dies.

-= Bob =-
KC4UAI

4627. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 20:08:54 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12hlmilh2mu4u46@corp.supernews.com>
Source record: 10378
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

<bob_deep@yahoo.com> wrote in message
news:1159385541.965825.190570@d34g2000cwd.googlegroups.com...
> I don't think things are all that "unfair" with the maximum code speed
> we currently test being 5 WPM.

I don't think the code require is necessarily "unfair" somehow, but it does seem awfully "arbitrary" these days. In *today's* world, it's just one mode of many, and a rather unpopular one at that.

> So where do I fall in this debate? I certainly don't favor the removal
> of the code requirement for all license classes. Extra's surely need
> to be tested at the current 5 WPM.

If we're going to make people show a certain commitment to amateur radio before giving them advance privileges -- reasonable enough --, to me it seems that the study should be of something more people are likely to use... say, error correction coding theory, or modulator design or something. Or maybe something even more practical such as demonstrating the ability to perform link planning (antenna selection, power selection, etc.). I imagine one of the reasons CW testing remains is because it is so easy to test compared to those options.

I think I'm pretty much in agreement with you... 5 WPM is not an unreasonable barrier to entry, and I don't particular oppose keeping it around, but I do think it seems awfully arbitrary, and this refelcts somewhat poorly on hams as a group trying to present themselves as modern and professional.

---Joel Kolstad

4628. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 20:43:19 UTC
From: Leroy <no.spam@no.spam.invalid>
Message-ID: <pan.2006.09.27.20.43.09.198072@no.spam.invalid>
Source record: 10379
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

On Wed, 27 Sep 2006 12:32:22 -0700, bob_deep wrote:

>
> Slow Code wrote:
>> Dumbing it down cheapened the license, making being a radio amateur
>> nothing special. No wonder they leaving.
>>
>>
> I'll bet that most of the folks "leaving" are simply not renewing being
> SK. Code is in a way a dying art quite literally. Which is a shame.
>
> We have to face it, this hobby doesn't attract a lot of new blood and the
> existing stock is rapidly growing older. The advantage to me is that I
> can find old ham equipment at estate sales for next to nothing but that's
> not what I'm posting about.. :)
>
> I don't think things are all that "unfair" with the maximum code speed we
> currently test being 5 WPM. Of course that's what I got tested at so you
> can charge bias if you want. I currently don't operate CW (heck, I don't
> operate at all right now) but all that spectrum space in the lower part of
> the bands is starting to beckon. I've got a code practice program and I
> work on my code from time to time so maybe someday...
>
> So where do I fall in this debate? I certainly don't favor the removal of
> the code requirement for all license classes. Extra's surely need to be
> tested at the current 5 WPM. But the fact remains that the interest in
> this hobby as shown by the decline in the number of licenses needs some
> attention.
>
> We don't need to "dumb" down the hobby to get more folks in it, but we do
> need to bring the requirements into the current age. Before the advent of
> the personal computer 20 years ago, it would have been very expensive to
> set up an automated CW send and receive station, but now you can do it for
> next to nothing. One can actually send and receive CW without ever
> learning it and get transmission rates much faster than just about anybody
> can copy by ear, just hook up your PC to the rig load the software and
> voila, the no code licensee is sending and receiving at 25 WPM the day
> after he failed the 5 WPM test.
>
> On the other hand, you guys that struggled to get their code speed up to
> 20 WPM so they could get their Extra have my respect. I understand that
> lowering that requirement seems like we are dumbing down the hobby, but I
> hope you can understand that like AM, CW is being replaced by other modes

> that you and your generation have pioneered.
>
> My greatest fear is that the FCC will totally do away with code in it's
> testing requirements, which will logically lead to a mass spectrum
> reassignment to make more room for voice and we will likely loose our
> valuable spectrum space in the process. But once the last license goes to
> SK what's to stop the FCC from giving it all away?
>
> May code never die, there are times it's the only option, but we have to
> keep the hobby relevant or it will all go away when the hobby dies.
>
> -= Bob =-
> KC4UAI

I was under the impression that CW would get through under worse
conditions and/or with lower power requirements than other modes.

Does no one run "flea power" anymore?

I sometimes listen in on 10 meters but don't hear much there. A bit of CW
every now and then, but not much of anything, usually. Maybe I'm listening
at the wrong times? Or is it mostly vacant and just freebanders buying the
10 meter rigs?

4629. Re: CW not CB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 20:59:57 UTC
From: Cecil Moore <mycall@hotmail.com>
Message-ID: <hDBSg.17676$lj.3549@newssvr14.news.prodigy.com>
Source record: 10380
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

LenAnderson@ieee.org wrote:
> My wife and I had aged ham at Easter. Tasted like chicken.

I have a turkey ham sandwich in my hand at the moment.
--
73, Cecil http://www.w5dxp.com

4630. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 21:09:11 UTC
From: Count Floyd <CountFloyd@MonsterChillerHorrorTheater>
Message-ID: <g40vCXBzNU8x-pn2-nJ0zzeMiNFDJ@localhost>
Source record: 10381
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Wed, 27 Sep 2006 14:34:17 UTC, kludge@panix.com (Scott Dorsey)
wrote:

> Count Floyd <CountFloyd@MonsterChillerHorrorTheater> wrote:
> >On Tue, 26 Sep 2006 22:46:20 UTC, kludge@panix.com (Scott Dorsey)
> >wrote:
> >>
> >> How about making them demonstrate competence operating five different
> >> modes of their choice? They can choose between HF SSB, VHF/UHF FM, CW,
> >> SSTV, fax, RTTY, packet, what have you. That way folks who want to learn
> >> code and might use code have an advantage, but folks who can type 130 wpm
> >> also have an advantage...
> >>
> >I agree with you! It is organizations like ARRL who continue to
> >insist on Code! Keep up with the times and test over what is current
> >and actually being used. I have a restored 1940 Chrysler but I also
> >have a 2005 PT Cruiser with A/C and all the options. I enjoy the
> >1940, but I would not take it on a cross-country trip.
>
> Well, the argument is that you have to do _something_ to ensure that people
> licensed are competent operators and have some usable skills. I think the
> code requirement is not the best way of doing that, but it's better than
> nothing. The only alternative I ever seen proposed is just that, nothing.
>
> So, I am in favor of dropping the code requirement, IF it can be replaced
> with something else that helps ensure licensed operators are competent and
> skilled.
> --scott
>
> But then, I _would_ take a 1940 Chrysler cross-country.

Scott,
I took the 1940 Royal Coupe on a mini-cross country trip here in
Florida, managed 60-65 with the overdrive, the original factory AM
radio pulling in at least 10 states, remember those days! Got about
19-21mpg with the old flathead 6, but the 2/60 A/C wasn't really up to
snuff. Once I opened the cowl vent and the vent windows turned all
the way in on us, it became tolerable. Waiting for the winter months
here in Florida to really enjoy the old car.
"What do you mean there's no movie?"

4631. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 21:13:27 UTC
From: Kork <kork@btlekorks.org>
Message-ID: <bbf2b.k33.19.1@news.alt.net>
Source record: 10382
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

<bob_deep@yahoo.com> a.k.a. The Stupidest Person in The
World, wrote in message (nothing important, as usual)
///////remainig drivel flushed///////

4632. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 22:00:49 UTC
From: kludge@panix.com
Message-ID: <efesah$9cf$1@panix2.panix.com>
Source record: 10383
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

<bob_deep@yahoo.com> wrote:
>My greatest fear is that the FCC will totally do away with code in it's
>testing requirements, which will logically lead to a mass spectrum
>reassignment to make more room for voice and we will likely loose our
>valuable spectrum space in the process. But once the last license goes
>to SK what's to stop the FCC from giving it all away?

Well, one of the nice things about code is that you don't _need_ very
much bandwidth. And with modern DSP you should be able to make IF filters
even narrower than my old R-390... should be possible to cram hundreds of
carriers into the space of one SSB channel.

And hey, what's happening to the 500KC marine allocation? That's pretty
much dead... I wonder if the ITU could be convinced to give that to the
ham radio operators. Nobody else wants it.

>May code never die, there are times it's the only option, but we have
>to keep the hobby relevant or it will all go away when the hobby dies.

I don't think code ever will die, but I could see a world in which it is
even less relevant than it is today. That's not to say we shouldn't encourage
its use.
--scott
--
"C'est un Nagra. C'est suisse, et tres, tres precis."

4633. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 22:36:15 UTC
From: bob_deep@yahoo.com
Message-ID: <1159396575.512792.26990@e3g2000cwe.googlegroups.com>
Source record: 10384
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

Scott Dorsey wrote:
> <bob_deep@yahoo.com> wrote:
> >My greatest fear is that the FCC will totally do away with code in it's
> >testing requirements, which will logically lead to a mass spectrum
> >reassignment to make more room for voice and we will likely loose our
> >valuable spectrum space in the process. But once the last license goes
> >to SK what's to stop the FCC from giving it all away?
>
> Well, one of the nice things about code is that you don't _need_ very
> much bandwidth. And with modern DSP you should be able to make IF filters
> even narrower than my old R-390... should be possible to cram hundreds of
> carriers into the space of one SSB channel.

So true, and low bandwidth helps CW get though when SSB would be
impossible. However, don't forget that CW can be done quite nicely with
a cheap computer, some simple cables and some free software without
learning it. I suppose that one could argue that a human ear can hear
what a computer can't, but I'd be willing to argue that point in favor
of the computer.

I'll be willing to bet that there won't be much improvement over CW in
the raw "get the message though under bad conditions" power with the
new digital modes using the same bandwidth as CW. Simple is
under-rated in my book.

As an operating mode CW is alive and well and likely to stay, however
it will be computer driven more and more as the art dies off and new
blood is not required to learn it as well as the old.

Change is neither good or bad, it's just change.

-= Bob =-

4634. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 22:36:25 UTC
From: bob_deep@yahoo.com
Message-ID: <1159396585.074065.188310@m73g2000cwd.googlegroups.com>
Source record: 10385
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

Scott Dorsey wrote:
> <bob_deep@yahoo.com> wrote:
> >My greatest fear is that the FCC will totally do away with code in it's
> >testing requirements, which will logically lead to a mass spectrum
> >reassignment to make more room for voice and we will likely loose our
> >valuable spectrum space in the process. But once the last license goes
> >to SK what's to stop the FCC from giving it all away?
>
> Well, one of the nice things about code is that you don't _need_ very
> much bandwidth. And with modern DSP you should be able to make IF filters
> even narrower than my old R-390... should be possible to cram hundreds of
> carriers into the space of one SSB channel.

So true, and low bandwidth helps CW get though when SSB would be
impossible. However, don't forget that CW can be done quite nicely with
a cheap computer, some simple cables and some free software without
learning it. I suppose that one could argue that a human ear can hear
what a computer can't, but I'd be willing to argue that point in favor
of the computer.

I'll be willing to bet that there won't be much improvement over CW in
the raw "get the message though under bad conditions" power with the
new digital modes using the same bandwidth as CW. Simple is
under-rated in my book.

As an operating mode CW is alive and well and likely to stay, however
it will be computer driven more and more as the art dies off and new
blood is not required to learn it as well as the old.

Change is neither good or bad, it's just change.

-= Bob =-

4635. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 22:36:29 UTC
From: bob_deep@yahoo.com
Message-ID: <1159396589.117712.187670@m73g2000cwd.googlegroups.com>
Source record: 10386
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

Scott Dorsey wrote:
> <bob_deep@yahoo.com> wrote:
> >My greatest fear is that the FCC will totally do away with code in it's
> >testing requirements, which will logically lead to a mass spectrum
> >reassignment to make more room for voice and we will likely loose our
> >valuable spectrum space in the process. But once the last license goes
> >to SK what's to stop the FCC from giving it all away?
>
> Well, one of the nice things about code is that you don't _need_ very
> much bandwidth. And with modern DSP you should be able to make IF filters
> even narrower than my old R-390... should be possible to cram hundreds of
> carriers into the space of one SSB channel.

So true, and low bandwidth helps CW get though when SSB would be
impossible. However, don't forget that CW can be done quite nicely with
a cheap computer, some simple cables and some free software without
learning it. I suppose that one could argue that a human ear can hear
what a computer can't, but I'd be willing to argue that point in favor
of the computer.

I'll be willing to bet that there won't be much improvement over CW in
the raw "get the message though under bad conditions" power with the
new digital modes using the same bandwidth as CW. Simple is
under-rated in my book.

As an operating mode CW is alive and well and likely to stay, however
it will be computer driven more and more as the art dies off and new
blood is not required to learn it as well as the old.

Change is neither good or bad, it's just change.

-= Bob =-

4636. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 22:40:03 UTC
From: kd5sak <kd5sak@sbcglobal.net>
Message-ID: <75DSg.5293$TV3.2834@newssvr21.news.prodigy.com>
Source record: 10387
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

"Leroy" <no.spam@no.spam.invalid> wrote in message
news:pan.2006.09.27.20.43.09.198072@no.spam.invalid...
> On Wed, 27 Sep 2006 12:32:22 -0700, bob_deep wrote:
> I sometimes listen in on 10 meters but don't hear much there. A bit of CW
> every now and then, but not much of anything, usually. Maybe I'm listening
> at the wrong times? Or is it mostly vacant and just freebanders buying the
> 10 meter rigs?
>
>
Has much to do with where we are in the sunspot cycle. A couple or three
years from now
10 meters will start to be much busier. It's my misfortune I got my upgrade
to General a year before the dead bottom of the cycle. At the age of 74 I'm
just hoping to be around long enough
to see what the high point in the cycle sounds like.(G)

Harold
KD5SAK

4637. Re: CW not CB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 23:05:20 UTC
From: "kb9rqz-1@hotmail.com" <kb9rqz-1@hotmail.com>
Message-ID: <1159398320.388587.235320@b28g2000cwb.googlegroups.com>
Source record: 10388
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

MnMikew wrote:
> "Slow Code" <my.mail@no.spam> wrote in message
> news:twiSg.6707$UG4.5234@newsread2.news.pas.earthlink.net...
> > Why are you people against having good hams?
> >
> > SC
>
> If you're one then it's already fucked.
sthat heis superior and Wismen in his many avatar is superior and that
Robeson who threatens the murder of people he disagrees with all are
according to SC superior hams

4638. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 23:11:44 UTC
From: "kb9rqz-2@hotmail.com" <kb9rqz-2@hotmail.com>
Message-ID: <1159398704.620753.312820@m7g2000cwm.googlegroups.com>
Source record: 10389
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

Joel Kolstad wrote:
> <bob_deep@yahoo.com> wrote in message
> news:1159385541.965825.190570@d34g2000cwd.googlegroups.com...
> > I don't think things are all that "unfair" with the maximum code speed
> > we currently test being 5 WPM.
>
> I don't think the code require is necessarily "unfair" somehow, but it does
> seem awfully "arbitrary" these days. In *today's* world, it's just one mode
> of many, and a rather unpopular one at that.
fair or unfair has nothing to do with the isue relavant to regulaory
need is the issue
>, but I do
> think it seems awfully arbitrary, and this refelcts somewhat poorly on hams as
> a group trying to present themselves as modern and professional.
which means it should go esp as it serves no valid regulatroy prupose
>
> ---Joel Kolstad

4639. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 23:26:06 UTC
From: Dee Flint <deeflint01@comcast.net>
Message-ID: <vlidnYm705YFlYbYnZ2dnUVZ_rWdnZ2d@comcast.com>
Source record: 10390
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

"Leroy" <no.spam@no.spam.invalid> wrote in message
news:pan.2006.09.27.20.43.09.198072@no.spam.invalid...
> On Wed, 27 Sep 2006 12:32:22 -0700, bob_deep wrote:
>

[SNIP]

>
> I was under the impression that CW would get through under worse
> conditions and/or with lower power requirements than other modes.
>

Yes that can be true. They speak of PSK as being low power but that is only
low transmit power. It takes more power to generate a 25w PSK signal than a
100watt CW signal. Computers draw a lot of power.

> Does no one run "flea power" anymore?
>

There are a lot of QRP (low power) hobbyists.

> I sometimes listen in on 10 meters but don't hear much there. A bit of CW
> every now and then, but not much of anything, usually. Maybe I'm listening
> at the wrong times? Or is it mostly vacant and just freebanders buying the
> 10 meter rigs?
>
>

Bad point in the sunspot cycle for 10 meters. It does open occasionally but
not like it does at the peak of the sunspot cycle. Right now it is not open
every day (although it may be open for a while each week). And the time of
day it is open tends to be when people are working, doing errands after
work, etc.

Dee, N8UZE

4640. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 23:32:45 UTC
From: Dee Flint <deeflint01@comcast.net>
Message-ID: <DP-dnRUel627I4bYnZ2dnUVZ_oqdnZ2d@comcast.com>
Source record: 10391
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

<bob_deep@yahoo.com> wrote in message
news:1159396575.512792.26990@e3g2000cwe.googlegroups.com...
>
> Scott Dorsey wrote:
>> <bob_deep@yahoo.com> wrote:
>> >My greatest fear is that the FCC will totally do away with code in it's
>> >testing requirements, which will logically lead to a mass spectrum
>> >reassignment to make more room for voice and we will likely loose our
>> >valuable spectrum space in the process. But once the last license goes
>> >to SK what's to stop the FCC from giving it all away?
>>
>> Well, one of the nice things about code is that you don't _need_ very
>> much bandwidth. And with modern DSP you should be able to make IF
>> filters
>> even narrower than my old R-390... should be possible to cram hundreds of
>> carriers into the space of one SSB channel.
>
> So true, and low bandwidth helps CW get though when SSB would be
> impossible. However, don't forget that CW can be done quite nicely with
> a cheap computer, some simple cables and some free software without
> learning it. I suppose that one could argue that a human ear can hear
> what a computer can't, but I'd be willing to argue that point in favor
> of the computer.
>

Actually, you would lose such an argument. There are many hams who have
proven that they can decipher better than the computer. The computer
hardware or software requires the following characteristics in the received
transmission to work:

1. A strong signal
2. No distortion on the signal such as occurs from aurora, meteor scatter,
etc.
3. The code sent is nearly equal in quality to that sent by a computer.
Some one using paddles may achieve that but if they are sending with a
manual key or bug, that is highly unlikely.

I have frequently been able to copy better than the computer and my code
skills are quite modest. The only time it beats me is when the code meets
the above three criteria and is too fast for me to copy.

> I'll be willing to bet that there won't be much improvement over CW in
> the raw "get the message though under bad conditions" power with the
> new digital modes using the same bandwidth as CW. Simple is

> under-rated in my book.
>

I'm not sure I understand what you are saying here. Did you leave something out?

> As an operating mode CW is alive and well and likely to stay, however
> it will be computer driven more and more as the art dies off and new
> blood is not required to learn it as well as the old.
>
> Change is neither good or bad, it's just change.
>

While change is neither good or bad, sometimes the results of change can be undesireable.

Dee, N8UZE

4641. Re: parting out an HP 8557A

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 23:38:35 UTC
From: "g. beat"
Message-ID: <3fednaXvgeUclobYnZ2dnUVZ_oadnZ2d@comcast.com>
Source record: 10392
Body handling: HTML body converted to readable text

"Pete KE9OA" wrote in message
news:4bSdnSadEZmUl4fYnZ2dnUVZ_sCdnZ2d@comcast.com...
> Thanks for the info.....I've already got an 8558B, so I
> am set. I just removed the knobs for some extras for my own unit. I don't
> have much tied up in this unit, and I have already scrapped it.
>
> Pete

Hopefully you kept the attenuator

w9gb

4642. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 23:38:58 UTC
From: Mark@kb9rqz.net
Message-ID: <rr2mh2dkl99th2pbelssgtvu84jhptu85o@4ax.com>
Source record: 10393
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

On Wed, 27 Sep 2006 19:26:06 -0400, "Dee Flint"
<deeflint01@comcast.net> wrote:

>
>"Leroy" <no.spam@no.spam.invalid> wrote in message
>news:pan.2006.09.27.20.43.09.198072@no.spam.invalid...
>> On Wed, 27 Sep 2006 12:32:22 -0700, bob_deep wrote:
>>
>
>[SNIP]
>
>>
>> I was under the impression that CW would get through under worse
>> conditions and/or with lower power requirements than other modes.
>>
>
>Yes that can be true. They speak of PSK as being low power but that is only
>low transmit power. It takes more power to generate a 25w PSK signal than a
>100watt CW signal. Computers draw a lot of power.
depends on how it is generated
>
>> Does no one run "flea power" anymore?
>>
>
>There are a lot of QRP (low power) hobbyists.
>
>> I sometimes listen in on 10 meters but don't hear much there. A bit of CW
>> every now and then, but not much of anything, usually. Maybe I'm listening
>> at the wrong times? Or is it mostly vacant and just freebanders buying the
>> 10 meter rigs?
>>
>>
>
>Bad point in the sunspot cycle for 10 meters. It does open occasionally but
>not like it does at the peak of the sunspot cycle. Right now it is not open
>every day (although it may be open for a while each week). And the time of
>day it is open tends to be when people are working, doing errands after
>work, etc.
>
>Dee, N8UZE
>
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4643. Re: CW not CB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 23:43:36 UTC
From: Dave <W1MCE@comcast.net>
Message-ID: <oaydnYisrsw5kYbYnZ2dnUVZ_rydnZ2d@comcast.com>
Source record: 10394
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

kb9rqz-1@hotmail.com wrote:

> MnMikew wrote:
>
>>"Slow Code" <my.mail@no.spam> wrote in message
>>news:twiSg.6707$UG4.5234@newsread2.news.pas.earthlink.net...
>>
>>>Why are you people against having good hams?
>>>
>>>SC
>>
>>If you're one then it's already fucked.
>
> sthat heis superior and Wismen in his many avatar is superior and that
> Robeson who threatens the murder of people he disagrees with all are
> according to SC superior hams
>

Is this un-readable USA english from a USA ham?

4644. High Quality RF Connectors, Adapters & Cable Assemblies @ Low Cost

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 23:47:19 UTC
From: AAA RF Products <sales@aaarfproducts.com>
Message-ID: <h2ESg.895$La2.447@fed1read08>
Source record: 10395

AAARFProducts.com

Any 10 SMA Male to SMA Male cable assemblies for $99.00

RG-58C/U or RG-223/U

Mix & match any 10

Length available: 12", 18", 24", 30", 36", 48", 60", 72", 84", & 96"

High quality & made in USA

Please visit
AAARFProducts.com

4645. Re: CW not CB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-27 23:52:09 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1159401129.637366.183720@m7g2000cwm.googlegroups.com>
Source record: 10396
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Cecil Moore wrote:
> LenAnderson@ieee.org wrote:
> > My wife and I had aged ham at Easter. Tasted like chicken.
>
> I have a turkey ham sandwich in my hand at the moment.

Enjoy! :-)

Everyone else ought to remember the definition of ham: "Ham is
the butchered meat of swine."

There...now THAT's a troll! :-)

4646. Re: CW not CB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 00:07:46 UTC
From: Mark Morgan <kb9rqz@blumpkin.net>
Message-ID: <451b0552$0$19695$88260bb3@free.teranews.com>
Source record: 10397
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"Dave" <W1MCE@comcast.net> wrote in message
news:oaydnYisrsw5kYbYnZ2dnUVZ_rydnZ2d@comcast.com...
> kb9rqz-1@hotmail.com wrote:
>
>> MnMikew wrote:
>>
>>>"Slow Code" <my.mail@no.spam> wrote in message
>>>news:twiSg.6707$UG4.5234@newsread2.news.pas.earthlink.net...
>>>
>>>>Why are you people against having good hams?
>>>>
>>>>SC
>>>
>>>If you're one then it's already fucked.
>>
>> sthat heis superior and Wismen in his many avatar is superior and that
>> Robeson who threatens the murder of people he disagrees with all are
>> according to SC superior hams
>>
>
> Is this un-readable USA english from a USA ham?
>
with the punce gotcha he wonders why I simple don't bother to ty
impoving my spelling do u hav anyting cognet two say?

my blog
http://www.marksspamblog.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4647. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 01:07:19 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12hm82854rvpdff@corp.supernews.com>
Source record: 10298
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

"Leroy" <no.spam@no.spam.invalid> wrote in message
news:pan.2006.09.27.20.43.09.198072@no.spam.invalid...
> I was under the impression that CW would get through under worse
> conditions and/or with lower power requirements than other modes.

Various digital modes do better under low SNR conditions than CW, but they do require a computer at both ends to perform the encoding and decoding -- some people don't like that fact, that you seemingly need "more equipment" to work such modes than you do with CW. It's a bit of a red herring, however, in that these days pretty much every single amateur radio being sold commercially has a processor (computer) in it anyway, and while some are strictly for "control" (not modulation/demodulation), the percentage that does have raw number crunching power increases every day, and within a decade it's a fair bet that over 90% of all commerical amateur radios will use DSP techniques for modulation and demodulation. (Cell phone went to DSPs somewhere between 5-10 years ago now...)

> Does no one run "flea power" anymore?

Absolutely they do, and it's a really cool part of the hobby... but for every 100 amateurs, I would guess that the number running QRP on a regular basis is about 1.

---Joel

4648. Re: HHH Update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 01:19:44 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1159406384.485928.232760@b28g2000cwb.googlegroups.com>
Source record: 10299

Harry Lethall wrote:
> Hi all,
> I have had a bit of a busy half-year, with sickness in the family and the
> like. But I have managed to add a few new projects that could be of interest
> to my homepages on http://web.telia.com/~u85920178
>
> Have you ever wondered how these old IF-cans can be re-used? I have two
> different articles dedicated to them:
> http://web.telia.com/~u85920178/begin/cans-0.htm (reusing IF cans)
> http://web.telia.com/~u85920178/rx/tda7k-rx2.htm (TDA7000 for NBFM)
> http://web.telia.com/~u85920178/blocks/if-txfmr_tube_00.htm (Making your
> own)
>
> Last month someone asked me how I choose values for components, but "Can you
> add calculations". Ok, I did it, with a few over-simplifications, and for a
> crude project:
> http://web.telia.com/~u85920178/begin/bug_calc.htm (FM Wireless Microphone)
> http://web.telia.com/~u85920178/begin/calc-00.htm (Includes loads of useful
> calculators)
>
> Earlier int he year I needed to throw together s quick VHF antenna for
> 446MHz, 432MHz, and again for 145MHz. When I had to do it for 105MHz I
> created this project:
> http://web.telia.com/~u85920178/antennas/vpole0.htm (15-minute +2.5dBd
> antenna)
>
> Where did those multi-gang tuning capacitors go? I needed one, so I etched
> it on a PCB, cheap:
> http://web.telia.com/~u85920178/use/tuning_caps.htm (multi-gang - for
> HF/VHF)
> http://web.telia.com/~u85920178/use/tuning_caps2.htm (PCB Preset capacitor)

Hejsan, "Lethall Harry!" :-)

Excellent new pages on your website. The two on homemade
tuning capacitors is very good. Keep it up, please, should be of
help to many hobbyists, not just licensed radio amateurs.

LenAnderson@ieee.org

4649. Re: CW not CB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 01:42:03 UTC
From: Mike little lamp <precise4beans@yahoo.com>
Message-ID: <201cd$451b28af$d1cc41f9$16757@snip.allthenewsgroups.com>
Source record: 10300
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"Slow Code" <my.mail@no.spam> wrote in message
news:twiSg.6707$UG4.5234@newsread2.news.pas.earthlink.net...
> Why are you people against having good hams?

Go back to rec.radio.amateur.policy Lloyd.

4650. Slightly OT was Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 01:47:31 UTC
From: kd5sak <kd5sak@sbcglobal.net>
Message-ID: <TQFSg.6683$vJ2.3843@newssvr12.news.prodigy.com>
Source record: 10301
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> wrote in message
news:12hm82854rvpdff@corp.supernews.com...
> "Leroy" <no.spam@no.spam.invalid> wrote in message
> news:pan.2006.09.27.20.43.09.198072@no.spam.invalid...
> Absolutely they do, and it's a really cool part of the hobby... but for
> every 100 amateurs, I would guess that the number running QRP on a regular
> basis is about 1.
>
> ---Joel
>
>
My sole experience with QRP was accidental. I had reduced power to 5 watts
to tune to a different band (17 meters) and forgot to turn the power back
up. As a result I found myself speaking to a Swiss ham form my southern
Oklahoma shack with 5 watts and getting a reasonably good signal report. I
realize that for real QRPers 5 watts is high power, but for me it was an
unusual pleasure. Moreso because bad weather had me using an indoor dipole
mounted on the wifes sewing room ceiling (about nine feet above the earth).

Harold
KD5SAK

4651. Re: CW not CB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 01:53:14 UTC
From: Noon-Air <Noon-Air@comcast.net>
Message-ID: <m4ednVjF1PeRtobYnZ2dnUVZ_rKdnZ2d@comcast.com>
Source record: 10302
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

<LenAnderson@ieee.org> wrote in message
news:1159401129.637366.183720@m7g2000cwm.googlegroups.com...
>
> Cecil Moore wrote:
>> LenAnderson@ieee.org wrote:
>> > My wife and I had aged ham at Easter. Tasted like chicken.
>>
>> I have a turkey ham sandwich in my hand at the moment.
>
> Enjoy! :-)
>
> Everyone else ought to remember the definition of ham: "Ham is
> the butchered meat of swine."
>
>
>
>
> There...now THAT's a troll! :-)

either way, its still a dead farm animal

4652. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 01:54:57 UTC
From: kludge@panix.com
Message-ID: <effa1h$ec7$1@panix2.panix.com>
Source record: 10303
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

kd5sak <kd5sak@sbcglobal.net> wrote:
>>
>Has much to do with where we are in the sunspot cycle. A couple or three
>years from now
>10 meters will start to be much busier. It's my misfortune I got my upgrade
>to General a year before the dead bottom of the cycle. At the age of 74 I'm
>just hoping to be around long enough
>to see what the high point in the cycle sounds like.(G)

Man, do anything you can to stick around. It's going to be good, and 10M
FM is just more fun than anything. Get a PRC-8 and take lots of vitamin C.
I predict that this next peak is going to be a really good one, at least as
good as '78 was.
--scott
--
"C'est un Nagra. C'est suisse, et tres, tres precis."

4653. Re: parting out an HP 8557A

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 05:07:44 UTC
From: Pete KE9OA <p.gianako@comcast.net>
Message-ID: <guidnUQjyvcLxYbYnZ2dnUVZ_sOdnZ2d@comcast.com>
Source record: 10304
Body handling: HTML body converted to readable text

I did, but all of the unit is up for grabs. It is a nice 60dB attenuator. I've got all of the board in a box.....probably, I will end up taking it to a hamfest if I don't sell the parts sooner. The LED readout board seems to be the same as on my 8558, so maybe I will hang on to that.

Pete

"g. beat >" <@ wrote in message
news:3fednaXvgeUclobYnZ2dnUVZ_oadnZ2d@comcast.com...
>
> "Pete KE9OA" wrote in message
> news:4bSdnSadEZmUl4fYnZ2dnUVZ_sCdnZ2d@comcast.com...
>> Thanks for the info.....I've already got an 8558B, so I
>> am set. I just removed the knobs for some extras for my own unit. I don't
>> have much tied up in this unit, and I have already scrapped it.
>>
>> Pete
>
> Hopefully you kept the attenuator
>
> w9gb
>
>

4654. Re: Change (was : Proposal 3 (US Hams))

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 11:29:22 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <Sv2dnUdWMKWSL4bYRVny2w@pipex.net>
Source record: 10305

```
>
> Change is neither good or bad, it's just change.
============================
IMHO Change enables people to retain an active mind.........and that
in itself is positive ---------> Good !

Frank GM0CSZ / KN6WH
```

4655. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 11:43:13 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <2c2dnUZNMb7TKIbYRVnyuQ@pipex.net>
Source record: 10306

> Yes that can be true. They speak of PSK as being low power but that is only
> low transmit power. It takes more power to generate a 25w PSK signal than a
> 100watt CW signal. ---> Computers draw a lot of power.<-----
==========
Unless you use a laptop

Frank GM0CSZ / KN6WH

4656. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 12:54:10 UTC
From: bob_deep@yahoo.com
Message-ID: <1159448050.572061.307800@b28g2000cwb.googlegroups.com>
Source record: 10307
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

Dee Flint wrote:
> <bob_deep@yahoo.com> wrote in message
>> I'd be willing to argue that point in favor
> > of the computer.
> >
>
> Actually, you would lose such an argument.

I don't think so, at least under most common operating conditions.

>There are many hams who have
> proven that they can decipher better than the computer. The computer
> hardware or software requires the following characteristics in the received
> transmission to work:
>
> 1. A strong signal

Signal to noise ratio would be important, to be sure, however with the
proper application of some limited computing power I'm sure one could
construct a detector that would work with seriously low SNR. It is
amazing what DSP's can do now days..

> 2. No distortion on the signal such as occurs from aurora, meteor scatter,
> etc.

Again, I've seen spectral displays that clearly show CW transmissions
that could *not* be heard.

> 3. The code sent is nearly equal in quality to that sent by a computer.
> Some one using paddles may achieve that but if they are sending with a
> manual key or bug, that is highly unlikely.

Sending code is not in question. Surely a computer is able to open and
close the keying faster than a transmitter can possibly transmit.
Also, remember that the faster you key, the higher bandwidth your
signal will require and the higher the SNR will theoretically need to
be for it to be decoded at the receiving end.

> I have frequently been able to copy better than the computer and my code
> skills are quite modest. The only time it beats me is when the code meets
> the above three criteria and is too fast for me to copy.

I would contend that the software you are using is not utilizing the
inputted signal at it's full potential. I've seen audio processing
techniques that could pull out inaudible signals that where more
complicated than CW would be.

I would also ask if you where copying random characters or where you
able to "fill in the gaps" by using the context? The latter would be a
very different problem for a computer to solve.

> > I'll be willing to bet that there won't be much improvement over CW in
> > the raw "get the message though under bad conditions" power with the
> > new digital modes using the same bandwidth as CW. Simple is
> > under-rated in my book.
> >
>
> I'm not sure I understand what you are saying here. Did you leave something
> out?
>

I'm saying that if you pick any digital mode, restrict the bandwidth to
that of the CW signal with the same data rate, keep the SNR the same
with the same error rates, CW will be about as good as you can get.
Not bad for an operating mode that has been around as long as CW.

4657. Re: MFJ-1278 software

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 13:50:47 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <451BD335.6060309@invalid.invalid>
Source record: 10308

Kerry Miller wrote:
> I've been off the air for several years and am getting back on finally.
> I have an MFJ-1278B TNC and have used it with a normal terminal program
> on Windows (hyperterm) and Linux (minicom) but don't have any software
> anymore that will run on XP or Linux. Is there any software out there
> that supports the other modes this TNC will do like wefax and sstv? I
> have used it for rtty, cw and packet but don't have anything that will
> work with the graphical modes.
>
> Any suggestions? Will any of the sound card software work with a TNC
> instead of a soundcard?

I bought one of these some years back. I made the same search you did and came up empty-handed. I've been happy with Baudot and VHF packet so never really got too serious about the other modes.

I did hook up the accessory audio I/O on my rig to the soundcard in the computer, with the intent of making unattended recordings (for AM BCB DXing - works great!) and using the computer as a voice keyer. Turns out the same connections are appropriate for PSK31 and other soundcard modes. Very simple (one transistor, one resistor) serial port interfaces are possible to let the computer PTT the radio, or you can even buy one preassembled, and if you don't have a soundcard they're pretty cheap.

I still use the 1278 for Baudot.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

4658. Re: High Quality RF Connectors, Adapters & Cable Assemblies @ Low Cost

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 14:41:33 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1159454493.485278.177110@b28g2000cwb.googlegroups.com>
Source record: 10309

Others who are tired of seeing these ads: I suggest you all send email
telling them that, to sales@aaarfproducts.com. You might mention that
they are getting _negative_ word-of-mouth because of this practice.

Cheers,
Tom

AAA RF Products wrote:
> AAARFProducts.com
>
> Any 10 SMA Male to SMA Male cable assemblies for $99.00
>
> RG-58C/U or RG-223/U
>
> Mix & match any 10
>
> Length available: 12", 18", 24", 30", 36", 48", 60", 72", 84", & 96"
>
> High quality & made in USA
>
> Please visit
> AAARFProducts.com

4659. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 15:16:33 UTC
From: Dee Flint <deeflint01@comcast.net>
Message-ID: <IIKdndc7m_XBeobYnZ2dnUVZ_vGdnZ2d@comcast.com>
Source record: 10310
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

<bob_deep@yahoo.com> wrote in message
news:1159448050.572061.307800@b28g2000cwb.googlegroups.com...
>
> Dee Flint wrote:
>> <bob_deep@yahoo.com> wrote in message
>>> I'd be willing to argue that point in favor
>> > of the computer.
>> >
>>
>> Actually, you would lose such an argument.
>
> I don't think so, at least under most common operating conditions.
>

Define "common operating conditions".

For a contester, common operating conditions often include murderous QRM.
Yet contesting is common. I've always maintained that one can construct
various scenarios such that there is one where the particular mode under
discussion is "the best".

For ragchewers, common operating conditions often include manually sent CW.

>>There are many hams who have
>> proven that they can decipher better than the computer. The computer
>> hardware or software requires the following characteristics in the
>> received
>> transmission to work:
>>
>> 1. A strong signal
>
> Signal to noise ratio would be important, to be sure, however with the
> proper application of some limited computing power I'm sure one could
> construct a detector that would work with seriously low SNR. It is
> amazing what DSP's can do now days..
>

Yes and there are some very fine software programs already available. But
even so they fail before the "EAR" fails, assuming a trained and experienced
operator.

>> 2. No distortion on the signal such as occurs from aurora, meteor
>> scatter,
>> etc.
>

> Again, I've seen spectral displays that clearly show CW transmissions
> that could *not* be heard.
>

So I've seen displays of many types of signals that cannot be heard. That is an entirely different issue from distortion. When the auroras start playing, PSK (as an example) is so distorted that no matter how strong the signal, the computer cannot decipher it. If a CW signal is distorted but loud enough to hear, the human ear/brain combo can still decipher.

>> 3. The code sent is nearly equal in quality to that sent by a computer.
>> Some one using paddles may achieve that but if they are sending with a
>> manual key or bug, that is highly unlikely.
>
> Sending code is not in question. Surely a computer is able to open and
> close the keying faster than a transmitter can possibly transmit.
> Also, remember that the faster you key, the higher bandwidth your
> signal will require and the higher the SNR will theoretically need to
> be for it to be decoded at the receiving end.
>

Receiving is the issue. If the received code was manually sent, the computer often fails.

>> I have frequently been able to copy better than the computer and my code
>> skills are quite modest. The only time it beats me is when the code
>> meets
>> the above three criteria and is too fast for me to copy.
>
> I would contend that the software you are using is not utilizing the
> inputted signal at it's full potential. I've seen audio processing
> techniques that could pull out inaudible signals that where more
> complicated than CW would be.
>

I''ve tested everyone I could find. I'm one of those people who gets pleasure out of trying all the new gadgets & software I can find and afford. I've also seen inaudible signals pulled out of all kinds. That's quite feasible when the bands are in good shape. Add a little thunderstorm activity, geomagnetic disturbances, solar flares, etc and the machine can't decipher them. It's not a matter of signal strength but a matter of signal quality.

> I would also ask if you where copying random characters or where you
> able to "fill in the gaps" by using the context? The latter would be a
> very different problem for a computer to solve.
>

Yes it is a different matter. Humans definitely have the edge on "fill in the gaps".

>> > I'll be willing to bet that there won't be much improvement over CW in
>> > the raw "get the message though under bad conditions" power with the

>> > new digital modes using the same bandwidth as CW. Simple is
>> > under-rated in my book.
>> >
>>
>> I'm not sure I understand what you are saying here. Did you leave
>> something
>> out?
>>
>
> I'm saying that if you pick any digital mode, restrict the bandwidth to
> that of the CW signal with the same data rate, keep the SNR the same
> with the same error rates, CW will be about as good as you can get.
> Not bad for an operating mode that has been around as long as CW.
>

Ok, I understand. Actually many digital modes are, by their nature, narrower than CW already. You would have to open up the filter to get to the same bandwidth. Again the key item is quality of signal. For example, aurora induces phase shifts on PSK (phase shift keying) and makes it undecipherable. It also induces phase shifts in voice and CW. It gives the voice & CW signals a buzzy, raspy sound. Yet you can often understand voice when PSK is undecipherable. CW, when there is a phase shift, sounds like a series of buzzes but can still be copied if you are used to it.

And yes CW does a fine job and will continue to be advantageous under certain conditions.

Dee, N8UZE

4660. Re: CW not CB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 16:00:16 UTC
From: "kb9rqz-2@hotmail.com" <kb9rqz-2@hotmail.com>
Message-ID: <1159459216.319850.296270@e3g2000cwe.googlegroups.com>
Source record: 10311
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Mike little lamp wrote:
> "Slow Code" <my.mail@no.spam> wrote in message
> news:twiSg.6707$UG4.5234@newsread2.news.pas.earthlink.net...
> > Why are you people against having good hams?
>
> Go back to rec.radio.amateur.policy Lloyd.
no to hell would be better

4661. Re: High Quality RF Connectors, Adapters & Cable Assemblies @ Low Cost

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 17:08:42 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <451C015F.312C9531@earthlink.net>
Source record: 10312

K7ITM wrote:
>
> Others who are tired of seeing these ads: I suggest you all send email
> telling them that, to sales@aaarfproducts.com. You might mention that
> they are getting _negative_ word-of-mouth because of this practice.
>
> Cheers,
> Tom
>
> AAA RF Products wrote:
> > AAARFProducts.com
> >
> > Any 10 SMA Male to SMA Male cable assemblies for $99.00
> >
> > RG-58C/U or RG-223/U
> >
> > Mix & match any 10
> >
> > Length available: 12", 18", 24", 30", 36", 48", 60", 72", 84", & 96"
> >
> > High quality & made in USA
> >
> > Please visit
> > AAARFProducts.com

All that will do is get you abusive e-mails in return. Report them by
forwarding the spam inline and with full headers to: abuse@cox.net and
CC to: spam@uce.gov

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

4662. Re: CW not CB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 18:14:46 UTC
From: Dave <W1MCE@comcast.net>
Message-ID: <25qdnRRVeYmKjIHYnZ2dnUVZ_tydnZ2d@comcast.com>
Source record: 10313
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Mark Morgan wrote:

SNIPPED
>>
>>Is this un-readable USA english from a USA ham?
>>
>
> with the punce gotcha he wonders why I simple don't bother to ty
> impoving my spelling do u hav anyting cognet two say?
>
> my blog
> http://www.marksspamblog.blogspot.com/
>
>
>
>

Do you? I can't read your version of 'inklyshe'

4663. Input Bandwidth of an ADC.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 20:27:32 UTC
From: "radiofreeq@gmail.com" <radiofreeq@gmail.com>
Message-ID: <1159475252.142155.154630@h48g2000cwc.googlegroups.com>
Source record: 10314

Hello All,
I was going through an ADC tutorial and realized that they use the term input bandwidth more frequently as one of the important factors to be considered before choosing an ADC.

Based on my search, I found out that "the input bandwidth is something that determines the maximum bandwidth of an input signal that can be accurately sampled, regardless of the stated sample rate".

http://www.diamondsystems.com/slideshow.php3?name=ADBoardTutorial&page=4

I am not sure why is this input bandwidth different from Fs/2. From the above link, one of the example has Fs/4. Is it just because to increase more precision that we use a sampling frequency 4 times the bandwidth of the signal?

I assume for practical reasons, we oversample it but that is for more precision (correct me) but the Nyquist criteria still holds good for sampling the frequencies upto Fs/2. That means I can still get the original signal. I am not sure about the accuracy though.

Also, can I say that if an ADC is oversampled 4 times the Nyquist rate (Fs = 4*BW), then is my input frequency given by Fs/4? Assume single channel case.
Correct me if I am wrong.

Thanks for your responses.

4664. Re: Input Bandwidth of an ADC.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 20:42:15 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrnehoct7.2a5o.ben@saturn.home.ben.com>
Source record: 10315

On 2006-09-28, radiofreeq@gmail.com <radiofreeq@gmail.com> wrote:
>
> I am not sure why is this input bandwidth different from Fs/2.

It's really two different bandwidths. Fs is determined by the bandwidth of the signal. If you filter a 10MHz passband from a 1GHz signal, your Fs calculation is based on the 10MHz of signal (if you choose to undersample, which would clearly be to your advantage in a case like this). However, since it's up at 1GHz, even though you might be able to use a Fs > 20MHz, the ADC must have a sample and hold bandwidth > 2GSps.

If your input signal has components from DC up to your desired signal, then the two bandwidths are the same.

--
Ben Jackson AD7GD
<ben@ben.com>
http://www.ben.com/

4665. Re: CW not CB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 23:22:26 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <SOYSg.3988$o71.1637@newsread3.news.pas.earthlink.net>
Source record: 10316
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Cecil Moore <mycall@hotmail.com> wrote in
news:XWiSg.15024$Ij.13307@newssvr14.news.prodigy.com:

> Slow Code wrote:
>> Why are you people against having good hams?
>
> We're certainly are not against good hams. If code
> skill is representative of hams like you, we are
> against any other low-IQ-products-of-incest being
> allowed into this otherwise nice hobby.

Do you think discussions on repeaters are as technical today as they were
25 Years ago?

SC

4666. Re: CW not CB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 23:57:25 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <451C6139.5C259EA6@earthlink.net>
Source record: 10317
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:
>
> Cecil Moore <mycall@hotmail.com> wrote in
> news:XWiSg.15024$Ij.13307@newssvr14.news.prodigy.com:
>
> > Slow Code wrote:
> >> Why are you people against having good hams?
> >
> > We're certainly are not against good hams. If code
> > skill is representative of hams like you, we are
> > against any other low-IQ-products-of-incest being
> > allowed into this otherwise nice hobby.
>
> Do you think discussions on repeaters are as technical today as they were
> 25 Years ago?
>
> SC

25 years? Probably about the same, since repeaters had been around
at least 10 years by then. You could by a repeater over the counter
with tone squelch, and several other toys built in, so they were no more
complicated than a 2 meter handheld. My high school Amateur radio club
built a two meter repeater of of Motorola and GE strips, homebrew powers
supplies, diplexer, and timers in the late '60s. What is the big deal,
unless you have multiple sites and voting receivers? We were just a
bunch of RF crazy teenagers with less than $50 to spend, and we wanted
to build a repeater. A few months later we were given a surplus WE Touch
TOne decoder module, and added a phone patch.

Like everything else the club did, we raised the funds by repairing
old electronics and selling it to buy the parts we needed for the next
project. the only new piece of equipment we ever purchases was a HW-16,
in kit form. BTW, CW was the least used form of communications from the
club's station. they could do that at home, but we had some nice
antennas, the two meter repeater, and several full coverage HF rigs.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

4667. ARRL "Homebrew Challenge" NOT about Operating Systems

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-28 23:58:40 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1159487920.128972.214010@i3g2000cwc.googlegroups.com>
Source record: 10318

Folks, all this stuff about Operating Systems is interesting, but it
doesn't apply that much to this "Homebrew Challenge" insofar as
the radio part of the radio station specified in the contest.

For only $50 in New Part cost, what does everyone think about
for the actual RADIO hardware?

Just curious...I have no interest in that contest...just a curiosity
of what might come up in the next year.

LenAnderson@ieee.org

4668. Re: Input Bandwidth of an ADC.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-29 01:37:56 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12hou7lmufluc1c@corp.supernews.com>
Source record: 10319

The Nyquist sample rate of Fs/2 is the minimum rate at which you can sample and theoretically recover the exact original signal. It's only theoretical, though, because recovery of the signal from the samples would require a perfect, "brick-wall" frequency response, flat phase response, low pass filter. Because we're stuck with using real filters, we have to sample at a considerably higher rate if we want to recover the original signal. Just how fast you have to sample depends on how good a filter you're willing to construct and how much distortion in the reconstructed signal you're willing to tolerate.

The bandwidth of an ADC can be limited by things other than the sampling characteristics, such as internal circuitry and packaging. For that matter, the distortion can also greatly exceed the amount determined only by quantization error.

Roy Lewallen, W7EL

radiofreeq@gmail.com wrote:
> Hello All,
> I was going through an ADC tutorial and realized that they use the term
> input bandwidth more frequently as one of the important factors to be
> considered before choosing an ADC.
>
> Based on my search, I found out that "the input bandwidth is something
> that determines the maximum bandwidth of an input signal that can be
> accurately sampled, regardless of the stated sample rate".
>
> http://www.diamondsystems.com/slideshow.php3?name=ADBoardTutorial&page=4
>
> I am not sure why is this input bandwidth different from Fs/2. From the
> above link, one of the example has Fs/4. Is it just because to increase
> more precision that we use a sampling frequency 4 times the bandwidth
> of the signal?
>
> I assume for practical reasons, we oversample it but that is for more
> precision (correct me) but the Nyquist criteria still holds good for
> sampling the frequencies upto Fs/2. That means I can still get the
> original signal. I am not sure about the accuracy though.
>
>
> Also, can I say that if an ADC is oversampled 4 times the Nyquist rate
> (Fs = 4*BW), then is my input frequency given by Fs/4? Assume single
> channel case.
> Correct me if I am wrong.
>

> Thanks for your responses.
>

4669. Re: CW not CB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-29 02:05:29 UTC
From: Mark@kb9rqz.net
Message-ID: <4gvoh2dcrjqm6bg6jn17dro6jucrvhnelq@4ax.com>
Source record: 10320
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Thu, 28 Sep 2006 23:22:26 GMT, Slow Code <my.mail@no.spam> wrote:

>Cecil Moore <mycall@hotmail.com> wrote in
>news:XWiSg.15024$Ij.13307@newssvr14.news.prodigy.com:
>
>> Slow Code wrote:
>>> Why are you people against having good hams?
>>
>> We're certainly are not against good hams. If code
>> skill is representative of hams like you, we are
>> against any other low-IQ-products-of-incest being
>> allowed into this otherwise nice hobby.
>
>
>Do you think discussions on repeaters are as technical today as they were
>25 Years ago?
no s suspect they are more thecnical at time then they were25 years
ago
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4670. Re: ARRL "Homebrew Challenge" NOT about Operating Systems

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-29 04:34:07 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrnehp8hv.2i9m.ben@saturn.home.ben.com>
Source record: 10321

On 2006-09-28, LenAnderson@ieee.org <LenAnderson@ieee.org> wrote:
>
> For only $50 in New Part cost, what does everyone think about
> for the actual RADIO hardware?

Their goals of homebuildable and as cheap/functional as possible are in conflict. A starter homebrew design should be more modular, rely less on overloading of components for multiple purposes, include guidelines for substituting any expensive or rare part with found alternatives. It would not be concerned about requiring one of a part you can only readily get in bags of 10 or 20.

The cheapest possible starter 40M CW/SSB radio would probably be a kit, not built from a collection of overpriced Radio Shack components. It probably does a lot of work in the digital domain, without regard to ease of modification. It's built on an etched PCB mass produced in such quantities that it's cheaper than bare copper board at the local electronics store.

--
Ben Jackson AD7GD
<ben@ben.com>
http://www.ben.com/

4671. Re: HHH Update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-29 09:13:56 UTC
From: Harry Lethall <oeieio@NOSPAAM.hotmail.com>
Message-ID: <efio4k$sb3$1@news.al.sw.ericsson.se>
Source record: 10323

I have received the mail, and I shall reply to it shortly - very interesting views: needs some thought :-)

Nice change to get some "inteligent" mail for a change. Usually I get 90% SPAM, and of the rest it is 80% "I want" or 20% "I wanna complain".

> >I have had a bit of a busy half-year, ...ad a few new projects that could be of interest
> >to my homepages on http://web.telia.com/~u85920178
>
> >http://web.telia.com/~u85920178/rx/tda7k-rx2.htm (TDA7000 for NBFM)
>
> >Best regards Harry
>
> I like when someone fiddles with that TDA7000 chip :-))
> I did it time ago too ! :-)) ... you will get mail ! :-)
>
> --
> Regards , SPAJKY
> mail addr. @ my site @ http://www.spajky.vze.com
> 4y - "Tualatin OC-ed / BX-Slot1 / inaudible setup!"

4672. Re: HHH Update

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-29 09:15:16 UTC
From: Harry Lethall <oeieio@NOSPAAM.hotmail.com>
Message-ID: <efio74sfr1@news.al.sw.ericsson.se>
Source record: 10322

Oh yes, I do intend to keep it up.
I am in the middle of building a TV transmitter with HB tuning caps built on the PCB, but it is the modulator that is giving me a bit of a problem.

BR H

> > Hi all,
> > I have had a bit of a busy half-year, with sickness in the family and the
> > like. But I have managed to add a few new projects that could be of interest
> > to my homepages on http://web.telia.com/~u85920178
> >
> > Have you ever wondered how these old IF-cans can be re-used? I have two
> > different articles dedicated to them:
> > http://web.telia.com/~u85920178/begin/cans-0.htm (reusing IF cans)
> > http://web.telia.com/~u85920178/rx/tda7k-rx2.htm (TDA7000 for NBFM)
> > http://web.telia.com/~u85920178/blocks/if-txfmr_tube_00.htm (Making your
> > own)
> >
> > Last month someone asked me how I choose values for components, but "Can you
> > add calculations". Ok, I did it, with a few over-simplifications, and for a
> > crude project:
> > http://web.telia.com/~u85920178/begin/bug_calc.htm (FM Wireless Microphone)
> > http://web.telia.com/~u85920178/begin/calc-00.htm (Includes loads of useful
> > calculators)
> >
> > Earlier int he year I needed to throw together s quick VHF antenna for
> > 446MHz, 432MHz, and again for 145MHz. When I had to do it for 105MHz I
> > created this project:
> > http://web.telia.com/~u85920178/antennas/vpole0.htm (15-minute +2.5dBd
> > antenna)
> >
> > Where did those multi-gang tuning capacitors go? I needed one, so I etched
> > it on a PCB, cheap:
> > http://web.telia.com/~u85920178/use/tuning_caps.htm (multi-gang - for
> > HF/VHF)
> > http://web.telia.com/~u85920178/use/tuning_caps2.htm (PCB Preset capacitor)
>

> Hejsan, "Lethall Harry!" :-)
>
> Excellent new pages on your website. The two on homemade
> tuning capacitors is very good. Keep it up, please, should be of
> help to many hobbyists, not just licensed radio amateurs.
>
> LenAnderson@ieee.org
>

4673. VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-29 13:05:21 UTC
From: Ceriel Nosforit <ceriel@googlemail.com>
Message-ID: <pan.2006.09.29.13.05.21.718750@googlemail.com>
Source record: 10324

Hey all,

I read about people using their sound card to catch transmissions
from dedicated senders such as SAQ by just hooking a roll of wire to the
mic-in and apparently finding some success in this. This got my wondering,
what aside from laws and fines is stopping me from hooking my 80W
stereo amp up to some sort of antenna for global transmission fun?
Somebody must have thought of this before...

--
Nos

4674. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-29 14:38:17 UTC
From: Max Headroom <Max.Headroom@nogotmail.com>
Message-ID: <12hqbupibfvi381@corp.supernews.com>
Source record: 10325

Ceriel Nosforit wrote:
> I read about people using their sound card to catch transmissions
> from dedicated senders such as SAQ by just hooking a roll of wire to the
> mic-in and apparently finding some success in this. This got my wondering,
> what aside from laws and fines is stopping me from hooking my 80W
> stereo amp up to some sort of antenna for global transmission fun?
> Somebody must have thought of this before...
>

It's cheaper to use your car alternator as an LO.
Upconvert by using the transmission as a mixer
and the gear shift knob as a band selector.
FM by riding up or down steep hills in a 2-cylinder Citroen.

4675. Re: High Quality RF Connectors, Adapters & Cable Assemblies @ Low Cost

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-29 14:38:56 UTC
From: yankeeinexile@gmail.com
Message-ID: <87psdelou7.fsf@gmail.com>
Source record: 10326

"K7ITM" <k7itm@msn.com> writes:
> Others who are tired of seeing these ads: I suggest you all send email
> telling them that, to sales@aaarfproducts.com. You might mention that
> they are getting _negative_ word-of-mouth because of this practice.
>
> Cheers,
> Tom
>

Better yet, fax them copies of invoices of connector purchases from
competitors. Telling them "I'm not buying your product" means
nothing. Telling them "Because I hate your advertising, I am buying
your COMPETITOR'S products" means more.

73
N1GAK

4676. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-29 15:10:10 UTC
From: Ceriel Nosforit <ceriel@googlemail.com>
Message-ID: <pan.2006.09.29.15.10.10.62500@googlemail.com>
Source record: 10327

On Fri, 29 Sep 2006 14:38:17 +0000, Max Headroom wrote:

> Ceriel Nosforit wrote:

<snip>

> It's cheaper to use your car alternator as an LO.
> Upconvert by using the transmission as a mixer
> and the gear shift knob as a band selector.
> FM by riding up or down steep hills in a 2-cylinder Citroen.

Now that would be something. DX licence or driver's licence? Hehe.

Too bad I don't have a car. ;)

--
Nos

4677. Re: ARRL "Homebrew Challenge" NOT about Operating Systems

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-29 15:15:16 UTC
From: MadEngineer <glenn.b.dixon@gmail.com>
Message-ID: <1159542916.364976.4800@i42g2000cwa.googlegroups.com>
Source record: 10328

Ben Jackson wrote:

> The cheapest possible starter 40M CW/SSB radio would probably be a kit,
> not built from a collection of overpriced Radio Shack components. It
> probably does a lot of work in the digital domain, without regard to
> ease of modification. It's built on an etched PCB mass produced in
> such quantities that it's cheaper than bare copper board at the local
> electronics store.
>
I agree, but I also think many will rise to the challenge, even though the prize is modest. Look for some very clever things--mostly done with IQ phasing techniques. I personally plan to enter with something, and suspect others on this list will as well. Also expect an even better project to follow that builds on all the best from the contest...I'm most interested to see what sort of frequency synthesizers/VFOs come out of this. I'm personally hoping ARRL gets enough entries that they can publish a book or something, and am hoping this will inspire some wonderful new kits and other things for newbies.

My design will not use IQ, will have a DSP (probably one of the Microchip 30F4013s in a DIP pkg), but I haven't found/invented a VFO scheme I really like yet (yes, I know the contest allows you to be rockbound, but I'm shooting a little higher). I'll try to set up a brag page and post progress.

I appreciate the time given for this contest--even with very spare time people should be able to do something. I suspect ARRL's lab will have their hands full testing everything that comes in (maybe they will only test the finalists).

What fun!

73,
Glenn Dixon AC7ZN

4678. Re: Input Bandwidth of an ADC.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-29 15:23:14 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <87SdnT8t8tfHp4DYnZ2dnUVZ_sGdnZ2d@web-ster.com>
Source record: 10329

radiofreeq@gmail.com wrote:

> Hello All,
> I was going through an ADC tutorial and realized that they use the term
> input bandwidth more frequently as one of the important factors to be
> considered before choosing an ADC.
>
> Based on my search, I found out that "the input bandwidth is something
> that determines the maximum bandwidth of an input signal that can be
> accurately sampled, regardless of the stated sample rate".
>
> http://www.diamondsystems.com/slideshow.php3?name=ADBoardTutorial&page=4
>
> I am not sure why is this input bandwidth different from Fs/2. From the
> above link, one of the example has Fs/4. Is it just because to increase
> more precision that we use a sampling frequency 4 times the bandwidth
> of the signal?

They are different because they are two completely different things.

In a successive approximation or flash ADC the signal sampling happens over a very brief window, so aliasing happens over a very wide band. This means(for instance) that you could sample a signal at 10.25 times the sample rate of the ADC and have it come out at 0.25 Fs, assuming that your sampling jitter is small enough and your signal is intact going into the sampler at that frequency.

The input bandwidth of the ADC is just the bandwidth of the ADCs circuitry leading up to the sampling stage. In principal it could be just about anything. In practice SAR and flash ADC's have relatively wide input bandwidths, while sigma-delta and slope converters have input bandwidths closely matched to the sampling rate.

> I assume for practical reasons, we oversample it but that is for more
> precision (correct me) but the Nyquist criteria still holds good for
> sampling the frequencies upto Fs/2. That means I can still get the
> original signal. I am not sure about the accuracy though.
>
Theoretically the Nyquist criteria holds up to Fs/2. Practically you need to oversample at much greater frequencies than that, or sweat blood on your anti-alias filters.

> Also, can I say that if an ADC is oversampled 4 times the Nyquist rate
> (Fs = 4*BW), then is my input frequency given by Fs/4? Assume single
> channel case.

You can say that your bandwidth is given by Fs/4. Your input frequency
depends on the characteristics of your input signal, which may be quite
different from the characteristics of your input filter.

> Correct me if I am wrong.
>
> Thanks for your responses.
>

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

4679. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-29 15:36:12 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <e7fqh2hvvmum7rigqhl3g56pdbd0kt8mep@4ax.com>
Source record: 10330

ORIGINAL MESSAGE:

On Fri, 29 Sep 2006 16:05:21 +0300, Ceriel Nosforit
<ceriel@googlemail.com> wrote:

>what aside from laws and fines is stopping me from hooking my 80W
>stereo amp up to some sort of antenna for global transmission fun?

------------ REPLY FOLLOWS ------------

What is stopping you?

Well, the laws of physics for one, but you're welcome to give it a
try. You'll find enforcement of those laws is pretty strict. :-)

Bill, W6WRT

4680. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-29 21:12:10 UTC
From: Ceriel Nosforit <ceriel@googlemail.com>
Message-ID: <pan.2006.09.29.21.12.09.921875@googlemail.com>
Source record: 10331

On Fri, 29 Sep 2006 08:36:12 -0700, Bill Turner wrote:

> ORIGINAL MESSAGE:
>
> On Fri, 29 Sep 2006 16:05:21 +0300, Ceriel Nosforit
> <ceriel@googlemail.com> wrote:
>
>>what aside from laws and fines is stopping me from hooking my 80W
>>stereo amp up to some sort of antenna for global transmission fun?
>
> ------------ REPLY FOLLOWS ------------
>
> What is stopping you?
>
> Well, the laws of physics for one, but you're welcome to give it a
> try. You'll find enforcement of those laws is pretty strict. :-)
>
> Bill, W6WRT

Hehe. Well yeah, I figured as much, but why doesn't it work? Too high impendance? Why is that something the amp can't handle, if I maybe resist the urge to crank it up to eleven?

I'm approaching the issue from the engineering perspective, but I don't have much knowledge in this particular field. If you can enlighten me I'd be much obliged. ;)

--
Nos

4681. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-29 21:40:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12hr4mdog38ahc7@corp.supernews.com>
Source record: 10332

Ceriel Nosforit wrote:
>
> Hehe. Well yeah, I figured as much, but why doesn't it work? Too high
> impendance? Why is that something the amp can't handle, if I maybe resist
> the urge to crank it up to eleven?
>
> I'm approaching the issue from the engineering perspective, but I don't
> have much knowledge in this particular field. If you can enlighten me I'd
> be much obliged. ;)

Engineering is the application of physics. An "engineering perspective" is one that starts from knowledge of the basic physical principles involved, and uses mathematics along with that knowledge to produce a design or solve a problem. I've seen no evidence of either in your approach. Whatever you're doing, it's certainly not engineering.

The main problem with what you propose is that the electromagnetic field you create with the amplifier will be small to begin with, and it will be attenuated rapidly with distance for a number of physical reasons. But don't take my word for it. Crank that dude up, and don't stop at 11. Broadcast your telephone number and wait for the phone to ring.

Roy Lewallen, P.E., W7EL

4682. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-29 23:25:46 UTC
From: Ceriel Nosforit <ceriel@googlemail.com>
Message-ID: <pan.2006.09.29.23.25.46.218750@googlemail.com>
Source record: 10333

On Fri, 29 Sep 2006 14:40:26 -0700, Roy Lewallen wrote:

> Ceriel Nosforit wrote:
>>
>> Hehe. Well yeah, I figured as much, but why doesn't it work? Too high
>> impendance? Why is that something the amp can't handle, if I maybe resist
>> the urge to crank it up to eleven?
>>
>> I'm approaching the issue from the engineering perspective, but I don't
>> have much knowledge in this particular field. If you can enlighten me I'd
>> be much obliged. ;)
>
> Engineering is the application of physics. An "engineering perspective"
> is one that starts from knowledge of the basic physical principles
> involved, and uses mathematics along with that knowledge to produce a
> design or solve a problem. I've seen no evidence of either in your
> approach. Whatever you're doing, it's certainly not engineering.
>
> The main problem with what you propose is that the electromagnetic field
> you create with the amplifier will be small to begin with, and it will
> be attenuated rapidly with distance for a number of physical reasons.
> But don't take my word for it. Crank that dude up, and don't stop at 11.
> Broadcast your telephone number and wait for the phone to ring.
>
> Roy Lewallen, P.E., W7EL

Hm. I was a student of IT on a polytechnic... The basic state of mind one
needed there was that we don't need to know all the facts by heart, but we
must know where to find them.
In this case through a few degrees of separation I had specs which say
that it doesn't need to be efficient; it only needs to work. Then when I
have it working I can begin identifying bottlenecks and come up with ways
to widen them.

Good info on magnetic field strength there, thank you. It gives me a good
idea of where to start looking and comparing.

I'm not going to experiment just yet since I'm not a radio amateur, though
I'm vying for a licence. The radio-regulatory authorities here in
Finland don't have much to do, so I'm not going to give them a reason to
hunt me down. :o)

--
Nos

4683. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-30 00:13:28 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12hrdl9f7ofja28@corp.supernews.com>
Source record: 10334

"Ceriel Nosforit" <ceriel@googlemail.com> wrote in message
news:pan.2006.09.29.21.12.09.921875@googlemail.com...
> Hehe. Well yeah, I figured as much, but why doesn't it work? Too high
> impendance? Why is that something the amp can't handle, if I maybe resist
> the urge to crank it up to eleven?

No. The problem is that wavelength of a, say, 10kHz signal is 3km in free space. You need to have an antenna that's a decent fraction of that length for the antenna to look "distributed" enough (that is, the phase of your 10kHz signal at the far end of the wire is significantly different than that at the near end) in your to start getting any radiation. You can go through the math for all this -- look up the input impedance of a short dipole on Google -- and you'll find that the radiation resistance of a reasonable length speaker wire is probably going to be in the milliohms, yet the finite (real) resistance of the wire is going to be 10-1000 times as much, and the reactance will be as well. Hence, all three parameters are against you: The high reactance will keep the amps from being able to put much power into the cable in the first place, and of what does get there, the vast majority will be eaten up as heat rather than radiating.

To make matching tenable (so that you can actually get power into the cable), you need a *very* long wire. To make things efficient, you need low loss conductors -- nice, thick metal rods. Hence, doing a good job becomes rather spendy, and thus you don't see that many people outside of the military building VLF systems.

I think I'd almost suggest trying something like a 1.3GHz moonbounce system prior to building your own VLF transmitter...

4684. Re: Look at what Griffey thinks his amp will do...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-30 00:18:10 UTC
From: U-Know-Who <no-one@nowhere.com>
Message-ID: <6JiTg.3269$DU3.692@tornado.texas.rr.com>
Source record: 10335
Cross-posted to: rec.radio.amateur,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"U-Know-Who" <no-one@nowhere.com> wrote in message
news:W9%Sg.1297$DU3.483@tornado.texas.rr.com...
>
> 516 watts PEP, huh? You are ignorant.
>
> http://www.telstar-electronics.com/SkyWave%202879AB.pdf
>

4685. Re: Look at what Griffey thinks his amp will do...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-30 01:06:57 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <1159578417.041444.102200@i3g2000cwc.googlegroups.com>
Source record: 10336
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

U-Know-Who wrote:
> "U-Know-Who" <no-one@nowhere.com> wrote in message
>
tomm way are you enaged in more of the crossposting you claim to hate

4686. Help calibrating a noise source

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-30 02:26:00 UTC
From: "Gary, WB9JPS" <gwj@spamcop.net>
Message-ID: <1159583160.221099.124060@c28g2000cwb.googlegroups.com>
Source record: 10337

I built a noise source as described by Bill Sabin, W0IYH in QST (1995) and EMRFD. Works fine, but now it's time for calibration. Chatting with Bill, he reinforces the notion that the best way to go is comparison with another calibrated source, or a direct measurement with a calibrated noise figure test set. NoiseCom used to provide this service to hams for <$50, but now they claim they have dropped that offer (it's about $600, now). So my question is, is there anyone in the SF Bay Area (I live in Livermore) who might be able to help? If someone owns a source or test set, perhaps we could get together. I'm open to other suggestions, too.

FYI, this is primarily for testing HF rcvr performance. I'm building an R2-style DC rcvr, and it's turned into a nice research and education project, so I go a bit overboard sometimes, but it sure is fun. I'm also using an IQPro DDS VFO. I wrote a couple reports on its performance that are up on the AA0ZZ website.

This is my first post to this group. There seem to be a lot of talented folks lurking out there... Thanks in advance for any help.

73,
Gary, WB9JPS

4687. Griffey changes his mind...derates to 322 watts PEP

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-30 02:30:28 UTC
From: U-Know-Who <no-one@nowhere.com>
Message-ID: <8FkTg.3291$DU3.2720@tornado.texas.rr.com>
Source record: 10338
Cross-posted to: rec.radio.amateur,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Possible, but with more distortion (oops, he calls it compression) than he claims.

http://www.telstar-electronics.com/SkyWave%202879AB.pdf

Now was that all so hard, Brian? Did you peruse some websites to rethink your internet theories? "LOL"

4688. Re: Help calibrating a noise source

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-30 03:04:32 UTC
From: Rex <me@hutmail.invalid>
Message-ID: <gcnrh25fmsv8h9vkf0jgspso6j3h124c5k@4ax.com>
Source record: 10339

On 29 Sep 2006 19:26:00 -0700, "Gary, WB9JPS" <gwj@spamcop.net> wrote:

>FYI, this is primarily for testing HF rcvr performance.

<sarcasm>
I'm not sure, but at HF, can't you get a reasonable noise performance
measurement by pushing the radio off the bench and using a Radio Shack
sound level meter?
</sarcasm>

Sorry.

4689. J5NnuBPDNy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-30 03:13:03 UTC
From: C5hFL@IDWlZZt.com
Message-ID: <efknbvvft1@news.lublin.pl>
Source record: 10340

aKirOTsneTKSW s1GpMBiqwG MlfryIxFDp

4690. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-30 06:56:11 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <vm1sh215kmv4dlrihqb7p8p7pvtbgsc9q6@4ax.com>
Source record: 10342

On Fri, 29 Sep 2006 16:05:21 +0300, Ceriel Nosforit
<ceriel@googlemail.com> wrote:

>Hey all,
>
>I read about people using their sound card to catch transmissions
>from dedicated senders such as SAQ by just hooking a roll of wire to the
>mic-in and apparently finding some success in this. This got my wondering,
>what aside from laws and fines is stopping me from hooking my 80W
>stereo amp up to some sort of antenna for global transmission fun?
>Somebody must have thought of this before...

At least previously, the frequency tables started at 9 kHz, so
anything below that would not cause any interference to any other
service.

However, the problem with VLF is that any practical antenna is going
to be very short compared to wavelength and since the radiation
resistance is proportional to the square of frequency for antennas
well below 1/4 wavelength, most of the power injected into an antenna
is going to be dissipated in resistive losses.

At the LF aeronautical beacon band with 90 m antennas, the antenna
efficiency based on measurements flown around these beacons seems to
be about 1 %. In Europe, the maximum _radiated_ power limit on the 135
kHz amateur radio band is 1 W, but generating that kind of radiated
power with reasonable sized antennas (30 m) would require at least 1
kW of transmitter power, indicating that the practical antenna
efficiency is about 0.1 %. At 13 kHz, the efficiency would be about
0.001 %.

The near field distance for a simple antenna extends to about 1/6
wavelength, so at VLF, the practical communication range for amateur
communication systems would be well within the near field.

Since you are apparently from Finland and since the Finnish
telecommunication law only grants the jurisdiction to the
telecommunication authorities for "freely propagating" electromagnetic
radiation, my interpretation of the law is that it does not cover any
near field i.e. magnetic or electrostatic communication systems, in
which the near field communication systems work.

Of course, if you are able to generate huge magnetic or electric
fields that cause interference to other systems, this may cause
problems to you.

But otherwise, go ahead with your experiments, but unfortunately the laws of physics will hit you sooner or later :-).

Paul OH3LWR

4691. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-30 06:56:12 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <pi4sh2l4tar5e46m0872nhadvfcsuif3mg@4ax.com>
Source record: 10341

On Fri, 29 Sep 2006 17:13:28 -0700, "Joel Kolstad"
<JKolstad71HatesSpam@yahoo.com> wrote:

>No. The problem is that wavelength of a, say, 10kHz signal is 3km in free
>space.

This must be a typo, since the free space wavelength at 10 kHz is 30
km.

Paul OH3LWR

4692. FA: NOS JOHNSON + OTHER STUFF

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-30 13:49:25 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <FBuTg.155098$QM6.12332@bgtnsc05-news.ops.worldnet.att.net>
Source record: 10343

Am listing NOS and a few used EF Johnson parts along other stuff too at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

If you are in need of one of these parts, get them while available.

Tnx for looking: heytubeguy

4693. trolinmg right along

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-30 16:07:32 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <1159632452.068769.150480@m73g2000cwd.googlegroups.com>
Source record: 10344
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

U-Know-Who wrote:
>
again with the trolling Tom what a matter can't you deal with him by
yourself

4694. Re: MFJ-1278 software

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-30 18:31:39 UTC
From: Kerry Miller <kmiller01at@ticnet.com>
Message-ID: <fKyTg.6211$Go3.4500@dukeread05>
Source record: 10345

Doug Smith W9WI wrote:
> Kerry Miller wrote:
>> I've been off the air for several years and am getting back on
>> finally. I have an MFJ-1278B TNC and have used it with a normal
>> terminal program on Windows (hyperterm) and Linux (minicom) but don't
>> have any software anymore that will run on XP or Linux. Is there any
>> software out there that supports the other modes this TNC will do like
>> wefax and sstv? I have used it for rtty, cw and packet but don't have
>> anything that will work with the graphical modes.
>>
>> Any suggestions? Will any of the sound card software work with a TNC
>> instead of a soundcard?
>
> I bought one of these some years back. I made the same search you did
> and came up empty-handed. I've been happy with Baudot and VHF packet so
> never really got too serious about the other modes.
>
> I did hook up the accessory audio I/O on my rig to the soundcard in the
> computer, with the intent of making unattended recordings (for AM BCB
> DXing - works great!) and using the computer as a voice keyer. Turns
> out the same connections are appropriate for PSK31 and other soundcard
> modes. Very simple (one transistor, one resistor) serial port
> interfaces are possible to let the computer PTT the radio, or you can
> even buy one preassembled, and if you don't have a soundcard they're
> pretty cheap.
>
> I still use the 1278 for Baudot.

Thanks, that's what I was afraid of. I, too, use it for rtty, packet,
amtor, pactor, etc. but I was looking for a way to use the fax and sstv
modes. It sounds like I might be out of luck, maybe I can find a sound
card program to do those modes. I guess worst case I could find my old
software and load up dos on an old machine if I can still find it all.
MFJ doesn't seem to support it anymore, they don't seem to have any
windows software for it.

Thanks,
Kerry, WD5ABC

4695. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-30 20:33:20 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12htl4hfceam035@corp.supernews.com>
Source record: 10346

Hi Paul,

"Paul Keinanen" <keinanen@sci.fi> wrote in message
news:pi4sh2l4tar5e46m0872nhadvfcsuif3mg@4ax.com...
> On Fri, 29 Sep 2006 17:13:28 -0700, "Joel Kolstad"
> <JKolstad71HatesSpam@yahoo.com> wrote:
>
>>No. The problem is that wavelength of a, say, 10kHz signal is 3km in free
>>space.
>
> This must be a typo, since the free space wavelength at 10 kHz is 30
> km.

Oops, sorry... yeah, you're correct -- my mistake.

4696. Re: Help calibrating a noise source

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-30 21:07:29 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1159650449.174260.130390@c28g2000cwb.googlegroups.com>
Source record: 10347

From: Gary, WB9JPS on Fri, Sep 29 2006 7:26 pm

>I built a noise source as described by Bill Sabin, W0IYH in QST (1995)
>and EMRFD. Works fine, but now it's time for calibration. Chatting with
>Bill, he reinforces the notion that the best way to go is comparison
>with another calibrated source, or a direct measurement with a
>calibrated noise figure test set. NoiseCom used to provide this service
>to hams for <$50, but now they claim they have dropped that offer (it's
>about $600, now). So my question is, is there anyone in the SF Bay
>Area (I live in Livermore) who might be able to help? If someone owns a
>source or test set, perhaps we could get together. I'm open to other
>suggestions, too.
>
>FYI, this is primarily for testing HF rcvr performance. I'm building an
>R2-style DC rcvr, and it's turned into a nice research and education
>project, so I go a bit overboard sometimes, but it sure is fun. I'm
>also using an IQPro DDS VFO. I wrote a couple reports on its
>performance that are up on the AA0ZZ website.

If you can't get a calibrated comparison noise source, here's
some tips on workshop calibration techniques on random noise:

Random noise voltage or current can ONLY be calibrated by
a TRUE Root Mean Square measuring instrument. By "true" I
mean a thermionic type such as an RF power meter (thermistor,
bolometer, etc. sensor). Few voltmeters on the market have
TRUE RMS measuring capability; those that do are specified
as such and rather on the expensive side.

A very low-level random noise source can seldom be measured
directly by an available-market voltmeter or power meter.* To
calibrate it with such instruments requires amplification. A
receiver can provide that - provided - it is carefully checked
for linearity. By linearity I mean one that does not clip or
saturate the RF or IF or detector. A wideband TRUE RMS volt-
meter can measure the last IF output and do a comparison
between IF signals from a signal generator and the random
noise source into the front end. If the front end noise is
significant, the total noise input-equivalent will be the
good old square root of the sum of the squares of the noise
sources; knowing the true RMS values of both and just one
will let you find the true RMS value of input noise voltage
of the unknown. [kind of nuisance grunge work but then
most metrological work <calibration> is of that nature :-(]

* Jim Williams of Linear Semiconductor had a nice article in
EDN a few years back, pushing a Linear Semi true RMS IC. In
that was a list of available "RMS implied" voltmeters with
their sensor types stated. The cheapo averaging circuits in
common multimeters could be LOW on true RMS voltage readings
down to half of readings (despite their stated accuracy
specs). The Linear Semi IC apparently didn't sell well and
was taken off of active production. Perhaps only National
Semiconductor has a rough equivalent?

>This is my first post to this group. There seem to be a lot of talented
>folks lurking out there... Thanks in advance for any help.

Living in southern California I don't get up to mid-state
often. Difficult to drop over with a comparison source.
:-) However, a bunch of us lurking in here have been
"around the horn" a few times and we can supply a few
items of information to help. [or maybe to add to the
"random noise" level? :-)]

LenAnderson@ieee.org

4697. RF field meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-30 21:34:58 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <efmnu3$g3f$1@news.onet.pl>
Source record: 10198

Hi
I am looking for PCB og field strenght meter with AD8313.
Can anybody help?

MAc
sp9mrn

4698. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-30 22:23:51 UTC
From: Ceriel Nosforit <ceriel@googlemail.com>
Message-ID: <pan.2006.09.30.22.23.48.406250@googlemail.com>
Source record: 10199

On Sat, 30 Sep 2006 09:56:11 +0300, Paul Keinanen wrote:

> On Fri, 29 Sep 2006 16:05:21 +0300, Ceriel Nosforit
> <ceriel@googlemail.com> wrote:
>
>>Hey all,
>>
>>I read about people using their sound card to catch transmissions from
>>dedicated senders such as SAQ by just hooking a roll of wire to the
>>mic-in and apparently finding some success in this. This got my
>>wondering, what aside from laws and fines is stopping me from hooking my
>>80W stereo amp up to some sort of antenna for global transmission fun?
>>Somebody must have thought of this before...
>
> At least previously, the frequency tables started at 9 kHz, so anything
> below that would not cause any interference to any other service.
>
> However, the problem with VLF is that any practical antenna is going to
> be very short compared to wavelength and since the radiation resistance
> is proportional to the square of frequency for antennas well below 1/4
> wavelength, most of the power injected into an antenna is going to be
> dissipated in resistive losses.
>
> At the LF aeronautical beacon band with 90 m antennas, the antenna
> efficiency based on measurements flown around these beacons seems to be
> about 1 %. In Europe, the maximum _radiated_ power limit on the 135 kHz
> amateur radio band is 1 W, but generating that kind of radiated power
> with reasonable sized antennas (30 m) would require at least 1 kW of
> transmitter power, indicating that the practical antenna efficiency is
> about 0.1 %. At 13 kHz, the efficiency would be about 0.001 %.
>
> The near field distance for a simple antenna extends to about 1/6
> wavelength, so at VLF, the practical communication range for amateur
> communication systems would be well within the near field.
>
> Since you are apparently from Finland and since the Finnish
> telecommunication law only grants the jurisdiction to the
> telecommunication authorities for "freely propagating" electromagnetic
> radiation, my interpretation of the law is that it does not cover any
> near field i.e. magnetic or electrostatic communication systems, in
> which the near field communication systems work.
>
> Of course, if you are able to generate huge magnetic or electric fields
> that cause interference to other systems, this may cause problems to

> you.
>
> But otherwise, go ahead with your experiments, but unfortunately the
> laws of physics will hit you sooner or later :-).
>
> Paul OH3LWR

Woha. A lot of info to assimilate. Thank you.

A few quick questions; the efficiency at higher frequencies does only increse logarithmically, correct? Around where is the 'knee' where increment of frequency no longer provideas a significant increase in efficiency? - Ballpark numbers and guesstimates are perfectly OK for me, since I'm only curious of the general idea.
Finally, what exactly do you mean by 'near field'? Is it an arbitrary line in the sand that separates near fields from normal fields, or a completely different physical phenomena?

--
Nos

4699. Tektronix Scope Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-30 22:45:35 UTC
From: JimL <jimbethladd@aol.com>
Message-ID: <451fc696$0$4682$ec3e2dad@news.usenetmonster.com>
Source record: 10207

I need to buy a time base plug-in for my Tek 7704 mainframe.

The7B53A is described as being a "Delayed/delaying time base in one", while the 7B71 is a" Delaying time base".

Can someone tell me the difference? Tnx, Jim.

4700. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-30 23:08:06 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12htu6l6dfl9c00@corp.supernews.com>
Source record: 10200

"Ceriel Nosforit" <ceriel@googlemail.com> wrote in message
news:pan.2006.09.30.22.23.48.406250@googlemail.com...
> A few quick questions; the efficiency at higher frequencies does only
> increse logarithmically, correct?

Sort of, but not really. It's linear for electrically short antennas, but it's actually oscillatory in nature (albeit this occurs after you've hit a half wavelength -- not something you're likely to do at VLF).

> Finally, what exactly do you mean by 'near field'? Is it an arbitrary line
> in the sand that separates near fields from normal fields, or a completely
> different physical phenomena?

Any element that you're pumping energy into creates an electric and magnetic field. In a non-radiating component, that energy just "flows" around the element, e.g., the magnetic field diagrams you're probably familiar with for something like a solenoidal inductor. "Near" and "far" field aren't necessarily precisely defined terms, but the idea is that that energy that's just flowing around the element is in the "near field" whereas the energy that's actually radiating out towards Alpha Centauri is in the "far field." As a ballbark estimate, the near field of an element is within about a wavelength away (in distance) from it... hence the mention that, at 10kHz with a 30km wavelength, anywhere in your home is within the near field.

Mathematically, if you look at the equations for a dipole, the electric and magnetic field look something like E(r) or H(r) = foo/r+bar/r^2+bar/r^3+... (where r is the radial distance from the dipole), and hence the power in the field (the Poynting vector) is something like P(r) = baz/r^2+quux/r^3+... From this equation, you can see that over large distance the only term that matters is bar/r^2 -- this is the far field radiation. (Another way to define near field vs. far field, in fact, is to solve P(r) for r when the baz/r^2 terms equals quux/r^3+... -- reasonable enough, as at that point, the far field energy flux is equal to the near field energy flux.)

The above is a fair amount of hand-waving and probably some of it is just plain wrong :-) -- you really should pick up a book on the topic or start Googling. Krauss' books are excellent, by the way, in that the exercises are often "real world"-based, meant to demonstrate either how something really does work or, if it isn't practical, why not.

The Germans call near-field and far-field the Fresnel-region and the Fraunhofer-region, which is really a lot more colorful IMHO.

---Joel

4701. Re: Help calibrating a noise source

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-09-30 23:31:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12htvj3ajlh5k7f@corp.supernews.com>
Source record: 10201

LenAnderson@ieee.org wrote:
> . . .
> Random noise voltage or current can ONLY be calibrated by
> a TRUE Root Mean Square measuring instrument. By "true" I
> mean a thermionic type such as an RF power meter (thermistor,
> bolometer, etc. sensor). Few voltmeters on the market have
> TRUE RMS measuring capability; those that do are specified
> as such and rather on the expensive side.
> . . .

Not too long ago, I got an HP3400A (10 MHz bandwidth) on eBay for the purpose of measuring noise. Don't recall what I paid, but it was very reasonable. Since truly random noise also has low-frequency fluctuations, an RMS meter reading wanders quite a bit while measuring noise. I find it easier to eyeball interpolate an average reading with the analog meter of the HP3400A than with a digital meter.

Roy Lewallen, W7EL

4702. Re: Help calibrating a noise source

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-01 00:06:51 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <T+tkADVbawHFFAmc@ifwtech.co.uk>
Source record: 10202

Gary, WB9JPS wrote:
>I built a noise source as described by Bill Sabin, W0IYH in QST (1995)
>and EMRFD. Works fine, but now it's time for calibration. Chatting with
>Bill, he reinforces the notion that the best way to go is comparison
>with another calibrated source, or a direct measurement with a
>calibrated noise figure test set. NoiseCom used to provide this service
>to hams for <$50, but now they claim they have dropped that offer (it's
>about $600, now). So my question is, is there anyone in the SF Bay
>Area (I live in Livermore) who might be able to help? If someone owns a
>source or test set, perhaps we could get together. I'm open to other
>suggestions, too.
>
>FYI, this is primarily for testing HF rcvr performance. I'm building an
>R2-style DC rcvr, and it's turned into a nice research and education
>project, so I go a bit overboard sometimes, but it sure is fun. I'm
>also using an IQPro DDS VFO. I wrote a couple reports on its
>performance that are up on the AA0ZZ website.
>

Sorry I can't help with a calibrated noise source from this side of the Atlantic. The amateur microwave community hold regular meetings that always include a measurement session using calibrated professional test equipment. Given a calibrated professional noise source and a NF test set, it is very easy to transfer the ENR calibration to your HB source (especially if the room temperature happens to be 290K :-)

However, you don't really need a professional test set. You can make very accurate measurements of relative RMS noise power levels using a PC sound card, and this opens the way to NF measurements. The only hardware accessories needed are a simple linear downconverter of the type described in EMRFD, and a noise source that can be gated by an output from the PC. For details and software, see:
http://uk.geocities.com/g8kbb@btinternet.com/newfile4.htm

The only other issue is that almost all professional noise sources are designed and calibrated mainly for UHF/microwave use. For your HF application, you'll typically be limited to just one transfer calibration point at 10MHz. You can rely on a professional source to have no nasty resonances between calibration points, but the ENR will probably roll off rapidly below 10MHz owing to the relatively low value of the DC blocking capacitor.

--
73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

4703. Cheap, Small TNC?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-01 01:54:50 UTC
From: Bill Powell <whp@att.net>
Message-ID: <ef7uh2981hroj8e87s6je8uat15in9o3l8@4ax.com>
Source record: 10203

I was working on designing a surface mount PC board to build up a bunch of Bob Ball's nifty $25 PIC-based TNCs together so every RACES radio would have one built-in. . . and then read the source code and discovered it doesn't do AX.25 connected mode!

Any suggestions for a TNC that:
- Is cheap enough I can afford to give away 20 of them,
- Is small enough to install inside a mobile radio,
- Is AX.25 connected mode capable,
- Is NOT KISS or APRS (UI) specific,
- Is NOT dependant on ANY PC interaction or support,
- Will digipeat.

So far I can't find anything that meets all those requirements. We are currently using a limited number of Alinco internal TNCs but they are expensive, don't digi and only work with Alinco radios.

And - NO - I'm NOT looking for a different way to do what I need to do: it's Plain Old AX.25 connected mode; NOTHING ELSE!

Thanks in advance,
Bill - WB1GOT

4704. Tektronix Scope Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-01 02:26:04 UTC
From: JimL <jimbethladd@aol.com>
Message-ID: <451fc696$1$4682$ec3e2dad@news.usenetmonster.com>
Source record: 10208

I need a time base plug-in for my Tek 7704 main frame scope.

The 7B53A plug-in is described as a "Delayed/delaying time base in one". The 7B71 is descried as a "Delaying time base"

Can someone tell me the difference? Tnx, Jim.

4705. Re: Cheap, Small TNC?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-01 05:33:24 UTC
From: "g. beat"
Message-ID: <D_adnRgspqewzoLYnZ2dnUVZ_vadnZ2d@comcast.com>
Source record: 10204

"Bill Powell" <whp@att.net> wrote in message
news:ef7uh2981hroj8e87s6je8uat15in9o3l8@4ax.com...
>I was working on designing a surface mount PC board to build up a
> bunch of Bob Ball's nifty $25 PIC-based TNCs together so every RACES
> radio would have one built-in. . . and then read the source code and
> discovered it doesn't do AX.25 connected mode!
>
> Any suggestions for a TNC that:
> - Is cheap enough I can afford to give away 20 of them,
> - Is small enough to install inside a mobile radio,
> - Is AX.25 connected mode capable,
> - Is NOT KISS or APRS (UI) specific,
> - Is NOT dependant on ANY PC interaction or support,
> - Will digipeat.

Bill -

The NO KISS specification I think eliminates the John Hansen products ?

He now lists these under the name Coastal ChipWorks - TNC X solution
http://www.tnc-x.com/

You can also ask John of his thoughts (his designs are also PIC based)
His TNC-X boards are expandable via an expansion header that allows the
addition of "daughter boards".

w9gb

4706. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-01 07:40:51 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <jdkuh258k01df3jaltp4020ep46v748k82@4ax.com>
Source record: 10205

On Sun, 01 Oct 2006 01:23:51 +0300, Ceriel Nosforit
<ceriel@googlemail.com> wrote:

>A few quick questions; the efficiency at higher frequencies does only
>increse logarithmically, correct? Around where is the 'knee' where
>increment of frequency no longer provideas a significant increase in
>efficiency? -

You can model the antenna system as a series connection of a loss
resistance and the radiation resistance. The loss resistance will
convert the RF power created with your expensive gear into heat :-),
while the power "dissipated" by the radiation resistance will actually
disappear as EM fields.

For full sized antennas, the loss resistance is small compared to the
radiation resistance and most of the RF power generated will actually
radiate. However, even with 1/4 wave vertical antennas, the ground
losses can be significant, if not ground planes are used, but the
antenna is grounded with grounding electrodes.

When the antenna size is below perhaps 1/10 wavelength, the radiation
resistance drops by the square of frequency, so the radiation
resistance can quite easily be well below 1 ohm at LF and below. The
loss resistance (include grounding and loading coil losses) can be
several ohms, thus the majority of the generator power is dissipated
in the losses and only a very small part is actually radiated by the
very small radiation resistance.

While the metallic conductor skin effect losses are proportional to
the square_root_ of frequency, the ground losses are harder to
predict, so the total efficiency at VLF frequencies is almost
proportional to the square of frequency (not logarithmic). The 'knee'
would be at 1/4 wavelength for a vertical antenna. At even higher
frequencies, the radiation resistance would vary cyclically.

Paul OH3LWR

4707. Re: MFJ-1278 software

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-01 12:57:29 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <451FBB39.5070707@bloomer.net>
Source record: 10206

A bit expensive, but is this what you are looking for?

http://www.mfjenterprises.com/products.php?prodid=MFJ-1289W

It says it is for Windows and works with the 1278 (as well as some others)

Scott
N0EDV

Kerry Miller wrote:

> Doug Smith W9WI wrote:
>
>> Kerry Miller wrote:
>>
>>> I've been off the air for several years and am getting back on
>>> finally. I have an MFJ-1278B TNC and have used it with a normal
>>> terminal program on Windows (hyperterm) and Linux (minicom) but don't
>>> have any software anymore that will run on XP or Linux. Is there any
>>> software out there that supports the other modes this TNC will do
>>> like wefax and sstv? I have used it for rtty, cw and packet but
>>> don't have anything that will work with the graphical modes.
>>>
>>> Any suggestions? Will any of the sound card software work with a TNC
>>> instead of a soundcard?
>>
>>
>> I bought one of these some years back. I made the same search you did
>> and came up empty-handed. I've been happy with Baudot and VHF packet
>> so never really got too serious about the other modes.
>>
>> I did hook up the accessory audio I/O on my rig to the soundcard in
>> the computer, with the intent of making unattended recordings (for AM
>> BCB DXing - works great!) and using the computer as a voice keyer.
>> Turns out the same connections are appropriate for PSK31 and other
>> soundcard modes. Very simple (one transistor, one resistor) serial
>> port interfaces are possible to let the computer PTT the radio, or you
>> can even buy one preassembled, and if you don't have a soundcard
>> they're pretty cheap.
>>
>> I still use the 1278 for Baudot.
>
>
> Thanks, that's what I was afraid of. I, too, use it for rtty, packet,
> amtor, pactor, etc. but I was looking for a way to use the fax and sstv
> modes. It sounds like I might be out of luck, maybe I can find a sound

> card program to do those modes. I guess worst case I could find my old
> software and load up dos on an old machine if I can still find it all.
> MFJ doesn't seem to support it anymore, they don't seem to have any
> windows software for it.
>
> Thanks,
> Kerry, WD5ABC

4708. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-01 14:18:49 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <451fcfc0$0$5150$9b4e6d93@newsspool1.arcor-online.net>
Source record: 10209

Hi Glen -

> >Is multiplying I with Q enougth to demodulate FM as in a quadrature
> >demodulator?
> The IQ signals multiplied do not make an FM quadrature
> detector as the phase does not really shift much over the NBFM
> bandwidth. There may be a clever way to extract FM more direcly from
> the IQ channels without first detecting a sideband, but I don't know
> it.
direct way:
I read about something like:
phase = (I * diff Q + Q * diff I)/(I*I + Q*Q)
but I cannot remember it exactly.

>
> > Thank you for given the link to Peregrine. I read the datasheet. How do
you
> > mix it?
>
> Maybe the wrong part? I'm talking about the PE4140 FET ring mixer.
> You use two, driven with LOs ninety degress out of phase with respect
> to each other.
Yes, the correct part!
But I cannot see a great benefit using your concept. What is better than
others?

> > How much dynamic range do I need? I thought about 100dB?
> > If I recall theory I loss 2dB if limiting the signal to remove AM
sensitivy.techniques,
>
> You need good dynamic range up to the limiter. This can be done with
> analog circuits as discussed. After the limiter an A/D converter is
> not even needed in theory--a fast-running timer hooked to a digital
> port could do the trick. I don't remember any loss by removing AM in
> the limiter (since all the the information is contained in the
> frequency of the signal), but my theory is in the distant past, back
> when FM meant 'funny math'.
Everywhere I read about the necessity to remove AM. If the band is used for
FM only, why then remove the not found AM in it?
I ran a simulation with Spice doing FM demodulator concepts comparision. The
difference between limited and not limited FM product detector was not of
significance. Doing the correct low-pass filtering after the detector was of
much higher importance.

- Henry

4709. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-01 14:22:41 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <451fcfc1$0$5150$9b4e6d93@newsspool1.arcor-online.net>
Source record: 10210

> FM the problem is not responding to amplitude changes but frequency
> changes. So any system that can count and measure frequency and
> render a pattern based on changing frequency.
>
> Synthetic PLL or simple a software PLL. would do it.
> The synthethetic PLL approach means a software oscillator locked
> to a varying frequency external signal. The error word generated is
> the demodulated signal (apply to D/A or use raw).

A digital detector will have problems if the SNR is to low! If the SNR is high enought, the all-digital system is just simpler to realize and consumes lower power.

> You need good dynamic range up to the first selectivity that can
> remove offending close in signals.
>
> Then you can limit hard. If you limit before or without adaquate
> selectivity you will have intermodulation problems.

Superposition prinzip.

4710. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-01 16:19:16 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <efopq4$c39$1@theodyn.ncf.ca>
Source record: 10211

"Henry Kiefer" (otc_friend@gmx.net) writes:

> Everywhere I read about the necessity to remove AM. If the band is used for
> FM only, why then remove the not found AM in it?

The limiting has nothing to do with receiving FM, it has everything to do
with getting rid of QRN.

Armstrong pursued FM because he wanted some system that was more noise
free than AM. Since FM does not have an amplitude componenet, that means
you can limit to clear out the QRN and some of the fading. The limiting
is what makes FM so appealling. Take out the limiter and the FM demodulator
will still work fine, but there'll be little point in switching to FM.

Michael VE2BVW

4711. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-01 17:24:03 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <q2uvh2p5v54rge87cncq81vsk2vskkit8n@4ax.com>
Source record: 10212

ORIGINAL MESSAGE:

On Sat, 30 Sep 2006 00:12:10 +0300, Ceriel Nosforit
<ceriel@googlemail.com> wrote:

>Hehe. Well yeah, I figured as much, but why doesn't it work? Too high
>impendance? Why is that something the amp can't handle, if I maybe resist
>the urge to crank it up to eleven?
>
>I'm approaching the issue from the engineering perspective, but I don't
>have much knowledge in this particular field. If you can enlighten me I'd
>be much obliged. ;)

------------ REPLY FOLLOWS ------------

Here's what is working against you:

1. Frequency is too low for the power level you are using. At higher
frequencies in the shortwave region, 80 watts is plenty to talk around
the world, but not down in the audio range.

2. If you did have lots of power, you would still need an efficient
antenna. Unless you own an entire county, you won't have enough room
to put one up.

The US military does use very low frequencies in the audio range to
communicate with submarines world wide, but they have a pretty good
budget for it. :-)

It can be done, but not by you or me.

Bill, W6WRT

4712. Re: Help calibrating a noise source

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-01 17:54:10 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1159725250.402145.244790@b28g2000cwb.googlegroups.com>
Source record: 10213

Roy Lewallen wrote:
> LenAnderson@ieee.org wrote:
> > . . .
> > Random noise voltage or current can ONLY be calibrated by
> > a TRUE Root Mean Square measuring instrument. By "true" I
> > mean a thermionic type such as an RF power meter (thermistor,
> > bolometer, etc. sensor). Few voltmeters on the market have
> > TRUE RMS measuring capability; those that do are specified
> > as such and rather on the expensive side.
> > . . .
>
> Not too long ago, I got an HP3400A (10 MHz bandwidth) on eBay for the
> purpose of measuring noise. Don't recall what I paid, but it was very
> reasonable. Since truly random noise also has low-frequency
> fluctuations, an RMS meter reading wanders quite a bit while measuring
> noise. I find it easier to eyeball interpolate an average reading with
> the analog meter of the HP3400A than with a digital meter.

I agree there on analog display versus digital.

Dug out my CD of old "saves" and found the Jim Williams article
in the 11 May 2000 edition of EDN (www.ednmag.com). In that
he lists the following as having zero error when compared to using
the Linear true-RMS IC: HP 3400, 3403C, 3478; Fluke 8920A.

By the bye, the 1967-era HP pseudorandom noise generator has
the following "calibration" procedure to check RMS output voltage:
Connect it to an HP digital voltmeter-recorder, set it to slow
speed and record 1023 voltage readings (corresponding to the
slow-speed 'flat' pseudorandom waveform parts), then take the
sum of the squares of all those readings and find the square root
of it. Heh heh heh...I can just see a calibration technician doing
all that work with a mechanical calculator in the 60s...with the QC
chief storming in after an hour or so asking "You STILL working
on that?!?" :-)

LenAnderson@ieee.org

4713. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-01 20:12:54 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12i08acrkvgg820@corp.supernews.com>
Source record: 10214

Paul Keinanen wrote:
> . . .
> When the antenna size is below perhaps 1/10 wavelength, the radiation
> resistance drops by the square of frequency, so the radiation
> resistance can quite easily be well below 1 ohm at LF and below. The
> loss resistance (include grounding and loading coil losses) can be
> several ohms, thus the majority of the generator power is dissipated
> in the losses and only a very small part is actually radiated by the
> very small radiation resistance.
> . . .

Neglecting ground effects, the radiation resistance of a four-sided loop 100 meters on a side at 100 kHz is 45 milliohms. The radiation resistance of a four-sided loop 10 meters on a side at 10 kHz is about 400 picoohms (4 X 10^-10 ohms). If you used 2 mm diameter wire to construct the loops, the first would have an efficiency of 0.7%, and the second of 0.00000016 percent. These are very optimistic, since they don't account for the considerable loss you'd incur by induction into the ground and objects for quite some distance around. They also don't account for losses in the required impedance matching network. And a receiving antenna would have the same efficiency.

You can easily get these numbers with the free EZNEC demo program from http://eznec.com. Or use a calculator and the simple equations you'll find in any antenna text.

The OP wondered if anybody had ever thought of this before. The answer is yes, the first time probably well over a hundred years ago. Anyone doing the simple calculations sees immediately why it's not a great idea.

Roy Lewallen, W7EL

4714. Re: Tektronix Scope Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-01 20:32:43 UTC
From: JimL <jimbethladd@aol.com>
Message-ID: <4522bb46$0$4700$ec3e2dad@news.usenetmonster.com>
Source record: 10236

I now have the answer so no need to reply. Thanks, Jim.

"JimL" <jimbethladd@aol.com> wrote in message
news:451fc696$0$4682$ec3e2dad@news.usenetmonster.com...
>I need to buy a time base plug-in for my Tek 7704 mainframe.
>
> The7B53A is described as being a "Delayed/delaying time base in one",
> while the 7B71 is a" Delaying time base".
>
> Can someone tell me the difference? Tnx, Jim.
>

4715. Re: Intermediate Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-01 21:02:22 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <45202d70$0$5155$9b4e6d93@newsspool1.arcor-online.net>
Source record: 10215

"Michael Black" <et472@FreeNet.Carleton.CA> schrieb im Newsbeitrag
news:efopq4$c39$1@theodyn.ncf.ca...
> "Henry Kiefer" (otc_friend@gmx.net) writes:
>
> > Everywhere I read about the necessity to remove AM. If the band is used
for
> > FM only, why then remove the not found AM in it?
>
> The limiting has nothing to do with receiving FM, it has everything to do
> with getting rid of QRN.
>
> Armstrong pursued FM because he wanted some system that was more noise
> free than AM. Since FM does not have an amplitude componenet, that means
> you can limit to clear out the QRN and some of the fading. The limiting
> is what makes FM so appealling. Take out the limiter and the FM
demodulator
> will still work fine, but there'll be little point in switching to FM.

OK Michael. So it is for fight against QRN and fading, not primary for being
immune to AM.
As my Spice simulations suggest; the FM demodulator works almost completely
comparable in analog (=not limiting) and digital (=limiting) mode.

What about the performance comparision of PLL demod and quadrature demod
concepts? Seems no much difference?

regards -
Henry

4716. Re: Cheap, Small TNC?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-01 23:29:35 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <EbYTg.45$lm7.19@newsfe05.lga>
Source record: 10216

"g. beat >" <@<spam protected> wrote in message
news:D_adnRgspqewzoLYnZ2dnUVZ_vadnZ2d@comcast.com...
> "Bill Powell" <whp@att.net> wrote in message
> news:ef7uh2981hroj8e87s6je8uat15in9o3l8@4ax.com...
>>I was working on designing a surface mount PC board to build up a
>> bunch of Bob Ball's nifty $25 PIC-based TNCs together so every RACES
>> radio would have one built-in. . . and then read the source code and
>> discovered it doesn't do AX.25 connected mode!
>>
>> Any suggestions for a TNC that:
>> - Is cheap enough I can afford to give away 20 of them,
>> - Is small enough to install inside a mobile radio,
>> - Is AX.25 connected mode capable,
>> - Is NOT KISS or APRS (UI) specific,
>> - Is NOT dependant on ANY PC interaction or support,
>> - Will digipeat.
>
> Bill -
>
> The NO KISS specification I think eliminates the John Hansen products ?

From a practical standpoint, I can't see much difference, unless OP has some specific software beyond the typical terminal emulator. The TNC-X works quite nicely from a laptop and a mobile (haven't tried it with a hand held). And consume little power.

However, they don't digipeat without the addition of a daughter card, and that would drive the price up, maybe too high

..

4717. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-01 23:58:12 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1159747092.551411.49370@h48g2000cwc.googlegroups.com>
Source record: 10217

Tom Coates wrote:
> ARRL has announced a design competition that some of you may not have heard
> of. The objective is to produce a CW and SSB transceiver with at least 5
> watts of output on 40 meters. Components must be commercially available. The
> total cost of all components (except key, mic and power supply) must not
> exceed $50. Any instruments beyond a multimeter must be in the $50.

WOW.

$50 today is like $10 when I was first licensed 30-something years ago.

$50 is just five more dollars than what the 2007 ARRL handbook
(paperback) is going to cost!

Tim.

4718. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-02 00:09:50 UTC
From: Ceriel Nosforit <ceriel@googlemail.com>
Message-ID: <pan.2006.10.02.00.09.50.515625@googlemail.com>
Source record: 10218

On Sun, 01 Oct 2006 13:12:54 -0700, Roy Lewallen wrote:

> Paul Keinanen wrote:

<snip>

> The OP wondered if anybody had ever thought of this before. The answer
> is yes, the first time probably well over a hundred years ago. Anyone
> doing the simple calculations sees immediately why it's not a great idea.

Yes, I'm beginnig to see that now. :D However, I am learning a great deal
in the process, and the equations I have found to explain the issue in
detail don't seem simple at all. But if it was simple it wouldn't be
interesting, now would it? ;)

Right now I'm looking at;
http://en.wikipedia.org/wiki/Near-field
http://en.wikipedia.org/wiki/Radiation_pattern
http://en.wikipedia.org/wiki/Fresnel_zone

Lucky for me I'm trying to build up an interest in math. Cos here's plenty
of it...

Again, thank you all for your replies. It'll be a while until I really
have an intuitive understanding of the subject like you all do, but I am
patient. :)

--
Nos

4719. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-02 02:09:53 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <efpsdh$118$1@theodyn.ncf.ca>
Source record: 10219

"Tim Shoppa" (shoppa@trailing-edge.com) writes:
> Tom Coates wrote:
>> ARRL has announced a design competition that some of you may not have heard
>> of. The objective is to produce a CW and SSB transceiver with at least 5
>> watts of output on 40 meters. Components must be commercially available. The
>> total cost of all components (except key, mic and power supply) must not
>> exceed $50. Any instruments beyond a multimeter must be in the $50.
>
> WOW.
>
> $50 today is like $10 when I was first licensed 30-something years ago.
>
> $50 is just five more dollars than what the 2007 ARRL handbook
> (paperback) is going to cost!
>
> Tim.
>

That is an interesting perspective.

My first handbook, the 1971 edition, had a $4.50 cover price. It
was preceeded, by about a month, "How To Become A Radio Amateur",
and I can't remember how much that was but obviously not much.

The latter book had a single tube transmitter built on a wooden
"chassis", though I can't remember if they suggested you scrounge
the parts. I have no recollection of the receiver, but it would
have been a regen.

Michael VE2BVW

4720. Re: Tektronix Scope Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-02 02:38:32 UTC
From: mrhaney <w4pqw@cox.net>
Message-ID: <1159756712.604672.235400@k70g2000cwa.googlegroups.com>
Source record: 10220

Jim,if you will do a google search for patent # 4109182 it describes
the Delay and Delaying sweep setup.. Not a simple subject ,,but,, this
seems to cover it quite well...Good luck ..Harold
JimL wrote:
> I need to buy a time base plug-in for my Tek 7704 mainframe.
>
> The7B53A is described as being a "Delayed/delaying time base in one", while
> the 7B71 is a" Delaying time base".
>
> Can someone tell me the difference? Tnx, Jim.

4721. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-02 03:36:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12i129r9j4uet19@corp.supernews.com>
Source record: 10221

To get the numbers I came up with, all you need is the equation for the radiation resistance of a small loop and the resistance of copper wire. It shouldn't be hard to find the equation for the small loop, and it's very simple. At those frequencies, the resistance of the wire should be nearly the same as the DC resistance, so all you need is a copper wire table(*). Both should be readily available on the web.

Of course, if you want to know about other kinds of antennas and more detailed effects like the field intensity in the presence of ground, the equations can get difficult indeed, and some are too difficult to solve directly. That's what the modeling programs are for.

(*) At higher frequencies or with much larger diameter wires, you'll need to account for skin effect. This requires calculation of a square root and can be done on a pocket calculator as can the others.

Roy Lewallen, W7EL

Ceriel Nosforit wrote:
> On Sun, 01 Oct 2006 13:12:54 -0700, Roy Lewallen wrote:
>
>> Paul Keinanen wrote:
>
> <snip>
>
>> The OP wondered if anybody had ever thought of this before. The answer
>> is yes, the first time probably well over a hundred years ago. Anyone
>> doing the simple calculations sees immediately why it's not a great idea.
>
> Yes, I'm beginnig to see that now. :D However, I am learning a great deal
> in the process, and the equations I have found to explain the issue in
> detail don't seem simple at all. But if it was simple it wouldn't be
> interesting, now would it? ;)
>
> Right now I'm looking at;
> http://en.wikipedia.org/wiki/Near-field
> http://en.wikipedia.org/wiki/Radiation_pattern
> http://en.wikipedia.org/wiki/Fresnel_zone
>
> Lucky for me I'm trying to build up an interest in math. Cos here's plenty
> of it...
>
> Again, thank you all for your replies. It'll be a while until I really
> have an intuitive understanding of the subject like you all do, but I am
> patient. :)

>

4722. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-02 05:16:28 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <gs61i2pkiad3e4v45pl2bbpvrep8hv8hma@4ax.com>
Source record: 10222

On Sun, 01 Oct 2006 20:36:23 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>To get the numbers I came up with, all you need is the equation for the
>radiation resistance of a small loop and the resistance of copper wire.
>It shouldn't be hard to find the equation for the small loop, and it's
>very simple. At those frequencies, the resistance of the wire should be
>nearly the same as the DC resistance, so all you need is a copper wire
>table(*). Both should be readily available on the web.

Small magnetic loops with gains in -30 ..-60 dB range can be usable
for receiving due to the extreme noise levels on LF and VLF, but for
transmitting, they are far to lossy.

To get any significant communication distance, you would need a
vertical polarised signal. The popular antenna among 135 kHz
experimenters as well as in LF aeronautical beacons is a vertical
tower with as much top capacitance as you can put up.

Look at the antenna systems of old ships using the LF band, these have
multiple parallel wires erected between the masts in the bow and
stern. These wires form the top capacitance and a vertical wire going
directly from it isolator on the radio room to the top wires, which is
the actual vertical radiator. The top loading will increase the
current in the vertical conductor and hence vertical radiation.

Paul

4723. Re: Tektronix Scope Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-02 05:46:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12i19t7b4nkahf6@corp.supernews.com>
Source record: 10223

The 7B71 is a single time base, which can be used as-is, or to provide a delayed trigger to a second time base plugged into another hole. When one timebase is used to delay another, it allows seeing an expanded-time closeup of a part of a waveform.

The 7B53A is a dual timebase -- two timebases in the same package. One can be used to delay the other, so you can do the whole thing with the one plugin.

Roy Lewallen, W7EL

JimL wrote:
> I need to buy a time base plug-in for my Tek 7704 mainframe.
>
> The7B53A is described as being a "Delayed/delaying time base in one", while
> the 7B71 is a" Delaying time base".
>
> Can someone tell me the difference? Tnx, Jim.
>
>

4724. Trouble matching SA605 input at 434 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-02 07:11:57 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <1Z2Ug.39931$rP1.16940@news-server.bigpond.net.au>
Source record: 10224

I am having trouble matching to the input of a SA605 at 434 MHz.

If I apply a sig gen directly to pin 1 via a 1n cap I get around - 95Bm sensitivity. I then add my match and the sensitivity drops more than 10dB. I am expecting 10dB increase in sensitivity when input is matched correctly.

First I tried matching to 800R as per input impedance listed in the Philips APP note. I then noticed most applications matched to 1k5.

My current circuit is C-Tap (33pF to ground and series 5p6 to inductor).
18.5nH inductor (Q = 100) across input pins 1 and 2.
10n decoupling cap from pin 2 to ground.

Any help much appreciated.

Regards

David

4725. FS ABE Elettronica L60 UHF amplifier and 2 BPFs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-02 11:59:36 UTC
From: terry.widdowson@btopenworld.com
Message-ID: <1159790376.822275.199330@b28g2000cwb.googlegroups.com>
Source record: 10225
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

A friend of mine has an ABE L60/TH, 60W p.s. UHF band (470 to 860 MHz)
amplifier, with a 3 cavity and a 6 cavity 500W tuneable filters also
supplied by ABE. All in mint condition. The part numbers are:

L60/TH/U/Ch 68 amplifier

L60/TH/U/Ch 68 STD I bandpass
L60/TH/U/Ch 68 STD I notch

The two filters are mounted on a 1U 19 inch rack mount, also mint.
He has asked me to sell them, any offers before they go on ebay?
Cheers,
Terry

4726. Re: Trouble matching SA605 input at 434 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-02 16:20:10 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <UOOdnSMe1uexobzYnZ2dnUVZ_sGdnZ2d@web-ster.com>
Source record: 10226

David wrote:

> I am having trouble matching to the input of a SA605 at 434 MHz.
>
> If I apply a sig gen directly to pin 1 via a 1n cap I get around - 95Bm
> sensitivity. I then add my match and the sensitivity drops more than
> 10dB. I am expecting 10dB increase in sensitivity when input is matched
> correctly.
>
> First I tried matching to 800R as per input impedance listed in the
> Philips APP note. I then noticed most applications matched to 1k5.
>
> My current circuit is C-Tap (33pF to ground and series 5p6 to inductor).
> 18.5nH inductor (Q = 100) across input pins 1 and 2.
> 10n decoupling cap from pin 2 to ground.
>
> Any help much appreciated.
>
> Regards
>
> David

You don't mention any adjustable components -- you _are_ tuning this thing, right? Your circuit will have a loaded Q of around 5, so you should see a pretty broad peak, but you will have to tune out all your stray capacitance.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

4727. Re: ARRL "Homebrew Challenge"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-02 20:26:41 UTC
From: MadEngineer <glenn.b.dixon@gmail.com>
Message-ID: <1159820800.754659.183440@e3g2000cwe.googlegroups.com>
Source record: 10227

Tim wrote:
>
> $50 today is like $10 when I was first licensed 30-something years ago.

Yes, but electronics follow a strange economy...some parts such as
batteries and pots haven't changed price much, but most are much
cheaper. You can now buy a`stereo FM receiver for $3.00 at Wal Mart.
In the sixties that would have cost at least $30.00. But today's
integrated radios have darn few parts that can be removed/reused.

>
> $50 is just five more dollars than what the 2007 ARRL handbook
> (paperback) is going to cost!
>

Well, if it's any consolation, you will probably get lots more from the
handbook--in terms of weight, at least.

Regards,
Glenn Dixon AC7ZN

4728. Re: Trouble matching SA605 input at 434 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-02 20:57:48 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <g3fUg.861$lf3.394@trnddc07>
Source record: 10228

Also, you don't say what the input caoacitance is. In my modeling, with an assumption of about 4pf for chip and strays, the voltage gain is about 9 (19db), the resonance is a little below 400 mhz and you'd be about 10 db down at 434 mhz. I agree with Tim...tune it.

Joe
W3JDR

"Tim Wescott" <tim@seemywebsite.com> wrote in message
news:UOOdnSMe1uexobzYnZ2dnUVZ_sGdnZ2d@web-ster.com...
> David wrote:
>
> > I am having trouble matching to the input of a SA605 at 434 MHz.
> >
> > If I apply a sig gen directly to pin 1 via a 1n cap I get around - 95Bm
> > sensitivity. I then add my match and the sensitivity drops more than
> > 10dB. I am expecting 10dB increase in sensitivity when input is matched
> > correctly.
> >
> > First I tried matching to 800R as per input impedance listed in the
> > Philips APP note. I then noticed most applications matched to 1k5.
> >
> > My current circuit is C-Tap (33pF to ground and series 5p6 to inductor).
> > 18.5nH inductor (Q = 100) across input pins 1 and 2.
> > 10n decoupling cap from pin 2 to ground.
> >
> > Any help much appreciated.
> >
> > Regards
> >
> > David
>
> You don't mention any adjustable components -- you _are_ tuning this
> thing, right? Your circuit will have a loaded Q of around 5, so you
> should see a pretty broad peak, but you will have to tune out all your
> stray capacitance.
>
> --
>
> Tim Wescott
> Wescott Design Services
> http://www.wescottdesign.com
>
> Posting from Google? See http://cfaj.freeshell.org/google/
>

> "Applied Control Theory for Embedded Systems" came out in April.
> See details at http://www.wescottdesign.com/actfes/actfes.html

4729. Re: Trouble matching SA605 input at 434 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-02 23:10:58 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <60hUg.40305$rP1.26302@news-server.bigpond.net.au>
Source record: 10229

Yes, I tune the series capacitance of the tap(3-10p trimmer), the 5.6pF
is the calculated value.
The input capacitance of the IC is assumed to be around 2.6pF and I
allowed a couple of pF stray circuit capacitance.

As the match is so broad due to low Q, I would assume the tuning is not
critical and that any matching closer to the device input impedance
would show a significant improvement in sensitivity.

Does anyone know what the impedance of the SA605 is at 434 MHz?

Philips APP note AN1994 shows a table that states 1785 Ohms // 2.5 pF at
250 MHz and dropping to 588 Ohms // 2.75pF at 500 MHz. If I interpolate
the values between these points and assume the change is almost linear
then I would expect the impedance to be around 800R // 2p5 or 2.6.

I do not have a network analyser to determine the impedance.

Thanks

Regards

David

W3JDR wrote:
> Also, you don't say what the input caoacitance is. In my modeling, with an
> assumption of about 4pf for chip and strays, the voltage gain is about 9
> (19db), the resonance is a little below 400 mhz and you'd be about 10 db
> down at 434 mhz. I agree with Tim...tune it.
>
> Joe
> W3JDR
>
>
> "Tim Wescott" <tim@seemywebsite.com> wrote in message
> news:UOOdnSMe1uexobzYnZ2dnUVZ_sGdnZ2d@web-ster.com...
>> David wrote:
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>>> First I tried matching to 800R as per input impedance listed in the
>>> Philips APP note. I then noticed most applications matched to 1k5.

>>>
>>> My current circuit is C-Tap (33pF to ground and series 5p6 to inductor).
>>> 18.5nH inductor (Q = 100) across input pins 1 and 2.
>>> 10n decoupling cap from pin 2 to ground.
>>>
>>> Any help much appreciated.
>>>
>>> Regards
>>>
>>> David
>> You don't mention any adjustable components -- you _are_ tuning this
>> thing, right? Your circuit will have a loaded Q of around 5, so you
>> should see a pretty broad peak, but you will have to tune out all your
>> stray capacitance.
>>
>> --
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>
>

4730. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-03 04:23:51 UTC
From: bob_deep@yahoo.com
Message-ID: <1159849431.252394.325320@b28g2000cwb.googlegroups.com>
Source record: 10230
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

Joel Kolstad wrote:
>
> I think I'm pretty much in agreement with you... 5 WPM is not an unreasonable
> barrier to entry, and I don't particular oppose keeping it around, but I do
> think it seems awfully arbitrary, and this refelcts somewhat poorly on hams as
> a group trying to present themselves as modern and professional.
>

Well, we agree that we should keep this requirement, but I don't agree
that CW should seen as reflecting poorly on us hams. CW operation,
albeit old fashion, remains a useful skill that I think should be
encouraged. I do acknowledge that the new digital modes and computer
based CW does make CW skills less necessary, but I don't think we
should consider it old fashion or out of date.

-= Bob =-

4731. Re: Trouble matching SA605 input at 434 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-03 08:07:37 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <RRoUg.69$Ys1.793708@news.sisna.com>
Source record: 10231

Your 10 nanofarad capacitor as a bypass on the low RF input is ridiculous.
It has to have a self-resonance down in the low MHz., if not the kHz.

Use a bypass something on the order of 50 pf if a leaded capacitor, and
something like 200 pf if a chip.

Jim

"David" <dhuisman@bigpond.net.au> wrote in message
news:60hUg.40305$rP1.26302@news-server.bigpond.net.au...
> Yes, I tune the series capacitance of the tap(3-10p trimmer), the 5.6pF is
> the calculated value.
> The input capacitance of the IC is assumed to be around 2.6pF and I
> allowed a couple of pF stray circuit capacitance.
>
> As the match is so broad due to low Q, I would assume the tuning is not
> critical and that any matching closer to the device input impedance would
> show a significant improvement in sensitivity.
>
> Does anyone know what the impedance of the SA605 is at 434 MHz?
>
> Philips APP note AN1994 shows a table that states 1785 Ohms // 2.5 pF at
> 250 MHz and dropping to 588 Ohms // 2.75pF at 500 MHz. If I interpolate
> the values between these points and assume the change is almost linear
> then I would expect the impedance to be around 800R // 2p5 or 2.6.
>
> I do not have a network analyser to determine the impedance.
>
> Thanks
>
> Regards
>
> David
>
>
> W3JDR wrote:
>> Also, you don't say what the input caoacitance is. In my modeling, with
>> an
>> assumption of about 4pf for chip and strays, the voltage gain is about 9
>> (19db), the resonance is a little below 400 mhz and you'd be about 10 db
>> down at 434 mhz. I agree with Tim...tune it.
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>> Joe
>> W3JDR
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>>> Tim Wescott
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>>> "Applied Control Theory for Embedded Systems" came out in April.
>>> See details at http://www.wescottdesign.com/actfes/actfes.html
>>

4732. Re: Trouble matching SA605 input at 434 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-03 10:45:45 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <tbrUg.40616$rP1.33786@news-server.bigpond.net.au>
Source record: 10232

Jim,

I replaced the ridiculously large 10n with 200pF as suggested. Not a gnat's wisker difference in the response. Should this have some noticeable difference ?

The Philips app note AN1993 shows a 152 MHz RF receiver using even larger and more ridiculous 100nF values for the RF decoupling throughout the circuit. Why would the IC manufacturer use these values ?

Regards

David

RST Engineering wrote:
> Your 10 nanofarad capacitor as a bypass on the low RF input is ridiculous.
> It has to have a self-resonance down in the low MHz., if not the kHz.
>
> Use a bypass something on the order of 50 pf if a leaded capacitor, and
> something like 200 pf if a chip.
>
> Jim
>
>
>
>
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>> the values between these points and assume the change is almost linear
>> then I would expect the impedance to be around 800R // 2p5 or 2.6.
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>> I do not have a network analyser to determine the impedance.
>>

>> Thanks
>>
>> Regards
>>
>> David
>>
>>
>> W3JDR wrote:
>>> Also, you don't say what the input caoacitance is. In my modeling, with
>>> an
>>> assumption of about 4pf for chip and strays, the voltage gain is about 9
>>> (19db), the resonance is a little below 400 mhz and you'd be about 10 db
>>> down at 434 mhz. I agree with Tim...tune it.
>>>
>>> Joe
>>> W3JDR
>>>
>>>
>>> "Tim Wescott" <tim@seemywebsite.com> wrote in message
>>> news:UOOdnSMe1uexobzYnZ2dnUVZ_sGdnZ2d@web-ster.com...
>>>> David wrote:
>>>>
>>>>> I am having trouble matching to the input of a SA605 at 434 MHz.
>>>>>
>>>>> If I apply a sig gen directly to pin 1 via a 1n cap I get around - 95Bm
>>>>> sensitivity. I then add my match and the sensitivity drops more than
>>>>> 10dB. I am expecting 10dB increase in sensitivity when input is matched
>>>>> correctly.
>>>>>
>>>>> First I tried matching to 800R as per input impedance listed in the
>>>>> Philips APP note. I then noticed most applications matched to 1k5.
>>>>>
>>>>> My current circuit is C-Tap (33pF to ground and series 5p6 to
>>>>> inductor).
>>>>> 18.5nH inductor (Q = 100) across input pins 1 and 2.
>>>>> 10n decoupling cap from pin 2 to ground.
>>>>>
>>>>> Any help much appreciated.
>>>>>
>>>>> Regards
>>>>>
>>>>> David
>>>> You don't mention any adjustable components -- you _are_ tuning this
>>>> thing, right? Your circuit will have a loaded Q of around 5, so you
>>>> should see a pretty broad peak, but you will have to tune out all your
>>>> stray capacitance.
>>>>
>>>> --
>>>>
>>>> Tim Wescott

>>>> Wescott Design Services
>>>> http://www.wescottdesign.com
>>>>
>>>> Posting from Google? See http://cfaj.freeshell.org/google/
>>>>
>>>> "Applied Control Theory for Embedded Systems" came out in April.
>>>> See details at http://www.wescottdesign.com/actfes/actfes.html
>

4733. RF data modules

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-03 14:07:54 UTC
From: SW <SW@!aol.com>
Message-ID: <26f76$45226eba$d871df4e$21265@PRIMUS.CA>
Source record: 10233

What are some RF modules that work well to transmit serial data from a computer to another device.
Will consider homebrew circuits.

Thanks

SW

4734. Re: Trouble matching SA605 input at 434 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-03 15:23:28 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <1evUg.76$5k1.753766@news.sisna.com>
Source record: 10234

"David" <dhuisman@bigpond.net.au> wrote in message
news:tbrUg.40616$rP1.33786@news-server.bigpond.net.au...
> Jim,
>
> I replaced the ridiculously large 10n with 200pF as suggested. Not a
> gnat's wisker difference in the response. Should this have some noticeable
> difference ?

Only if the low side RF input grounding makes a bit of difference in the performance. It seems as though this device is rather numb to doing anything with the other balanced input.

>
> The Philips app note AN1993 shows a 152 MHz RF receiver using even larger
> and more ridiculous 100nF values for the RF decoupling throughout the
> circuit. Why would the IC manufacturer use these values ?

Several reasons come to mind. The aforementioned numb unused input. They found some interesting motorboating (low frequency) proclivities and started throwing capacitors at it until they found the right value. The applications engineer was two weeks out of school on his first real RF circuit.

Jim

4735. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-03 18:42:10 UTC
From: "kb9rqz-2@hotmail.com" <kb9rqz-2@hotmail.com>
Message-ID: <1159900929.982877.78090@c28g2000cwb.googlegroups.com>
Source record: 10235
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

bob_deep@yahoo.com wrote:
> Joel Kolstad wrote:
> >
> > I think I'm pretty much in agreement with you... 5 WPM is not an unreasonable
> > barrier to entry, and I don't particular oppose keeping it around, but I do
> > think it seems awfully arbitrary, and this refelcts somewhat poorly on hams as
> > a group trying to present themselves as modern and professional.
> >
>
> Well, we agree that we should keep this requirement, but I don't agree
> that CW should seen as reflecting poorly on us hams. CW operation,
> albeit old fashion, remains a useful skill that I think should be
> encouraged. I do acknowledge that the new digital modes and computer
> based CW does make CW skills less necessary, but I don't think we
> should consider it old fashion or out of date.
it is old fashioned obselete and damaging to the ARS
>
> -= Bob =-

4736. Re: Tektronix Scope Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-03 20:02:10 UTC
From: JimL <jimbethladd@aol.com>
Message-ID: <4522c416$0$3138$ec3e2dad@news.usenetmonster.com>
Source record: 10237

"JimL" <jimbethladd@aol.com> wrote in message
news:451fc696$0$4682$ec3e2dad@news.usenetmonster.com...
>I need to buy a time base plug-in for my Tek 7704 mainframe.
>
> The7B53A is described as being a "Delayed/delaying time base in one",
> while the 7B71 is a" Delaying time base".
>
> Can someone tell me the difference? Tnx, Jim.
>

Many tnx to all- I did look up the patent. I really appreciate your efforts.
I ordered a 7B53A and will see if that is adequate. Jim.

4737. Re: SMD

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-03 21:33:42 UTC
From: Dan Andersson <dan@andersson.co.uk>
Message-ID: <bJGdnbizr72nSr_YRVnyvQ@eclipse.net.uk>
Source record: 10238

tony.swanborough wrote:

> Hi all, could some kind soul please help me !!
>
> I live in the uk, looking to buy small amounts of SMD, ie
>
> Resistors/capacitors etc Local (UK) if possible !
>
> TIA
> Tony

Tony,

If I'm in a hurry, I order SMD's from Farnell.

For "planned" homebrews, I order SMD combo packs from Chinese E-Bay traders. You can find 5000 assorted and bagged resistors and 3000 ditto capacitors for less than £10 incl p&p. Look for "SMD resistors" on e-bay.

I even buy more expensive SMD'parts on E-bay and you can find real SMD bargains. Many SMD components have a "best before" date with less than a year solder warranty from the suppliers. It basically means that they doesn't guarantee the components if machine soldered. As an example, I bought 100 pcs of 33.333MHz SMD oscillators for 99 pence plus £2 p&p. That's less than 1 pence per oscillator! (plus p&p)

Guess why a lot of my designs currently are based around 33.333 MHz Epson oscillators...

Buying SMD oscillators on lower freqs are normally around £3 to £7 each.

Cheers

Dan / M0DFI

4738. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-03 23:15:13 UTC
From: U-Know-Who <no-one@nowhere.com>
Message-ID: <5aCUg.25279$DU3.9144@tornado.texas.rr.com>
Source record: 10239
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

<kb9rqz-2@hotmail.com> wrote in message
news:1159900929.982877.78090@c28g2000cwb.googlegroups.com...
>
> bob_deep@yahoo.com wrote:
>> Joel Kolstad wrote:
>> >
>> > I think I'm pretty much in agreement with you... 5 WPM is not an
>> > unreasonable
>> > barrier to entry, and I don't particular oppose keeping it around, but
>> > I do
>> > think it seems awfully arbitrary, and this refelcts somewhat poorly on
>> > hams as
>> > a group trying to present themselves as modern and professional.
>> >
>>
>> Well, we agree that we should keep this requirement, but I don't agree
>> that CW should seen as reflecting poorly on us hams. CW operation,
>> albeit old fashion, remains a useful skill that I think should be
>> encouraged. I do acknowledge that the new digital modes and computer
>> based CW does make CW skills less necessary, but I don't think we
>> should consider it old fashion or out of date.
> it is old fashioned obselete and damaging to the ARS

Not if it keeps you off HF.

4739. Re: SMD

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-03 23:27:39 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <NICUg.606$KS4.50@newsfe05.lga>
Source record: 10240

ROTFLMAO - I had to share this

I took a peek on Bay and the first interesting I ran across was from a British supplier (I'm in the U.S.) There was a link that stated that the translation was provided by eBay and might not be accurate. So I clicked on the link and read it in the original English! I'm not so sure what they translated since the word colour never appeared.

..

"Dan Andersson" <dan@andersson.co.uk> wrote in message
news:bJGdnbizr72nSr_YRVnyvQ@eclipse.net.uk...
> tony.swanborough wrote:
>
>> Hi all, could some kind soul please help me !!
>>
>> I live in the uk, looking to buy small amounts of SMD, ie
>>
>> Resistors/capacitors etc Local (UK) if possible !
>>
>> TIA
>> Tony
>
> Tony,
>
> If I'm in a hurry, I order SMD's from Farnell.
>
> For "planned" homebrews, I order SMD combo packs from Chinese E-Bay
> traders.
> You can find 5000 assorted and bagged resistors and 3000 ditto capacitors
> for less than £10 incl p&p. Look for "SMD resistors" on e-bay.

4740. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-04 01:36:45 UTC
From: Mark@kb9rqz.net
Message-ID: <n046i2tn6eil67cn8d0q4f6do782k5mi4c@4ax.com>
Source record: 10241
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

On Tue, 03 Oct 2006 23:15:13 GMT, "U-Know-Who" <no-one@nowhere.com>
wrote:

>
>Not if it keeps you off HF.
but it doesn't tom you know that
>
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4741. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-04 02:15:33 UTC
From: U-Know-Who <no-one@nowhere.com>
Message-ID: <9PEUg.1728$5o5.1317@tornado.texas.rr.com>
Source record: 10242
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

<Mark@kb9rqz.net> wrote in message
news:n046i2tn6eil67cn8d0q4f6do782k5mi4c@4ax.com...
> On Tue, 03 Oct 2006 23:15:13 GMT, "U-Know-Who" <no-one@nowhere.com>
> wrote:
>
>>
>>Not if it keeps you off HF.
> but it doesn't tom you know that
>>

BTW, you never did say what you use the AL-80 for. Keeping warm in the
winter?

4742. Re: Trouble matching SA605 input at 434 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-04 02:24:21 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1159928660.977486.271720@i3g2000cwc.googlegroups.com>
Source record: 10243

David,

http://www.geocities.com/markaren10/misc/SA605.gif

You had this in mind ??

-Mark.

David wrote:
> I am having trouble matching to the input of a SA605 at 434 MHz.
>
> If I apply a sig gen directly to pin 1 via a 1n cap I get around - 95Bm
> sensitivity. I then add my match and the sensitivity drops more than
> 10dB. I am expecting 10dB increase in sensitivity when input is matched
> correctly.
>
> First I tried matching to 800R as per input impedance listed in the
> Philips APP note. I then noticed most applications matched to 1k5.
>
> My current circuit is C-Tap (33pF to ground and series 5p6 to inductor).
> 18.5nH inductor (Q = 100) across input pins 1 and 2.
> 10n decoupling cap from pin 2 to ground.
>
> Any help much appreciated.
>
> Regards
>
> David

4743. Re: Trouble matching SA605 input at 434 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-04 03:06:33 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <ZyFUg.40975$rP1.24229@news-server.bigpond.net.au>
Source record: 10244

Mark,

Yes, that's the circuit I am having trouble with.

Regards

David

MarkAren wrote:
> David,
>
> http://www.geocities.com/markaren10/misc/SA605.gif
>
> You had this in mind ??
>
> -Mark.
>
> David wrote:
>> I am having trouble matching to the input of a SA605 at 434 MHz.
>>
>> If I apply a sig gen directly to pin 1 via a 1n cap I get around - 95Bm
>> sensitivity. I then add my match and the sensitivity drops more than
>> 10dB. I am expecting 10dB increase in sensitivity when input is matched
>> correctly.
>>
>> First I tried matching to 800R as per input impedance listed in the
>> Philips APP note. I then noticed most applications matched to 1k5.
>>
>> My current circuit is C-Tap (33pF to ground and series 5p6 to inductor).
>> 18.5nH inductor (Q = 100) across input pins 1 and 2.
>> 10n decoupling cap from pin 2 to ground.
>>
>> Any help much appreciated.
>>
>> Regards
>>
>> David
>

4744. Re: Trouble matching SA605 input at 434 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-04 03:21:55 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1159932115.903458.36920@m7g2000cwm.googlegroups.com>
Source record: 10245

David,

What type of inductor are you using ? SMT can be sensitive with
proximity issues.

Are you 100% sure that capacitor values are as you hoped - SMT can be a
pain to verify.

Note, I did drop the 33pF to 15pF to improve return loss.

The 6.5pF cap is the most sensitive of all parts in the cct.

Any chance of a photo of the input network and signal coupling ?

My current bet is an inadvertently loaded wrong value component. Been
there, done that etc.

Regards,

Mark

==========

David wrote:
> Mark,
> Yes, that's the circuit I am having trouble with.
> Regards
> David
>
> MarkAren wrote:
> > David,
> > http://www.geocities.com/markaren10/misc/SA605.gif
> > You had this in mind ??
> > Mark.
> >
> > David wrote:
> >> I am having trouble matching to the input of a SA605 at 434 MHz.
> >>
> >> If I apply a sig gen directly to pin 1 via a 1n cap I get around - 95Bm
> >> sensitivity. I then add my match and the sensitivity drops more than
> >> 10dB. I am expecting 10dB increase in sensitivity when input is matched
> >> correctly.
> >>
> >> First I tried matching to 800R as per input impedance listed in the
> >> Philips APP note. I then noticed most applications matched to 1k5.
> >>
> >> My current circuit is C-Tap (33pF to ground and series 5p6 to inductor).

> >> 18.5nH inductor (Q = 100) across input pins 1 and 2.
> >> 10n decoupling cap from pin 2 to ground.
> >>
> >> Any help much appreciated.
> >> Regards
> >> David

4745. Re: Proposal 3 (US Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-04 03:22:05 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <1159932125.628438.115220@m73g2000cwd.googlegroups.com>
Source record: 10246
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.boatanchors

U-Know-Who wrote:
> <Mark@kb9rqz.net> wrote in message
> news:n046i2tn6eil67cn8d0q4f6do782k5mi4c@4ax.com...
> > On Tue, 03 Oct 2006 23:15:13 GMT, "U-Know-Who" <no-one@nowhere.com>
> > wrote:
> >
> >>
> >>Not if it keeps you off HF.
> > but it doesn't tom you know that
> >>
>
> BTW, you never did say what you use the AL-80 for. Keeping warm in the
> winter?
i don't own one you are showing that you can't or don't read the posts
your coment very well

4746. Perspex

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-04 10:27:18 UTC
From: Martyn Preston <Martyn.Preston@pharm.ox.ac.uk>
Message-ID: <eg02a6odj1@frank-exchange-of-views.oucs.ox.ac.uk>
Source record: 10247

Does anyone know how lossy perspex is at 2.3GHz? Want to use it to support a helical antenna.

TIA - G0THY

4747. Re: Perspex

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-04 13:55:06 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2006.10.04.13.55.05.801686@oceanfree.net>
Source record: 10148

On Wed, 04 Oct 2006 11:27:18 +0100, Martyn Preston wrote:

> Does anyone know how lossy perspex is at 2.3GHz? Want to use it to support a
> helical antenna.
>
> TIA - G0THY

2.3GHz is not too far from the frequency of a microwave oven.
Zap it and you will find out. It might be a good idea to
put a cup of water in the microwave with it.

73, Ed. EI9GQ.

--
Remove 'X' to reply by e-mail
Linux 2.6.17

4748. Re: Perspex

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-04 20:03:52 UTC
From: Risto Tiilikainen <risto.tiilikainenPOISTA@luukku.comMUNIST.NOT>
Message-ID: <4524139f$0$16499$39db0f71@news.song.fi>
Source record: 10149

Martyn Preston kirjoitti:
> Does anyone know how lossy perspex is at 2.3GHz? Want to use it to support a
> helical antenna.
>
> TIA - G0THY
>
>
Hi

I wouldn't try perspex nowadays
Perspex itself is very lossy when compared to modern compounds
I think perspex absorbs easily humidity and then you may have problems.
Specially in voltage maximum points of helical.
For the same reason I don't recommend fiberglass for outdoor use.

I recommend Teflon or nylon for insulators and supports.

73, Risto OH2BT

4749. Re: Perspex

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-04 21:51:02 UTC
From: gsm@mendelson.com
Message-ID: <slrnei8amm.23q.gsm@cable.mendelson.com>
Source record: 10150

Risto Tiilikainen wrote:
> I wouldn't try perspex nowadays
> Perspex itself is very lossy when compared to modern compounds
> I think perspex absorbs easily humidity and then you may have problems.
> Specially in voltage maximum points of helical.
> For the same reason I don't recommend fiberglass for outdoor use.
>
> I recommend Teflon or nylon for insulators and supports.

I have read that toothbrush handles work very well. I'm not sure how you would use them to mount a helical antenna, but with it in front of you, it might be easier to figure out.

73,

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 Fax ONLY: 972-2-648-1443 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

4750. Re: Perspex

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-04 22:37:17 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1160001437.934976.138270@m73g2000cwd.googlegroups.com>
Source record: 10151

Wow, I'm amazed you put Teflon and nylon in the same category! There
are many types of nylon, and AFAIK, none is particularly low loss.

One reference I have suggests a dissipation factor for polymethyl
methacrylate (unadulterated "Perspex") of about .008 at 3GHz. Nylon 66
(a common formulation) seems to be about three or four times that much.
But beware that you commonly don't get "pure" plastics.

For comparison, Teflon runs more like .00015 dissipation factor at
3GHz. Pure forms of polyethylene and polystyrene are similarly low.
Polypropylene tends to be good, below .001. Polycarbonate is decent at
around .002.

Cheers,
Tom

Risto Tiilikainen wrote:
> Martyn Preston kirjoitti:
> > Does anyone know how lossy perspex is at 2.3GHz? Want to use it to support a
> > helical antenna.
> >
> > TIA - G0THY
> >
> >
> Hi
>
> I wouldn't try perspex nowadays
> Perspex itself is very lossy when compared to modern compounds
> I think perspex absorbs easily humidity and then you may have problems.
> Specially in voltage maximum points of helical.
> For the same reason I don't recommend fiberglass for outdoor use.
>
> I recommend Teflon or nylon for insulators and supports.
>
> 73, Risto OH2BT

4751. Re: Perspex

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-04 23:26:38 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12i8gpg69lmqjd5@corp.supernews.com>
Source record: 10152

K7ITM wrote:
> Wow, I'm amazed you put Teflon and nylon in the same category! There
> are many types of nylon, and AFAIK, none is particularly low loss.
>
> One reference I have suggests a dissipation factor for polymethyl
> methacrylate (unadulterated "Perspex") of about .008 at 3GHz. Nylon 66
> (a common formulation) seems to be about three or four times that much.
> But beware that you commonly don't get "pure" plastics.
>
> For comparison, Teflon runs more like .00015 dissipation factor at
> 3GHz. Pure forms of polyethylene and polystyrene are similarly low.
> Polypropylene tends to be good, below .001. Polycarbonate is decent at
> around .002.

But be sure to pay attention to UV susceptibility if your antenna is exposed to the sun. Many plastics deteriorate quickly in sunlight, and polypropylene is particularly bad. And of course you might need to consider mechanical properties. Polystyrene is brittle and breaks quite easily. Polyethylene and Teflon are soft, and Teflon cold flows. (I don't know about polyethylene but suspect it might also.) Polycarbonate is tough and nice stuff mechanically, but don't know about its UV resistance.

Roy Lewallen, W7EL

4752. Re: Perspex

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-05 00:16:18 UTC
From: jawod <jawod@fuse.net>
Message-ID: <45244ED2.2040408@fuse.net>
Source record: 10153

Roy Lewallen wrote:
> K7ITM wrote:
>
>> Wow, I'm amazed you put Teflon and nylon in the same category! There
>> are many types of nylon, and AFAIK, none is particularly low loss.
>>
>> One reference I have suggests a dissipation factor for polymethyl
>> methacrylate (unadulterated "Perspex") of about .008 at 3GHz. Nylon 66
>> (a common formulation) seems to be about three or four times that much.
>> But beware that you commonly don't get "pure" plastics.
>>
>> For comparison, Teflon runs more like .00015 dissipation factor at
>> 3GHz. Pure forms of polyethylene and polystyrene are similarly low.
>> Polypropylene tends to be good, below .001. Polycarbonate is decent at
>> around .002.
>
>
> But be sure to pay attention to UV susceptibility if your antenna is
> exposed to the sun. Many plastics deteriorate quickly in sunlight, and
> polypropylene is particularly bad. And of course you might need to
> consider mechanical properties. Polystyrene is brittle and breaks quite
> easily. Polyethylene and Teflon are soft, and Teflon cold flows. (I
> don't know about polyethylene but suspect it might also.) Polycarbonate
> is tough and nice stuff mechanically, but don't know about its UV
> resistance.
>
> Roy Lewallen, W7EL
I can speak to polycarbonate in a very small way: PCB ophthalmic lenses
are treated to provide excellent UV protection. But my understanding is
that pure PCB is not particularly UV resistant. Without a coating
(which provides the UV protection) it scratches very easily, so in that
sense, it is a soft material.

John
AB8O

4753. Re: Perspex

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-05 00:44:57 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1160009097.695738.17420@b28g2000cwb.googlegroups.com>
Source record: 10154

Roy Lewallen wrote:
> K7ITM wrote:
> > Wow, I'm amazed you put Teflon and nylon in the same category! There
> > are many types of nylon, and AFAIK, none is particularly low loss.
> >
> > One reference I have suggests a dissipation factor for polymethyl
> > methacrylate (unadulterated "Perspex") of about .008 at 3GHz. Nylon 66
> > (a common formulation) seems to be about three or four times that much.
> > But beware that you commonly don't get "pure" plastics.
> >
> > For comparison, Teflon runs more like .00015 dissipation factor at
> > 3GHz. Pure forms of polyethylene and polystyrene are similarly low.
> > Polypropylene tends to be good, below .001. Polycarbonate is decent at
> > around .002.
>
> But be sure to pay attention to UV susceptibility if your antenna is
> exposed to the sun. Many plastics deteriorate quickly in sunlight, and
> polypropylene is particularly bad. And of course you might need to
> consider mechanical properties. Polystyrene is brittle and breaks quite
> easily. Polyethylene and Teflon are soft, and Teflon cold flows. (I
> don't know about polyethylene but suspect it might also.) Polycarbonate
> is tough and nice stuff mechanically, but don't know about its UV
> resistance.

Polycarbonate sheets in many sizes are found in do-it-
yourself stores as window glass replacement. While
expensive, most of those brands are marked "sunlight
resistant."

Lowes, Home Depot, OSH all carry polycarbonate "window
replacement" pieces here in southern California.

LenAnderson@ieee.org

4754. Re: Perspex

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-05 02:35:06 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <6nr8i215r87fck45ebl138a7rmopv9kiov@4ax.com>
Source record: 10155

On 4 Oct 2006 17:44:57 -0700, "LenAnderson@ieee.org"
<LenAnderson@ieee.org> wrote:

>
>Roy Lewallen wrote:
>> K7ITM wrote:
>> > Wow, I'm amazed you put Teflon and nylon in the same category! There
>> > are many types of nylon, and AFAIK, none is particularly low loss.
>> >
>> > One reference I have suggests a dissipation factor for polymethyl
>> > methacrylate (unadulterated "Perspex") of about .008 at 3GHz. Nylon 66
>> > (a common formulation) seems to be about three or four times that much.
>> > But beware that you commonly don't get "pure" plastics.
>> >
>> > For comparison, Teflon runs more like .00015 dissipation factor at
>> > 3GHz. Pure forms of polyethylene and polystyrene are similarly low.
>> > Polypropylene tends to be good, below .001. Polycarbonate is decent at
>> > around .002.
>>
>> But be sure to pay attention to UV susceptibility if your antenna is
>> exposed to the sun. Many plastics deteriorate quickly in sunlight, and
>> polypropylene is particularly bad. And of course you might need to
>> consider mechanical properties. Polystyrene is brittle and breaks quite
>> easily. Polyethylene and Teflon are soft, and Teflon cold flows. (I
>> don't know about polyethylene but suspect it might also.) Polycarbonate
>> is tough and nice stuff mechanically, but don't know about its UV
>> resistance.
>
> Polycarbonate sheets in many sizes are found in do-it-
> yourself stores as window glass replacement. While
> expensive, most of those brands are marked "sunlight
> resistant."
>
> Lowes, Home Depot, OSH all carry polycarbonate "window
> replacement" pieces here in southern California.

Those materials are apparently coated for UV protection. I put some
in the windows of a playhouse I built for my granddaughter and the
protective film was labeled as to which side should be out.

4755. Re: radiomart descriptions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-05 05:12:36 UTC
From: Matt Williamson <mdj_williamson@hotmail.com>
Message-ID: <8v0Vg.38819$Lb5.23551@edtnps89>
Source record: 10156
Cross-posted to: rec.ham-radio.misc,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.swap,rec.radio.boatanchors,rec.radio.shortwave

A private auction doesn't limit who can bid on the item, it just hides the user ids of the people who are bidding on it. I bought an Icom PCR-100 from him a while ago, and while I am quite happy with it I noticed he had a few more for sale that where owned by the same guy with a 486 who was selling it because he didn't know how to use it. However, there was an issue that came up in the sale and he handled it very well.

$0.02

Matt

"Mike" <no@where.man> wrote in message
news:12fej93b8d99jc5@news.supernews.com...
> "Chas" <wg2a@mhtc.net> wrote in message
> news:9-ydna4LspfC22rZnZ2dnUVZ_oydnZ2d@bright.net...
>> Because before his auctions went "Private", you could see
>> "gottahaveit1995
>> bidding on numerous things of his. Ebays use of "Private" auctions
>> mystifies
>> me, it only serves to protect questionable dealers, anyone else have more
>> insight?
>
> The purpose of Private auctions is just that - private. As in not public.
>
> For example, where I work, we have a yearly "sell off some old computers
> to the employees" thing. We have used eBay private auctions for this.
> Only our employees can bid - not the general public.
>
> Mike
>
>

4756. Re: RF data modules

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-05 05:45:49 UTC
From: SW <SW@!aol.com>
Message-ID: <e33d3$45249c0d$d871df4e$24324@PRIMUS.CA>
Source record: 10157

How about the Parallax modules at 433 MHz?

> What are some RF modules that work well to transmit serial data from a
> computer to another device.
> Will consider homebrew circuits.
>
> Thanks
>
> SW
>

4757. Re: Perspex

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-05 07:27:23 UTC
From: Martyn Preston <Martyn.Preston@pharm.ox.ac.uk>
Message-ID: <eg2c4thna1@frank-exchange-of-views.oucs.ox.ac.uk>
Source record: 10158

thanks for the replies and advice- am going to try the microwave oven test.

martyn g0thy

4758. Re: radiomart descriptions

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-05 13:02:41 UTC
From: Jim Hackett <hackman@pcpeople.com>
Message-ID: <Rn7Vg.1831$NE6.1457@newssvr11.news.prodigy.com>
Source record: 10159
Cross-posted to: rec.ham-radio.misc,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.swap,rec.radio.boatanchors,rec.radio.shortwave

I had a good experience with him too but people are ONLY interested in the deals that went sour...

"Matt Williamson" <mdj_williamson@hotmail.com> wrote in message news:8v0Vg.38819$Lb5.23551@edtnps89...
>A private auction doesn't limit who can bid on the item, it just hides the
>user ids of the people who are bidding on it. I bought an Icom PCR-100
>from him a while ago, and while I am quite happy with it I noticed he had a
>few more for sale that where owned by the same guy with a 486 who was
>selling it because he didn't know how to use it. However, there was an
>issue that came up in the sale and he handled it very well.
>
> $0.02
>
> Matt
>
>
> "Mike" <no@where.man> wrote in message
> news:12fej93b8d99jc5@news.supernews.com...
>> "Chas" <wg2a@mhtc.net> wrote in message
>> news:9-ydna4LspfC22rZnZ2dnUVZ_oydnZ2d@bright.net...
>>> Because before his auctions went "Private", you could see
>>> "gottahaveit1995
>>> bidding on numerous things of his. Ebays use of "Private" auctions
>>> mystifies
>>> me, it only serves to protect questionable dealers, anyone else have
>>> more
>>> insight?
>>
>> The purpose of Private auctions is just that - private. As in not
>> public.
>>
>> For example, where I work, we have a yearly "sell off some old computers
>> to the employees" thing. We have used eBay private auctions for this.
>> Only our employees can bid - not the general public.
>>
>> Mike
>>
>>
>
>

4759. Re: Perspex

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-05 13:49:28 UTC
From: cbx <nospam@nospam.com>
Message-ID: <ua3ai2lnicv3usrq0235521c2qvcn45pcg@4ax.com>
Source record: 10160

Report back please...

On Thu, 5 Oct 2006 08:27:23 +0100, "Martyn Preston"
<Martyn.Preston@pharm.ox.ac.uk> wrote:

>
>thanks for the replies and advice- am going to try the microwave oven test.
>
>martyn g0thy
>

4760. PSD on a spectrum analyzer.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-05 15:36:21 UTC
From: "radiofreeq@gmail.com" <radiofreeq@gmail.com>
Message-ID: <1160062581.342218.315870@m73g2000cwd.googlegroups.com>
Source record: 10161

Hello,
I think what we read on a spectrum analyzer is dBm for the specified
range.

dBm/MHz is the PSD.

Lets say if the signal bandwidth is occupying 500Mhz (UWB) and has a
PSD of -30dBm, then what is my power in the entire channel?

(-30dBm)*500 = (1microW)*500 = 500 microWatts = -3dBm

So do I see the -3dBm signal level on the spectrum analyzer in the
whole bandwidth?

Please correct me if I am wrong.

Thanks.

4761. Re: PSD on a spectrum analyzer.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-05 16:39:21 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1160066361.921060.189680@k70g2000cwa.googlegroups.com>
Source record: 10162

A spectrum analyzer has filters with particular bandwidths. What you see displayed is the power passed by the filter. If you have the analyzer set for a 5kHz resolution bandwidth, what you see, then, is the power in (nominally) 5kHz of spectrum. To make things accurate, you need to understand the shape of the filter, as well. In addition, you can't necessarily use that number to find power spectral density in other than a gross sense unless you know that the power is distributed more or less evenly across that piece of spectrum. That is, if you use 5kHz resolution bandwidth and the signal has 99% of its power in a 1Hz segment within that 5kHz, the signal's actual power spectral density (at its center frequency) is much higher than the indicated power per 5kHz.

Many modern spectrum analyzers will display power spectral density directly for you, taking into account the filter shapes and such. Also, beware that resolution bandwidth and video bandwidth (on analyzers that have both) are not the same thing.

Cheers,
Tom

radiofreeq@gmail.com wrote:
> Hello,
> I think what we read on a spectrum analyzer is dBm for the specified
> range.
>
> dBm/MHz is the PSD.
>
> Lets say if the signal bandwidth is occupying 500Mhz (UWB) and has a
> PSD of -30dBm, then what is my power in the entire channel?
>
> (-30dBm)*500 = (1microW)*500 = 500 microWatts = -3dBm
>
> So do I see the -3dBm signal level on the spectrum analyzer in the
> whole bandwidth?
>
> Please correct me if I am wrong.
>
>
> Thanks.

4762. GE paging transmitter 4CX250 question.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-05 17:00:51 UTC
From: hexter@blazenet.net
Message-ID: <y6mdnQ6Jtbrep7jYnZ2dnUVZ_o2dnZ2d@suscom.com>
Source record: 10163

Hi folks,

I am responsible for the care and feeding of our GE pager transmitter on 150mhz vhf frequency range. I don't have the model number here as I am at home at the moment. It uses a single 4CX250 in the cavity final.

The problem is this, 10 watts output with 10 watts input, Plate voltage is 2100, plate current is very low at 100ma (normal is 270) and the screen voltage is around 60 to 80 volts.

The screen is supplied through an 80k resistor from the 2100 volt supply and has variable resistors to ground to set the actual screen operating point. I have placed as much as 500 volts on the screen circuit externally with the tube removed to check the bypass caps and they seem fine. They withstand the 500vdc without breaking down. The tube is good, we tried it in another cavity (our spare amplifier). The plate circuit is good also. At first I thought I had lost a plate choke or connection causing the screen to draw excess current.

I know the screen is drawing excess current causing the screen voltage to fall off. The control grid current looks normal and behaves normally with tuning controls. I don't get it?? How can I have excess screen current and yet have the low plate current? The tank circuit seems normal, the tuning controls appear to work properly, in fact every once in a while the unit will work perfect for a minute or two making 250 watts output, then it goes back to acting weird again.

Anyone ever have a GE vhf amplifier do this? Thanks!!

4763. Re: PSD on a spectrum analyzer.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-05 20:45:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12iarnp3a5pekb8@corp.supernews.com>
Source record: 10164

To add to what Tom wrote,

Ordinary spectrum analyzers sweep the filter across the band of interest, so what you see is not only the power in that filter bandwidth, but the power that's at each frequency at the moment the filter is there. Movement of the filter frequency constitutes modulation of the observed signal, which in itself creates sidebands. So what you see on a spectrum analyzer is heavily influenced by the relationship between the nature of the modulation causing the bandwidth spreading and the sweep rate of the analyzer. With some broadband signals, you can get vastly different displays by changing the resolution bandwidth and sweep rate, or with different filter shapes.

This is covered in detail in _Modern Spectrum Analyzer Theory and Applications_ by Morris Engelson (Artech House, 1984). I highly recommend it to anyone needing to measure and interpret complex waveforms on a spectrum analyzer.

Roy Lewallen, W7EL

K7ITM wrote:
> A spectrum analyzer has filters with particular bandwidths. What you
> see displayed is the power passed by the filter. If you have the
> analyzer set for a 5kHz resolution bandwidth, what you see, then, is
> the power in (nominally) 5kHz of spectrum. To make things accurate,
> you need to understand the shape of the filter, as well. In addition,
> you can't necessarily use that number to find power spectral density in
> other than a gross sense unless you know that the power is distributed
> more or less evenly across that piece of spectrum. That is, if you use
> 5kHz resolution bandwidth and the signal has 99% of its power in a 1Hz
> segment within that 5kHz, the signal's actual power spectral density
> (at its center frequency) is much higher than the indicated power per
> 5kHz.
>
> Many modern spectrum analyzers will display power spectral density
> directly for you, taking into account the filter shapes and such.
> Also, beware that resolution bandwidth and video bandwidth (on
> analyzers that have both) are not the same thing.
>
> Cheers,
> Tom
>
> radiofreeq@gmail.com wrote:
>> Hello,
>> I think what we read on a spectrum analyzer is dBm for the specified

>> range.
>>
>> dBm/MHz is the PSD.
>>
>> Lets say if the signal bandwidth is occupying 500Mhz (UWB) and has a
>> PSD of -30dBm, then what is my power in the entire channel?
>>
>> (-30dBm)*500 = (1microW)*500 = 500 microWatts = -3dBm
>>
>> So do I see the -3dBm signal level on the spectrum analyzer in the
>> whole bandwidth?
>>
>> Please correct me if I am wrong.
>>
>>
>> Thanks.
>

4764. Re: Perspex

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-05 21:38:22 UTC
From: Risto Tiilikainen <risto.tiilikainenPOISTA@luukku.comMUNIST.NOT>
Message-ID: <45257b42$0$16504$39db0f71@news.song.fi>
Source record: 10165

Martyn Preston kirjoitti:
> thanks for the replies and advice- am going to try the microwave oven test.
>
> martyn g0thy
>
>
Hi

Before you test perspex immerse the test piece in water for some days.
Maybe this simulates rainy days.

73, Risto OH2BT

4765. Re: Help calibrating a noise source

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-05 23:19:16 UTC
From: Chris Jones <lugnut808@nospam.yahoo.com>
Message-ID: <12ib16797jc6318@corp.supernews.com>
Source record: 10166

Gary, WB9JPS wrote:

> I built a noise source as described by Bill Sabin, W0IYH in QST (1995)
> and EMRFD. Works fine, but now it's time for calibration. Chatting with
> Bill, he reinforces the notion that the best way to go is comparison
> with another calibrated source, or a direct measurement with a
> calibrated noise figure test set. NoiseCom used to provide this service
> to hams for <$50, but now they claim they have dropped that offer (it's
> about $600, now). So my question is, is there anyone in the SF Bay
> Area (I live in Livermore) who might be able to help? If someone owns a
> source or test set, perhaps we could get together. I'm open to other
> suggestions, too.
>
> FYI, this is primarily for testing HF rcvr performance. I'm building an
> R2-style DC rcvr, and it's turned into a nice research and education
> project, so I go a bit overboard sometimes, but it sure is fun. I'm
> also using an IQPro DDS VFO. I wrote a couple reports on its
> performance that are up on the AA0ZZ website.
>
> This is my first post to this group. There seem to be a lot of talented
> folks lurking out there... Thanks in advance for any help.
>
> 73,
> Gary, WB9JPS

For very low noise frequencies, perhaps you could use a pseudo-random sequence generator made from fast logic clocked at say a hundred MHz, and calculate what the "noise" power spectral density in the output signal is. My only other suggestion is if you can make a 50 Ohm resistive terminator on the end a teflon cable that will go into an oven, then you can just measure the noise temperature directly... as long as you don't want an ENR over 3dB.

Chris

4766. Re: PSD on a spectrum analyzer.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 01:24:55 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12ibc3e3ov1nr10@corp.supernews.com>
Source record: 10167

Roy,

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:12iarnp3a5pekb8@corp.supernews.com...
> This is covered in detail in _Modern Spectrum Analyzer Theory and
> Applications_ by Morris Engelson (Artech House, 1984).

Does Engelson's idea of "modern" include digitizing spectrum analyzers, which have already taken over most of the mid- to high-end of test equipment and -- as with digital scopes -- will most likely soon be in all but the lowest of the low-end of instruments?

Thanks,
---Joel

4767. Re: GE paging transmitter 4CX250 question.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 01:25:20 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1160097920.023089.257070@b28g2000cwb.googlegroups.com>
Source record: 10168

Hi,

If you connect the 80k Screen resistor to ground via an ammeter, how much current do you see ? I would expect 26mA.

Are you sure that there arn't any shunt regulators on the screen supply ? Zeners, or an active regulator ? I have never heard of screen to HT without a shunt regulator before...

Regards,

Mark

Gudmundur wrote:
> Hi folks,
>
> I am responsible for the care and feeding of our GE pager transmitter
> on 150mhz vhf frequency range. I don't have the model number here as
> I am at home at the moment. It uses a single 4CX250 in the cavity final.
>
> The problem is this, 10 watts output with 10 watts input, Plate
> voltage is 2100, plate current is very low at 100ma (normal is 270)
> and the screen voltage is around 60 to 80 volts.
>
> The screen is supplied through an 80k resistor from the 2100 volt
> supply and has variable resistors to ground to set the actual screen
> operating point. I have placed as much as 500 volts on the screen
> circuit externally with the tube removed to check the bypass caps and
> they seem fine. They withstand the 500vdc without breaking down.
> The tube is good, we tried it in another cavity (our spare amplifier).
> The plate circuit is good also. At first I thought I had lost a plate
> choke or connection causing the screen to draw excess current.
>
> I know the screen is drawing excess current causing the screen
> voltage to fall off. The control grid current looks normal and
> behaves normally with tuning controls. I don't get it?? How can
> I have excess screen current and yet have the low plate current?
> The tank circuit seems normal, the tuning controls appear to work
> properly, in fact every once in a while the unit will work perfect
> for a minute or two making 250 watts output, then it goes back to
> acting weird again.
>
> Anyone ever have a GE vhf amplifier do this? Thanks!!

4768. New to Ham

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 01:39:12 UTC
From: Ed Byars <byars_e@bellsouth.net>
Message-ID: <1160098752.441683.304190@c28g2000cwb.googlegroups.com>
Source record: 10169

I am going to buy a radio that I hope will last me many years. I want to start with a mobile that will also serve as a base station.I am looking at a YAESU FT-857D.

Any comments on the pros or cons of this as a beginner radio that can stay with me as I develop my skills?

4769. Re: PSD on a spectrum analyzer.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 02:46:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12ibgsn5ll1qt7d@corp.supernews.com>
Source record: 10170

Joel Kolstad wrote:
> Roy,
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:12iarnp3a5pekb8@corp.supernews.com...
>> This is covered in detail in _Modern Spectrum Analyzer Theory and
>> Applications_ by Morris Engelson (Artech House, 1984).
>
> Does Engelson's idea of "modern" include digitizing spectrum analyzers, which
> have already taken over most of the mid- to high-end of test equipment and --
> as with digital scopes -- will most likely soon be in all but the lowest of
> the low-end of instruments?

No, the book was written before those came about. I fudged a little by qualifying my posting with "conventional" spectrum analyzer to exclude newer technologies, but it sounds like "conventional" is rapidly advancing to become the newer types.

I got out of the SA development world just as digital techniques were beginning to develop -- my last patent (# 5,629,703), in fact, dealt with a way of reducing distortion in an A/D converter intended for use in a SA-like instrument. At that time, we were anticipating doing a conventional sweeping down-conversion, then digitizing it at a 25 MHz IF. Predictably, the digitization point has been moving toward the front of the instrument since then.

I haven't followed the technology since, but I'm sure the new ones use sampling techniques combined with an FFT, which is another way of imperfectly representing what the real spectrum is like. (Actually, you can never perfectly represent the spectrum of a real waveform, because any spectrum which is finite in frequency span has to have existed for an infinite time. Any modulated waveform is way outside this category.) Sampling produces its own, different, sorts of artifacts which are different from the ones produced by sweeping, although there are some similarities. You have to be at least as careful, and maybe more so, in interpreting a sampled waveform as one which is from a swept filter.

I'd be surprised if someone hasn't written an equivalent book to cover the new type instruments, although a lot of the material in Morris' books is still valid and teaches a lot about the nature of spectra. Morris was the driving force behind Tektronix's entry into the spectrum analyzer market, and the group's chief engineer and architect for a long time. He'd retired by the time I joined the group, and I only met him when he taught a couple of one-week courses based on his books. He's truly one of the experts in the field.

Roy Lewallen, W7EL

4770. Re: MFJ-1278 software

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 04:33:21 UTC
From: Kerry Miller <kmiller01at@ticnet.com>
Message-ID: <l0lVg.8624$Go3.2945@dukeread05>
Source record: 10171

Thanks, that might be it, I'll check into it. I had the old DOS
version, it worked ok but had a very strange copy protection scheme that
made it hard to use.

Thanks,
Kerry, WD5ABC

Scott wrote:
> A bit expensive, but is this what you are looking for?
>
> http://www.mfjenterprises.com/products.php?prodid=MFJ-1289W
>
> It says it is for Windows and works with the 1278 (as well as some others)
>
> Scott
> N0EDV
>
> Kerry Miller wrote:
>
>> Doug Smith W9WI wrote:
>>
>>> Kerry Miller wrote:
>>>
>>>> I've been off the air for several years and am getting back on
>>>> finally. I have an MFJ-1278B TNC and have used it with a normal
>>>> terminal program on Windows (hyperterm) and Linux (minicom) but
>>>> don't have any software anymore that will run on XP or Linux. Is
>>>> there any software out there that supports the other modes this TNC
>>>> will do like wefax and sstv? I have used it for rtty, cw and packet
>>>> but don't have anything that will work with the graphical modes.
>>>>
>>>> Any suggestions? Will any of the sound card software work with a
>>>> TNC instead of a soundcard?
>>>
>>>
>>> I bought one of these some years back. I made the same search you
>>> did and came up empty-handed. I've been happy with Baudot and VHF
>>> packet so never really got too serious about the other modes.
>>>
>>> I did hook up the accessory audio I/O on my rig to the soundcard in
>>> the computer, with the intent of making unattended recordings (for AM
>>> BCB DXing - works great!) and using the computer as a voice keyer.
>>> Turns out the same connections are appropriate for PSK31 and other
>>> soundcard modes. Very simple (one transistor, one resistor) serial
>>> port interfaces are possible to let the computer PTT the radio, or

>>> you can even buy one preassembled, and if you don't have a soundcard
>>> they're pretty cheap.
>>>
>>> I still use the 1278 for Baudot.
>>
>>
>> Thanks, that's what I was afraid of. I, too, use it for rtty, packet,
>> amtor, pactor, etc. but I was looking for a way to use the fax and
>> sstv modes. It sounds like I might be out of luck, maybe I can find a
>> sound card program to do those modes. I guess worst case I could find
>> my old software and load up dos on an old machine if I can still find
>> it all. MFJ doesn't seem to support it anymore, they don't seem to
>> have any windows software for it.
>>
>> Thanks,
>> Kerry, WD5ABC

4771. Re: New to Ham

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 10:59:29 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <5dydndiwfsmOqrvYnZ2dnUVZ_u-dnZ2d@bright.net>
Source record: 10172

I personally love my FT-857. Mine is the original model, not the "D" model, but I modified it for full transmit (I use it with transverters I build to get on other bands...right now I have transverters for 222 and 902) so it should work on the newer 60M band but I haven't tried it there.

It is a very small rig with pretty big features! When I ordered mine, they threw in the DSP board. I've never had a rig with DSP, but it sure does work nice!

I don't think you'd do much better for an all around rig (starter or advanced) for the money! Hopefully, others will chime in here as well.

You didn't mention what license class you have, but the rig would be great for any class. It has 100 Watts out on HF and 6M, 50W on 2M and 20W on 430. My only wish is that they would have built 222 in as well, but I built a really simple transverter for 222 (designed by W1GHZ... http://www.w1ghz.org)...I use mine at home, portable and mobile. No problems and I've had it for about 3 years now.

Happy hammin' !!!

Scott
N0EDV

Ed Byars wrote:
> I am going to buy a radio that I hope will last me many years. I want
> to start with a mobile that will also serve as a base station.I am
> looking at a YAESU FT-857D.
>
> Any comments on the pros or cons of this as a beginner radio that can
> stay with me as I develop my skills?
>

4772. Re: New to Ham

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 13:07:32 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <eg5kekfkj2@puck.litech.org>
Source record: 10173

On 5 Oct 2006 18:39:12 -0700, Ed Byars <byars_e@bellsouth.net> wrote in
<1160098752.441683.304190@c28g2000cwb.googlegroups.com>:
> I am going to buy a radio that I hope will last me many years. I want
> to start with a mobile that will also serve as a base station.I am
> looking at a YAESU FT-857D.

> Any comments on the pros or cons of this as a beginner radio that can
> stay with me as I develop my skills?

I really like my FT-857, and would buy another to put in the other car if
I had the cash to spare. Be sure to buy the separation kit and put the
control panel where you can see it without having to divert your eyes from
the road, and give *serious* thought to the fancy handmike with all the
controls on it except Squelch.

The 857's big brother, the FT-857, makes a good shack rig, too, and the two
radios use the same programming software, so that you can have the same
memory settings on both.

The 857 has a nice, sensitive receiver, and I've worked Italy, Germany,
Hong Kong and Taiwan mobile from central Oklahoma. It should really shine
when the sunspot cycle gets a bit farther away from the minimum.

But it's not really homebrew.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

4773. Foxhunting controller/transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 13:13:41 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <eg5kq5fkj3@puck.litech.org>
Source record: 10174

Anyone got pointers to a good *and* inexpensive 2m FM foxhunting xmtr with integrated controller? Ramsey used to make just exactly what I want, and so (of course) they've discontinued it.

I'd like it to do a (programmable) CW ID, with a programmable delay from a minute or so up to 30 minutes, in roughly 1-minute steps. Xtal control is OK, but a good, stable VFO (DDS or DDS + PLL, rather than PLL alone) would be better. Settable power level would be good, too, and I can do with max power about 1 W.

Thanks and 73, de

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

4774. Re: New to Ham

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 13:15:06 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <eg5ksqfkj4@puck.litech.org>
Source record: 10175

On 5 Oct 2006 18:39:12 -0700, Ed Byars <byars_e@bellsouth.net> wrote in
<1160098752.441683.304190@c28g2000cwb.googlegroups.com>:
> I am going to buy a radio that I hope will last me many years. I want
> to start with a mobile that will also serve as a base station.I am
> looking at a YAESU FT-857D.

> Any comments on the pros or cons of this as a beginner radio that can
> stay with me as I develop my skills?

I really like my FT-857, and would buy another to put in the other car if
I had the cash to spare. Be sure to buy the separation kit and put the
control panel where you can see it without having to divert your eyes from
the road, and give *serious* thought to the fancy handmike with all the
controls on it except Squelch.

The 857's big brother, the FT-897, makes a good shack rig, too, and the two
radios use the same programming software, so that you can have the same
memory settings on both.

The 857 has a nice, sensitive receiver, and I've worked Italy, Germany,
Hong Kong and Taiwan mobile from central Oklahoma. It should really shine
when the sunspot cycle gets a bit farther away from the minimum.

But it's not really homebrew.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

4775. Re: Foxhunting controller/transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 13:35:30 UTC
From: Yuri Blanarovich <K3BU@optonline.net>
Message-ID: <PYsVg.73$JI6.13@newsfe08.lga>
Source record: 10176

In absence of dedicated controller, you could use one of the memory keyers, AEA comes to mind. They have beacon mode, where you can program message and set the repetition time.

73

"Mike Andrews" <mikea@mikea.ath.cx> wrote in message news:eg5kq5fkj3@puck.litech.org...
> Anyone got pointers to a good *and* inexpensive 2m FM foxhunting xmtr
> with integrated controller? Ramsey used to make just exactly what I
> want, and so (of course) they've discontinued it.
>
> I'd like it to do a (programmable) CW ID, with a programmable delay
> from a minute or so up to 30 minutes, in roughly 1-minute steps. Xtal
> control is OK, but a good, stable VFO (DDS or DDS + PLL, rather than
> PLL alone) would be better. Settable power level would be good, too,
> and I can do with max power about 1 W.
>
> Thanks and 73, de
>
> --
> Mike Andrews, W5EGO
> mikea@mikea.ath.cx
> Tired old sysadmin

4776. Re: Foxhunting controller/transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 13:44:40 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <eg5mk8fkj5@puck.litech.org>
Source record: 10177

On Fri, 6 Oct 2006 09:35:30 -0400, Yuri Blanarovich <K3BU@optonline.net> wrote in
<PYsVg.73$Jl6.13@newsfe08.lga>:
> In absence of dedicated controller, you could use one of the memory keyers,
> AEA comes to mind. They have beacon mode, where you can program message and
> set the repetition time.

> 73

> "Mike Andrews" <mikea@mikea.ath.cx> wrote in message
> news:eg5kq5fkj3@puck.litech.org...
>> Anyone got pointers to a good *and* inexpensive 2m FM foxhunting xmtr
>> with integrated controller? Ramsey used to make just exactly what I
>> want, and so (of course) they've discontinued it.
>>
>> I'd like it to do a (programmable) CW ID, with a programmable delay
>> from a minute or so up to 30 minutes, in roughly 1-minute steps. Xtal
>> control is OK, but a good, stable VFO (DDS or DDS + PLL, rather than
>> PLL alone) would be better. Settable power level would be good, too,
>> and I can do with max power about 1 W.

Thanks, Yuri. If nothing else comes up, I may go to that, or roll my
own.

I'm looking for something that doesn't involve using an HT. I'd lots
rather use the HT on the fox hunt, and not risk having it stolen.
Losing a transmitter/controller would chap me considerably, but losing
my HT would be _bad_.

If I wind up doing the full-tilt-boogie 5-transmitter foxhunt, I'd
really prefer not to buy 4 more HTs, for that matter. 5 ammo cans,
each with a transmitter/controller and a battery inside and a BNC or
SMA jack through the lid, would be a lot more affordable.

73, de

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

4777. Re: Foxhunting controller/transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 14:18:59 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <452665CC.6000608@invalid.invalid>
Source record: 10178

Mike Andrews wrote:
> I'm looking for something that doesn't involve using an HT. I'd lots
> rather use the HT on the fox hunt, and not risk having it stolen.
> Losing a transmitter/controller would chap me considerably, but losing
> my HT would be _bad_.

I would think you could get *used* HTs pretty cheap.

For that service, you don't need fancy scanning features etc. --
something like an old IC-2AT would do fine - and since you're going to
need to power the keyer anyway you don't really need a workable battery
with the HT.

I would think you could find something useful for less than the cost of
a new transmitter kit or the parts to build one.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

4778. F.A. LAST DAY HOMEBREW 10M FM XCVR

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 14:21:03 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <jDtVg.32$2l5.28@trnddc07>
Source record: 10179

http://electronics.search.ebay.com/10m-fm_Radios-CB-Ham-Shortwave_W0QQcatrefZC6QQcoactionZcompareQQcoentrypageZsearchQQcopagenumZ1QQfposZ28736QQfromZR10QQfsooZ2QQfsopZ2QQftrtZ1QQftrvZ1QQsacatZ1500QQsadisZ200QQsargnZQ2d1QQsaslcZ2QQsbrftogZ1QQsofocusZunknown

4779. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 15:24:40 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <452678b0$0$30584$9b4e6d93@newsspool4.arcor-online.net>
Source record: 10181

You can use ferrit antenna rods. That works for receivers very fine in VLF band and for transmitters too - as long as the ferrit won't go into saturation.
That is a magnetic antenna and it is much shorter than the equivalent mentioned.

- Henry

"Paul Keinanen" <keinanen@sci.fi> schrieb im Newsbeitrag news:pi4sh2l4tar5e46m0872nhadvfcsuif3mg@4ax.com...
> On Fri, 29 Sep 2006 17:13:28 -0700, "Joel Kolstad"
> <JKolstad71HatesSpam@yahoo.com> wrote:
>
> >No. The problem is that wavelength of a, say, 10kHz signal is 3km in free
> >space.
>
> This must be a typo, since the free space wavelength at 10 kHz is 30
> km.
>
> Paul OH3LWR
>

4780. Re: GE paging transmitter 4CX250 question.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 15:35:48 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <t9tci297rjlek5n42bvah61k492j56qvsu@4ax.com>
Source record: 10180

Hi,

> I know the screen is drawing excess current causing the screen
>voltage to fall off. The control grid current looks normal and
>behaves normally with tuning controls. I don't get it?? How can
>I have excess screen current and yet have the low plate current?
>The tank circuit seems normal, the tuning controls appear to work
>properly, in fact every once in a while the unit will work perfect
>for a minute or two making 250 watts output, then it goes back to
>acting weird again.

I would say that the screen current is high because the plate voltage is swinging down too far (i.e. there is little or no loading on the tank circuit or it has become mis-tuned). One possibility, if it has one, is an open plate blocking capacitor.

BTW, the screen current on that series of tubes is often used as a tuning aid; some metering circuits even having a negative screen current position for when the grid gets too hot and emits electrons.

Cheers - Joe, G3LLV

4781. Re: Foxhunting controller/transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 15:53:40 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <hqednbfn7pNw5rvYnZ2dnUVZ_tmdnZ2d@web-ster.com>
Source record: 10182

Mike Andrews wrote:

> Anyone got pointers to a good *and* inexpensive 2m FM foxhunting xmtr
> with integrated controller? Ramsey used to make just exactly what I
> want, and so (of course) they've discontinued it.
>
> I'd like it to do a (programmable) CW ID, with a programmable delay
> from a minute or so up to 30 minutes, in roughly 1-minute steps. Xtal
> control is OK, but a good, stable VFO (DDS or DDS + PLL, rather than
> PLL alone) would be better. Settable power level would be good, too,
> and I can do with max power about 1 W.
>
> Thanks and 73, de
>
Do a web search for the "Montreal Fox". I've built one that works OK.
The circuit board that's available is quite rough, but the thing is
buildable.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

4782. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 17:49:38 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <dt4di25hil16nh3fmqduga4v0cc4q218dc@4ax.com>
Source record: 10183

On Fri, 6 Oct 2006 17:24:40 +0200, "Henry Kiefer" <otc_friend@gmx.net>
wrote:

>You can use ferrit antenna rods. That works for receivers very fine in VLF
>band and for transmitters too - as long as the ferrit won't go into
>saturation.
>That is a magnetic antenna and it is much shorter than the equivalent
>mentioned.

Ferrite rod antennas with perhaps -50 to -60 dB gain are useful since the extremely high band noise at VLF. It does not matter very much if both the wanted signal and the band noise is attenuated by 60 dB, as long as the wanted signal at the antenna terminals is stronger than the preamplifier thermal noise.

For transmitting, such antenna would be ridiculous.

In order to get 1 W EiRP as allowed on the 135 kHz amateur band in many countries, you would have to feed 1 MW into an antenna with -60 dB gain. The ferrite rod would saturate at much lower power levels such as 1 W or a few mW. Most likely you might get a few nW radiated power without saturating the rod.

Paul OH3LWR

4783. Re: PSD on a spectrum analyzer.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 18:21:05 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1160158865.841736.24210@m73g2000cwd.googlegroups.com>
Source record: 10184

Roy Lewallen wrote:
> Joel Kolstad wrote:
> > Roy,
> >
> > "Roy Lewallen" <w7el@eznec.com> wrote in message
> > news:12iarnp3a5pekb8@corp.supernews.com...
> >> This is covered in detail in _Modern Spectrum Analyzer Theory and
> >> Applications_ by Morris Engelson (Artech House, 1984).
> >
> > Does Engelson's idea of "modern" include digitizing spectrum analyzers, which
> > have already taken over most of the mid- to high-end of test equipment and --
> > as with digital scopes -- will most likely soon be in all but the lowest of
> > the low-end of instruments?
>
> No, the book was written before those came about. I fudged a little by
> qualifying my posting with "conventional" spectrum analyzer to exclude
> newer technologies, but it sounds like "conventional" is rapidly
> advancing to become the newer types.
>
> I got out of the SA development world just as digital techniques were
> beginning to develop -- my last patent (# 5,629,703), in fact, dealt
> with a way of reducing distortion in an A/D converter intended for use
> in a SA-like instrument. At that time, we were anticipating doing a
> conventional sweeping down-conversion, then digitizing it at a 25 MHz
> IF. Predictably, the digitization point has been moving toward the front
> of the instrument since then.
>
> I haven't followed the technology since, but I'm sure the new ones use
> sampling techniques combined with an FFT, which is another way of
> imperfectly representing what the real spectrum is like. (Actually, you
> can never perfectly represent the spectrum of a real waveform, because
> any spectrum which is finite in frequency span has to have existed for
> an infinite time. Any modulated waveform is way outside this category.)
> Sampling produces its own, different, sorts of artifacts which are
> different from the ones produced by sweeping, although there are some
> similarities. You have to be at least as careful, and maybe more so, in
> interpreting a sampled waveform as one which is from a swept filter.
>
> I'd be surprised if someone hasn't written an equivalent book to cover
> the new type instruments, although a lot of the material in Morris'
> books is still valid and teaches a lot about the nature of spectra.
> Morris was the driving force behind Tektronix's entry into the spectrum
> analyzer market, and the group's chief engineer and architect for a long
> time. He'd retired by the time I joined the group, and I only met him

> when he taught a couple of one-week courses based on his books. He's
> truly one of the experts in the field.
>
> Roy Lewallen, W7EL

Indeed, we've been making spectral analysis equipment using FFT techniques since the early 80's or even a little longer. I believe the HP3577 from that era uses digital IF techniques, though I never got familiar with its "guts." Things have come a very long way since then. Just as Roy says, there's a whole different set of things to understand to get accurate, meaningful measurements out of them. Even knowing what I do, I still get surprised by the instrument's response to particular signals sometimes.

With respect to signals in finite bandwidths having to have existed forever, in theory that's true, but in practice, noise from sources beyond the signal of interest will always overwhelm those portions of the signal that are very far from its main power, for a huge proportion of practical signals. We'll keep pushing for higher spurious-free dynamic range and lower noise floors in the instruments, but it's probably fair to say they'll never be perfect, and signals are essentially always polluted by external noise sources as well, if only thermal noise in external resistances.

I believe you can find some information on the Agilent website about factors to consider when making FFT-based spectral measurements. I probably have a pdf or two hiding somewhere in my archives covering some of this, too.

Modern analyzers are backed up by some very impressive software that can help you analyze all sorts of things about modulation, signal variation with time, etc. It goes FAR beyond simple spectral displays of FFT results.

One of the key features of FFT-based spectral analysis is that you don't miss as much as a swept analyzer with narrow IF does. For example, if you have a signal that keys on for a millisecond out of every second or so at 100MHz, it might indeed be radiating a broad spectrum but there's observable energy only within a few kilohertz of 100MHz. An analyzer sweeping 50-150MHz with a 1kHz resolution bandwidth will take quite a while to do its sweep, several seconds, and may very well not be "looking at" 100Mhz, or close enough to it, at the time the pulsed signal comes up to be able to see it. But an FFT-based analyzer that's sampling fast enough to capture the whole 50-150MHz band at once can easily find the 100MHz signal every time it pulses on. The FFT is, quite literally, a large bank of parallel filters/energy detectors at evenly spaced frequencies. In combination with a "windowing" function, the effective shape of those filters can be adjusted.

Cheers,
Tom

4784. Re: PSD on a spectrum analyzer.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 20:20:34 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12idekiaq151n81@corp.supernews.com>
Source record: 10185

Hi Roy,

That's a lot of extra detail; thanks!

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:12ibgsn5ll1qt7d@corp.supernews.com...
> Morris was the driving force behind Tektronix's entry into the spectrum
> analyzer market, and the group's chief engineer and architect for a long
> time. He'd retired by the time I joined the group, and I only met him when
> he taught a couple of one-week courses based on his books. He's truly one of
> the experts in the field.

Was Dennis Rosenauer around while you were still at Tek? Last I heard (a couple of years ago), he was working on their spectrum analyzers. As you're probably aware, Tek pretty much dumped spectrum analyzer development for awhile in the '90s, and something like 3-4 years ago hired Elaine May to be the new product group manager... she having been layed off when *Agilent* decided to dump *their* spectrum analyzer development! Sheesh. Rumor had it she was trying to get a a bunch of her former co-workers from Agilent to join her up at Tek.

These days Tek and Agilent seem to have realized that SAs are rather important, albeit with Agilent pursuing a more "traditional" architecture (very high frequencies, mix down to IF, digitize there) but Tektronix utilizing their high-speed ADCs from their scopes to just digitize directly and compute FFTs -- this approach limiting them to lower frequencies with noticeably less dynamic range, but giving them the advantage of being able to trigger on arbitrary masks withoug ever "missing" one.

---Joel

P.S. -- Planning to visit Swaptober Fest on the 21st?

4785. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 20:27:47 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4526be69$0$13102$9b4e6d93@newsspool2.arcor-online.net>
Source record: 10186

Sure Paul. It is as a transmitting antenna for short-range only. Do you know
about:
http://www.ancom.no/
products? They claim their ferrite rod styled antenna works as good
transmitter. See their patent application.

regards -
Henry

"Paul Keinanen" <keinanen@sci.fi> schrieb im Newsbeitrag
news:dt4di25hil16nh3fmqduga4v0cc4q218dc@4ax.com...
> On Fri, 6 Oct 2006 17:24:40 +0200, "Henry Kiefer" <otc_friend@gmx.net>
> wrote:
>
> >You can use ferrit antenna rods. That works for receivers very fine in
VLF
> >band and for transmitters too - as long as the ferrit won't go into
> >saturation.
> >That is a magnetic antenna and it is much shorter than the equivalent
> >mentioned.
>
> Ferrite rod antennas with perhaps -50 to -60 dB gain are useful since
> the extremely high band noise at VLF. It does not matter very much if
> both the wanted signal and the band noise is attenuated by 60 dB, as
> long as the wanted signal at the antenna terminals is stronger than
> the preamplifier thermal noise.
>
> For transmitting, such antenna would be ridiculous.
>
> In order to get 1 W EiRP as allowed on the 135 kHz amateur band in
> many countries, you would have to feed 1 MW into an antenna with -60
> dB gain. The ferrite rod would saturate at much lower power levels
> such as 1 W or a few mW. Most likely you might get a few nW radiated
> power without saturating the rod.
>
> Paul OH3LWR
>

4786. Re: PSD on a spectrum analyzer.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 20:58:36 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1160168316.507130.68170@m7g2000cwm.googlegroups.com>
Source record: 10187

Joel Kolstad wrote:
> Hi Roy,
>
> That's a lot of extra detail; thanks!
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:12ibgsn5ll1qt7d@corp.supernews.com...
> > Morris was the driving force behind Tektronix's entry into the spectrum
> > analyzer market, and the group's chief engineer and architect for a long
> > time. He'd retired by the time I joined the group, and I only met him when
> > he taught a couple of one-week courses based on his books. He's truly one of
> > the experts in the field.
>
> Was Dennis Rosenauer around while you were still at Tek? Last I heard (a
> couple of years ago), he was working on their spectrum analyzers. As you're
> probably aware, Tek pretty much dumped spectrum analyzer development for
> awhile in the '90s, and something like 3-4 years ago hired Elaine May to be
> the new product group manager... she having been layed off when *Agilent*
> decided to dump *their* spectrum analyzer development! Sheesh.
...

Sheesh, indeed. Where did you hear _that_? Lots of shrinking happened back then (and not just in Agilent, for sure), but it would certainly be a stretch to say that they "dumped their spectrum analyzer development." That's a pretty gross misrepresentation of what went on.

Cheers,
Tom

4787. FEMME MARIEES DELAISSEES LA CHATTE EN FEU

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 22:27:02 UTC
From: melanie@franceweb.com
Message-ID: <4526d835$0$27369$ba4acef3@news.orange.fr>
Source record: 10188
Body handling: HTML body converted to readable text

[No readable article body recovered]

4788. Code, for SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-06 22:43:54 UTC
From: U-Know-Who <no-one@nowhere.com>
Message-ID: <K_AVg.14606$5o5.4494@tornado.texas.rr.com>
Source record: 10189
Cross-posted to: rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

I have an idea. This should thin the ranks of amateurs and let Big Brother have the bands as is desired. We all know the FCC wants to sell the bands to the highest bidder. In addition to the code requirement, lets have proficiency testing in SSB, FM, RTTY, PSK-31 and Packet. That should just about kill the code proponents off, as they are mostly too old, addled, and unable to learn. That way, even they won't be able to use *their* bands without these proficiencies.

Sounds like a plan, eh?

HTH

4789. Re: Code, for SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 00:10:37 UTC
From: Dee Flint <deeflint01@comcast.net>
Message-ID: <AKydnaOKRqIWbbvYnZ2dnUVZ_tGdnZ2d@comcast.com>
Source record: 10190
Cross-posted to: rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"U-Know-Who" <no-one@nowhere.com> wrote in message
news:K_AVg.14606$5o5.4494@tornado.texas.rr.com...
>I have an idea. This should thin the ranks of amateurs and let Big Brother
>have the bands as is desired. We all know the FCC wants to sell the bands
>to the highest bidder. In addition to the code requirement, lets have
>proficiency testing in SSB, FM, RTTY, PSK-31 and Packet. That should just
>about kill the code proponents off, as they are mostly too old, addled, and
>unable to learn. That way, even they won't be able to use *their* bands
>without these proficiencies.
>
> Sounds like a plan, eh?
>
> HTH

And just who do you think developed these modes? How new do you think these
modes are? It seems like everyone I contact on the "new" mode of PSK31 is
retired and has been for many years.

4790. Re: Code, for SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 00:30:51 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <1160181051.207519.101700@e3g2000cwe.googlegroups.com>
Source record: 10191
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Dee Flint wrote:
>

>
> And just who do you think developed these modes? How new do you think these
> modes are? It seems like everyone I contact on the "new" mode of PSK31 is
> retired and has been for many years.
sample check Dee: how many people that you contact on ANY mode are not
retired and have been for years

went to our Radio meeting tues night and a talk was given on the "New"
mode PSK-31

if your sample is skewed towrd retirees as badly as mine........

4791. Check the SWR on your HF antenna's.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 00:32:04 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <8ACVg.5933$Y24.3733@newsread4.news.pas.earthlink.net>
Source record: 10193
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Then make a couple CW contacts this weekend.

You'll get up from your rig afterwards and feel pretty good about being a ham again.

SC

4792. Re: Code, for SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 00:32:05 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <9ACVg.5934$Y24.5304@newsread4.news.pas.earthlink.net>
Source record: 10192
Cross-posted to: rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"U-Know-Who" <no-one@nowhere.com> wrote in
news:K_AVg.14606$5o5.4494@tornado.texas.rr.com:

> I have an idea. This should thin the ranks of amateurs and let Big
> Brother have the bands as is desired. We all know the FCC wants to sell
> the bands to the highest bidder. In addition to the code requirement,
> lets have proficiency testing in SSB, FM, RTTY, PSK-31 and Packet. That
> should just about kill the code proponents off, as they are mostly too
> old, addled, and unable to learn. That way, even they won't be able to
> use *their* bands without these proficiencies.
>
> Sounds like a plan, eh?
>
> HTH

I could go for that.

The more testing, the better. Then outsiders would look at the amateur
radio service and see valuable and capable operators, they would see our
spectrum wasn't being wasted by people that only know how to talk into a
microphone to communicate.

Thanks. :-) Great idea.

SC

4793. when you going to stop welching on your bets SC?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 00:35:03 UTC
From: Mark@kb9rqz.net
Message-ID: <dhtdi2hj2b2mq0145f230031r7qhc4tugb@4ax.com>
Source record: 10194
Cross-posted to: rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sat, 07 Oct 2006 00:32:05 GMT, Slow Code <my.mail@no.spam> wrote:

when you going to stop welching on your bets SC?
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4794. when you going to stop welching on your bets SC?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 00:39:53 UTC
From: Mark@kb9rqz.net
Message-ID: <eqtdi2h357r7gti1k92jdn5hi2rqmga6sr@4ax.com>
Source record: 10195
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Sat, 07 Oct 2006 00:32:04 GMT, Slow Code <my.mail@no.spam> wrote:
when you going to stop welching on your bets SC?
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4795. Re: when you going to stop welching on your bets SC?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 00:42:57 UTC
From: U-Know-Who <no-one@nowhere.com>
Message-ID: <lKCVg.14645$5o5.9563@tornado.texas.rr.com>
Source record: 10196
Cross-posted to: rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

<Mark@kb9rqz.net> wrote in message
news:dhtdi2hj2b2mq0145f230031r7qhc4tugb@4ax.com...
> On Sat, 07 Oct 2006 00:32:05 GMT, Slow Code <my.mail@no.spam> wrote:
>
> when you going to stop welching on your bets SC?
> http://kb9rqz.blogspot.com/

Stop hijacking threads, you idiot.

4796. Re: when you going to stop welching on your bets SC?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 00:45:04 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <1160181904.205698.186540@m7g2000cwm.googlegroups.com>
Source record: 10197
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

```
U-Know-Who wrote:
> <Mark@kb9rqz.net> wrote in message
> news:dhtdi2hj2b2mq0145f230031r7qhc4tugb@4ax.com...
> > On Sat, 07 Oct 2006 00:32:05 GMT, Slow Code <my.mail@no.spam> wrote:
> >
> > when you going to stop welching on your bets SC?
> > http://kb9rqz.blogspot.com/
>
> Stop hijacking threads, you idiot.
not hijacking them myself Sc hijacked them
```

4797. Re: Check the SWR on your HF antenna's.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 06:23:00 UTC
From: matt vk3zmw <nospam@nospam.ever>
Message-ID: <8JHVg.42819$rP1.30725@news-server.bigpond.net.au>
Source record: 10048
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:
> Then make a couple CW contacts this weekend.
>
> You'll get up from your rig afterwards and feel pretty good about being a
> ham again.
>
> SC

Actually, just make a couple of contacts in any mode. Too many stations
sit unused week after week, month after month...

4798. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 08:23:05 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <gakei2toqbk7qn8a8tp7ovdifooe31ektn@4ax.com>
Source record: 10049

On Fri, 6 Oct 2006 22:27:47 +0200, "Henry Kiefer" <otc_friend@gmx.net>
wrote:

>Sure Paul. It is as a transmitting antenna for short-range only.

So we are talking about a near field system.

In the far field the ratio between the electric (E) and magnetic (H)
field is constant and is 120 pi or 377 ohms. This field is inversely
proportional to the square of distance since both the electric and
magnetic field is inversely proportional to the distance.

However, very close to the transmitting antenna (near field) the E/H
ratio is no longer 377 ohms. The magnetic field is inversely
proportional to the square of distance and the electric field
inversely proportional to the cube of distance.

There is much debate were the near field ends and were the far field
begins. For simple antennas, the distance is less than one wavelength,
the value lambda / (2*pi) often appears in literature. For large
parabolic reflectors or lasers, the far field begins at hundreds or
thousands of wavelengths.

Near field communication systems have been used for decades e.g. in
induction loop systems for the hearing impaired, in which a magnetic
loop is surrounding the room and audio frequencies are fed into the
loop. The headset will pick up the field, amplify the signal and feed
it to the ear of the person with reduced hearing. Of course, such
systems are now more or less useless due to the stray magnetic fields
caused by various inverters.

>Do you know
>about:
>http://www.ancom.no/
>products? They claim their ferrite rod styled antenna works as good
>transmitter. See their patent application.

These seem to be near field devices even at MF, where they seem to
operate.

Paul OH3LWR

4799. Re: Check the SWR on your HF antenna's.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 10:49:49 UTC
From: john <john@nospam.net>
Message-ID: <ed1fi25eei6aajmhvaqirh6lqfngjejast@4ax.com>
Source record: 10050
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

I feel good that Slow Code doesn't have a ham license and is poisoning
the ham bands like he does the newsgroups. What's your call Slow Code?

On Sat, 07 Oct 2006 06:23:00 GMT, matt vk3zmw <nospam@nospam.ever>
wrote:

>Slow Code wrote:
>> Then make a couple CW contacts this weekend.
>>
>> You'll get up from your rig afterwards and feel pretty good about being a
>> ham again.
>>
>> SC
>
>Actually, just make a couple of contacts in any mode. Too many stations
>sit unused week after week, month after month...

4800. Re: Check the SWR on your HF antenna's.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 13:23:01 UTC
From: my.mail@no.spam
Message-ID: <BACVg.5952$Y34.8931@newsread4.news.pas.earthlink.net>
Source record: 10051
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sat, 07 Oct 2006 05:49:49 -0500, john <john@nospam.net> wrote:
> I feel good that Slow Code doesn't have a ham license and is poisoning
> the ham bands like he does the newsgroups. What's your call Slow Code?
>
>
> On Sat, 07 Oct 2006 06:23:00 GMT, matt vk3zmw <nospam@nospam.ever>
> wrote:
>
> >Slow Code wrote:
> >> Then make a couple CW contacts this weekend.
> >>
> >> You'll get up from your rig afterwards and feel pretty good about being a
> >> ham again.
> >>
> >> SC
> >
> >Actually, just make a couple of contacts in any mode. Too many stations
> >sit unused week after week, month after month...
>

Top posting is a sign of inexperience. You are probably a newbie on the net. Go to news.groups and read the FAQ on Usenet etiquette first. After that, come back here and post properly and I will give you my call.

SC

4801. Re: Check the SWR on your HF antenna's.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 14:28:10 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <xrmdnSGLcauyJ7rYnZ2dnUVZ_uudnZ2d@rcn.net>
Source record: 10052
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Slow Code wrote:

>>>> SC
>>> Actually, just make a couple of contacts in any mode. Too many stations
>>> sit unused week after week, month after month...
>
> Top posting is a sign of inexperience. You are probably a newbie on the
> net. Go to news.groups and read the FAQ on Usenet etiquette first. After
> that, come back here and post properly and I will give you my call.

Actually top posting is a sign of *experience*. Us guys that were on the internet back when it was run by darpa always top posted. That was because we were running very slow lines, typically 110 to 300 baud, and it was desirable not to have to wait through the down load of a dozen copies of the same quoted material as we progressed through a thread. Bottom posting forced everyone on the newsgroup to fully download every article waisting tons of our very limited bandwidth and time. Top posting allowed you to get right to the meat of the article in the first few seconds of downloading... and it allowed you the option of continuing to footnotes if you really needed to.

You newbies have dozens of ways of trying to impose your will on the group. Most of your so called rules of etiquette are simply you following the bottom posting convention that was set up as a default on internet explorer. Rn, trn, tin, and other premicrosloth news readers defaulted to top posting.

You are so spoiled by high bandwidth and large amounts of memory that you think that a posting arrives at your machine in its full length instantly.. and for all practical purposes, it does.

I can go either way. I do, however, get very tired of having to scroll through the same old quoted crap at the top of post after post... just to get to the bottom and find the highly informative, but typical, "me too" tacked onto the end.

-Chuck

4802. Re: Check the SWR on your HF antenna's.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 15:28:25 UTC
From: my.mail@no.spam
Message-ID: <BACVg.AAB2$Y24.5826@newsread4.news.pas.earthlink.net>
Source record: 10053
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sat, 07 Oct 2006 10:28:10 -0400, Chuck Harris wrote:
> Slow Code wrote:
>
> >>>> SC
> >>> Actually, just make a couple of contacts in any mode. Too many stations
> >>> sit unused week after week, month after month...
> > >
> > > Top posting is a sign of inexperience. You are probably a newbie on the
> > > net. Go to news.groups and read the FAQ on Usenet etiquette first. After
> > > that, come back here and post properly and I will give you my call.
> >
> > Actually top posting is a sign of *experience*. Us guys that were on the
> > internet back when it was run by darpa always top posted. That was because
> > we were running very slow lines, typically 110 to 300 baud, and
> > it was desirable
> > not to have to wait through the down load of a dozen copies of the same quoted

Bzzzzzzzzzzzzzzzzzzzzzzzzzt!

My bullshit detector just went off real loud. Here is an authoritative
statement about ARPANET from one of Comer's books:

"Initially, most of the leased data circuits in the ARPANET operated
at 56 Kbps, a speed considered extremely fast in 1968 but slow by
current standards." -- Douglas E. Comer, Internetworking with TCP/IP,
Volume One, 3rd Edition, Prentice-Hall (1995), page 57.

300 baud, my ass! You should have been on a time sharing machine
connected directly to the 56K ARPANET, so don't bother to backpedal by
claiming dialup speeds. (And of course Usenet didn't even begin until
the 80's, shortly after ARPANET had ended.)

Don't try to bullshit someone who has forgotten more about the subject
than you have yet to learn.

SC

4803. Re: Check the SWR on your HF antenna's.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 16:40:08 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <-r2dnT-L-9e8RLrYnZ2dnUVZ_oudnZ2d@rcn.net>
Source record: 10054
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Slow Code wrote:
> On Sat, 07 Oct 2006 10:28:10 -0400, Chuck Harris wrote:

>> Actually top posting is a sign of *experience*. Us guys that were on the
>> internet back when it was run by darpa always top posted. That was because
>> we were running very slow lines, typically 110 to 300 baud, and
>> it was desirable
>> not to have to wait through the down load of a dozen copies of the same quoted
>
> Bzzzzzzzzzzzzzzzzzzzzzzzzzt!
>
> My bullshit detector just went off real loud. Here is an authoritative
> statement about ARPANET from one of Comer's books:
>
> "Initially, most of the leased data circuits in the ARPANET operated
> at 56 Kbps, a speed considered extremely fast in 1968 but slow by
> current standards." -- Douglas E. Comer, Internetworking with TCP/IP,
> Volume One, 3rd Edition, Prentice-Hall (1995), page 57.

Yep, those were the *backbones* of ARPANET. We had *ONE* at the University
of Maryland back in the 1970s. That leased line cost thousands of dollars
per month, and was paid for by darpa. Compare that to the backbones of today
which are measured in terrabits per second. These 56K backbones were
connected to mainframe computers that acted as concentrators, and provided
connections to other mainframes, and to thousands of users on timesharing
systems. Yes, I have that right, *thousands* of users shared a single 56K
backbone.

Those users that were local to the concentrator (eg, in the computer room)
were connected to the mainframe by various speed RS-232 lines, but those who
were on remote dial up connections were connected by good old bell 103,
110 to 300 baud modems.

> 300 baud, my ass! You should have been on a time sharing machine
> connected directly to the 56K ARPANET,

Yep, we were on timesharing machines, Univac 1106's, 1108's, and 1140's,
and as I said, thousands of users shared a single 56K leased line into
Darpanet. Do the math, if you can't, I'll help you:

56K/1000 = 56 bps.

If there were *only* 1000 users vying for the net at the same time, they
could each pump 56bps into the backbone. But there were many many more
than that, and they weren't always needing the net all of the time.

(hence the name concentrator)

so don't bother to backpedal by

I'm sorry, I don't backpedal for idiots. I don't brake for them either.

> claiming dialup speeds. (And of course Usenet didn't even begin until
> the 80's, shortly after ARPANET had ended.)
>
> Don't try to bullshit someone who has forgotten more about the subject
> than you have yet to learn.

Riiiight! Just because you can look up darpa on a wiki somewhere, doesn't
mean you can understand what you have read.

-Chuck

4804. stop you welching sc

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 17:42:34 UTC
From: Mark@kb9rqz.net
Message-ID: <inpfi2hnjhfko3haaafbqjojj1v3sgpmbo@4ax.com>
Source record: 10055
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sat, 7 Oct 2006 13:23:01 +0000 (UTC), my.mail@no.spam (Slow Code)
wrote:

stop you welching sc
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4805. stop you welching sc

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 17:42:57 UTC
From: Mark@kb9rqz.net
Message-ID: <oopfi2hqqo9776jp2niijkv4c0i90amkds@4ax.com>
Source record: 10056
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sat, 7 Oct 2006 15:28:25 +0000 (UTC), my.mail@no.spam (Slow Code)
wrote:

stop you welching sc
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4806. Re: stop you welching sc

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 18:16:22 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <C14D3D06.46962%dbowey@comcast.net>
Source record: 10057
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On 10/7/06 10:42 AM, in article oopfi2hqqo9776jp2niijkv4c0i90amkds@4ax.com,
"Mark@kb9rqz.net" <Mark@kb9rqz.net> wrote:

> On Sat, 7 Oct 2006 15:28:25 +0000 (UTC), my.mail@no.spam (Slow Code)
> wrote:
>
> stop you welching sc
> http://kb9rqz.blogspot.com/

I reported your abuse to this and other boards, to your service provider.
Hopefully they will shut you down.

4807. Re: stop you welching sc

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 18:22:52 UTC
From: Mark@kb9rqz.net
Message-ID: <4527e37e$0$19726$88260bb3@free.teranews.com>
Source record: 10058
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Don Bowey" <dbowey@comcast.net> wrote in message
news:C14D3D06.46962%dbowey@comcast.net...
> On 10/7/06 10:42 AM, in article
> oopfi2hqqo9776jp2niijkv4c0i90amkds@4ax.com,
> "Mark@kb9rqz.net" <Mark@kb9rqz.net> wrote:
>
>> On Sat, 7 Oct 2006 15:28:25 +0000 (UTC), my.mail@no.spam (Slow Code)
>> wrote:
>>
>> stop you welching sc
>> http://kb9rqz.blogspot.com/
>
> I reported your abuse to this and other boards, to your service provider.
> Hopefully they will shut you down.

you could just admit to making a mistake but then you can't admit to
error and it would still be a lie since that shit of yours I have
encountered
is you writing on RRAP and other locations

as inded you have that with your gay bashing means you need help you asked
for it robeson

http://www.marksspamblog.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4808. Re: stop you welching sc

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 19:00:55 UTC
From: Mark@kb9rqz.net
Message-ID: <laufi25pmi43fehhgs5qt6l60n4nsb382t@4ax.com>
Source record: 10059
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sat, 07 Oct 2006 11:16:22 -0700, Don Bowey <dbowey@comcast.net>
wrote:

>On 10/7/06 10:42 AM, in article oopfi2hqqo9776jp2niijkv4c0i90amkds@4ax.com,
>"Mark@kb9rqz.net" <Mark@kb9rqz.net> wrote:
>
>> On Sat, 7 Oct 2006 15:28:25 +0000 (UTC), my.mail@no.spam (Slow Code)
>> wrote:
>>
>> stop you welching sc
>> http://kb9rqz.blogspot.com/
>
>I reported your abuse to this and other boards, to your service provider.
>Hopefully they will shut you down.
what abuse are you refering to?
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4809. Re: stop you welching sc

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 19:01:19 UTC
From: Mark@kb9rqz.net
Message-ID: <gbufi25j8p456ebavadg3uv32t0ajrb0ef@4ax.com>
Source record: 10060
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sat, 7 Oct 2006 14:22:52 -0400, <Mark@kb9rqz.net> wrote:

more id theft it is crime you know
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4810. Re: Check the SWR on your HF antenna's.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 21:59:07 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <LqVVg.11324$UG4.1538@newsread2.news.pas.earthlink.net>
Source record: 10061
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

john <john@nospam.net> wrote in
news:ed1fi25eei6aajmhvaqirh6lqfngjejast@4ax.com:

> I feel good that Slow Code doesn't have a ham license and is poisoning
> the ham bands like he does the newsgroups. What's your call Slow Code?

KB9RQZ, and I'm retarded.

4811. Re: Check the SWR on your HF antenna's.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 22:37:47 UTC
From: my.mail@no.spam
Message-ID: <Bifhnn.5952$Y24.5826@newsread4.news.pas.earthlink.net>
Source record: 10062
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sat, 07 Oct 2006 12:40:08 -0400, Chuck Harris wrote:
> Slow Code wrote:
> > On Sat, 07 Oct 2006 10:28:10 -0400, Chuck Harris wrote:
>
> >> Actually top posting is a sign of *experience*. Us guys that were on the
> >> internet back when it was run by darpa always top posted. That was because
> >> we were running very slow lines, typically 110 to 300 baud, and
> >> it was desirable
> >> not to have to wait through the down load of a dozen copies of the
> same quoted
> >
> > Bzzzzzzzzzzzzzzzzzzzzzzzzzt!
> >
> > My bullshit detector just went off real loud. Here is an authoritative
> > statement about ARPANET from one of Comer's books:
> >
> > "Initially, most of the leased data circuits in the ARPANET operated
> > at 56 Kbps, a speed considered extremely fast in 1968 but slow by
> > current standards." -- Douglas E. Comer, Internetworking with TCP/IP,
> > Volume One, 3rd Edition, Prentice-Hall (1995), page 57.
>
> Yep, those were the *backbones* of ARPANET. We had *ONE* at the University
> of Maryland back in the 1970s. That leased line cost thousands of dollars
> per month, and was paid for by darpa. Compare that to the backbones of today
> which are measured in terrabits per second. These 56K backbones were
> connected to mainframe computers that acted as concentrators, and provided
> connections to other mainframes, and to thousands of users on timesharing
> systems. Yes, I have that right, *thousands* of users shared a single 56K
> backbone.
>
> Those users that were local to the concentrator (eg, in the computer room)
> were connected to the mainframe by various speed RS-232 lines, but those who
> were on remote dial up connections were connected by good old bell 103,
> 110 to 300 baud modems.
>
> > 300 baud, my ass! You should have been on a time sharing machine
> > connected directly to the 56K ARPANET,
>
> Yep, we were on timesharing machines, Univac 1106's, 1108's, and 1140's,
> and as I said, thousands of users shared a single 56K leased line into
> Darpanet. Do the math, if you can't, I'll help you:
>
> 56K/1000 = 56 bps.

So you think that 1000 users at your location were always using
ARPANET simultaneously? Please don't tell me that someone gave you an
engineering degree, because you obviously didn't understand the course
work.

> If there were *only* 1000 users vying for the net at the same time, they
> could each pump 56bps into the backbone. But there were many many more
> than that, and they weren't always needing the net all of the time.
> (hence the name concentrator)

> > Don't try to bullshit someone who has forgotten more about the subject
> > than you have yet to learn.
>
> Riiiight! Just because you can look up darpa on a wiki somewhere, doesn't
> mean you can understand what you have read.

Comer's books on TCP/IP are standards, and they don't involve a wiki.
They happen to be in my library of reference textbooks, and they
happen to be standard references kept in all university libraries.

The claim about slow speeds on ARPANET and Usenet is quite stupid.
ARPANET and Usenet did not exist at the same time. ARPANET didn't use
TCP/IP protocol, and it gave way to what is now called the Internet
when TCP/IP became the standard packet delivery protocol. Shortly
after that, the message posting system called Usenet was formalized to
run on the Internet and on several other message delivery systems
(such as UUCP). So your reference to ARPANET is simply irrelevant.
ARPANET and Usenet never coexisted, making the claims about 300 bps
and other speed limitations total BS intended to impress the ignorant.

Enough said. Conversation ended. You don't seem to be worth any
followup messages until you do some additional reading.

SC

4812. QQV06-40A

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 22:39:52 UTC
From: "rextrunt@yahoo.com" <rextrunt@yahoo.com>
Message-ID: <1160260792.541888.147840@m73g2000cwd.googlegroups.com>
Source record: 10063

Anybody ever tried connecting both sections of the valve together and using this device on HF instead of VHF? Its cheap and is good for 100W max output with 1kV anode potential.

4813. Re: Check the SWR on your HF antenna's.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 22:59:20 UTC
From: Lloyd Morgan <lloyd@no.spammmmm>
Message-ID: <11324$UG43.2458F8789@tarrnews.net>
Source record: 10064
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Sat, 07 Oct 2006 21:59:07 GMT, Slow Code <my.mail@no.spam> wrote:
> john <john@nospam.net> wrote in
> news:ed1fi25eei6aajmhvaqirh6lqfngjejast@4ax.com:
>
> > I feel good that Slow Code doesn't have a ham license and is poisoning
> > the ham bands like he does the newsgroups. What's your call Slow Code?
>
>
> KB9RQZ, and I'm retarded.

You are K4YZ, and Mark Morgan knows it, Steve.

4814. Re: Check the SWR on your HF antenna's.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 23:51:56 UTC
From: Mark@kb9rqz.net
Message-ID: <3cfgi2la50756diq6o85lq0tk4cf4pv425@4ax.com>
Source record: 10065
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Sat, 07 Oct 2006 21:59:07 GMT, Slow Code <my.mail@no.spam> wrote:

>john <john@nospam.net> wrote in
>news:ed1fi25eei6aajmhvaqirh6lqfngjejast@4ax.com:
>
>> I feel good that Slow Code doesn't have a ham license and is poisoning
>> the ham bands like he does the newsgroups. What's your call Slow Code?
>
>
>KB9RQZ, and I'm retarded.
Id theft is crime Slow Code

as is fraud you are both
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4815. Re: Check the SWR on your HF antenna's.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-07 23:52:31 UTC
From: Mark@kb9rqz.net
Message-ID: <4dfgi219dd9dk9mdfj7ure9g0opg5d5cg5@4ax.com>
Source record: 10066
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Sat, 7 Oct 2006 22:59:20 +0000 (UTC), Lloyd Morgan
<lloyd@no.spammmmm> wrote:

>On Sat, 07 Oct 2006 21:59:07 GMT, Slow Code <my.mail@no.spam> wrote:
>> john <john@nospam.net> wrote in
>> news:ed1fi25eei6aajmhvaqirh6lqfngjejast@4ax.com:
>>
>> > I feel good that Slow Code doesn't have a ham license and is poisoning
>> > the ham bands like he does the newsgroups. What's your call Slow Code?
>>
>>
>> KB9RQZ, and I'm retarded.
>
>You are K4YZ, and Mark Morgan knows it, Steve.
that is the most likely call but it is onl;y high probabilty
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4816. Re: Check the SWR on your HF antenna's.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-08 00:29:52 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1160267392.851652.48400@e3g2000cwe.googlegroups.com>
Source record: 10067
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

From: Chuck Harris on Sat, Oct 7 2006 12:40 pm

Thank you for the explanation. As a user on a corporate system
(RCA Corporation, EASD, Van Nuys, CA) '73 to '75, and with a
Tym-Share account (the time-sharing computer company), I concur.

>Slow Code wrote:
>> On Sat, 07 Oct 2006 10:28:10 -0400, Chuck Harris wrote:
>
>>> Actually top posting is a sign of *experience*. Us guys that were on the
>>> internet back when it was run by darpa always top posted. That was because
>>> we were running very slow lines, typically 110 to 300 baud, and
>>> it was desirable
>>> not to have to wait through the down load of a dozen copies of the same quoted
>
>> Bzzzzzzzzzzzzzzzzzzzzzzzzzt!
>
>> My bullshit detector just went off real loud. Here is an authoritative
>> statement about ARPANET from one of Comer's books:

[Blowcode's ears must be ringing all the time from his
"bullshit detector" going off on his own postings... :-)]

>> "Initially, most of the leased data circuits in the ARPANET operated
>> at 56 Kbps, a speed considered extremely fast in 1968 but slow by
>> current standards." -- Douglas E. Comer, Internetworking with TCP/IP,
>> Volume One, 3rd Edition, Prentice-Hall (1995), page 57.
>
>Yep, those were the *backbones* of ARPANET. We had *ONE* at the University
>of Maryland back in the 1970s. That leased line cost thousands of dollars
>per month, and was paid for by darpa. Compare that to the backbones of today
>which are measured in terrabits per second. These 56K backbones were
>connected to mainframe computers that acted as concentrators, and provided
>connections to other mainframes, and to thousands of users on timesharing
>systems. Yes, I have that right, *thousands* of users shared a single 56K
>backbone.
>
>Those users that were local to the concentrator (eg, in the computer room)
>were connected to the mainframe by various speed RS-232 lines, but those who
>were on remote dial up connections were connected by good old bell 103,
>110 to 300 baud modems.

Heh heh heh...the "high tech" of its time, a mere 30+ years
ago. "Speedy" Teletype Model 33s (?) and "high speed" 300
baud video terminals (with local memory to print out screens

on Teletypes) where I was using it. :-)

>> 300 baud, my ass! You should have been on a time sharing machine
>> connected directly to the 56K ARPANET,
>
>Yep, we were on timesharing machines, Univac 1106's, 1108's, and 1140's,
>and as I said, thousands of users shared a single 56K leased line into
>Darpanet. Do the math, if you can't, I'll help you:
>
>56K/1000 = 56 bps.
>
>If there were *only* 1000 users vying for the net at the same time, they
>could each pump 56bps into the backbone. But there were many many more
>than that, and they weren't always needing the net all of the time.
>(hence the name concentrator)

"Concentrators" still exist but in a vastly different form,
configuration, and specifications. As a personal computer
hobbyist since '76 I've not delved into them (no need to for
personal dial-up connections) but know many who are; they
have supplied some interesting literature on them as well as
in-person explanations.

>> so don't bother to backpedal by
>
>I'm sorry, I don't backpedal for idiots. I don't brake for them either.

Blowcode is the road kill of this newsgroup...

>> claiming dialup speeds. (And of course Usenet didn't even begin until
>> the 80's, shortly after ARPANET had ended.)
>
>> Don't try to bullshit someone who has forgotten more about the subject
>> than you have yet to learn.
>
>Riiiight! Just because you can look up darpa on a wiki somewhere, doesn't
>mean you can understand what you have read.

HAAAAAA... :-)

Blowcode has never stated his amateur license call. Perhaps
he has "forgotten" it? :-)

LenAnderson@ieee.org

4817. SolderSmoke #34: Interview with Ashhar Farhan, BITX-20 designer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-08 06:09:52 UTC
From: bill.meara@gmail.com
Message-ID: <1160287792.089919.118830@i3g2000cwc.googlegroups.com>
Source record: 10068
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,sci.electronics.basics

SolderSmoke!
A SHOW FOR ELECTRONICS HOMEBREWERS!

http://www.soldersmoke.com

Listen at: http://www.soldersmoke.com

SolderSmoke #34 (October 7, 2006) is now available
on http://www.soldersmoke.com

Ashhar Farhan joined us from India for #34:

-- BITX-20 transceiver.
-- HB in India.
-- EMRFD.
-- W7ZOI influence.
-- Hans Summers.
-- Quadrature rigs.
-- DSB and PSK31.
-- Homebrew test gear.
-- The importance of measurement
-- Farhan's 'scope.
-- Homebrew heartaches.
-- Homebrew spirit.
-- Symmetry.

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you the kinds of ham radio conversations that you
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London, England meet regularly on the ECHOLINK system
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paste this URL into your I-poder (or similar)
software.
http://www.soldersmoke.com/soldersmoke.rss

If you don't have an MP3 player you can just go to the
site below and listen to the latest program (and
earlier editions) using the audio software on your

computer.

http://www.soldersmoke.com

All our programs are available here.

We hope you enjoy the program. Please send us feedback.

73 from London
Bill M0HBR N2CQR CU2JL
http://www.gadgeteer.us

4818. Re: Check the SWR on your HF antenna's.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-08 06:30:00 UTC
From: john <john@nospam.net>
Message-ID: <il6hi2t4v4q63dalar3dbgrmiubql6olei@4ax.com>
Source record: 10069
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Who is Slow Code? What is his call???
Does anybody know???

On Sat, 7 Oct 2006 22:59:20 +0000 (UTC), Lloyd Morgan
<lloyd@no.spammmmm> wrote:

>On Sat, 07 Oct 2006 21:59:07 GMT, Slow Code <my.mail@no.spam> wrote:
>> john <john@nospam.net> wrote in
>> news:ed1fi25eei6aajmhvaqirh6lqfngjejast@4ax.com:
>>
>> > I feel good that Slow Code doesn't have a ham license and is poisoning
>> > the ham bands like he does the newsgroups. What's your call Slow Code?
>>
>>
>> KB9RQZ, and I'm retarded.
>
>You are K4YZ, and Mark Morgan knows it, Steve.

4819. Re: QQV06-40A

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-08 07:07:41 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <JixRHeC9OKKFFAsN@ifwtech.co.uk>
Source record: 10071

rextrunt@yahoo.com wrote:
>Anybody ever tried connecting both sections of the valve together and
>using this device on HF instead of VHF?

Not a good idea. This dual tetrode is internally neutralized for
push-pull operation (the little crossover "twigs" above the anodes) but
in a parallel connection that same capacitance will appear as unwanted
anode-grid feedback.

> Its cheap and is good for 100W
>max output with 1kV anode potential.
>
The QQV06-40A is not capable of a clean 100W output on SSB! Many have
tried over the years, and all have either failed or become extremely
unpopular on the air.

If you want higher power at low cost, go for a GI-7B triode.

--
73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

4820. Re: Check the SWR on your HF antenna's.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-08 07:13:16 UTC
From: Mark@kb9rqz.net
Message-ID: <059hi2pffi65pv9gqkqfo5tt16os9h4jgi@4ax.com>
Source record: 10070
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Sun, 08 Oct 2006 01:30:00 -0500, john <john@nospam.net> wrote:

>Who is Slow Code? What is his call???
>Does anybody know???

know his for certain? no i don't but it seems likely it is K4YZ or at
least one of his close freind from years past here on RRAP but Slow
code to much of a coward to say what his call is

amusing that K4YZ does not pund on him or Arf arf for being no calls
make it realy likely he knows who they raly are
>
>
>
>
>On Sat, 7 Oct 2006 22:59:20 +0000 (UTC), Lloyd Morgan
><lloyd@no.spammmmm> wrote:
>
>>On Sat, 07 Oct 2006 21:59:07 GMT, Slow Code <my.mail@no.spam> wrote:
>>> john <john@nospam.net> wrote in
>>> news:ed1fi25eei6aajmhvaqirh6lqfngjejast@4ax.com:
>>>
>>> > I feel good that Slow Code doesn't have a ham license and is poisoning
>>> > the ham bands like he does the newsgroups. What's your call Slow Code?
>>>
>>>
>>> KB9RQZ, and I'm retarded.
>>
>>You are K4YZ, and Mark Morgan knows it, Steve.
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4821. bad wind's bust your "twig"!!!! Help is here :-0

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-08 09:02:54 UTC
From: mjsystems <madgadget05@hotmail.com>
Message-ID: <1160298174.371241.180050@m73g2000cwd.googlegroups.com>
Source record: 10072

For a quickie CB antenna, a vertical dipole (1/2) wave can be made right from the coax itself You take your coax and very carefully, without nicking the braided shield, strip 102 inches of the outer insulation jacket off one end. After removing the outer jacket, start bunching the shield down the coax from the end. Now, where the outer jacket and the shield meet, separate the braided shield enough to get the inner conductor out through the hole in the braid. Pull all of the inner conductor through and stretch it and the braid out. Be careful not to skin any of the insulation off the inner conductor. Now attach an antenna insulator to the end of the inner conductor. Measure the braided shield. Cut it off at about 106" and attach an antenna insulator to the end. The total length of the inner and outer conductor should be about 17 feet (1/2 wave). You can haul it up to any height you want with a string or rope attached to the insulator on the center conductor. It's a good idea to coat the end of the coax cable where it separates with some kind of waterproof sealer. This keeps water from seeping into the coax, which could cause a high SWR.

Just attach a coax connector on the end of the coax going to your transceiver and you are on the air. The SWR should be 1.5 or better, if cut to the proper length. It'll get out about as good as a ¼ wave ground plane CB radio antenna if you get it up high and in the clear. Do not hoist this antenna up next to a metal pole, because the metal will interfere with the antenna's operation and cause a high SWR

just get the lenght's right and you can mount this to a NON conducting pole eg wood , plastic coated carbon(fishing pole)

4822. ^^

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-08 09:09:38 UTC
From: mjsystems <madgadget05@hotmail.com>
Message-ID: <1160298578.318253.88120@m7g2000cwm.googlegroups.com>
Source record: 10073

this is a good idea to pre make this and mount it out of the way up
high like flat agenst your roof.this way if your main antenna brake's
or goes faulty then you have a backup always ready!!

4823. ^^

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-08 09:10:04 UTC
From: mjsystems <madgadget05@hotmail.com>
Message-ID: <1160298604.444021.263820@k70g2000cwa.googlegroups.com>
Source record: 10074

this is a good idea to pre make this and mount it out of the way up
high like flat agenst your roof.this way if your main antenna brake's
or goes faulty then you have a backup always ready!!

4824. Pnig netcopp gay basher Don Boewy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-08 11:20:03 UTC
From: Mark@kb9rqz.net
Message-ID: <754gi2tmmnifrol85pqfj3j4ufigl9htkj9@4ax.com>
Source record: 10075
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sat, 07 Oct 2006 11:16:22 -0700, Don Bowey <dbowey@comcast.net> wrote:
> On 10/7/06 10:42 AM, in article oopfi2hqqo9776jp2niijkv4c0i90amkds@4ax.com,
> "Mark@kb9rqz.net" <Mark@kb9rqz.net> wrote:
>
> > On Sat, 7 Oct 2006 15:28:25 +0000 (UTC), my.mail@no.spam (Slow Code)
> > wrote:
> >
> > stop you welching sc
> > http://kb9rqz.blogspot.com/
>
> I reported your abuse to this and other boards, to your service provider.
> Hopefully they will shut you down.
you cwoards can try buts ofar you ahve all failed. you are jsut anothre
gay basher who wilshit and fall back init again.

http://kb9rqz.blogspot.com/

4825. Re: stop you welching sc

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-08 15:25:58 UTC
From: Mark@kb9rqz.net
Message-ID: <754gi3umfvtrol85pqfj3j4ufigl9htkj9@4ax.com>
Source record: 10076
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sat, 07 Oct 2006 11:16:22 -0700, Don Bowey <dbowey@comcast.net> wrote:
> On 10/7/06 10:42 AM, in article oopfi2hqqo9776jp2niijkv4c0i90amkds@4ax.com,
> "Mark@kb9rqz.net" <Mark@kb9rqz.net> wrote:
>
> > On Sat, 7 Oct 2006 15:28:25 +0000 (UTC), my.mail@no.spam (Slow Code)
> > wrote:
> >
> > stop you welching sc
> > http://kb9rqz.blogspot.com/
>
> I reported your abuse to this and other boards, to your service provider.
> Hopefully they will shut you down.
fukc you inner mouth.
http://kb9rqz.blogspot.com/

4826. Re: stop you welching sc

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-08 16:03:18 UTC
From: Mark@kb9rqz.net
Message-ID: <m98ii2hofapa8fbcm2asa7sd4b5rat31vh@4ax.com>
Source record: 10077
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sun, 8 Oct 2006 15:25:58 +0000 (UTC), Mark@kb9rqz.net
(Mark@kb9rqz.net) wrote:

>
>On Sat, 07 Oct 2006 11:16:22 -0700, Don Bowey <dbowey@comcast.net> wrote:
>> On 10/7/06 10:42 AM, in article oopfi2hqqo9776jp2niijkv4c0i90amkds@4ax.com,
>> "Mark@kb9rqz.net" <Mark@kb9rqz.net> wrote:
>>
>> > On Sat, 7 Oct 2006 15:28:25 +0000 (UTC), my.mail@no.spam (Slow Code)
>> > wrote:
>> >
>> > stop you welching sc
>> > http://kb9rqz.blogspot.com/
>>
>> I reported your abuse to this and other boards, to your service provider.
>> Hopefully they will shut you down.
>fukc you inner mouth.
>http://kb9rqz.blogspot.com/
stop the foring and iD theft
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4827. hi steve

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-08 16:05:38 UTC
From: Mark@kb9rqz.net
Message-ID: <0e8ii21sfbunoctnjj6o0op13ot1s23ka8@4ax.com>
Source record: 10078
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sun, 8 Oct 2006 11:20:03 +0000 (UTC), Mark@kb9rqz.net
(Mark@ab9rqz.net) wrote:

hi steve
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4828. Re: Check the SWR on your HF antenna's.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-08 16:26:05 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <lJWdnYF4y-zAurTYnZ2dnUVZ_rudnZ2d@rcn.net>
Source record: 10079
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Slow Code wrote:
> On Sat, 07 Oct 2006 12:40:08 -0400, Chuck Harris wrote:
>> Slow Code wrote:
>>> On Sat, 07 Oct 2006 10:28:10 -0400, Chuck Harris wrote:
>>>> Actually top posting is a sign of *experience*. Us guys that were on the
>>>> internet back when it was run by darpa always top posted. That was because
>>>> we were running very slow lines, typically 110 to 300 baud, and
>>>> it was desirable
>>>> not to have to wait through the down load of a dozen copies of the
>> same quoted
>>> Bzzzzzzzzzzzzzzzzzzzzzzzzzzt!
>>>
>>> My bullshit detector just went off real loud. Here is an authoritative
>>> statement about ARPANET from one of Comer's books:
>>>
>>> "Initially, most of the leased data circuits in the ARPANET operated
>>> at 56 Kbps, a speed considered extremely fast in 1968 but slow by
>>> current standards." -- Douglas E. Comer, Internetworking with TCP/IP,
>>> Volume One, 3rd Edition, Prentice-Hall (1995), page 57.
>> Yep, those were the *backbones* of ARPANET. We had *ONE* at the University
>> of Maryland back in the 1970s. That leased line cost thousands of dollars
>> per month, and was paid for by darpa. Compare that to the backbones of today
>> which are measured in terrabits per second. These 56K backbones were
>> connected to mainframe computers that acted as concentrators, and provided
>> connections to other mainframes, and to thousands of users on timesharing
>> systems. Yes, I have that right, *thousands* of users shared a single 56K
>> backbone.
>>
>> Those users that were local to the concentrator (eg, in the computer room)
>> were connected to the mainframe by various speed RS-232 lines, but those who
>> were on remote dial up connections were connected by good old bell 103,
>> 110 to 300 baud modems.
>>
>>> 300 baud, my ass! You should have been on a time sharing machine
>>> connected directly to the 56K ARPANET,
>> Yep, we were on timesharing machines, Univac 1106's, 1108's, and 1140's,
>> and as I said, thousands of users shared a single 56K leased line into
>> Darpanet. Do the math, if you can't, I'll help you:
>>
>> 56K/1000 = 56 bps.
>
> So you think that 1000 users at your location were always using
> ARPANET simultaneously? Please don't tell me that someone gave you an

> engineering degree, because you obviously didn't understand the course
> work.

And gee, you only had to read the next sentence to see that I said no such thing. Look down.

>
>> If there were *only* 1000 users vying for the net at the same time, they
>> could each pump 56bps into the backbone. But there were many many more
>> than that, and they weren't always needing the net all of the time.
>> (hence the name concentrator)
>
>>> Don't try to bullshit someone who has forgotten more about the subject
>>> than you have yet to learn.
>> Riiiight! Just because you can look up darpa on a wiki somewhere, doesn't
>> mean you can understand what you have read.
>
> Comer's books on TCP/IP are standards, and they don't involve a wiki.
> They happen to be in my library of reference textbooks, and they
> happen to be standard references kept in all university libraries.

Just because you can find the names of some books by using google, doesn't mean you have ever read them, or understood them. I have copies of all three volumes of "Internetworking with TCP/IP- Client -Server Programming and Applications" by Douglas E. Comer, and David L. Stevens, Prentice Hall on my book shelf. (pick a page, any page, and I'll give you a quotation from it.)

If you note the copyright date of this series, you will see 1993. A mere 20 years after I started working with GE's world wide networks... top posting my email on model 33 teletypes with bell 103 modems.

>
> The claim about slow speeds on ARPANET and Usenet is quite stupid.

Really? Well, I suppose you think that everyone had 56K connections back in the '70's. I worked in the Electrical Engineering department at the University of Maryland, back then, and we were pretty proud of our first 9600 baud connection between the PDP11's, and the Univac's that had the darpa connection. It wasn't until we got a VAX 11/780 that we got a 56K pipe to the Univac's that connected to the darpanet. That was around 1980. I think diapers were you most prominent media for communication back then.

> ARPANET and Usenet did not exist at the same time. ARPANET didn't use
> TCP/IP protocol, and it gave way to what is now called the Internet
> when TCP/IP became the standard packet delivery protocol.

Prior to usenet, a variation on email, we were using email broadcast lists. The same top posting rules applied.

Usenet came into being while I was in graduate school, around 1980-83. I remember there was quite a buzz at that time. Decwriters were 300 baud, and the most common affortable modems were still using the Bell 103 standard

from the late '50s. 1200 baud modems were used for expensive applications,
usually computer to computer data transfer. The 1200 baud modem didn't come
into general use until DC Hayes produced an inexpensive model around 1983.
It was a real screamer compared to the Bell 103's.

Shortly
> after that, the message posting system called Usenet was formalized to
> run on the Internet and on several other message delivery systems
> (such as UUCP). So your reference to ARPANET is simply irrelevant.
> ARPANET and Usenet never coexisted, making the claims about 300 bps
> and other speed limitations total BS intended to impress the ignorant.
>
> Enough said. Conversation ended. You don't seem to be worth any
> followup messages until you do some additional reading.

I don't need to read about it, I was there doing it. My first
exposure to a world wide network was GE's back around 1970. It was the
first commercial use of a global network. The normal terminal to connect
to that net was a Model 33 Teletype, with a bell 103 modem. I bet you
think they used Windows based PC's with 56K modems, and Netscape.

-Chuck

4829. Re: VLF from the amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-08 19:33:19 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <452959f1$0$13101$9b4e6d93@newsspool2.arcor-online.net>
Source record: 10080

Thanks Paul for the long explanation!

I don't found a good source how ferrite rods works for transmitters. All say it cannot work because of big power eating in the ferrite. How much power is possible?
I think 1 watt should be possible.
I google on...

> >http://www.ancom.no/
> >products? They claim their ferrite rod styled antenna works as good
> >transmitter. See their patent application.
>
> These seem to be near field devices even at MF, where they seem to
> operate.
No! They are far-field devices.

I even saw a explosion picture of a mobile phone antenna 900MHz helix construction as composite in a (ferrite?) filled outline.

Does an antenna exists, which receives BOTH field-vectors? If the antenna covers only one /E or M), half of the transmitting power is lost - correct?

- Henry

4830. Re: Check the SWR on your HF antenna's.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-09 00:37:29 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <dRgWg.8914$o71.6596@newsread3.news.pas.earthlink.net>
Source record: 10081
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

john <john@nospam.net> wrote in
news:il6hi2t4v4q63dalar3dbgrmiubql6olei@4ax.com:

> Who is Slow Code? What is his call???
> Does anybody know???

Hello John. I'm KB9RQZ, and I just love CW. We need to bring back code
testing for Techs. 13 wpm should work fine, Then we can keep the
riff-raff off the repeaters and end all the bogus moon bounce contacts.

I've been burned by bogus EME contacts, but I'm a retard.

73'sssss & 88'sssssss

SC

4831. Re: Check the SWR on your HF antenna's.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-09 00:37:33 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <hRgWg.8915$o71.7501@newsread3.news.pas.earthlink.net>
Source record: 10082
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"LenAnderson@ieee.org" <LenAnderson@ieee.org> wrote in
news:1160267392.851652.48400@e3g2000cwe.googlegroups.com:

> From: Chuck Harris on Sat, Oct 7 2006 12:40 pm
>
> Thank you for the explanation. As a user on a corporate system
> (RCA Corporation, EASD, Van Nuys, CA) '73 to '75, and with a
> Tym-Share account (the time-sharing computer company), I concur.
>
>>Slow Code wrote:
>>> On Sat, 07 Oct 2006 10:28:10 -0400, Chuck Harris wrote:
>>
>>>> Actually top posting is a sign of *experience*. Us guys that were on
>>>> the internet back when it was run by darpa always top posted. That
>>>> was because we were running very slow lines, typically 110 to 300
>>>> baud, and it was desirable
>>>> not to have to wait through the down load of a dozen copies of the
>>>> same quoted
>>
>>> Bzzzzzzzzzzzzzzzzzzzzzzzzzzt!
>>
>>> My bullshit detector just went off real loud. Here is an
>>> authoritative statement about ARPANET from one of Comer's books:
>
> [Blowcode's ears must be ringing all the time from his
> "bullshit detector" going off on his own postings... :-)]
>
>>> "Initially, most of the leased data circuits in the ARPANET operated
>>> at 56 Kbps, a speed considered extremely fast in 1968 but slow by
>>> current standards." -- Douglas E. Comer, Internetworking with TCP/IP,
>>> Volume One, 3rd Edition, Prentice-Hall (1995), page 57.
>>
>>Yep, those were the *backbones* of ARPANET. We had *ONE* at the
>>University of Maryland back in the 1970s. That leased line cost
>>thousands of dollars per month, and was paid for by darpa. Compare that
>>to the backbones of today which are measured in terrabits per second.
>>These 56K backbones were connected to mainframe computers that acted as
>>concentrators, and provided connections to other mainframes, and to
>>thousands of users on timesharing systems. Yes, I have that right,
>>*thousands* of users shared a single 56K backbone.
>>
>>Those users that were local to the concentrator (eg, in the computer
>>room) were connected to the mainframe by various speed RS-232 lines, but

>>those who were on remote dial up connections were connected by good old
>>bell 103, 110 to 300 baud modems.
>
> Heh heh heh...the "high tech" of its time, a mere 30+ years
> ago. "Speedy" Teletype Model 33s (?) and "high speed" 300
> baud video terminals (with local memory to print out screens
> on Teletypes) where I was using it. :-)
>
>>> 300 baud, my ass! You should have been on a time sharing machine
>>> connected directly to the 56K ARPANET,
>>
>>Yep, we were on timesharing machines, Univac 1106's, 1108's, and 1140's,
>>and as I said, thousands of users shared a single 56K leased line into
>>Darpanet. Do the math, if you can't, I'll help you:
>>
>>56K/1000 = 56 bps.
>>
>>If there were *only* 1000 users vying for the net at the same time, they
>>could each pump 56bps into the backbone. But there were many many more
>>than that, and they weren't always needing the net all of the time.
>>(hence the name concentrator)
>
> "Concentrators" still exist but in a vastly different form,
> configuration, and specifications. As a personal computer
> hobbyist since '76 I've not delved into them (no need to for
> personal dial-up connections) but know many who are; they
> have supplied some interesting literature on them as well as
> in-person explanations.
>
>>> so don't bother to backpedal by
>>
>>I'm sorry, I don't backpedal for idiots. I don't brake for them either.
>
> Blowcode is the road kill of this newsgroup...
>
>>> claiming dialup speeds. (And of course Usenet didn't even begin until
>>> the 80's, shortly after ARPANET had ended.)
>>
>>> Don't try to bullshit someone who has forgotten more about the subject
>>> than you have yet to learn.
>>
>>Riiiight! Just because you can look up darpa on a wiki somewhere,
>>doesn't mean you can understand what you have read.
>
> HAAAAAA... :-)
>
> Blowcode has never stated his amateur license call. Perhaps
> he has "forgotten" it? :-)
>
> LenAnderson@ieee.org

I haven't forgotten it. It's a real 20WPM extra class licence. Not one of them cheap Nickled down hand-out ones. Heee Heeee Heeeeeeeeee.

Ten-Four Len?

SC

4832. Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-09 00:37:52 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <ARgWg.8930$o71.4009@newsread3.news.pas.earthlink.net>
Source record: 10083
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

What do you like best about appliance operating?

SC

4833. Re: Check the SWR on your HF antenna's.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-09 00:42:38 UTC
From: Mark@kb9rqz.net
Message-ID: <an6ji2t9fihb2e0tsd36v2fpg5t1d59jtr@4ax.com>
Source record: 10084
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Mon, 09 Oct 2006 00:37:33 GMT, Slow Code <my.mail@no.spam> wrote:

>
>
>I haven't forgotten it. It's a real 20WPM extra class licence. Not one of
>them cheap Nickled down hand-out ones. Heee Heeee Heeeeeeeeee.
you are afraid to lmention it though
>
>Ten-Four Len?
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4834. Re: Check the SWR on your HF antenna's.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-09 00:43:10 UTC
From: Mark@kb9rqz.net
Message-ID: <fo6ji25if93sd471civp41ljlu51tv4tf1@4ax.com>
Source record: 10085
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Mon, 09 Oct 2006 00:37:29 GMT, Slow Code <my.mail@no.spam> wrote:

>john <john@nospam.net> wrote in
>news:il6hi2t4v4q63dalar3dbgrmiubql6olei@4ax.com:
>
>> Who is Slow Code? What is his call???
>> Does anybody know???
>
>
>Hello John. I'm KB9RQZ, and I just love CW.
stop lying
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4835. troling right along

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-09 00:46:24 UTC
From: Mark@kb9rqz.net
Message-ID: <nu6ji2hogdvu8r0mtjkeuv35v5ee570sls@4ax.com>
Source record: 10086
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Mon, 09 Oct 2006 00:37:52 GMT, Slow Code <my.mail@no.spam> wrote:

troling right along
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4836. Re: Pnig netcopp gay basher Don Boewy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-09 01:34:56 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <C14EF550.46BDB%dbowey@comcast.net>
Source record: 10087
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On 10/8/06 4:20 AM, in article 754gi2tmmnifrol85pqfj3j4ufigl9htkj9@4ax.com,
"Mark@ab9rqz.net" <Mark@kb9rqz.net> wrote:

>
> On Sat, 07 Oct 2006 11:16:22 -0700, Don Bowey <dbowey@comcast.net> wrote:
>> On 10/7/06 10:42 AM, in article oopfi2hqqo9776jp2niijkv4c0i90amkds@4ax.com,
>> "Mark@kb9rqz.net" <Mark@kb9rqz.net> wrote:
>>
>>> On Sat, 7 Oct 2006 15:28:25 +0000 (UTC), my.mail@no.spam (Slow Code)
>>> wrote:
>>>
>>> stop you welching sc
>>> http://kb9rqz.blogspot.com/
>>
>> I reported your abuse to this and other boards, to your service provider.
>> Hopefully they will shut you down.
> you cwoards can try buts ofar you ahve all failed. you are jsut anothre
> gay basher who wilshit and fall back init again.
>
> http://kb9rqz.blogspot.com/

I already received a reply from your service provider, but I'll send this to
them also.

As to gay bashing.... You are a liar. You can't find a post anywhere to
support your lie.

4837. Re: stop you welching sc

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-09 01:49:15 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <C14EF8AB.46BDC%dbowey@comcast.net>
Source record: 10088
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On 10/8/06 9:03 AM, in article m98ii2hofapa8fbcm2asa7sd4b5rat31vh@4ax.com,
"Mark@kb9rqz.net" <Mark@kb9rqz.net> wrote:

> On Sun, 8 Oct 2006 15:25:58 +0000 (UTC), Mark@kb9rqz.net
> (Mark@kb9rqz.net) wrote:
>
>>
>> On Sat, 07 Oct 2006 11:16:22 -0700, Don Bowey <dbowey@comcast.net> wrote:
>>> On 10/7/06 10:42 AM, in article oopfi2hqqo9776jp2niijkv4c0i90amkds@4ax.com,
>>> "Mark@kb9rqz.net" <Mark@kb9rqz.net> wrote:
>>>
>>>> On Sat, 7 Oct 2006 15:28:25 +0000 (UTC), my.mail@no.spam (Slow Code)
>>>> wrote:
>>>>
>>>> stop you welching sc
>>>> http://kb9rqz.blogspot.com/
>>>
>>> I reported your abuse to this and other boards, to your service provider.
>>> Hopefully they will shut you down.
>> fukc you inner mouth.
>> http://kb9rqz.blogspot.com/
> stop the foring and iD theft
> http://kb9rqz.blogspot.com/

I see you have a new path this time. I sent this one and the routing to the
abuse address, too.

4838. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-09 02:59:46 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <CWiWg.9949$YO.9181@tornado.tampabay.rr.com>
Source record: 10089
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

The new radio smell.

Slow Code wrote:

>What do you like best about appliance operating?
>
>SC
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

4839. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-09 04:05:46 UTC
From: COLIN LAMB <k7fm@teleport.com>
Message-ID: <uUjWg.9044$o71.1849@newsread3.news.pas.earthlink.net>
Source record: 10090
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"What do you like best about appliance operating?"

The are wonderful for making dinner, washing the dishes or washing or drying clothes.

Colin K7FM

4840. Re: stop you gay bashing Don Boewy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-09 10:36:20 UTC
From: Mark@kb9rqz.net
Message-ID: <694gi2tmfvtrol85pqfj3j4ufigl9htkj9@4ax.com>
Source record: 10091
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sun, 08 Oct 2006 18:49:15 -0700, Don Bowey <dbowey@comcast.net> wrote:
> On 10/8/06 9:03 AM, in article m98ii2hofapa8fbcm2asa7sd4b5rat31vh@4ax.com,
> "Mark@kb9rqz.net" <Mark@kb9rqz.net> wrote:
>
> > On Sun, 8 Oct 2006 15:25:58 +0000 (UTC), Mark@kb9rqz.net
> > (Mark@kb9rqz.net) wrote:
> >
> >>
> >> On Sat, 07 Oct 2006 11:16:22 -0700, Don Bowey <dbowey@comcast.net> wrote:
> >>> On 10/7/06 in article oopfi2hqqo9776jp2niijkv4c0i90amkds@4ax.com,
> >>> "Mark@kb9rqz.net" <Mark@kb9rqz.net> wrote:
> >>>
> >>>> On Sat, 7 Oct 2006 15:28:25 +0000 (UTC), my.mail@no.spam (Slow Code)
> >>>> wrote:
> >>>>
> >>>> stop you welching sc
> >>>> http://kb9rqz.blogspot.com/
> >>>
> >>> I reported your abuse to this and other boards, to your service provider.
> >>> Hopefully they will shut you down.
> >> fukc you inner mouth.
> >> http://kb9rqz.blogspot.com/
> > stop the foring and iD theft
> > http://kb9rqz.blogspot.com/
>
> I see you have a new path this time. I sent this one and the routing to the
> abuse address, too.
you wilonly siht and fall backc in it again gay basher.
http://kb9rqz.blogspot.com/

4841. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-09 11:27:07 UTC
From: matt vk3zmw <nospam@nospam.ever>
Message-ID: <fmqWg.44288$rP1.21614@news-server.bigpond.net.au>
Source record: 10092
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:
> What do you like best about appliance operating?
>
> SC

Operating the 'big switch' on the chair you are sitting in.

4842. Re: stop you welching sc

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-09 12:47:39 UTC
From: toddaug555@yahoo.com
Message-ID: <1137462796.60230@f14g2000cwb.googlegroups.com>
Source record: 10093
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sun, 08 Oct 2006 18:49:15 -0700, Don Bowey <dbowey@comcast.net> wrote:
> On 10/8/06 9:03 AM, in article m98ii2hofapa8fbcm2asa7sd4b5rat31vh@4ax.com,
> "Mark@kb9rqz.net" <Mark@kb9rqz.net> wrote:
>
> > On Sun, 8 Oct 2006 15:25:58 +0000 (UTC), Mark@kb9rqz.net
> > (Mark@kb9rqz.net) wrote:
> >
> >>
> >> On Sat, 07 Oct 2006 11:16:22 -0700, Don Bowey <dbowey@comcast.net> wrote:
> >>> On 10/7/06 10:42 AM, in article oopfi2hqqo9776jp2niijkv4c0i90amkds@4ax.com,
> >>> "Mark@kb9rqz.net" <Mark@kb9rqz.net> wrote:
> >>>
> >>>> On Sat, 7 Oct 2006 15:28:25 +0000 (UTC), my.mail@no.spam (Slow Code)
> >>>> wrote:
> >>>>
> >>>> stop you welching sc
> >>>> http://kb9rqz.blogspot.com/
> >>>
> >>> I reported your abuse to this and other boards, to your service provider.
> >>> Hopefully they will shut you down.
> >> fukc you inner mouth.
> >> http://kb9rqz.blogspot.com/
> > stop the foring and iD theft
> > http://kb9rqz.blogspot.com/
>
> I see you have a new path this time. I sent this one and the routing to the
> abuse address, too.

Hey Mark, this retard is following you around and harrassing you. You
should complain his ISP about him and dont let the bitchwhore get
way with it. He also violate his state laws and you state laws and
you can file police complaint against the harrassment coward.

Todd N9OGL
OMEGA ONE RADIO
13.556.00 LSB
88.3 MHz FM

4843. Re: PSD on a spectrum analyzer.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-09 16:13:41 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12ikt9mk5fcmua9@corp.supernews.com>
Source record: 10094

Hi Tom,

"K7ITM" <k7itm@msn.com> wrote in message
news:1160168316.507130.68170@m7g2000cwm.googlegroups.com...
> Sheesh, indeed. Where did you hear _that_?

Various people at Tektronix. Perhaps they were trying to portray Agilent as being somewhat more "shrunken" than they really were based on how downsized they'd just been?

The new Agilent MXA series analyzers look really nice (we've had a demo). I'm glad to see that the Agilent spectrum analyzer folks realized that, if you're going to have an instrument that's based on a PC architecture, people want a *good* PC architecture to back it with -- I'm thinking of the MXA's XGA LCD, some reasonably modern CPU, etc.; it's *snappy*. Compare to some of Agilent's network analyzers... we have an N5230A that's only 9 months old, and it has a 640x480 LCD *with a dead pixel* and a whopping 500MHz CPU. Ouch! My understanding is that the current ones still have the same old LCD, but a 1.1GHz CPU now (woo hoo!)

Thanks for the extra information,
---Joel

4844. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-09 17:33:07 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1160415187.380043.233770@b28g2000cwb.googlegroups.com>
Source record: 10095
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow wrote:
> What do you like best about appliance operating?

I particularly like that the free neutron density is quite low, at
least for most white goods.

When are you going to stop beating your mother?

4845. Re: stop you gay bashing Don Boewy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-09 19:20:08 UTC
From: Lloyd Davies Slappa <LDS@nomail.invalid>
Message-ID: <ege7dd$5ib$1@news.albasani.net>
Source record: 10096
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

<Mark@kb9rqz.net> wrote in message
news:694gi2tmfvtrol85pqfj3j4ufigl9htkj9@4ax.com...
>
> On Sun, 08 Oct 2006 18:49:15 -0700, Don Bowey <dbowey@comcast.net> wrote:
>> On 10/8/06 9:03 AM, in article
>> m98ii2hofapa8fbcm2asa7sd4b5rat31vh@4ax.com,
>> "Mark@kb9rqz.net" <Mark@kb9rqz.net> wrote:
>>
>> > On Sun, 8 Oct 2006 15:25:58 +0000 (UTC), Mark@kb9rqz.net
>> > (Mark@kb9rqz.net) wrote:
>> >
>> >>
>> >> On Sat, 07 Oct 2006 11:16:22 -0700, Don Bowey <dbowey@comcast.net>
>> >> wrote:
>> >>> On 10/7/06 in article oopfi2hqqo9776jp2niijkv4c0i90amkds@4ax.com,
>> >>> "Mark@kb9rqz.net" <Mark@kb9rqz.net> wrote:
>> >>>
>> >>>> On Sat, 7 Oct 2006 15:28:25 +0000 (UTC), my.mail@no.spam (Slow Code)
>> >>>> wrote:
>> >>>>
>> >>>> stop you welching sc
>> >>>> http://kb9rqz.blogspot.com/
>> >>>
>> >>> I reported your abuse to this and other boards, to your service
>> >>> provider.
>> >>> Hopefully they will shut you down.
>> >> fukc you inner mouth.
>> >> http://kb9rqz.blogspot.com/
>> > stop the foring and iD theft
>> > http://kb9rqz.blogspot.com/
>>
>> I see you have a new path this time. I sent this one and the routing to
>> the
>> abuse address, too.
> you wilonly siht and fall backc in it again gay basher.
> http://kb9rqz.blogspot.com/
>
^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
Another forge brought to you by Lloyd Davies NOVFP.

http://www.qrz.com/detail/N0VFP

http://i12.tinypic.com/2qnv3fr.jpg

Hi Lardass.

4846. Re: stop you welching sc

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-09 19:22:29 UTC
From: Lloyd Davies Slappa <LDS@nomail.invalid>
Message-ID: <ege7hq$5p5$1@news.albasani.net>
Source record: 10097
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"N9OGL" <toddaug555@yahoo.com> wrote in message
news:1137462796.60230@f14g2000cwb.googlegroups.com...
>
> On Sun, 08 Oct 2006 18:49:15 -0700, Don Bowey <dbowey@comcast.net> wrote:
>> On 10/8/06 9:03 AM, in article
>> m98ii2hofapa8fbcm2asa7sd4b5rat31vh@4ax.com,
>> "Mark@kb9rqz.net" <Mark@kb9rqz.net> wrote:
>>
>> > On Sun, 8 Oct 2006 15:25:58 +0000 (UTC), Mark@kb9rqz.net
>> > (Mark@kb9rqz.net) wrote:
>> >
>> >>
>> >> On Sat, 07 Oct 2006 11:16:22 -0700, Don Bowey <dbowey@comcast.net>
>> >> wrote:
>> >>> On 10/7/06 10:42 AM, in article
>> >>> oopfi2hqqo9776jp2niijkv4c0i90amkds@4ax.com,
>> >>> "Mark@kb9rqz.net" <Mark@kb9rqz.net> wrote:
>> >>>
>> >>>> On Sat, 7 Oct 2006 15:28:25 +0000 (UTC), my.mail@no.spam (Slow Code)
>> >>>> wrote:
>> >>>>
>> >>>> stop you welching sc
>> >>>> http://kb9rqz.blogspot.com/
>> >>>
>> >>> I reported your abuse to this and other boards, to your service
>> >>> provider.
>> >>> Hopefully they will shut you down.
>> >> fukc you inner mouth.
>> >> http://kb9rqz.blogspot.com/
>> > stop the foring and iD theft
>> > http://kb9rqz.blogspot.com/
>>
>> I see you have a new path this time. I sent this one and the routing to
>> the
>> abuse address, too.
>
> Hey Mark, this retard is following you around and harrassing you. You
> should complain his ISP about him and dont let the bitchwhore get
> way with it. He also violate his state laws and you state laws and
> you can file police complaint against the harrassment coward.
>
> Todd N9OGL
> OMEGA ONE RADIO

> 13.556.00 LSB
> 88.3 MHz FM
>
>
^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^

Another forge brought to you by Lloyd Davies NOVFP.

http://www.qrz.com/detail/N0VFP

http://i12.tinypic.com/2qnv3fr.jpg

Hi Lardass.

4847. Re: Pnig netcopp gay basher Don Boewy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-09 19:49:29 UTC
From: Lloyd Davies Slappa <LDS@nomail.invalid>
Message-ID: <ege94d$7mv$1@news.albasani.net>
Source record: 10098
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Don Bowey" <dbowey@comcast.net> wrote in message
news:C14EF550.46BDB%dbowey@comcast.net...
> On 10/8/06 4:20 AM, in article
> 754gi2tmmnifrol85pqfj3j4ufigl9htkj9@4ax.com,
> "Mark@ab9rqz.net" <Mark@kb9rqz.net> wrote:
>
>>
>> On Sat, 07 Oct 2006 11:16:22 -0700, Don Bowey <dbowey@comcast.net> wrote:
>>> On 10/7/06 10:42 AM, in article
>>> oopfi2hqqo9776jp2niijkv4c0i90amkds@4ax.com,
>>> "Mark@kb9rqz.net" <Mark@kb9rqz.net> wrote:
>>>
>>>> On Sat, 7 Oct 2006 15:28:25 +0000 (UTC), my.mail@no.spam (Slow Code)
>>>> wrote:
>>>>
>>>> stop you welching sc
>>>> http://kb9rqz.blogspot.com/
>>>
>>> I reported your abuse to this and other boards, to your service
>>> provider.
>>> Hopefully they will shut you down.
>> you cwoards can try buts ofar you ahve all failed. you are jsut anothre
>> gay basher who wilshit and fall back init again.
>>
>> http://kb9rqz.blogspot.com/
>
> I already received a reply from your service provider, but I'll send this
> to
> them also.
>
> As to gay bashing.... You are a liar. You can't find a post anywhere to
> support your lie.
>
>
Don, you're responding to a forged post from NOVFP.

Lloyd Davies NOVFP.

http://www.qrz.com/detail/N0VFP

http://i12.tinypic.com/2qnv3fr.jpg

4848. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-09 21:34:42 UTC
From: marqueer@mail2world.com
Message-ID: <1160429682.631111.162040@m7g2000cwm.googlegroups.com>
Source record: 10099
Cross-posted to:
rec.radio.amateur.boatanchors,alt.usenet.kooks,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

K7ITM wrote:
> Slow wrote:
> > What do you like best about appliance operating?
>
> I particularly like that the free neutron density is quite low, at
> least for most white goods.
>
> When are you going to stop beating your mother?

I LIKE APPLIANCE FUCKING, WHICH IS WHY SC'S ASS IS SO HOT!

4849. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-09 22:04:36 UTC
From: Spokesman <his@spam.net>
Message-ID: <sb-dncTrEoTqWrfYnZ2dnUVZ_vudnZ2d@wightman.ca>
Source record: 10100
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"Slow Code" <my.mail@no.spam> wrote in message
news:ARgWg.8930$o71.4009@newsread3.news.pas.earthlink.net...
> What do you like best about appliance operating?
>
> SC

The most interseting part of this newgroup is watching Slow Mind
posting trolls.

4850. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-10 01:08:44 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <woCWg.12121$UG4.9225@newsread2.news.pas.earthlink.net>
Source record: 10101
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"Spokesman" <his@spam.net> wrote in
news:sb-dncTrEoTqWrfYnZ2dnUVZ_vudnZ2d@wightman.ca:

>
> "Slow Code" <my.mail@no.spam> wrote in message
> news:ARgWg.8930$o71.4009@newsread3.news.pas.earthlink.net...
>> What do you like best about appliance operating?
>>
>> SC
>
> The most interseting part of this newgroup is watching Slow Mind
> posting trolls.

Pull my finger.

SC

4851. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-10 11:50:43 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <nOLWg.2685$Ka1.1928@news01.roc.ny>
Source record: 10102
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:
> What do you like best about appliance operating?

All the crotchety old farts are either off somewhere beep-beep-beeping
away on CW or bitching to each other on the lower half of the 80m phone
band, so it's easy to avoid them and talk to someone who enjoys ham
radio as it is instead of whining about how it was.

4852. Re: stop you welching sc

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-10 14:18:21 UTC
From: Mark@kb9rqz.net
Message-ID: <hsani2lf8da7div7libg3qgrodqaq4dq88@4ax.com>
Source record: 10103
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Mon, 9 Oct 2006 12:47:39 +0000 (UTC), toddaug555@yahoo.com (N9OGL)
wrote:

>
>On Sun, 08 Oct 2006 18:49:15 -0700, Don Bowey <dbowey@comcast.net> wrote:
>> On 10/8/06 9:03 AM, in article m98ii2hofapa8fbcm2asa7sd4b5rat31vh@4ax.com,
>> "Mark@kb9rqz.net" <Mark@kb9rqz.net> wrote:
>>
>> > On Sun, 8 Oct 2006 15:25:58 +0000 (UTC), Mark@kb9rqz.net
>> > (Mark@kb9rqz.net) wrote:
>> >
>> >>
>> >> On Sat, 07 Oct 2006 11:16:22 -0700, Don Bowey <dbowey@comcast.net> wrote:
>> >>> On 10/7/06 10:42 AM, in article oopfi2hqqo9776jp2niijkv4c0i90amkds@4ax.com,
>> >>> "Mark@kb9rqz.net" <Mark@kb9rqz.net> wrote:
>> >>>
>> >>>> On Sat, 7 Oct 2006 15:28:25 +0000 (UTC), my.mail@no.spam (Slow Code)
>> >>>> wrote:
>> >>>>
>> >>>> stop you welching sc
>> >>>> http://kb9rqz.blogspot.com/
>> >>>
>> >>> I reported your abuse to this and other boards, to your service provider.
>> >>> Hopefully they will shut you down.
>> >> fukc you inner mouth.
>> >> http://kb9rqz.blogspot.com/
>> > stop the foring and iD theft
>> > http://kb9rqz.blogspot.com/
>>
>> I see you have a new path this time. I sent this one and the routing to the
>> abuse address, too.
>
>Hey Mark, this retard is following you around and harrassing you. You
>should complain his ISP about him and dont let the bitchwhore get
>way with it. He also violate his state laws and you state laws and
>you can file police complaint against the harrassment coward.
ewould do as much food as the same things done about steve and wisemen

but I am not sorried about him
>
>Todd N9OGL
>OMEGA ONE RADIO
>13.556.00 LSB
>88.3 MHz FM

http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4853. (THIS IS SO REAL PEOPLE) IM ASKING FOR DONATIONS FOR HEART SURGERY

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-10 14:20:51 UTC
From: mike <bphtzywr@bngrxwuq.com>
Message-ID: <452bc60e$0$2995$ec3e2dad@news.usenetmonster.com>
Source record: 10015
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

hello i always figured this would never happen to me but my heart is having serious issuses do to a birth defect (i was born with a hole in my heart)and need money to have the surgery to get the hole fix so i am asking for donations to help with the cost since i dont have insurance so if you have a paypal account please look into your heart and donate a dollar or two my paypal emial is mcollins7373@msn.com i need around 20,000 dollars usd to have the surgery done. This is my last resort for money i have
tried goverment agencies family and friends and to my dissapointment nothing happened SO PLEASE I NEED HELP thank you so much mike collins

P.S. THANKS FOR ALL THE HATE MAIL WHERE WOULD THE WORLD BE WITHOUT HATERS

E#YtndPa8PFHBK(w+.g35'e1#d_2@(T@aB]X
GILd&dpLWXChv1DGnt@IqJwOwVRUUuiJ^I2FiNR?!PJ"dbNVCsTn0"j2MVALZEl

4854. Re: QRP-ARCI

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-10 15:29:47 UTC
From: "." <none@none.com>
Message-ID: <PIqdnYwPt-3nIbbYnZ2dnUVZ_t-dnZ2d@adelphia.com>
Source record: 10104
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur,alt.ham.radio,rec.ham-radio

Good riddance! Both John and Karl whose bellicose, fragile

egos contributed to the ruin of QRP-L by chasing off brilliant

contributing engineers and operators then ultimately forced the

exile of QRP-L from its home on listserv.lehigh.edu . Cheers to

QRP-ARCI with exercising their Freedom of Disassociation

and dumping Beavis-n-Butthead!

4855. Re: (THIS IS SO REAL PEOPLE) IM ASKING FOR DONATIONS FOR HEART SURGERY

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-10 16:45:54 UTC
From: Mark@kb9rqz.net
Message-ID: <452bc14c$0$19672$88260bb3@free.teranews.com>
Source record: 10105
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"mike" <bphtzywr@bngrxwuq.com> wrote in message
news:452bc60e$0$2995$ec3e2dad@news.usenetmonster.com...
> hello i always figured this would never happen to me but my
> heart is having serious issuses do to a birth defect (i was born with a
> hole in my heart)and need money to have the surgery to get the hole fix so
> i am asking for donations to help with the cost since i dont have
> insurance so if you have a paypal account please look into your heart and
> donate a dollar or two my paypal emial is mcollins7373@msn.com i need
> around 20,000 dollars usd to have the surgery done. This is my last resort
> for money i have
> tried goverment agencies family and friends and to my
> dissapointment nothing happened SO PLEASE I NEED HELP thank you so much
> mike collins
>
> P.S. THANKS FOR ALL THE HATE MAIL WHERE WOULD THE WORLD BE
> WITHOUT HATERS
>
>
geuss waht im trying toget the cheep poeple at teh welfair to pay four my
penis inmplant an it ben like puling teeth to get those two pay.

--
Posted via a free Usenet account from http://www.teranews.com

4856. Re: IM ASKING FOR DONATIONS FOR HEART SURGERY

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-10 16:46:49 UTC
From: Mark@kb9rqz.net
Message-ID: <452bc186$0$19615$88260bb3@free.teranews.com>
Source record: 10106
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"mike" <mcollins7373@msn.com> wrote in message
news:452ba865$0$4677$ec3e2dad@news.usenetmonster.com...
> hello i always figured this would never happen to me but my
> heart is having serious issuses do to a birth defect (i was born with a
> hole in my heart)and need money to have the surgery to get the hole fix so
> i am asking for donations to help with the cost since i dont have
> insurance so if you have a paypal account please look into your heart and
> donate a dollar or two my paypal emial is mcollins7373@msn.com i need
> around 20,000 dollars usd to have the surgery done. This is my last resort
> for money i have tried goverment agencies family and friends and to my
> dissapointment nothing happened SO PLEASE I NEED HELP thank you so much
> mike collins
>
>
>
>
> uW18P>^&K2[o%09E*`x[9K%bwh'bt/QIr8!Vk
> MwoA)75ElpSj?Z[U`)tK`%OLP#m2qLF<MuIR5q.lYC;M:1Lc>: aQcG]SjrTf$

geuss waht im trying toget the cheep poeple at teh welfair to pay four my
penis inmplant an it ben like puling teeth to get those two pay.

--
Posted via a free Usenet account from http://www.teranews.com

4857. Re: QRP-ARCI

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-10 17:29:51 UTC
From: W2AGN <w2agn@nospamw2agn.net>
Message-ID: <452BD88F.3090309@nospamw2agn.net>
Source record: 10107
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur,alt.ham.radio,rec.ham-radio

. wrote:
> Good riddance! Both John and Karl whose bellicose, fragile
>
> egos contributed to the ruin of QRP-L by chasing off brilliant
>
> contributing engineers and operators then ultimately forced the
>
> exile of QRP-L from its home on listserv.lehigh.edu . Cheers to
>
> QRP-ARCI with exercising their Freedom of Disassociation
>
> and dumping Beavis-n-Butthead!
>
>
>
BULL! The credibility of your comments is summed up quite nicely by your cowardly anonymous email address (none@none.com).

John W2AGN

4858. Re: QRP-ARCI

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-10 17:30:02 UTC
From: W2AGN <w2agn@nospamw2agn.net>
Message-ID: <U7SdnQmnTtgHRbbYnZ2dnUVZ_tmdnZ2d@comcast.com>
Source record: 10108
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur,alt.ham.radio,rec.ham-radio

. wrote:
> Good riddance! Both John and Karl whose bellicose, fragile
>
> egos contributed to the ruin of QRP-L by chasing off brilliant
>
> contributing engineers and operators then ultimately forced the
>
> exile of QRP-L from its home on listserv.lehigh.edu . Cheers to
>
> QRP-ARCI with exercising their Freedom of Disassociation
>
> and dumping Beavis-n-Butthead!
>
>
>
BULL! The credibility of your comments is summed up quite nicely by your cowardly anonymous email address (none@none.com).

John W2AGN

4859. Stop Bio-TERROR in America: The Government of Torture!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-10 19:15:03 UTC
From: poetry4justice@yahoo.com
Message-ID: <1160507703.434461.142800@k70g2000cwa.googlegroups.com>
Source record: 10109

AMERICA IN DANGER of its own out-of-control Bio-Terror:
Is 1984 here? Or cripping... God help us,
blinded!
Originally Secret Bio-Aerosols are misused to HARM and Torture in
U.S.A.
Tempering with pills/ medicine/ treatments to HARM and DISABLE !

Our government needs TORTURE in U.S.? See details
below...
It has your VOTE, support? Abused... for power-grab or
vicy-terror!
Transitory harm and HELL are U.S.-legal? for
critics-cleansing.

Did Denny Hastert cover the basterd? And other Washington
crooks?

CRITICS (political/social/cultural) are harassed and secretly
persecuted
along with their KIDS in schools/colleges, especially, during
tests/exams
(Think: Guantanamo "stress-positions" in the context of
1984-technologies)
Female FBI-informers are coerced
and abused!

Bio-Aerosols and aerosolized chemicals are used to cause:
- severe colds/coughs turning into bronchitis, eye irritation
- bacterial pneumonia/other pneumonia, shortness of breath
- surges of severe headaches, migraines, dizziness, etc.
- fainting collapses by symptoms-mimicking aerosols
- severe stomach pains (sharp, burning, nausea, etc)
- chest-wall pains, heart-muscle inflammations/trauma, etc.
WORSE:
- heart attacks under cover of second-hand smocking
- aerosolized chemicals from the death-penalty drugs
- car crashes/accidents by Vertigo-causing aerosols
- car accidents due to the fine/controlled tempering
- liver/organ failure by small-dose toxins (trace-less?)
- cancer-causing/facilitating - months-long assasinations
This "Yushchenko syndrom" CAN destabilize NATIONs
Waste, Fraud, Cronism and Abuse in HomeSec/FBI
Fabrication of Believable Info/Manufacturing of accidents

U.S. mail IS polluted in "anthrax-like" manner to HARM critics
Libraries, airplanes, hotels, offices, buses, trains - all polluted!

Remote control, off-jacket/off-book/off-paper pollutant attacks!

A network of Secret Gas-Aerosol Rooms operated in US
(in Philadelphia, Narberth, Lower Merion, PA)
(in Wilmington and Newark, DE)
(in Hampton, Williamsburg and Richmond, VA)
AND ELSEWHERE.... details below...
Freddie May/Freddie Mac likely used to buy silent cooperation
Bio-aerosols used to hurt and simulate panic attacks, etc.!
Soviets locked critics into nut-houses, now WE do the same!
Symptoms-mimicking aerosols do HARM, weak or ill people.

Echo-location/wire-taps/listening used to turn homes into cages!

Say "Stop, I care" - call Senate (202) 224-3121
House of Representatives (202) 225-3121
What IS going on in America? *Print and
Post*
Manufacturing of FEAR to grab more Power and Money, of course.
Tragedy IS used to Power Graib, while Fear is molded into profit!

Big Brother spins protection...
And fear is used to clamp.
Democracy needs action!
On which side do you stand?

Looked at this?!! Go to Google/Yahoo newsGroups:

TORTURE IN USA: Secret Aerosol Rooms

US Scientist needs legal help dealing with the secret aerosols rooms
(SARs) operated illegally in Philadelphia area, Newark (DE), Hampton
and Williamsburg (VA) and other places. Highly volatile aerosols with
and without bacterial content cause dry cough, airways a...

Full text was at:
http://buyit.philly.com/findit/search/results.jsp?catId=krd_philenqda...

This was a new on-line ad placed in Philadelphia Inquirer and
Philadelphia Daily News on www.philly.com (see full text below)
It was about the secret aerosols rooms in US. One could find it by
searching "secret", say, in the ad section of philly.com.

Democracy can not function effectively without the informed public. As
a former NASA Langley scientist working in the area of nanotechnology
and nanoscale particles, I have been recently exposed to the
establishment of secret gas-aerosol rooms inside of United States, at
least in the Mid-Atlantic region (from Philadelphia to Virginia).
First, the highly irritant aerosols have surfaced at the NASA Langley
Research Center in several safety accidents. Investigations were
blocked, probably, because of lack of Congressional approval for such
financially-lucrative research at NASA. Later, these aerosols had been

encountered outside of NASA in Virginia, Delaware and Pennsylvania
.
This points out to yet another proliferation of originally-sensitive technologies into domestic American life to hurt and harass people without a proper oversight and much control. This amounts to torture, extra-judicial prosecution and authoritarian intimidation tactics. The use of such irritants and the operations of the secret gas-aerosol rooms are gross violations of human and constitutional rights of American citizens and various domestic and international laws.

------------------Full text of an ad from Philadelphia's philly.com--------------------------
TORTURE IN USA: Secret Aerosol Rooms
US Scientist needs legal help dealing with the secret aerosols rooms (SARs) operated illegally in Philadelphia area, Newark (DE), Hampton and Williamsburg (VA). Highly volatile aerosols with and without bacterial content cause dry cough, airways and eyes irritation, chest pain and inflammation. FBI and Homeland Security associates are likely operators of SARs, while collaborators may be hotel staff and landlords, who get financial/material or other incentives. US citizens and kids are victims.

Torture is any act by which severe pain, whether physical or psychological, is intentionally inflicted on a person as a means of intimidation, deterrence, revenge, punishment, sadism, or information gathering. At times, medicine and medical practitioners have been drawn into the ranks of torturers, either to judge what victims can endure, to apply treatments which will enhance torture, or as torturers in their own right. http://en.wikipedia.org/wiki/Torture

America in Danger!

America in danger -
The vice is NOT impeached.
America in danger -
The public trust is breached.

Big Brother spins protection
And fear is used to clamp.
Democracy needs action!
On which side do you stand?

Which side are you on, boys?
Which side moves you on?
Which side are you on, girls?
Which side did you wrong?
(Chorus after F. Reece)

Your church is burned by haters.
The priests to go to jail?
Your dreams are cheyned by traitors,

But hope still shines through veil.

Dust rooms came back to gas us
With neo-Naz (or Con) embrace...
New immigrants do make US!
And not the SSuper-race...

***

The Government of Torture

Our government needs TORTURE?!
It has your VOTE, and, now, support?
But peace (not vice) needs steady nurture
And trustful words of calm rapport.

Beware of loud, but FALSE, ideas
That flame a thirsty hellish torch.
Protect the old and true ideals
And Constitution's civic urge.

Yes, torture IS a hellish torch -
In bloody hands, a blinded sword,
With Constitution used to forge
All laws on rights as mere absurd!

Remember victim's silent cry
And SEE the Christ in all of us.
Don't let your government to spy
And torture with some bio-dust.

There is NO good use for evil torture!
No matter how the need is spinned
By Nixon's men, as bloody sergeants,
While truth is painfully re-skinned.

V. Haryk-Bukovynsky © VMH

4860. Re: IM ASKING FOR DONATIONS FOR HEART SURGERY

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-10 19:33:19 UTC
From: an old freind <kb9rqz@hotmail.com>
Message-ID: <1160508799.718062.133210@c28g2000cwb.googlegroups.com>
Source record: 10110
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Mark@kb9rqz.net wrote:
> "mike" <mcollins7373@msn.com> wrote in message
> news:452ba865$0$4677$ec3e2dad@news.usenetmonster.com...
>
id theft is a crime

4861. Re: (THIS IS SO REAL PEOPLE) IM ASKING FOR DONATIONS FOR HEART SURGERY

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-10 19:33:59 UTC
From: an old freind <kb9rqz@hotmail.com>
Message-ID: <1160508839.316047.116040@b28g2000cwb.googlegroups.com>
Source record: 10111
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Mark@kb9rqz.net wrote:
> "mike" <bphtzywr@bngrxwuq.com> wrote in message

id theft is a crime

4862. FS:Yaesu FT-8100R

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-10 22:24:12 UTC
From: Rich <rullery@pioneer-data.com>
Message-ID: <j8Sdnfq2qNQRgLHYnZ2dnUVZ_radnZ2d@centurytel.net>
Source record: 10112
Cross-posted to: rec.radio.amateur.homebrew,alt.ham-radio.marketplace,rec.ham-radio.swap,rec.radio.amateur.swap

Like new excellent condition Never mobile with original box and manual, I
kid you not, this has spent most of its days in the box. S/N: 9M280040
$265.00 Includes shipping in the lower 48
No Paypal... only Postal M/O!!
rullery@pioneer-data.com

http://www.eham.net/classifieds/detail/213981

4863. Re: (THIS IS SO REAL PEOPLE) IM ASKING FOR DONATIONS FOR HEART SURGERY

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 00:40:10 UTC
From: Douche Bag <loumaagsucks@hotmail.com>
Message-ID: <1160527210.572830.117910@h48g2000cwc.googlegroups.com>
Source record: 10113
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

I need donations for my penis reduction.I was born with a huge schloong
and it's very difficult to carry around in my pants. Please help me
with my pain. I need this reduction operation now.

an old freind wrote:
> Mark@kb9rqz.net wrote:
> > "mike" <bphtzywr@bngrxwuq.com> wrote in message
>
> id theft is a crime

4864. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 00:44:46 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <28XWg.9930$o71.4353@newsread3.news.pas.earthlink.net>
Source record: 10114
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

gwatts <gwatts@frontiernet.net> wrote in
news:nOLWg.2685$Ka1.1928@news01.roc.ny:

> Slow Code wrote:
>> What do you like best about appliance operating?
>
> All the crotchety old farts are either off somewhere beep-beep-beeping
> away on CW or bitching to each other on the lower half of the 80m phone
> band, so it's easy to avoid them and talk to someone who enjoys ham
> radio as it is instead of whining about how it was.
>

Big Ten-Four on that Good Buddy.

SC

4865. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 01:27:51 UTC
From: Mark@kb9rqz.net
Message-ID: <34ioi2lt0ek3tklug9p3rf8s5lrc09i0ng@4ax.com>
Source record: 10115
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Wed, 11 Oct 2006 00:44:46 GMT, Slow Code <my.mail@no.spam> wrote:

>gwatts <gwatts@frontiernet.net> wrote in
>news:nOLWg.2685$Ka1.1928@news01.roc.ny:
>
>> Slow Code wrote:
>>> What do you like best about appliance operating?
>>
>> All the crotchety old farts are either off somewhere beep-beep-beeping
>> away on CW or bitching to each other on the lower half of the 80m phone
>> band, so it's easy to avoid them and talk to someone who enjoys ham
>> radio as it is instead of whining about how it was.
>>
>
>Big Ten-Four on that Good Buddy.
SC Poster boy for No Code
>
>
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4866. Re: (THIS IS SO REAL PEOPLE) IM ASKING FOR DONATIONS FOR HEART SURGERY

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 01:42:54 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <1160530974.778194.99840@e3g2000cwe.googlegroups.com>
Source record: 10116
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Douche Bag wrote:
>
help ham radio SC turn in your license

4867. Re: IM ASKING FOR DONATIONS FOR HEART SURGERY

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 08:20:28 UTC
From: steve carey <scarey@tds.net>
Message-ID: <gP1Xg.5409$5i7.5291@newsreading01.news.tds.net>
Source record: 10117
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

```
it goes along with the hole in your head
<Mark@kb9rqz.net> wrote in message
news:452bc186$0$19615$88260bb3@free.teranews.com...
>
> "mike" <mcollins7373@msn.com> wrote in message
> news:452ba865$0$4677$ec3e2dad@news.usenetmonster.com...
>> hello i always figured this would never happen to me but my
>> heart is having serious issuses do to a birth defect (i was born with a
>> hole in my heart)and need money to have the surgery to get the hole fix
>> so i am asking for donations to help with the cost since i dont have
>> insurance so if you have a paypal account please look into your heart and
>> donate a dollar or two my paypal emial is mcollins7373@msn.com i need
>> around 20,000 dollars usd to have the surgery done. This is my last
>> resort for money i have tried goverment agencies family and friends and
>> to my dissapointment nothing happened SO PLEASE I NEED HELP thank you so
>> much mike collins
>>
>>
>>
>>
>> uW18P>^&K2[o%09E*`x[9K%bwh'bt/QIr8!Vk
>> MwoA)75ElpSj?Z[U`)tK`%OLP#m2qLF<MuIR5q.lYC;M:1Lc>: aQcG]SjrTf$
>
> geuss waht im trying toget the cheep poeple at teh welfair to pay four my
> penis inmplant an it ben like puling teeth to get those two pay.
>
>
> --
> Posted via a free Usenet account from http://www.teranews.com
>
```

4868. hello from belgium

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 15:56:34 UTC
From: pierard laurent <pierard_laurent@hotmail.com>
Message-ID: <egj46hjvn1@news.brutele.be>
Source record: 10118

```
hello all,

i am from belgium
73s all de on3vhf

www.on3vhf.be.tf
```

4869. effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 17:11:00 UTC
From: Lathi.Tan@gmail.com
Message-ID: <1160586660.436290.243880@e3g2000cwe.googlegroups.com>
Source record: 10119

I am wondering what's the bad effect of cascading a lot of low noise amplifiers? It seems that if I devide 90dB into 4 LNAs I will have much less noise figure. Can I use 5 LNAs in series? Any disadvantage about this way? Thanks.

4870. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 17:45:33 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <15aXg.18227$wE5.8051@trnddc02>
Source record: 10120

<Lathi.Tan@gmail.com> wrote in message
news:1160586660.436290.243880@e3g2000cwe.googlegroups.com...
>I am wondering what's the bad effect of cascading a lot of low noise
> amplifiers? It seems that if I devide 90dB into 4 LNAs I will have much
> less noise figure. Can I use 5 LNAs in series? Any disadvantage about
> this way? Thanks.
>
If your 1st LNA has the lowest noise figure and sufficient gain, it will set
the noise floor.
You can work the cascaded amplifier equations and see what you will need.
90dB seems like a LOT of front end gain- unless this is very narrow band, I
would be very concerned about overload resulting in all kinds of in band
garbage.

Dale W4OP

4871. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 18:38:03 UTC
From: Lathi.Tan@gmail.com
Message-ID: <1160591883.323566.104340@m7g2000cwm.googlegroups.com>
Source record: 10121

What do you mean by overload? How come there is too much garbage as
long as my NF is low?

I actually need 143dB gain. What kind of problem I will have if I just
use 6 stages of amplifiers, like 1stage(20dB, NF2.4dB) 2nd stage(30dB,
NF3db), 3rd stage(43dB, NF 6.2dB), 4th stage(43dB NF6.2dB). It seems my
NFtotal is pretty low. What's my problem?

Thanks.

Dale Parfitt wrote:
> <Lathi.Tan@gmail.com> wrote in message
> news:1160586660.436290.243880@e3g2000cwe.googlegroups.com...
> >I am wondering what's the bad effect of cascading a lot of low noise
> > amplifiers? It seems that if I devide 90dB into 4 LNAs I will have much
> > less noise figure. Can I use 5 LNAs in series? Any disadvantage about
> > this way? Thanks.
> >
> If your 1st LNA has the lowest noise figure and sufficient gain, it will set
> the noise floor.
> You can work the cascaded amplifier equations and see what you will need.
> 90dB seems like a LOT of front end gain- unless this is very narrow band, I
> would be very concerned about overload resulting in all kinds of in band
> garbage.
>
> Dale W4OP

4872. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 18:52:33 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <m7fqi2d746s2ucmlhbkfsnqdfrdbaajhnj@4ax.com>
Source record: 10122

On 11 Oct 2006 11:38:03 -0700, Lathi.Tan@gmail.com wrote:

>What do you mean by overload? How come there is too much garbage as
>long as my NF is low?
>
>I actually need 143dB gain. What kind of problem I will have if I just
>use 6 stages of amplifiers, like 1stage(20dB, NF2.4dB) 2nd stage(30dB,
>NF3db), 3rd stage(43dB, NF 6.2dB), 4th stage(43dB NF6.2dB). It seems my
>NFtotal is pretty low. What's my problem?

Your problem is you don't know what you're doing.

What frequency is this oscillator going to run at?

4873. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 19:13:20 UTC
From: Lathi.Tan@gmail.com
Message-ID: <1160593999.986847.117750@i3g2000cwc.googlegroups.com>
Source record: 10123

I asked what I don't know. I am expecting a helpful answer.

The frequency is 70MHz.

Wes Stewart wrote:
> On 11 Oct 2006 11:38:03 -0700, Lathi.Tan@gmail.com wrote:
>
> >What do you mean by overload? How come there is too much garbage as
> >long as my NF is low?
> >
> >I actually need 143dB gain. What kind of problem I will have if I just
> >use 6 stages of amplifiers, like 1stage(20dB, NF2.4dB) 2nd stage(30dB,
> >NF3db), 3rd stage(43dB, NF 6.2dB), 4th stage(43dB NF6.2dB). It seems my
> >NFtotal is pretty low. What's my problem?
>
> Your problem is you don't know what you're doing.
>
> What frequency is this oscillator going to run at?

4874. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 19:27:15 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <nAbXg.1018204$084.97115@attbi_s22>
Source record: 10124

>I asked what I don't know. I am expecting a helpful answer.
>
> The frequency is 70MHz.
>
>
> As Dale gave you an answer that is correct, you might reason with him, I
> recognize that the last answer wasn't very helpful.

Basically, with 20 dB of gain, your noise figure will be well established with the NF of that first stage of 2.4 dB. It will actually deteriorate a tenth of a
dB or so for the further stages down the line, but not very much. The second stage could have as great a noise figure as 10 dB and the total would only deteriorate to 2.62 dB

If you need additional gain, it's best obtained after some selectivity. 140 plus dB of gain on a single frequency is going to be VERY difficult to tame and keep from oscillation in it's own right.

W4ZCB

4875. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 19:27:15 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <nAbXg.1018203$084.7002@attbi_s22>
Source record: 10125

>I asked what I don't know. I am expecting a helpful answer.
>
> The frequency is 70MHz.
>
>
> As Dale gave you an answer that is correct, you might reason with him, I
> recognize that the last answer wasn't very helpful.

Basically, with 20 dB of gain, your noise figure will be well established with the NF of that first stage. It will actually deteriorate a tenth of a dB or so for the further stages down the line, but not very much.

If you need additional gain, it's best obtained after some selectivity. 140 plus dB of gain on a single frequency is going to be VERY difficult to tame and keep from oscillation in it's own right.

W4ZCB

4876. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 19:46:32 UTC
From: Lathi.Tan@gmail.com
Message-ID: <1160595992.913074.73420@m7g2000cwm.googlegroups.com>
Source record: 10126

It seems that I know the Friis equation.

I am asking because it seems difficult, and maybe impossible. I've never heard of this high gain before, but I dont' know why I cann't stack amplifiers and I am looking for somebody who can tell me what exactly the problem is: you see the NF is nice, and I can get the SNR if the band is narrow enough.

It also seems that I "don't know what I'm doing". So please explain a little if you want me to understand. Thanks.

Harold E. Johnson wrote:
> >I asked what I don't know. I am expecting a helpful answer.
> >
> > The frequency is 70MHz.
> >
> >
> > As Dale gave you an answer that is correct, you might reason with him, I
> > recognize that the last answer wasn't very helpful.
>
> Basically, with 20 dB of gain, your noise figure will be well established
> with the NF of that first stage. It will actually deteriorate a tenth of a
> dB or so for the further stages down the line, but not very much.
>
> If you need additional gain, it's best obtained after some selectivity. 140
> plus dB of gain on a single frequency is going to be VERY difficult to tame
> and keep from oscillation in it's own right.
>
> W4ZCB

4877. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 20:02:01 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <Z4cXg.2828$ya1.2518@news02.roc.ny>
Source record: 10127
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:
> gwatts <gwatts@frontiernet.net> wrote in
> news:nOLWg.2685$Ka1.1928@news01.roc.ny:
>
>
>>Slow Code wrote:
>>
>>>What do you like best about appliance operating?
>>
>>All the crotchety old farts are either off somewhere beep-beep-beeping
>>away on CW or bitching to each other on the lower half of the 80m phone
>>band, so it's easy to avoid them and talk to someone who enjoys ham
>>radio as it is instead of whining about how it was.
>>
>
>
> Big Ten-Four on that Good Buddy.

It sounds like you run a lot of 11m, not surprising considering how much
you whine, and it's not alternator whine.

4878. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 20:13:43 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <XfcXg.1018236$084.652609@attbi_s22>
Source record: 10128

<Lathi.Tan@gmail.com> wrote in message
news:1160595992.913074.73420@m7g2000cwm.googlegroups.com...
> It seems that I know the Friis equation.
>
> I am asking because it seems difficult, and maybe impossible. I've
> never heard of this high gain before, but I dont' know why I cann't
> stack amplifiers and I am looking for somebody who can tell me what
> exactly the problem is: you see the NF is nice, and I can get the SNR
> if the band is narrow enough.
>
> It also seems that I "don't know what I'm doing". So please explain a
> little if you want me to understand. Thanks.

Well, how about a little additional information? What is it that you're trying to accomplish? A gain of 140 dB would amplify a signal of strength 8 x 10^-10 Watts (About the equivalent of a received signal of 10 dB over "S"-9) to a kiloWatt. I don't think you're trying to do that, so what convinces you that you NEED 140 dB of gain?

Regards
W4ZCB

4879. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 20:33:26 UTC
From: Lathi.Tan@gmail.com
Message-ID: <1160598806.809126.280010@m7g2000cwm.googlegroups.com>
Source record: 10129

I'm dealing with a DSSS current signal at 70MHz. Before I start
designing anything, I am calculating the signal amplitude. It's going
to be 5nArms. If I have a 50ohm resistor, it's -153dBm. I'd be happy to
know any solid proof that it's not doable because it's my job now.

In theory DSSS signal can work under noise level, but can it be so
much?

Harold E. Johnson wrote:
> <Lathi.Tan@gmail.com> wrote in message
> news:1160595992.913074.73420@m7g2000cwm.googlegroups.com...
> > It seems that I know the Friis equation.
> >
> > I am asking because it seems difficult, and maybe impossible. I've
> > never heard of this high gain before, but I dont' know why I cann't
> > stack amplifiers and I am looking for somebody who can tell me what
> > exactly the problem is: you see the NF is nice, and I can get the SNR
> > if the band is narrow enough.
> >
> > It also seems that I "don't know what I'm doing". So please explain a
> > little if you want me to understand. Thanks.
>
> Well, how about a little additional information? What is it that you're
> trying to accomplish? A gain of 140 dB would amplify a signal of strength 8
> x 10^-10 Watts (About the equivalent of a received signal of 10 dB over
> "S"-9) to a kiloWatt. I don't think you're trying to do that, so what
> convinces you that you NEED 140 dB of gain?
>
> Regards
> W4ZCB

4880. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 20:41:07 UTC
From: Lathi.Tan@gmail.com
Message-ID: <1160599267.891583.12910@m7g2000cwm.googlegroups.com>
Source record: 10130

I googled and saw GPS signal is -150dBm. So it's detectable, but it's
much higher frequency. What if it's 70Mhz?

Lathi.Tan@gmail.com wrote:
> I'm dealing with a DSSS current signal at 70MHz. Before I start
> designing anything, I am calculating the signal amplitude. It's going
> to be 5nArms. If I have a 50ohm resistor, it's -153dBm. I'd be happy to
> know any solid proof that it's not doable because it's my job now.
>
> In theory DSSS signal can work under noise level, but can it be so
> much?
>
>
> Harold E. Johnson wrote:
> > <Lathi.Tan@gmail.com> wrote in message
> > news:1160595992.913074.73420@m7g2000cwm.googlegroups.com...
> > > It seems that I know the Friis equation.
> > >
> > > I am asking because it seems difficult, and maybe impossible. I've
> > > never heard of this high gain before, but I dont' know why I cann't
> > > stack amplifiers and I am looking for somebody who can tell me what
> > > exactly the problem is: you see the NF is nice, and I can get the SNR
> > > if the band is narrow enough.
> > >
> > > It also seems that I "don't know what I'm doing". So please explain a
> > > little if you want me to understand. Thanks.
> >
> > Well, how about a little additional information? What is it that you're
> > trying to accomplish? A gain of 140 dB would amplify a signal of strength 8
> > x 10^-10 Watts (About the equivalent of a received signal of 10 dB over
> > "S"-9) to a kiloWatt. I don't think you're trying to do that, so what
> > convinces you that you NEED 140 dB of gain?
> >
> > Regards
> > W4ZCB

4881. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 20:56:55 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <rUcXg.99967$aJ.316@attbi_s21>
Source record: 10131

<Lathi.Tan@gmail.com> wrote in message
news:1160598806.809126.280010@m7g2000cwm.googlegroups.com...
> I'm dealing with a DSSS current signal at 70MHz. Before I start
> designing anything, I am calculating the signal amplitude. It's going
> to be 5nArms. If I have a 50ohm resistor, it's -153dBm. I'd be happy to
> know any solid proof that it's not doable because it's my job now.
>
> In theory DSSS signal can work under noise level, but can it be so
> much?

Well, I have no idea of what a DSSS signal is, so I can't be of much help. Whatever it is, it better be in a very narrow bandwidth. At that signal level, it will take a 50 Hz bandwidth to achieve minimum discernable signal (MDS) with a front end NF of 2.4 dB.

If you're talking about using autocorrelation to bring it up out of the noise, all bets are off depending on how much time you can sacrifice.

If you're planning on bringing this signal to -10 dBm, better prepare for a lot of shielding and decoupling, not to mention filtering and frequency stability at 70 MHz center frequency.

W4ZCB

4882. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 21:08:15 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <33dXg.191635$FQ1.50647@attbi_s71>
Source record: 10132

<Lathi.Tan@gmail.com> wrote in message
news:1160599267.891583.12910@m7g2000cwm.googlegroups.com...
>I googled and saw GPS signal is -150dBm. So it's detectable, but it's
> much higher frequency. What if it's 70Mhz?

Well, the GPS signal is detected all right, but they sure don't put all
their gain at the signal frequency.

W4ZCB

4883. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 21:46:44 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <egjoo4$c70$1@puck.litech.org>
Source record: 10133

On 11 Oct 2006 13:41:07 -0700, Lathi.Tan@gmail.com wrote in
<1160599267.891583.12910@m7g2000cwm.googlegroups.com>:

> Lathi.Tan@gmail.com wrote:
>> I'm dealing with a DSSS current signal at 70MHz. Before I start
>> designing anything, I am calculating the signal amplitude. It's going
>> to be 5nArms. If I have a 50ohm resistor, it's -153dBm. I'd be happy to
>> know any solid proof that it's not doable because it's my job now.
>>
>> In theory DSSS signal can work under noise level, but can it be so
>> much?
>>
>>
>> Harold E. Johnson wrote:
>> > <Lathi.Tan@gmail.com> wrote in message
>> > news:1160595992.913074.73420@m7g2000cwm.googlegroups.com...
>> > > It seems that I know the Friis equation.
>> > >
>> > > I am asking because it seems difficult, and maybe impossible. I've
>> > > never heard of this high gain before, but I dont' know why I cann't
>> > > stack amplifiers and I am looking for somebody who can tell me what
>> > > exactly the problem is: you see the NF is nice, and I can get the SNR
>> > > if the band is narrow enough.
>> > >
>> > > It also seems that I "don't know what I'm doing". So please explain a
>> > > little if you want me to understand. Thanks.
>> >
>> > Well, how about a little additional information? What is it that you're
>> > trying to accomplish? A gain of 140 dB would amplify a signal of strength 8
>> > x 10^-10 Watts (About the equivalent of a received signal of 10 dB over
>> > "S"-9) to a kiloWatt. I don't think you're trying to do that, so what
>> > convinces you that you NEED 140 dB of gain?

> I googled and saw GPS signal is -150dBm. So it's detectable, but it's
> much higher frequency. What if it's 70Mhz?

It probably isn't going to make a lot of difference whether it's 25 cm. or
40 cm; the principles are the same for DSSS decoding.

GPS signals make heavy use of PN sequences so that they can be detected
using autocorrelation techniques. They're down below the terrestrial noise
threshold, and require autocorrelation techniques for synchronization and
detection. But you probably know that already. This probably will be true
of your solution as well, and especially so at those power levels.

If you're going to be receiving and detecting signals at those power levels, you'll need to use something other than *just* amplification to pull the modulation out.

One presumes you'll have a known short spreading sequence that you can use to try to sync up on the signal, or (if it's a longer sequence) that you'll have a rough idea of the code epoch, so that you can try to sneak up on it from behind, as it were.

The point here is that a _lot_ of the process gain comes from the autocorrelation and despreading processes. You may not need all that analog gain. Getting it up to ... something like -30 dBm or -15 dBm may be enough -- or even overkill.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

4884. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 22:05:36 UTC
From: MadEngineer <glenn.b.dixon@gmail.com>
Message-ID: <1160604335.963542.79610@k70g2000cwa.googlegroups.com>
Source record: 10134

Harold E. Johnson wrote:
> <Lathi.Tan@gmail.com> wrote in message
> news:1160598806.809126.280010@m7g2000cwm.googlegroups.com...
> > I'm dealing with a DSSS current signal at 70MHz. Before I start
> > designing anything, I am calculating the signal amplitude. It's going
> > to be 5nArms. If I have a 50ohm resistor, it's -153dBm. I'd be happy to
> > know any solid proof that it's not doable because it's my job now.
> >
> > In theory DSSS signal can work under noise level, but can it be so
> > much?
>
> Well, I have no idea of what a DSSS signal is, so I can't be of much help.
> Whatever it is, it better be in a very narrow bandwidth. At that signal
> level, it will take a 50 Hz bandwidth to achieve minimum discernable signal
> (MDS) with a front end NF of 2.4 dB.
>
> If you're talking about using autocorrelation to bring it up out of the
> noise, all bets are off depending on how much time you can sacrifice.
>
> If you're planning on bringing this signal to -10 dBm, better prepare for a
> lot of shielding and decoupling, not to mention filtering and frequency
> stability at 70 MHz center frequency.
>
> W4ZCB

Some comments:

DSSS is direct sequence spread spectrum. It is wideband on the front
end.

It is probably not a valid comparison to compare DSSS detection levels
with GPS. GPS encodes much redundancy into the signal to enhance S/N,
and unless the DSSS encoder does something similar we can't use the
same detection level numbers. To say DSSS works under the noise level
assumes some gain due to encoding, and probably also assumes an
information bandwidth much less than the spread spectrum bandwidth.

Here are the main reasons you can't cascade a lot of gain at the
operating frequency. Others have mentioned this--so this is just a
summary with clarification:

1. Stability. A lot of gain at a single frequency is difficult to do
without causing stability problems. Even careful shielding between
stages doesn't`always work. At 70 Mhz, about 40 dB is the best I can
do reliably and even then I would use two separate metal enclosures,
each with 20 dB of gain. Above, say, 60 dB all kinds of things go

wrong--enclosures don't shield well enough, power supplies don't decouple enough, interconnects talk to each other, etc. With single-chip MMICs and LNAs it's really easy to build something and see for yourself.

2. Intermodulation and blocking. Any unwanted signal at the antenna would be amplified--assume you are trying to detect a -150 dBm signal and someone in the house has a wireless headphone, which transmits at about 72 MHz. With 140 dB of gain your amplifiers would saturate completely and pass none of the wanted signal.

Radio design uses a careful balance between gain, mixing, AGC and filtering to minimize stability and overload problems. For narrowband signals you want to apply selectivity as soon in the signal train as you can. For spread spectrum you do the same: a filter as narrow as you can get it and still pass the spectrum, then your despreader at the lowest level you can make it, then a narrow band filter that just passes the information, and finally more gain and the detector.

3. Components
Some components such as crystal filters and mixers work better at lower signal levels before a lot of gain is applied. This is really just an extension of reason 2.

Hope this helps.

Glenn Dixon AC7ZN

4885. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 22:10:04 UTC
From: Lathi.Tan@gmail.com
Message-ID: <1160604604.488296.164700@m73g2000cwd.googlegroups.com>
Source record: 10135

Well, I may have to go back to the old question, because it's not
exactly a DSSS depending on cross correlation. What are the possible
bad effects when I keep connecting amplifiers? Shorter bandwidth?
Smaller IP3? There should be something I don't know.

Mike Andrews wrote:
> On 11 Oct 2006 13:41:07 -0700, Lathi.Tan@gmail.com wrote in
<1160599267.891583.12910@m7g2000cwm.googlegroups.com>:
>
> > Lathi.Tan@gmail.com wrote:
> >> I'm dealing with a DSSS current signal at 70MHz. Before I start
> >> designing anything, I am calculating the signal amplitude. It's going
> >> to be 5nArms. If I have a 50ohm resistor, it's -153dBm. I'd be happy to
> >> know any solid proof that it's not doable because it's my job now.
> >>
> >> In theory DSSS signal can work under noise level, but can it be so
> >> much?
> >>
> >>
> >> Harold E. Johnson wrote:
> >> > <Lathi.Tan@gmail.com> wrote in message
> >> > news:1160595992.913074.73420@m7g2000cwm.googlegroups.com...
> >> > > It seems that I know the Friis equation.
> >> > >
> >> > > I am asking because it seems difficult, and maybe impossible. I've
> >> > > never heard of this high gain before, but I dont' know why I cann't
> >> > > stack amplifiers and I am looking for somebody who can tell me what
> >> > > exactly the problem is: you see the NF is nice, and I can get the SNR
> >> > > if the band is narrow enough.
> >> > >
> >> > > It also seems that I "don't know what I'm doing". So please explain a
> >> > > little if you want me to understand. Thanks.
> >> >
> >> > Well, how about a little additional information? What is it that you're
> >> > trying to accomplish? A gain of 140 dB would amplify a signal of strength 8
> >> > x 10^-10 Watts (About the equivalent of a received signal of 10 dB over
> >> > "S"-9) to a kiloWatt. I don't think you're trying to do that, so what
> >> > convinces you that you NEED 140 dB of gain?
> >
> > I googled and saw GPS signal is -150dBm. So it's detectable, but it's
> > much higher frequency. What if it's 70Mhz?
> >
> It probably isn't going to make a lot of difference whether it's 25 cm. or
> 40 cm; the principles are the same for DSSS decoding.

>
> GPS signals make heavy use of PN sequences so that they can be detected
> using autocorrelation techniques. They're down below the terrestrial noise
> threshold, and require autocorrelation techniques for synchronization and
> detection. But you probably know that already. This probably will be true
> of your solution as well, and especially so at those power levels.
>
> If you're going to be receiving and detecting signals at those power
> levels, you'll need to use something other than *just* amplification to
> pull the modulation out.
>
> One presumes you'll have a known short spreading sequence that you can
> use to try to sync up on the signal, or (if it's a longer sequence)
> that you'll have a rough idea of the code epoch, so that you can try
> to sneak up on it from behind, as it were.
>
> The point here is that a _lot_ of the process gain comes from the
> autocorrelation and despreading processes. You may not need all that
> analog gain. Getting it up to ... something like -30 dBm or -15 dBm
> may be enough -- or even overkill.
>
> --
> Mike Andrews, W5EGO
> mikea@mikea.ath.cx
> Tired old sysadmin

4886. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 22:12:58 UTC
From: Lathi.Tan@gmail.com
Message-ID: <1160604778.509265.122140@k70g2000cwa.googlegroups.com>
Source record: 10136

Can I know how did you get that number of 50Hz? Thanks.

Harold E. Johnson wrote:
> <Lathi.Tan@gmail.com> wrote in message
> news:1160598806.809126.280010@m7g2000cwm.googlegroups.com...
> > I'm dealing with a DSSS current signal at 70MHz. Before I start
> > designing anything, I am calculating the signal amplitude. It's going
> > to be 5nArms. If I have a 50ohm resistor, it's -153dBm. I'd be happy to
> > know any solid proof that it's not doable because it's my job now.
> >
> > In theory DSSS signal can work under noise level, but can it be so
> > much?
>
> Well, I have no idea of what a DSSS signal is, so I can't be of much help.
> Whatever it is, it better be in a very narrow bandwidth. At that signal
> level, it will take a 50 Hz bandwidth to achieve minimum discernable signal
> (MDS) with a front end NF of 2.4 dB.
>
> If you're talking about using autocorrelation to bring it up out of the
> noise, all bets are off depending on how much time you can sacrifice.
>
> If you're planning on bringing this signal to -10 dBm, better prepare for a
> lot of shielding and decoupling, not to mention filtering and frequency
> stability at 70 MHz center frequency.
>
> W4ZCB

4887. Re: hello from belgium

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 22:20:01 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <egjqmhrr1@news.onet.pl>
Source record: 10137

pierard laurent napisaďż˝(a):
> hello all,
>
> i am from belgium
> 73s all de on3vhf
hi from sp9mrn

4888. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-11 22:49:33 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <1yeXg.100041$aJ.10314@attbi_s21>
Source record: 10138

<Lathi.Tan@gmail.com> wrote in message
news:1160604778.509265.122140@k70g2000cwa.googlegroups.com...
> Can I know how did you get that number of 50Hz? Thanks.
>
>Boltzmans constant times temperature

KT for any resistor at room temperature =-174 dBm/Hz. That's as good as you
get without cryogenic cooling.

Add 17 dBm to increase bandwidth from 1 Hz to 50 Hz = -157 dBM/Hz

Add 3 more to get to MDS and it's -154 dBm, your signal level.

W4ZCB

4889. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-12 01:01:05 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <ltgXg.8081$Y24.2691@newsread4.news.pas.earthlink.net>
Source record: 10139
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

gwatts <gwatts@frontiernet.net> wrote in
news:Z4cXg.2828$ya1.2518@news02.roc.ny:

> Slow Code wrote:
>> gwatts <gwatts@frontiernet.net> wrote in
>> news:nOLWg.2685$Ka1.1928@news01.roc.ny:
>>
>>
>>>Slow Code wrote:
>>>
>>>>What do you like best about appliance operating?
>>>
>>>All the crotchety old farts are either off somewhere beep-beep-beeping
>>>away on CW or bitching to each other on the lower half of the 80m phone
>>>band, so it's easy to avoid them and talk to someone who enjoys ham
>>>radio as it is instead of whining about how it was.
>>>
>>
>>
>> Big Ten-Four on that Good Buddy.
>
> It sounds like you run a lot of 11m, not surprising considering how much
> you whine, and it's not alternator whine.

I only typed like because I knew you would understand that style of
communicating. So, after your license came in the mail what I appliance
did you decide to buy? MFJ? Alinco? Cobra?

SC

4890. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-12 01:51:26 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <MNGdnVFG3tY7ArDYnZ2dnUVZ_qudnZ2d@rcn.net>
Source record: 10140
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:

>>> Big Ten-Four on that Good Buddy.
>> It sounds like you run a lot of 11m, not surprising considering how much
>> you whine, and it's not alternator whine.
>
>
> I only typed like because I knew you would understand that style of
> communicating. So, after your license came in the mail what I appliance
> did you decide to buy? MFJ? Alinco? Cobra?

While you are being all holier than thou, what did you design and build for your main rig? I'm hoping to be impressed, but expecting to be disappointed.

Did the code help you with the design?

I took my Advanced class test down at 1919 M street 36 years ago. I had to sit at the desk and copy one solid minute out of five error free at 13WPM. I passed it on the first try. I almost failed the sending test, as I had never spent much time doing that. I had never made a code contact before my test, and I have only made a couple since.

The thing about code contacts is they never seem to want to say anything beyond:

WA3XXX DE W6XX RST 5NN WX FB 73 W6XX SK

How does that help the cause of amateur radio?

I have designed and built numerous rf receivers and transmitters, many are employed by the US Army for various uses. I have fixed many different radios from tube stuff through DSP driven affairs.

How exactly did the code help me to do this?

For me code was a means to an end. I wanted my license, so I learned the code.

There were plenty of rude, profane, and generally unpleasant hams on the air back when all had to pass the test in the offices of the FCC. I haven't noticed that things are any worse now. About the only real difference is in the quality of the gear folks are running. It is much better than the crappy stuff that was on the air back in the early 70's.

-Chuck

4891. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-12 01:53:52 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <e18ri2h52u09pn5cveos1r17i8b0vgaqlq@4ax.com>
Source record: 10141

On 11 Oct 2006 12:13:20 -0700, Lathi.Tan@gmail.com wrote:

>I asked what I don't know. I am expecting a helpful answer.

The problem was, you got some prior answers and then wanted to argue
about it.
>
>The frequency is 70MHz.

Then, assuming some type of filtering around that frequency that's
more or less where your system will likely oscillate.

One reason superhetrodyne receivers were developed to replace TRF
receivers was to develop system gain at different frequencies so as to
minimize the chance of oscillation. Another, of course was to achieve
better selectivity that with older technology was better accomplished
at lower frequencies.

Even a single conversion receiver usually develops its gain at three
different frequencies: r-f, i-f and post detection.

4892. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-12 02:28:29 UTC
From: Mark@kb9rqz.net
Message-ID: <pv9ri29i9agjbai939s3u4iqnn3hmqhkac@4ax.com>
Source record: 10142
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Thu, 12 Oct 2006 01:01:05 GMT, Slow Code <my.mail@no.spam> wrote:

>gwatts <gwatts@frontiernet.net> wrote in
>news:Z4cXg.2828$ya1.2518@news02.roc.ny:
>
>> Slow Code wrote:
>>> gwatts <gwatts@frontiernet.net> wrote in
>>> news:nOLWg.2685$Ka1.1928@news01.roc.ny:
>>>
>>>
>>>>Slow Code wrote:
>>>>
>>>>>What do you like best about appliance operating?
>>>>
>>>>All the crotchety old farts are either off somewhere beep-beep-beeping
>>>>away on CW or bitching to each other on the lower half of the 80m phone
>>>>band, so it's easy to avoid them and talk to someone who enjoys ham
>>>>radio as it is instead of whining about how it was.
>>>>
>>>
>>>
>>> Big Ten-Four on that Good Buddy.
>>
>> It sounds like you run a lot of 11m, not surprising considering how much
>> you whine, and it's not alternator whine.
>
>
>I only typed like because I knew you would understand that style of
>communicating. So, after your license came in the mail what I appliance
>did you decide to buy? MFJ? Alinco? Cobra?
this he is again Slow Code the POSTER boy for why should should go No
Code

indeed Slow Code is would be a poster boy for dumpoing all testing but
hopefully he will manage that "achievement
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4893. FA: NOS BIRD '43' PLUGS: 9 IN ALL

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-12 03:00:15 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <3diXg.251107$QM6.178915@bgtnsc05-news.ops.worldnet.att.net>
Source record: 10143

I have 9 NOS Bird Model 43 plugs at various sizes + a few more Johnson parts coming shortly too: Tnx for looking:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

heytubeguy

4894. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-12 06:57:23 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <oukri2pevc3j01gvn657qaubata0t45rnp@4ax.com>
Source record: 10144

On 11 Oct 2006 13:33:26 -0700, Lathi.Tan@gmail.com wrote:

>I'm dealing with a DSSS current signal at 70MHz. Before I start
>designing anything, I am calculating the signal amplitude.

You did not specify the chip rate or base band bit rate and spreading function. For GPS signals the chip rate is 1.023 MHz, and the signal spectrum is about 1 MHz wide, so the front end selectivity should be as close to this as possible.

For a terrestrial 70 MHz DSSS system, there are usually going to be several independent DSSS transmitters sharing this 1 MHz bandwidth (or whatever your chip rate is), some being close to the receiver and some very distant.

If you want to receive the distant signal and use the whole 1 MHz bandwidth all the way through the 140 dB gain, a weak distant transmitter producing only 0.1 uV at your receiver antenna terminal would be amplified to 1 V. However a local DSSS transmitter sharing the same 70 MHz band with a different PN sequence could produce 1 mV at your antenna terminal, which should also be amplified by 140 dB to 10 kV, which clearly is impossible ! The strong signals would saturate the later amplifying stages and the weak signal would not get through.

A reasonable gain/bandwidth distribution for a 70 MHz system would be to use a low loss band pass filter with a few MHz bandwidth at 70 MHz, to take out any VHF band I TV signals and FM broadcast signals at 100 MHz. Use a low noise amplifier stage, followed by a filter with deep sides which is matched to the bandwidth of the service (1 MHz for GPS). Then perhaps one stage, possibly with AGC and then the despreader, followed by a filter matching the bit rate (not chip rate) of the signal, followed by multiple AGC amplification stages to amplify the despread signal before the actual BPSK or whatever detector.

In terrestrial systems at 70 MHz the noise temperature is well above 300 K, thus the antenna noise figure is much worse than 3 dB, so trying to keep the receiver system noise figure below 3 dB might not be too productive. It might even be better to suffer an additional 1 dB noise figure hit and use steep filters tailored to the chip rate in front of the first LNA.

Paul OH3LWR

4895. Re: hello from belgium

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-12 11:52:46 UTC
From: Martyn Preston <Martyn.Preston@pharm.ox.ac.uk>
Message-ID: <eglaaf$4mj$1@frank-exchange-of-views.oucs.ox.ac.uk>
Source record: 10145

"pierard laurent" <pierard_laurent@hotmail.com> wrote in message
news:egj46hjvn1@news.brutele.be...
> hello all,
>
> i am from belgium
> 73s all de on3vhf
>
>
> www.on3vhf.be.tf
>gd de g0thy
kn

4896. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-12 16:18:09 UTC
From: Lathi.Tan@gmail.com
Message-ID: <1160669888.951386.320910@m7g2000cwm.googlegroups.com>
Source record: 10146

Thanks this makes things connected and I start to understand.

Paul Keinanen wrote:
> On 11 Oct 2006 13:33:26 -0700, Lathi.Tan@gmail.com wrote:
>
> >I'm dealing with a DSSS current signal at 70MHz. Before I start
> >designing anything, I am calculating the signal amplitude.
>
> You did not specify the chip rate or base band bit rate and spreading
> function. For GPS signals the chip rate is 1.023 MHz, and the signal
> spectrum is about 1 MHz wide, so the front end selectivity should be
> as close to this as possible.
>
> For a terrestrial 70 MHz DSSS system, there are usually going to be
> several independent DSSS transmitters sharing this 1 MHz bandwidth (or
> whatever your chip rate is), some being close to the receiver and some
> very distant.
>
> If you want to receive the distant signal and use the whole 1 MHz
> bandwidth all the way through the 140 dB gain, a weak distant
> transmitter producing only 0.1 uV at your receiver antenna terminal
> would be amplified to 1 V. However a local DSSS transmitter sharing
> the same 70 MHz band with a different PN sequence could produce 1 mV
> at your antenna terminal, which should also be amplified by 140 dB to
> 10 kV, which clearly is impossible ! The strong signals would saturate
> the later amplifying stages and the weak signal would not get through.
>
> A reasonable gain/bandwidth distribution for a 70 MHz system would be
> to use a low loss band pass filter with a few MHz bandwidth at 70 MHz,
> to take out any VHF band I TV signals and FM broadcast signals at 100
> MHz. Use a low noise amplifier stage, followed by a filter with deep
> sides which is matched to the bandwidth of the service (1 MHz for
> GPS). Then perhaps one stage, possibly with AGC and then the
> despreader, followed by a filter matching the bit rate (not chip rate)
> of the signal, followed by multiple AGC amplification stages to
> amplify the despread signal before the actual BPSK or whatever
> detector.
>
> In terrestrial systems at 70 MHz the noise temperature is well above
> 300 K, thus the antenna noise figure is much worse than 3 dB, so
> trying to keep the receiver system noise figure below 3 dB might not
> be too productive. It might even be better to suffer an additional 1
> dB noise figure hit and use steep filters tailored to the chip rate in
> front of the first LNA.

>
> Paul OH3LWR

4897. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-12 16:37:43 UTC
From: Lathi.Tan@gmail.com
Message-ID: <1160671063.115660.87710@m7g2000cwm.googlegroups.com>
Source record: 10147

When the answer is not clear for our doubts, we argue about it for
better explanation, until the doubts are solved. I think this is a
healthy way to get answers.

Wes Stewart wrote:
> On 11 Oct 2006 12:13:20 -0700, Lathi.Tan@gmail.com wrote:
>
> >I asked what I don't know. I am expecting a helpful answer.
>
> The problem was, you got some prior answers and then wanted to argue
> about it.
> >
> >The frequency is 70MHz.
>
> Then, assuming some type of filtering around that frequency that's
> more or less where your system will likely oscillate.
>
> One reason superhetrodyne receivers were developed to replace TRF
> receivers was to develop system gain at different frequencies so as to
> minimize the chance of oscillation. Another, of course was to achieve
> better selectivity that with older technology was better accomplished
> at lower frequencies.
>
> Even a single conversion receiver usually develops its gain at three
> different frequencies: r-f, i-f and post detection.

4898. EXTRA

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-12 17:03:48 UTC
From: mjsystems <madgadget05@hotmail.com>
Message-ID: <1160672628.842972.192210@k70g2000cwa.googlegroups.com>
Source record: 9998

I have also found that upon making this the swr can start off high.
What i did was get a small piece of pipe(non cond) and wrap the braded
wire around this about 4-6 times. this stebled thing's out and brought
the swr down to 1.4. using slight ajustments to the lenth and coil gap
of the braded wire and keeping the coax from touching the floor you can
get the swr down to 1.2. so got a load of spare coax and a swr meter
then why not have a go and see if you can improve it again

4899. looking for 455Khz IF can variable coil

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-12 20:51:19 UTC
From: loc.mai@drdc-rddc.gc.ca
Message-ID: <1160686279.602493.5420@m73g2000cwd.googlegroups.com>
Source record: 9999

I am looking for 455Khz IF can variable coils,. If you know part# and where I can buy them, please let me know. Your help will be appreciated.

4900. Re: looking for 455Khz IF can variable coil

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-12 21:43:49 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <egmculmrd1@theodyn.ncf.ca>
Source record: 10000

(loc.mai@drdc-rddc.gc.ca) writes:
> I am looking for 455Khz IF can variable coils,. If you know part# and
> where I can buy them, please let me know. Your help will be
> appreciated.
>
If this is just a basic IF transformer, you could just buy a radio
and extract the transformer. The radios will be available locally,
unlike just the IF transformer (unless you are lucky enough to be in a
city that still has a store that would carry them).

Buy a radio at a garage sale or a place like the Salvation Army,
and it won't even cost much.

Michael VE2BVW

4901. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-12 23:23:21 UTC
From: "Dana H. Myers" <dana.myers@gmail.com>
Message-ID: <pPadnTP697_-U7PYnZ2dnUVZ_sydnZ2d@comcast.com>
Source record: 10001

Lathi.Tan@gmail.com wrote:
> Well, I may have to go back to the old question, because it's not
> exactly a DSSS depending on cross correlation. What are the possible
> bad effects when I keep connecting amplifiers? Shorter bandwidth?
> Smaller IP3? There should be something I don't know.

Dynamic Range.

4902. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-13 00:18:24 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <kXAXg.10765$o71.3942@newsread3.news.pas.earthlink.net>
Source record: 10002
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
news:MNGdnVFG3tY7ArDYnZ2dnUVZ_qudnZ2d@rcn.net:

> Slow Code wrote:
>
>>>> Big Ten-Four on that Good Buddy.
>>> It sounds like you run a lot of 11m, not surprising considering how
>>> much you whine, and it's not alternator whine.
>>
>>
>> I only typed like because I knew you would understand that style of
>> communicating. So, after your license came in the mail what I
>> appliance did you decide to buy? MFJ? Alinco? Cobra?
>
>
> While you are being all holier than thou, what did you design and build
> for your main rig? I'm hoping to be impressed, but expecting to be
> disappointed.
>
> Did the code help you with the design?
>
> I took my Advanced class test down at 1919 M street 36 years ago. I had
> to sit at the desk and copy one solid minute out of five error free at
> 13WPM. I passed it on the first try. I almost failed the sending test,
> as I had never spent much time doing that. I had never made a code
> contact before my test, and I have only made a couple since.
>
> The thing about code contacts is they never seem to want to say anything
> beyond:
>
> WA3XXX DE W6XX RST 5NN WX FB 73 W6XX SK
>
> How does that help the cause of amateur radio?
>
> I have designed and built numerous rf receivers and transmitters, many
> are employed by the US Army for various uses. I have fixed many
> different radios from tube stuff through DSP driven affairs.
>
> How exactly did the code help me to do this?
>
> For me code was a means to an end. I wanted my license, so I learned
> the code.
>

> There were plenty of rude, profane, and generally unpleasant hams on the
> air back when all had to pass the test in the offices of the FCC. I
> haven't noticed that things are any worse now. About the only real
> difference is in the quality of the gear folks are running. It is much
> better than the crappy stuff that was on the air back in the early 70's.
>
> -Chuck

Are conversations on repeaters as technical as they were twenty-five years ago?

Me? I hear no-codes and nickle extras arguing how long a half wave dipole should be.

SC

4903. clean up ham radio SC start by truning in your license

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-13 00:54:51 UTC
From: Mark@kb9rqz.net
Message-ID: <cuoti2dqf32di7rnkn3ur228pc15069ct3@4ax.com>
Source record: 10003
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Fri, 13 Oct 2006 00:18:24 GMT, Slow Code <my.mail@no.spam> wrote:

>Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
>news:MNGdnVFG3tY7ArDYnZ2dnUVZ_qudnZ2d@rcn.net:
>
>> Slow Code wrote:
>>
>>>>>> Big Ten-Four on that Good Buddy.
>>>> It sounds like you run a lot of 11m, not surprising considering how
>>>> much you whine, and it's not alternator whine.
>>>
>>>
>>> I only typed like because I knew you would understand that style of
>>> communicating. So, after your license came in the mail what I
>>> appliance did you decide to buy? MFJ? Alinco? Cobra?
>>
>>
>> While you are being all holier than thou, what did you design and build
>> for your main rig? I'm hoping to be impressed, but expecting to be
>> disappointed.
>>
>> Did the code help you with the design?
>>
>> I took my Advanced class test down at 1919 M street 36 years ago. I had
>> to sit at the desk and copy one solid minute out of five error free at
>> 13WPM. I passed it on the first try. I almost failed the sending test,
>> as I had never spent much time doing that. I had never made a code
>> contact before my test, and I have only made a couple since.
>>
>> The thing about code contacts is they never seem to want to say anything
>> beyond:
>>
>> WA3XXX DE W6XX RST 5NN WX FB 73 W6XX SK
>>
>> How does that help the cause of amateur radio?
>>
>> I have designed and built numerous rf receivers and transmitters, many
>> are employed by the US Army for various uses. I have fixed many
>> different radios from tube stuff through DSP driven affairs.
>>
>> How exactly did the code help me to do this?
>>
>> For me code was a means to an end. I wanted my license, so I learned

>> the code.
>>
>> There were plenty of rude, profane, and generally unpleasant hams on the
>> air back when all had to pass the test in the offices of the FCC. I
>> haven't noticed that things are any worse now. About the only real
>> difference is in the quality of the gear folks are running. It is much
>> better than the crappy stuff that was on the air back in the early 70's.
>>
>> -Chuck
>
>
>Are conversations on repeaters as technical as they were twenty-five years
>ago?
>
>Me? I hear no-codes and nickle extras arguing how long a half wave dipole
>should be.

clean up ham radio SC start by truning in your license
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4904. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-13 00:59:52 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <NN-dnexaGIaKeLPYnZ2dnUVZ_rydnZ2d@rcn.net>
Source record: 10004
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:
> Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in

>> While you are being all holier than thou, what did you design and build
>> for your main rig? I'm hoping to be impressed, but expecting to be
>> disappointed.
>>
>> Did the code help you with the design?
>>
>> I took my Advanced class test down at 1919 M street 36 years ago. I had
>> to sit at the desk and copy one solid minute out of five error free at
>> 13WPM. I passed it on the first try. I almost failed the sending test,
>> as I had never spent much time doing that. I had never made a code
>> contact before my test, and I have only made a couple since.
>>
>> The thing about code contacts is they never seem to want to say anything
>> beyond:
>>
>> WA3XXX DE W6XX RST 5NN WX FB 73 W6XX SK
>>
>> How does that help the cause of amateur radio?
>>
>> I have designed and built numerous rf receivers and transmitters, many
>> are employed by the US Army for various uses. I have fixed many
>> different radios from tube stuff through DSP driven affairs.
>>
>> How exactly did the code help me to do this?
>>
>> For me code was a means to an end. I wanted my license, so I learned
>> the code.
>>
>> There were plenty of rude, profane, and generally unpleasant hams on the
>> air back when all had to pass the test in the offices of the FCC. I
>> haven't noticed that things are any worse now. About the only real
>> difference is in the quality of the gear folks are running. It is much
>> better than the crappy stuff that was on the air back in the early 70's.
>>
>> -Chuck
>
>
> Are conversations on repeaters as technical as they were twenty-five years
> ago?

Oh, easily. 25 years ago, technical conversations were dominated by such earth shatteringly important stuff as having a ham down at the repeater site helping other hams tune their transmitters to be on frequency. Other wonderkind were hitting the repeater with a full quieting signal, and turning their power up to try and get a better signal to that DX mobile that breaking up.

If it wasn't that, it was an endless sea of autopatches calling the xyl to tell her that traffic was bad, could she start dinner... or ordering pizza.

>
> Me? I hear no-codes and nickle extras arguing how long a half wave dipole
> should be.

I heard the same things 25 years ago from Generals that got their licenses at the offices of the FCC.

Even 34 years ago, there were study guides that had questions from the pool used by the FCC. If you could memorize the answers to those questions, you were virtually assured of passing. I used the ARRL handbook as my guide.

You didn't answer my questions about the home brew rig you are using.

-Chuck

4905. Re: looking for 455Khz IF can variable coil

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-13 01:32:32 UTC
From: w9gb <spam_protect@arrl.net>
Message-ID: <I_2dnRo1T_IscbPYnZ2dnUVZ_umdnZ2d@comcast.com>
Source record: 10005

<loc.mai@drdc-rddc.gc.ca> wrote in message
news:1160686279.602493.5420@m73g2000cwd.googlegroups.com...
>I am looking for 455Khz IF can variable coils,. If you know part# and
>where I can buy them, please let me know. Your help will be appreciated.
>

Hundreds of sources. You looking for traditional cans used in tubes
equipment or PC board mount (transistors radios)

Gold Mine sell 20 can for $ 2.50 (PC mount versions)

Local hamfests here I see NOS 455 kHZ and 10.7 MHz IF cans (case of them) --
in chassis mount style (tube radios).

A Google search should help.

gb

4906. Re: IM ASKING FOR DONATIONS FOR HEART SURGERY

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-13 10:27:59 UTC
From: Wolfgang Fartbubble <swift240@yahoo.co.uk>
Message-ID: <452F6A2D.6080003@yahoo.co.uk>
Source record: 10006
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

mike wrote:
> hello i always figured this would never happen to me but my heart is having serious issuses do to a birth defect (i was born with a hole in my heart)and need money to have the surgery to get the hole fix so i am asking for donations to help with the cost since i dont have insurance so if you have a paypal account please look into your heart and donate a dollar or two my paypal emial is mcollins7373@msn.com i need around 20,000 dollars usd to have the surgery done. This is my last resort for money i have tried goverment agencies family and friends and to my dissapointment nothing happened SO PLEASE I NEED HELP thank you so much mike collins
>
>
>
>
> uW18P>^&K2[o%09E*`x[9K%bwh'bt/QIr8!Vk MwoA)75ElpSj?Z[U`)tK`%OLP#m2qLF<MuIR5q.lYC;M:1Lc>:aQcG]SjrTf$
>
>
> ---
> avast! Antivirus: Inbound message clean.
> Virus Database (VPS): 0641-4, 13/10/2006
> Tested on: 13/10/2006 11:27:34
> avast! - copyright (c) 1988-2006 ALWIL Software.
> http://www.avast.com
>
>
>
Put the arse hole on the KILL list.

I have.......

---
avast! Antivirus: Outbound message clean.
Virus Database (VPS): 0641-4, 13/10/2006
Tested on: 13/10/2006 11:27:57
avast! - copyright (c) 1988-2006 ALWIL Software.
http://www.avast.com

4907. FA: EF JOHNSON PARTS & BIRD PLUGS

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-13 13:42:42 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <mJMXg.60158$QZ1.3673@bgtnsc04-news.ops.worldnet.att.net>
Source record: 10007

Will be listing a few Johnson items each day-check often- + take a look
at the NOS Bird '43' plugs too:
Tnx for looking:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

heytubeguy

4908. Re: New to Ham (FT-857 reviews)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-13 14:19:17 UTC
From: Caveat Lector <CL@nowhere.com>
Message-ID: <GfNXg.40010$nm1.4407@fed1read04>
Source record: 10008

See e-ham reviews:
http://www.eham.net/reviews/detail/3046

Has 187 reviews on the FT-857 series

CL

"Ed Byars" <byars_e@bellsouth.net> wrote in message
news:1160098752.441683.304190@c28g2000cwb.googlegroups.com...
>I am going to buy a radio that I hope will last me many years. I want
> to start with a mobile that will also serve as a base station.I am
> looking at a YAESU FT-857D.
>
> Any comments on the pros or cons of this as a beginner radio that can
> stay with me as I develop my skills?
>

4909. testing ferrite or iron powder toroids as to mix

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-13 18:05:46 UTC
From: dave <foda01@epix.net>
Message-ID: <_zQXg.1894$Db4.268540@news1.epix.net>
Source record: 10009

Hi all,

Is there an easy way to test surplus toroids as to what mix they might be? I have some here with no markings (plain black powder) and I would like to see what frequency ranges they would be useful at. I guess I would have to wind up a transformer and plot the frequency response?

Dave

4910. Re: testing ferrite or iron powder toroids as to mix

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-13 19:59:38 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <KeSXg.44$3C6.18@trnddc04>
Source record: 10010

"dave" <foda01@epix.net> wrote in message
news:_zQXg.1894$Db4.268540@news1.epix.net...
> Hi all,
>
> Is there an easy way to test surplus toroids as to what mix they might be?
> I have some here with no markings (plain black powder) and I would like to
> see what frequency ranges they would be useful at. I guess I would have
> to
> wind up a transformer and plot the frequency response?
>
> Dave
>
>Plain black is likely ferrite. Wind some turns and measure the inductance.
>Then resolve the turns/inductance formula for the permeability.
An Amidon or Ferrite catalog will then give you any other charactersitics
you require.
Dale W4OP

4911. Re: testing ferrite or iron powder toroids as to mix

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-13 21:20:20 UTC
From: ve3ab <ve3ab@personainternet.com>
Message-ID: <1160774420.443542.52640@k70g2000cwa.googlegroups.com>
Source record: 10011

I had some of my ferrite cores mixed up in my junkbox. What I did is thread them on to a
wire and mark them..so they wouldnt get mixed up again. I took some known torroids and
did some inductance tests at various frequencies ..with 3 or 4 turns of a 7 inch wire. I then
matched up the types that got mixed up. They were all ft37-43 and similar sized other ones of different permeability.
Now with types that are surplus from unknown origin..you may be able to match up inductance vs frequency graphs and match them up to known types of similar/same size.
Ferrites are often used in broadband applications..ie 1.8 to 30 mhz..therefore you have to
select a number of frequencies for test measurements. I use the a frequency in each amateur band.
See my web site:http://www.earlandrews.com for some more details. I use an autek rf analyser for my inductance measurements. I may get around to publishing more on this topic on my web pages this winter..stay tuned. Also..another method is to measure the actual resistance of the core with an ohmeter. I found this to be a very hit and miss and rather difficult method. The inductance vs. Frequency method is easier..but you need a test instrument ..and TIME!! 73 Earl VE3AB

4912. Re: testing ferrite or iron powder toroids as to mix

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-14 00:29:26 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <kra0j259gfapdk5pkhhqjaroe3dhfr7rad@4ax.com>
Source record: 10012

On Fri, 13 Oct 2006 19:59:38 GMT, "Dale Parfitt"
<par@parelectronics.com> wrote:

>
>"dave" <foda01@epix.net> wrote in message
>news:_zQXg.1894$Db4.268540@news1.epix.net...
>> Hi all,
>>
>> Is there an easy way to test surplus toroids as to what mix they might be?
>> I have some here with no markings (plain black powder) and I would like to
>> see what frequency ranges they would be useful at. I guess I would have
>> to
>> wind up a transformer and plot the frequency response?
>>
>> Dave
>>
>>Plain black is likely ferrite. Wind some turns and measure the inductance.
>>Then resolve the turns/inductance formula for the permeability.
>An Amidon or Ferrite catalog will then give you any other charactersitics
>you require.
>Dale W4OP

There seems to be a misconception that all iron dust cores are made by
Micrometals and often marketed under the Amidon brand name and that
all ferrite cores are made by Fair-Rite :-).

You can not assume that any colour coding system used by some
manufacturer would apply universally.

Paul OH3LWR

4913. Re: Trouble matching SA605 input at 434 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-14 02:19:55 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <12j0ia8ntvevm61@corp.supernews.com>
Source record: 10013

"RST Engineering" <jim@rstengineering.com> wrote in message
news:1evUg.76$5k1.753766@news.sisna.com...
> Several reasons come to mind. The aforementioned numb unused input.
They
> found some interesting motorboating (low frequency) proclivities and
> started throwing capacitors at it until they found the right value. The
> applications engineer was two weeks out of school on his first real RF
> circuit.

Something I've found myself -- and several considerably experienced RF designers have verified -- is that RF coupling and bypass capacitors are often nowhere near as critical as you might think they are. On a real circuit board, by the time you start getting close to the SRF of even a 100nF capacitor, there's usually enough parasitic coupling that what the capacitor is doing just doesn't matter that much. I've used 100nF coupling caps in paths all the way up to 3GHz, and while you *can* see a difference in S21 compared to using, e.g., 10pF, it's really, really small... like, under 1/4dB, and thus the overall response is usually swamped by active devices, loads, etc.

Thus I'm not at all surprised the OP saw absolutely no different when he reduced the 10nF caps to 200pF.

That being said, I wouldn't throw a larger-than-necessary cap into an RF path without good reason. My main point is that the problem of providing wideband coupling is often nowhere near as difficult as it first appears. On the other hand, this implies the well-known corollary that isolation is often a lot *harder* to achieve than we'd like.

---Joel

4914. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-14 02:25:33 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <12j0ikqqni2v4f3@corp.supernews.com>
Source record: 10014

<Lathi.Tan@gmail.com> wrote in message
news:1160595992.913074.73420@m7g2000cwm.googlegroups.com...
> I am asking because it seems difficult, and maybe impossible. I've
> never heard of this high gain before, but I dont' know why I cann't
> stack amplifiers and I am looking for somebody who can tell me what
> exactly the problem is: you see the NF is nice, and I can get the SNR
> if the band is narrow enough.

The problem is that, if you have 140dB gain at one frequency, you need *over
140dB isolation* from your final output back to the original input to
prevent oscillations from occurring.

140dB isolation is very difficult for reasonable amounts of money!

4915. Re: testing ferrite or iron powder toroids as to mix

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-14 08:19:02 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <XM4GLjJ21JMFFANJ@ifwtech.co.uk>
Source record: 10016

Paul Keinanen wrote:
>>An Amidon or Ferrite catalog will then give you any other charactersitics
>>you require.
>>Dale W4OP
>
>There seems to be a misconception that all iron dust cores are made by
>Micrometals and often marketed under the Amidon brand name and that all
>ferrite cores are made by Fair-Rite :-).
>
>You can not assume that any colour coding system used by some
>manufacturer would apply universally.
>

Magnetic materials do not have a universal colour code like resistors. Their properties are much more complex, including shape and size, and the magnetic properties also depend very much on the ingredients and the processing. Rather like bread, no two products are exactly the same, and it's hard work for manufacturers to maintain consistent quality even in the same material.

If someone has good reason to believe that the cores were made in the USA, then they may well be identifiable from the Micrometals, Amidon or Fair-Rite catalogs. Unless it's a custom shape, the exact dimensions are often the best clue about which company's catalogue to look in. Then a few electrical tests should help to identify one of that company's standard mixes.

On the other hand, cores from other manufacturers and other parts of the world could be almost anything! The only thing you know for sure is that they are NOT made from any "US standard" mix, so they're going to need a separate drawer or bag of their own.

Living in Europe, I have given up buying surplus cores "just in case" they might be useful, because they have almost all been a waste of money and storage space. After wasting time trying to measure and classify them, they have always turned out to be the wrong material or the wrong size for what I needed. As a result of that experience, I now keep almost no stocks of magnetic cores of any kind.

Instead, I keep the money in my pocket, and then buy exactly the right ones for each project, as and when they are needed.

--
73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

4916. Re: testing ferrite or iron powder toroids as to mix

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-14 10:20:30 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <OR2Yg.1021387$084.658192@attbi_s22>
Source record: 10017

I keep a modest collection of many useful types of cores that I bought from Amidon, from their excellent complete Catalog. The initial expense was a couple of hundred dollars about 15 years ago, but I know exactly what I have, and I save a lot of time and trouble. When I run low on some type I order replacements. I store them in plastic zipper bags with labels. For home experimenting it is a very good way to go. I also have an ancient Boonton Q meter and an ancient surplus HP Vector Impedance Meter.

Bill W0IYH

"dave" <foda01@epix.net> wrote in message
news:_zQXg.1894$Db4.268540@news1.epix.net...
> Hi all,
>
> Is there an easy way to test surplus toroids as to what mix they might be?
> I have some here with no markings (plain black powder) and I would like to
> see what frequency ranges they would be useful at. I guess I would have
> to
> wind up a transformer and plot the frequency response?
>
> Dave
>
>

4917. ad8307

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-14 15:03:31 UTC
From: Gary <gbelcas@comcast.net>
Message-ID: <QoGdnWyLXpDZYa3YnZ2dnUVZ_qCdnZ2d@comcast.com>
Source record: 10018

anyone here tried a homebrew wattmeter using an AD8307 log amp?? need
to chat w/ you...

gary
ka9rao

4918. Re: ad8307

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-14 15:26:11 UTC
From: dkelly42@cox.net
Message-ID: <1160839571.319414.232240@m73g2000cwd.googlegroups.com>
Source record: 10019

Yes. My meter is used for low level RF measurement. Primarily I have
been using it for LO measurement and crystal filter construction. It
waspretty simple to build ugly style. The June 2001 article by Bob
Larkin is a good article to read. Calibration will be a concern. I also
created a spreadsheet using the slope formulas provided in excel. I
guarentee you will fine it useful.

AADE has a kit.

K5UOS

On Oct 14, 8:03 am, Gary <gbel...@comcast.net> wrote:
> anyone here tried a homebrew wattmeter using an AD8307 log amp?? need
> to chat w/ you...
>
> gary
> ka9rao

4919. Re: testing ferrite or iron powder toroids as to mix

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-14 17:23:26 UTC
From: dave <foda01@epix.net>
Message-ID: <i29Yg.2016$Db4.272448@news1.epix.net>
Source record: 10020

Well, I wound 6 turns of #26 enamel magnet wire onto on of the surplus toroids. It measures an whopping 714uH on my Almost All Digital Electronics LC meter.

The toroid measures a bit less than 1 inch OD but definitely more than 0.94". I don't have a set of calipers here but it looks to be about 0.97" based on the ruler I have. The ID is about 0.50 inches. The thickness is about 0.34". These dimensions don't seem to be standard. By the way, here is the listing for these toroids:

http://www.goldmine-elec-products.com/prodinfo.asp?number=G6683

This inductance seems way too high - either I'm getting a false reading or else this not a good material to make RF transformers / inductors with?

I'm mostly working with 2 to 30 Mhz so I am looking for some stuff for that range.

thanks all,

Dave

"William E. Sabin" <w.sabin@mchsi.com> wrote in message news:OR2Yg.1021387$084.658192@attbi_s22...
> I keep a modest collection of many useful types of cores that I bought from
> Amidon, from their excellent complete Catalog. The initial expense was a
> couple of hundred dollars about 15 years ago, but I know exactly what I
> have, and I save a lot of time and trouble. When I run low on some type I
> order replacements. I store them in plastic zipper bags with labels. For
> home experimenting it is a very good way to go. I also have an ancient
> Boonton Q meter and an ancient surplus HP Vector Impedance Meter.
>
> Bill W0IYH
>
> "dave" <foda01@epix.net> wrote in message
> news:_zQXg.1894$Db4.268540@news1.epix.net...
> > Hi all,
> >
> > Is there an easy way to test surplus toroids as to what mix they might be?
> > I have some here with no markings (plain black powder) and I would like to
> > see what frequency ranges they would be useful at. I guess I would have
> > to
> > wind up a transformer and plot the frequency response?

> >
> > Dave
> >
> >
>
>

4920. Lots of old scanned books

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-14 20:42:33 UTC
From: RuneM <runemadsen@operamail.com>
Message-ID: <0-adnVuTWM4w1qzYnZ2dneKdnZydnZ2d@telenor.com>
Source record: 10021

Visit:
http://thepiratebay.org/tor/3538798

4921. Re: ad8307

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-15 02:02:27 UTC
From: artie <artie.m@gNOSPAMmail.com>
Message-ID: <1410200061902273822%artie.m@gNOSPAMmail.com>
Source record: 10022

In article <QoGdnWyLXpDZYa3YnZ2dnUVZ_qCdnZ2d@comcast.com>, Gary
<gbelcas@comcast.net> wrote:

> anyone here tried a homebrew wattmeter using an AD8307 log amp?? need
> to chat w/ you...
>
> gary
> ka9rao

Built one using an 8307, A/D, and Stamp II. As the other poster
mentioned, depending on what you want to do with it, calibration can be
an issue, for both frequency and amplitude. "Dead bug" style
construction works well with this part, providing a solid ground plane.

Oh, and look on eBay for HP 436 and 437 wattmeters. That part is
cheap. The expensive part is the probe -- 8481, 8482. But even
without the probe, the 436 and 437 have reference sources that put out
1mW into 50 ohms at 50 MHz with better than 1% accuracy.

omit the usual to e-mail me.

--
Namaste--

4922. Re: ad8307

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-15 08:17:26 UTC
From: KRP <planningpower@iprimus.com.au>
Message-ID: <1160900246.797594.276230@h48g2000cwc.googlegroups.com>
Source record: 10023

Gary wrote:
> anyone here tried a homebrew wattmeter using an AD8307 log amp?? need
> to chat w/ you...
>
> gary
> ka9rao

Hi; my first post so hope it works.

Yes, I built mine largely on the Kopski circuit. Manhattan
construction.

I made a separate measuring head in a small diecast box with a cable
which plugs-in to the meter unit via a microphone plug/socket.

I also made another head in an identical little box; it contains a
return-loss bridge with an AD8307 as the detector. Works fine up to
650 MHz. It allows quick & accurate return-loss measurements; I call
it my poor man's scalar network analyser. :)

Kerry VK2TIL.

4923. Radio Pirates Forum

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-15 18:35:19 UTC
From: DJboutit <Recordking@Hotmail.com>
Message-ID: <HbvYg.105473$5o5.60198@tornado.texas.rr.com>
Source record: 10024

http://www.radiopirates.co.nr/ come chat with with station ops & just listeners many sections to keep you busy

4924. step motor info please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-15 22:00:46 UTC
From: larry d clark <buddycl@nospam_swbell.net>
Message-ID: <icyYg.14335$vJ2.13689@newssvr12.news.prodigy.com>
Source record: 10025

i have always wanted to build a step motor driven
balanced tuner. i have acquired an excellent tx air capacitor
and 2 matched 28 uh roller inductors. next step is
to acquire 2 step motors with some kind of positioning
indicator, either optical or a pot.

any have any recommendations for a company site, or for
anyting else related, pulleys, belts, encoders etc

larry
kd5foy

4925. Re: effect of cascading LNAs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-15 22:24:16 UTC
From: Pete KE9OA <p.gianako@comcast.net>
Message-ID: <tZ-dnVztiNuTKK_YnZ2dnUVZ_qmdnZ2d@comcast.com>
Source record: 10026

I took a receiver design class at Rockwell-Collins when I was working for them. The guidelines given at the class were no more than 70dB gain at any single frequency. Any more than that, an instability can result. One of my instructers in college told me that with the old school of design, allow at least 1/2 inch of length for each 40dB of gain at a single frequency, and even with those parameters, interstage shields would be necessary. One technique that radio manufacturers is "egg crate" construction.....a die-cast chassis with 1/16th inch walls separating each compartment that contains a module is used.
The better RF generators also use this scheme. Examples of a receiver and RF generator are the Racal 6790/GM and the Boonton 103D, respectively.
If you are still curious if your idea will work or not, I suggest that you actually build the cascaded lineup and find out what happens. Sometimes, the best way to learn about these things is to experience them yourself. I remember the first cascaded amplifier lineup I built when I was going to school. When I asked my instructor why the circuit was oscillating, he asked me where the decoupling networks were. I asked him "decoupling what?". Oh, that's what those 100 ohm / .01uF RC networks were that I used to see in series with the collector/drain resistors. I used to jump out those 100 ohm resistors, thinking that the extra collector/drain voltage would somehow give the radio more gain!
It is always good to ask questions on the NG, but the best way to learn is to actually build the circuit yourself. Nothing like the "school of hard knocks".

Pete

<Lathi.Tan@gmail.com> wrote in message
news:1160671063.115660.87710@m7g2000cwm.googlegroups.com...
> When the answer is not clear for our doubts, we argue about it for
> better explanation, until the doubts are solved. I think this is a
> healthy way to get answers.
>
>
>
>
> Wes Stewart wrote:
>> On 11 Oct 2006 12:13:20 -0700, Lathi.Tan@gmail.com wrote:
>>
>> >I asked what I don't know. I am expecting a helpful answer.
>>
>> The problem was, you got some prior answers and then wanted to argue
>> about it.
>> >
>> >The frequency is 70MHz.

>>
>> Then, assuming some type of filtering around that frequency that's
>> more or less where your system will likely oscillate.
>>
>> One reason superhetrodyne receivers were developed to replace TRF
>> receivers was to develop system gain at different frequencies so as to
>> minimize the chance of oscillation. Another, of course was to achieve
>> better selectivity that with older technology was better accomplished
>> at lower frequencies.
>>
>> Even a single conversion receiver usually develops its gain at three
>> different frequencies: r-f, i-f and post detection.
>

4926. Re: step motor info please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-16 02:41:47 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1160966507.180397.128950@e3g2000cwe.googlegroups.com>
Source record: 10027

On Oct 15, 3:00 pm, larry d clark <buddycl@nospam_swbell.net> wrote:
> i have always wanted to build a step motor driven
> balanced tuner. i have acquired an excellent tx air capacitor
> and 2 matched 28 uh roller inductors. next step is
> to acquire 2 step motors with some kind of positioning
> indicator, either optical or a pot.
>
> any have any recommendations for a company site, or for
> anyting else related, pulleys, belts, encoders etc
>
> larry
> kd5foy

Some places you'll find surplus steppers:
Marlin P. Jones Associates, www.mpja.com
Surplus Center, www.surpluscenter.com (usually not many steppers,
though)
Herbach & Rademan, www.herbach.com
There are plenty of others. Some of these also have other drive
components. You may also find just what you need in an old printer or
pen plotter. I have a friend who has a bunch of big old printers and
keeps talking about cleaning out his garage. He'd probably give you
one for free, but you'd have to ship it. You may have someone like
that near you.

You may need to gear down (or otherwise step down the speed) of the
motor to get enough torque to drive the capacitor and inductors.

Especially if you use steppers, you may only need to detect a "home"
position, since you can count steps from there and know where you are
(or rather where the capacitor and inductors are). A continuous servo
system may only need to know the ends of travel, to know that it can't
go beyond those points.

If you want it to auto-tune, you may find it easier to just use DC
motors, though doing so successfully would probably take some
understanding of servo control systems.

Cheers,
Tom

4927. Re: step motor info please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-16 14:49:31 UTC
From: "John, N9JG" <john@Xremove.MeYgotwals.com>
Message-ID: <%ZMYg.6624$5i7.6574@newsreading01.news.tds.net>
Source record: 10028

You also might want to checkout these two links:
http://www.stepperstuff.com/
http://www.sscnet.ucla.edu/geog/gessler/topics/steppers.htm

"larry d clark" <buddycl@nospam_swbell.net> wrote in message
news:icyYg.14335$vJ2.13689@newssvr12.news.prodigy.com...
>
> i have always wanted to build a step motor driven
> balanced tuner. i have acquired an excellent tx air capacitor
> and 2 matched 28 uh roller inductors. next step is
> to acquire 2 step motors with some kind of positioning
> indicator, either optical or a pot.
>
> any have any recommendations for a company site, or for
> anyting else related, pulleys, belts, encoders etc
>
> larry
> kd5foy

4928. Re: step motor info please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-16 16:09:34 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <3cqdnaLwfeFdM67YnZ2dnUVZ_omdnZ2d@web-ster.com>
Source record: 10029

K7ITM wrote:

>
> On Oct 15, 3:00 pm, larry d clark <buddycl@nospam_swbell.net> wrote:
>
>>i have always wanted to build a step motor driven
>>balanced tuner. i have acquired an excellent tx air capacitor
>>and 2 matched 28 uh roller inductors. next step is
>>to acquire 2 step motors with some kind of positioning
>>indicator, either optical or a pot.
>>
>>any have any recommendations for a company site, or for
>>anyting else related, pulleys, belts, encoders etc
>>
>>larry
>>kd5foy
>
>
> Some places you'll find surplus steppers:
> Marlin P. Jones Associates, www.mpja.com
> Surplus Center, www.surpluscenter.com (usually not many steppers,
> though)
> Herbach & Rademan, www.herbach.com
> There are plenty of others. Some of these also have other drive
> components. You may also find just what you need in an old printer or
> pen plotter. I have a friend who has a bunch of big old printers and
> keeps talking about cleaning out his garage. He'd probably give you
> one for free, but you'd have to ship it. You may have someone like
> that near you.
>
> You may need to gear down (or otherwise step down the speed) of the
> motor to get enough torque to drive the capacitor and inductors.
>
> Especially if you use steppers, you may only need to detect a "home"
> position, since you can count steps from there and know where you are
> (or rather where the capacitor and inductors are). A continuous servo
> system may only need to know the ends of travel, to know that it can't
> go beyond those points.
>
> If you want it to auto-tune, you may find it easier to just use DC
> motors, though doing so successfully would probably take some
> understanding of servo control systems.
>
> Cheers,

> Tom
>
If you decide to use DC motors, and if you decide to drive them from a microprocessor (which would be indicated if you're planning on tuning it under computer control or auto-tuning), this may help: http://www.wescottdesign.com/articles/pidwophd.html.

But I'm not sure that it would be necessary -- as long as you've got _something_ that'll locate the variable components where you want them and does so reliably it doesn't matter whether they're DC motors or steppers.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

4929. Re: step motor info please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-16 17:22:09 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <9J6dnRZaiJhcIq7YnZ2dnUVZ_vidnZ2d@web-ster.com>
Source record: 10030

larry d clark wrote:
>
> i have always wanted to build a step motor driven
> balanced tuner. i have acquired an excellent tx air capacitor
> and 2 matched 28 uh roller inductors. next step is
> to acquire 2 step motors with some kind of positioning
> indicator, either optical or a pot.
>
> any have any recommendations for a company site, or for
> anyting else related, pulleys, belts, encoders etc
>
> larry
> kd5foy

Be careful sizing your steppers. The biggest drawback to designing with steppers is that if you exceed their available torque they'll quietly fail, and your system will do Very Bad Things. So you want to over-specify your stepper motors by quite a bit.

You'll need to consider two things when doing this: the amount of torque it takes to turn your inductors, and their rotational inertia (which will determine how fast you can accelerate them without causing grief). You can determine your necessary torque experimentally with a lever arm and weights, and you can determine your torque available from a 'mystery motor' in a similar manner -- there's even a web page out there to tell you how to do it, if you look for it.

Once you have selected steppers that are big enough, you'll know their other drawback: they take up a lot of space compared to DC motors with feedback.

But it's easy to understand how to control them, and you don't need to figure out complicated position feedback schemes, so maybe steppers are the right choice for you. If I were you I'd just use a stepper and a pair of home switches -- one to tell me that the roller is at one extreme of travel, and another to tell me that the drum has passed by an index mark. If you 'and' these two signals together you'll get a reliable home. Then each time your system starts up you just run the steppers down to the home position, and back to where you want them.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

4930. Re: testing ferrite or iron powder toroids as to mix

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-16 21:18:55 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1161033535.072648.101340@b28g2000cwb.googlegroups.com>
Source record: 10031

The extremely high permeability materials are not good for HF...

denny / k8do

4931. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-17 00:41:04 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <AEVYg.10362$Y24.1904@newsread4.news.pas.earthlink.net>
Source record: 10032
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
news:NN-dnexaGIaKeLPYnZ2dnUVZ_rydnZ2d@rcn.net:

> Slow Code wrote:
>> Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
>
>>> While you are being all holier than thou, what did you design and
>>> build for your main rig? I'm hoping to be impressed, but expecting to
>>> be disappointed.
>>>
>>> Did the code help you with the design?
>>>
>>> I took my Advanced class test down at 1919 M street 36 years ago. I
>>> had to sit at the desk and copy one solid minute out of five error
>>> free at 13WPM. I passed it on the first try. I almost failed the
>>> sending test, as I had never spent much time doing that. I had never
>>> made a code contact before my test, and I have only made a couple
>>> since.
>>>
>>> The thing about code contacts is they never seem to want to say
>>> anything beyond:
>>>
>>> WA3XXX DE W6XX RST 5NN WX FB 73 W6XX SK
>>>
>>> How does that help the cause of amateur radio?
>>>
>>> I have designed and built numerous rf receivers and transmitters, many
>>> are employed by the US Army for various uses. I have fixed many
>>> different radios from tube stuff through DSP driven affairs.
>>>
>>> How exactly did the code help me to do this?
>>>
>>> For me code was a means to an end. I wanted my license, so I learned
>>> the code.
>>>
>>> There were plenty of rude, profane, and generally unpleasant hams on
>>> the air back when all had to pass the test in the offices of the FCC.
>>> I haven't noticed that things are any worse now. About the only real
>>> difference is in the quality of the gear folks are running. It is
>>> much better than the crappy stuff that was on the air back in the
>>> early 70's.
>>>
>>> -Chuck

>>
>>
>> Are conversations on repeaters as technical as they were twenty-five
>> years ago?
>
> Oh, easily. 25 years ago, technical conversations were dominated by
> such earth shatteringly important stuff as having a ham down at the
> repeater site helping other hams tune their transmitters to be on
> frequency. Other wonderkind were hitting the repeater with a full
> quieting signal, and turning their power up to try and get a better
> signal to that DX mobile that breaking up.
>
> If it wasn't that, it was an endless sea of autopatches calling the xyl
> to tell her that traffic was bad, could she start dinner... or ordering
> pizza.
>
>>
>> Me? I hear no-codes and nickle extras arguing how long a half wave
>> dipole should be.
>
> I heard the same things 25 years ago from Generals that got their
> licenses at the offices of the FCC.
>
> Even 34 years ago, there were study guides that had questions from the
> pool used by the FCC. If you could memorize the answers to those
> questions, you were virtually assured of passing. I used the ARRL
> handbook as my guide.
>
> You didn't answer my questions about the home brew rig you are using.
>
> -Chuck

Construction projects you or I have done aren't important. Working to
insure ham radio doesn't turn into CB is important. Agreed?

SC

4932. clean up the ars turn in your license

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-17 00:58:32 UTC
From: Mark@kb9rqz.net
Message-ID: <hka8j2pbjgcbfj6vlbtsb6gmdu0c1eo359@4ax.com>
Source record: 10033
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Tue, 17 Oct 2006 00:41:04 GMT, Slow Code <my.mail@no.spam> wrote:

>Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
>news:NN-dnexaGIaKeLPYnZ2dnUVZ_rydnZ2d@rcn.net:
>
>> Slow Code wrote:
>>> Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in

>> You didn't answer my questions about the home brew rig you are using.
>>
>> -Chuck
>
>
>Construction projects you or I have done aren't important. Working to
>insure ham radio doesn't turn into CB is important. Agreed?
no you need to answer the question steve
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4933. Re: step motor info please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-17 01:53:44 UTC
From: Yuri Blanarovich <K3BU@optonline.net>
Message-ID: <NIWYg.132$tT6.124@newsfe12.lga>
Source record: 10034

>
> Be careful sizing your steppers. The biggest drawback to designing with
> steppers is that if you exceed their available torque they'll quietly
> fail, and your system will do Very Bad Things. So you want to
> over-specify your stepper motors by quite a bit.
>
> >
> Tim Wescott
> Wescott Design Services
> http://www.wescottdesign.com

There is a way around the initial high torque, like friction loads etc. You can use torsion spring/shaft to delay the application of torque to the step motor. Had that problem back at IBM and solved it with torsion shaft spring (Allen key), had invention disclosure on it and it was the only way to get around the problem due to limited space/size of the motor.

Yuri K3BU.us
www.computeradio.us

4934. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-17 02:52:28 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <bLydncmhdskF2KnYnZ2dnUVZ_o-dnZ2d@rcn.net>
Source record: 10035
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:

>> Even 34 years ago, there were study guides that had questions from the
>> pool used by the FCC. If you could memorize the answers to those
>> questions, you were virtually assured of passing. I used the ARRL
>> handbook as my guide.
>>
>> You didn't answer my questions about the home brew rig you are using.
>>
>> -Chuck
>
>
> Construction projects you or I have done aren't important. Working to
> insure ham radio doesn't turn into CB is important. Agreed?

Oh, I agree, but if you do too, then I have trouble understanding why
you are ragging on folks that are using store bought radios.

-Chuck

4935. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-17 03:08:49 UTC
From: Mark@kb9rqz.net
Message-ID: <a9i8j2plq40j8sgugnlrq181685le1m3jm@4ax.com>
Source record: 10036
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Mon, 16 Oct 2006 22:52:28 -0400, Chuck Harris
<cf-NO-SPAM-harris@erols.com> wrote:

>Slow Code wrote:
>
>>> Even 34 years ago, there were study guides that had questions from the
>>> pool used by the FCC. If you could memorize the answers to those
>>> questions, you were virtually assured of passing. I used the ARRL
>>> handbook as my guide.
>>>
>>> You didn't answer my questions about the home brew rig you are using.
>>>
>>> -Chuck
>>
>>
>> Construction projects you or I have done aren't important. Working to
>> insure ham radio doesn't turn into CB is important. Agreed?
>
>Oh, I agree, but if you do too, then I have trouble understanding why
>you are ragging on folks that are using store bought radios.

he is waving his hands tso fast that they are catching on fire
>
>-Chuck
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4936. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-17 03:36:23 UTC
From: U-Know-Who <no-one@nowhere.com>
Message-ID: <XcYYg.900$um6.99@tornado.texas.rr.com>
Source record: 10037
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"Slow Code" <my.mail@no.spam> wrote in message
news:AEVYg.10362$Y24.1904@newsread4.news.pas.earthlink.net...
> Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
> news:NN-dnexaGIaKeLPYnZ2dnUVZ_rydnZ2d@rcn.net:
>
>> Slow Code wrote:
>>> Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
>>
>>>> While you are being all holier than thou, what did you design and
>>>> build for your main rig? I'm hoping to be impressed, but expecting to
>>>> be disappointed.
>>>>
>>>> Did the code help you with the design?
>>>>
>>>> I took my Advanced class test down at 1919 M street 36 years ago. I
>>>> had to sit at the desk and copy one solid minute out of five error
>>>> free at 13WPM. I passed it on the first try. I almost failed the
>>>> sending test, as I had never spent much time doing that. I had never
>>>> made a code contact before my test, and I have only made a couple
>>>> since.
>>>>
>>>> The thing about code contacts is they never seem to want to say
>>>> anything beyond:
>>>>
>>>> WA3XXX DE W6XX RST 5NN WX FB 73 W6XX SK
>>>>
>>>> How does that help the cause of amateur radio?
>>>>
>>>> I have designed and built numerous rf receivers and transmitters, many
>>>> are employed by the US Army for various uses. I have fixed many
>>>> different radios from tube stuff through DSP driven affairs.
>>>>
>>>> How exactly did the code help me to do this?
>>>>
>>>> For me code was a means to an end. I wanted my license, so I learned
>>>> the code.
>>>>
>>>> There were plenty of rude, profane, and generally unpleasant hams on
>>>> the air back when all had to pass the test in the offices of the FCC.
>>>> I haven't noticed that things are any worse now. About the only real
>>>> difference is in the quality of the gear folks are running. It is
>>>> much better than the crappy stuff that was on the air back in the
>>>> early 70's.

>>>>
>>>> -Chuck
>>>
>>>
>>> Are conversations on repeaters as technical as they were twenty-five
>>> years ago?
>>
>> Oh, easily. 25 years ago, technical conversations were dominated by
>> such earth shatteringly important stuff as having a ham down at the
>> repeater site helping other hams tune their transmitters to be on
>> frequency. Other wonderkind were hitting the repeater with a full
>> quieting signal, and turning their power up to try and get a better
>> signal to that DX mobile that breaking up.
>>
>> If it wasn't that, it was an endless sea of autopatches calling the xyl
>> to tell her that traffic was bad, could she start dinner... or ordering
>> pizza.
>>
>>>
>>> Me? I hear no-codes and nickle extras arguing how long a half wave
>>> dipole should be.
>>
>> I heard the same things 25 years ago from Generals that got their
>> licenses at the offices of the FCC.
>>
>> Even 34 years ago, there were study guides that had questions from the
>> pool used by the FCC. If you could memorize the answers to those
>> questions, you were virtually assured of passing. I used the ARRL
>> handbook as my guide.
>>
>> You didn't answer my questions about the home brew rig you are using.
>>
>> -Chuck
>
>
> Construction projects you or I have done aren't important. Working to
> insure ham radio doesn't turn into CB is important. Agreed?
>
> SC

SC, tell us all, and don't lie. Do you not agree that a LOT of hams today were CB'ers in the '70's and chose to advance their radio skills by advancing to ham radio? If you disagree, then 1) you're a liar, and 2) did this not help the service? And thusly, if you disagree I suspect you fit into this mold, and choose to deny your past.

4937. Re: What Is Ham Radio?.....The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-17 03:47:09 UTC
From: Rick Frazier <rickf@rickfrazier.com>
Message-ID: <4534523D.4080707@rickfrazier.com>
Source record: 10038
Cross-posted to: uk.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Well, in my part of the world, and the parts I can talk to lately, the most negative issues around "ham radio" are on the internet newsgroups, not on the airwaves. It is unfortunate that anyone would take the rantings and attacks of the few obviously "impaired" individuals that continually post crap in the newsgroups, as something that is indicative of the general state of "Radio Hammery". As with any human endeavor, there will always be some bad apples, and in usenet newsgroups, there is absolutely NO filter to keep out the people who wish to disrupt everyone else. At least not yet. Someday, when we all pay for our posts (it's coming, believe me) and we all digitally sign our posts to ensure we are who we say we are, then maybe we'll have civility and normalcy come back to the newsgroups. Until then, at least, the comraderie and decency of true hams will still shine out on the air, in good times and during emergencies, and we will all be seen for what we are, not what a few whackos would like you to believe we are turning into....

Thanks
--Rick AH7H

If M3 is the answer, it's a silly question! wrote:
> A necessary preface.....
>
> (It is becoming increasingly difficult to fly the flag for
> decency and for civilised behaviour in Radio Hammery. Even
> the Usenet newsgroups dedicated to the cause have degenerated
> into a hotbed of abusive onslaughts by those who ought to know
> better; the Nugatory Numpties who boast of an interest
> exceeding 10, 20, 30, 40 or even 50 years and yet who have
> proved themselves incapable of even meeting the trivial exam
> standards set for 6-year-olds. However, there still exists
> the fundamental basis on which Ham Radio is based, and
> that will never die. This FAQ ("What Is Ham Radio?") will
> be regularly published and will not be shouted or bullied
> down. It is important that those of a technical bent, who
> are the natural seed-corn of Radio Hammery and who
> gravitate towards us to be the real novitiate, can
> still find us, (and know that we are still here), their fellows.)
---snip----

4938. Re: What Is Ham Radio?.....The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-17 08:47:57 UTC
From: david <david_perry@btconnect.com>
Message-ID: <lJOdnYUUm9AnBanYnZ2dnUVZ8tCdnZ2d@bt.com>
Source record: 10039
Cross-posted to: uk.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Someday, when we all pay for our posts (it's
> coming, believe me)

That'll be the day when ham radio comes back to life then. Paying for posts?
That's paying for toilet paper on a wipe by wipe basis.

D

4939. re: step motor info please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-17 12:44:50 UTC
From: larry d clark <buddycl@nospam_swbell.net>
Message-ID: <6f4Zg.14784$vJ2.8950@newssvr12.news.prodigy.com>
Source record: 10040

many tnx for the excellent suggestions

larry
kd5foy

4940. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-17 13:28:48 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1161091728.610995.236060@m7g2000cwm.googlegroups.com>
Source record: 10041
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:
> What do you like best about appliance operating?
>
> SC

Dear Slow, I'm a new ham. I passed my Novice Exams in November of 1986, so in Ham Years, I'm a new ham.

What do I like best about appliance operating? I like the features and the ease of cleanup. The new GE range we have allows me to scroll up to the desired operating temperature, and push the "ON" button. Then "Pre" is shown on the temp readout until the oven comes up to temperature. And the smooth glass stove top is a snap to cleanup. If something should boil over, you don't have to lift up the burners and take the spill pans out, etc. Just a quick wipe with a damp dish cloth. It doesn't get much better than that.

Thanks for asking.

4941. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-17 18:06:11 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1161108371.016803.159340@h48g2000cwc.googlegroups.com>
Source record: 10042
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

hot-ham-and-cheese@hotmail.com wrote:
> Slow Code wrote:
> > What do you like best about appliance operating?
> >
> > SC
>
> Dear Slow, I'm a new ham. I passed my Novice Exams in November of
> 1986, so in Ham Years, I'm a new ham.
>
> What do I like best about appliance operating? I like the features and
> the ease of cleanup. The new GE range we have allows me to scroll up
> to the desired operating temperature, and push the "ON" button. Then
> "Pre" is shown on the temp readout until the oven comes up to
> temperature. And the smooth glass stove top is a snap to cleanup. If
> something should boil over, you don't have to lift up the burners and
> take the spill pans out, etc. Just a quick wipe with a damp dish
> cloth. It doesn't get much better than that.
>
> Thanks for asking.
amzing the thing these procoders want to know. they keep reenforceing
the notion OOKed cw must have harmfull effects on the brain

4942. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-17 18:29:38 UTC
From: Caveat Lector <CL@nowhere.com>
Message-ID: <pi9Zg.46947$nm1.8930@fed1read04>
Source record: 10043
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

When you passed the FCC exam - you are an Amateur Radio Operator period -- plain and simple.

Whether you passed a 20 wpm code test or no code - you are a Ham

Whether you had to draw the schematic for a Colpitts Oscillator or not - you are a Ham

Whether you faced the steely-eyed FCC examiner or a VE -- you are a Ham

Those who say otherwise are shrouded in elitism and a synonym for elitism is snobbery - plain and simple

This is 2006, not 1920

CL

4943. Re: testing ferrite or iron powder toroids as to mix

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-17 21:01:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12jah608stlrpf1@corp.supernews.com>
Source record: 10044

dave wrote:
> Well, I wound 6 turns of #26 enamel magnet wire onto on of the surplus
> toroids. It measures an whopping 714uH on my Almost All Digital Electronics
> LC meter.
>
> The toroid measures a bit less than 1 inch OD but definitely more than
> 0.94". I don't have a set of calipers here but it looks to be about 0.97"
> based on the ruler I have. The ID is about 0.50 inches. The thickness is
> about 0.34". These dimensions don't seem to be standard. By the way, here
> is the listing for these toroids:
>
> http://www.goldmine-elec-products.com/prodinfo.asp?number=G6683
>
> This inductance seems way too high - either I'm getting a false reading or
> else this not a good material to make RF transformers / inductors with?
> . . .

There isn't a single material that's good for both broadband transformers and high-Q inductors. For broadband transformers, you want a winding impedance that's at least several times (5 - 10 is a usual rule of thumb) the level of impedance the winding is connected to. Unless you're dealing with a lot of power, the sign of the impedance doesn't matter, except that resistive impedance is desirable because it stays relatively constant with frequency and doesn't contribute to undesirable resonances. So high-permeability ("low frequency") ferrite cores are best for this at HF, since they give the highest impedance per turn squared. These cores are also good for EMI suppression because they're free from resonance effects over the HF range and beyond, and they maintain a relatively constant resistive impedance over many decades of frequency. See the Fair-Rite web site for typical values for various materials.

But the impedance of those high-permeability ferrite cores is typically resistive above a few MHz, and the Q is no more than a few over the entire HF range. So they're not suitable for use as high-Q inductors or tuned transformers. For that purpose, you're almost always better off using powdered iron cores. There are some high-frequency ferrites, but they tend to have a high temperature coefficient and have to be used with care if any DC bias is present, since they saturate much more easily than powdered iron. Also, it's often difficult to achieve as good Q with them as with powdered iron. So I generally use high-permeability ferrite for transformers, and powdered iron for high-Q inductors. There are, incidentally, some low frequency powdered irons which aren't suitable for this application at HF and above. I generally use MicroMetals type 6 material, and occasionally type 2.

What you really need to know is the type of ferrite or powdered iron you're dealing with. You can infer this by measuring the low frequency inductance with an inductance meter, then using that information along with the core dimensions to calculate the material permeability. From there, you can find a likely ferrite or powdered iron type and from a manufacturer's web site get the impedance at the frequency of interest. A much more direct way is to simply measure the complex impedance of a one- or few-turn inductor at the frequency of interest with an antenna analyzer or impedance bridge if you have either of those instruments.

Roy Lewallen, W7EL

4944. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-17 21:08:21 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1161119301.113067.200270@b28g2000cwb.googlegroups.com>
Source record: 10045
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Caveat Lector wrote:
> When you passed the FCC exam - you are an Amateur Radio Operator period --
> plain and simple.
>
> Whether you passed a 20 wpm code test or no code - you are a Ham
>
> Whether you had to draw the schematic for a Colpitts Oscillator or not - you
> are a Ham
>
> Whether you faced the steely-eyed FCC examiner or a VE -- you are a Ham
>
> Those who say otherwise are shrouded in elitism and a synonym for elitism
> is snobbery - plain and simple
>
> This is 2006, not 1920
>
> CL

You got that right.

4945. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-17 22:02:14 UTC
From: N2EY@AOL.COM
Message-ID: <1161122534.513340.243530@k70g2000cwa.googlegroups.com>
Source record: 10046
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:
> Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
> news:NN-dnexaGIaKeLPYnZ2dnUVZ_rydnZ2d@rcn.net:
> > Slow Code wrote:
> >> Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in

> >>> While you are being all holier than thou, what did you design and
> >>> build for your main rig? I'm hoping to be impressed, but expecting to
> >>> be disappointed.

> >>> Did the code help you with the design?

> >>> I took my Advanced class test down at 1919 M street 36 years ago. I
> >>> had to sit at the desk and copy one solid minute out of five error
> >>> free at 13WPM. I passed it on the first try. I almost failed the
> >>> sending test, as I had never spent much time doing that. I had never
> >>> made a code contact before my test, and I have only made a couple
> >>> since.

> >>> The thing about code contacts is they never seem to want to say
> >>> anything beyond:

> >>> WA3XXX DE W6XX RST 5NN WX FB 73 W6XX SK

That's not the case when I operate Morse Code.

> >>> How does that help the cause of amateur radio?

> >>> I have designed and built numerous rf receivers and transmitters, many
> >>> are employed by the US Army for various uses. I have fixed many
> >>> different radios from tube stuff through DSP driven affairs.

> >>> How exactly did the code help me to do this?

> >>> For me code was a means to an end. I wanted my license, so I learned
> >>> the code.

> >>> There were plenty of rude, profane, and generally unpleasant hams on
> >>> the air back when all had to pass the test in the offices of the FCC.

I don't remember that at all.

> >>> I haven't noticed that things are any worse now. About the only real
> >>> difference is in the quality of the gear folks are running. It is
> >>> much better than the crappy stuff that was on the air back in the
> >>> early 70's.

There were good and bad rigs then as well as now.

> >> Are conversations on repeaters as technical as they were twenty-five
> >> years ago?
> >
> > Oh, easily. 25 years ago, technical conversations were dominated by
> > such earth shatteringly important stuff as having a ham down at the
> > repeater site helping other hams tune their transmitters to be on
> > frequency. Other wonderkind were hitting the repeater with a full
> > quieting signal, and turning their power up to try and get a better
> > signal to that DX mobile that breaking up.
> >
> > If it wasn't that, it was an endless sea of autopatches calling the xyl
> > to tell her that traffic was bad, could she start dinner... or ordering
> > pizza.
> >
> >> Me? I hear no-codes and nickle extras arguing how long a half wave
> >> dipole should be.
> >
> > I heard the same things 25 years ago from Generals that got their
> > licenses at the offices of the FCC.
> >
> > Even 34 years ago, there were study guides that had questions from the
> > pool used by the FCC. If you could memorize the answers to those
> > questions, you were virtually assured of passing. I used the ARRL
> > handbook as my guide.

Do you mean the License Manual?

It did not have the exact questions and answers in it.

> > You didn't answer my questions about the home brew rig you are using.
> >
> Construction projects you or I have done aren't important.

Yes they are!

> Working to
> insure ham radio doesn't turn into CB is important. Agreed?

BOTH are important.

If you're not running a homebrew or at least home-assembled rig, who
are you to call someone else an appliance operator?

What good are technical *discussions* if they don't translate into
actual working radio systems?

4946. Re: What Is Ham Radio?.....The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-17 23:31:56 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <MJdZg.10772$Y24.4999@newsread4.news.pas.earthlink.net>
Source record: 10047
Cross-posted to:
uk.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.policy

"david" <david_perry@btconnect.com> wrote in
news:lJOdnYUUm9AnBanYnZ2dnUVZ8tCdnZ2d@bt.com:

> Someday, when we all pay for our posts (it's
>> coming, believe me)
>
> That'll be the day when ham radio comes back to life then. Paying for
> posts? That's paying for toilet paper on a wipe by wipe basis.
>
> D

Unfortunately, the Dumb-It-Down no-code ham radio crowd are too lazy to
wipe. They'll still hang around and the rest of us will have to smell
the stink.

SC

4947. id theft is a crime

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-17 23:38:21 UTC
From: Mark@kb9rqz.net
Message-ID: <s9qaj29iahgq6t2fj7nurjq5bqaes3u607@4ax.com>
Source record: 9948
Cross-posted to:
uk.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Tue, 17 Oct 2006 23:31:56 GMT, Slow Code <my.mail@no.spam> wrote:

>"david" <david_perry@btconnect.com> wrote in
>news:lJOdnYUUm9AnBanYnZ2dnUVZ8tCdnZ2d@bt.com:
>
>> Someday, when we all pay for our posts (it's
>>> coming, believe me)
>>
>> That'll be the day when ham radio comes back to life then. Paying for
>> posts? That's paying for toilet paper on a wipe by wipe basis.
>>
>> D
>
>
>Unfortunately, the Dumb-It-Down no-code ham radio crowd are too lazy to
>wipe. They'll still hang around and the rest of us will have to smell
>the stink.
>
you are the one that refuses to wipe and it is your nose that needs it
worst since you just whine on and on
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4948. Re: MARQUEER is a crime

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-18 00:05:45 UTC
From: slow_code_bitch_boi@yahoo.com
Message-ID: <1161129945.555322.182630@b28g2000cwb.googlegroups.com>
Source record: 9949
Cross-posted to:
uk.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.policy

Mark@kb9rqz.net wrote:
> On Tue, 17 Oct 2006 23:31:56 GMT, Slow Code <my.mail@no.spam> wrote:
>
> >"david" <david_perry@btconnect.com> wrote in
> >news:lJOdnYUUm9AnBanYnZ2dnUVZ8tCdnZ2d@bt.com:
> >
> >> Someday, when we all pay for our posts (it's
> >>> coming, believe me)
> >>
> >> That'll be the day when ham radio comes back to life then. Paying for
> >> posts? That's paying for toilet paper on a wipe by wipe basis.
> >>
> >> D
> >
> >
> >Unfortunately, the Dumb-It-Down no-code ham radio crowd are too lazy to
> >wipe. They'll still hang around and the rest of us will have to smell
> >the stink.
> >
> you are the one that refuses to wipe and it is your nose that needs it
> worst since you just whine on and on

FUCK YOU AND THE WHORE THAT GAVE YOU BIRTH, MORK-QUEER!

> >SC
> http://kb9rqz.blogspot.com/
>
> --
> Posted via a free Usenet account from http://www.teranews.com

4949. id theft is a crime

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-18 00:39:11 UTC
From: Mark@kb9rqz.net
Message-ID: <jstaj2dsgaod9jr8ku5m5kbhk9n632tnhb@4ax.com>
Source record: 9950
Cross-posted to:
uk.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.policy

On 17 Oct 2006 17:05:45 -0700, slow_code_bitch_boi@yahoo.com wrote:

>
>Mark@kb9rqz.net wrote:
>> On Tue, 17 Oct 2006 23:31:56 GMT, Slow Code <my.mail@no.spam> wrote:

>> you are the one that refuses to wipe and it is your nose that needs it
>> worst since you just whine on and on
>
>FUCK YOU AND THE WHORE THAT GAVE YOU BIRTH, MORK-QUEER!

no you may not have sex with me I have told and told you that
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4950. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-18 03:36:34 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <RL6dncpml9TnPKjYnZ2dnUVZ_oadnZ2d@rcn.net>
Source record: 9951
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

N2EY@AOL.COM wrote:
> Slow Code wrote:
>> Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
>> news:NN-dnexaGIaKeLPYnZ2dnUVZ_rydnZ2d@rcn.net:
>>> Slow Code wrote:
>>>> Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
>
>>>>> While you are being all holier than thou, what did you design and
>>>>> build for your main rig? I'm hoping to be impressed, but expecting to
>>>>> be disappointed.
>
>>>>> Did the code help you with the design?
>
>>>>> I took my Advanced class test down at 1919 M street 36 years ago. I
>>>>> had to sit at the desk and copy one solid minute out of five error
>>>>> free at 13WPM. I passed it on the first try. I almost failed the
>>>>> sending test, as I had never spent much time doing that. I had never
>>>>> made a code contact before my test, and I have only made a couple
>>>>> since.
>
>>>>> The thing about code contacts is they never seem to want to say
>>>>> anything beyond:
>
>>>>> WA3XXX DE W6XX RST 5NN WX FB 73 W6XX SK
>
> That's not the case when I operate Morse Code.

I have listened to hundreds of CW contacts, and the above is mostly the norm.
I exaggerate a bit, but it is rare that anyone talks about anything other
than a few very simple things. I have yet to listen to a complex conversation
on CW... The most complicated thing I have heard is W1AW code practice, and
some of the traffic nets.

>
>>>>> How does that help the cause of amateur radio?
>
>>>>> I have designed and built numerous rf receivers and transmitters, many
>>>>> are employed by the US Army for various uses. I have fixed many
>>>>> different radios from tube stuff through DSP driven affairs.
>
>>>>> How exactly did the code help me to do this?
>
>>>>> For me code was a means to an end. I wanted my license, so I learned
>>>>> the code.

>
>>>>> There were plenty of rude, profane, and generally unpleasant hams on
>>>>> the air back when all had to pass the test in the offices of the FCC.
>
> I don't remember that at all.

Well, you wouldn't if you spent all of your time on CW. Things are very
polite on those subbands. If however, you ever listened to 20 meters
around 14.313, you might have a different idea of what ham radio was about.
For some reason that frequency was full of profane garbage mouthed hams,
and lots of infighting in the '70s and '80s.

>
>>>>> I haven't noticed that things are any worse now. About the only real
>>>>> difference is in the quality of the gear folks are running. It is
>>>>> much better than the crappy stuff that was on the air back in the
>>>>> early 70's.
>
> There were good and bad rigs then as well as now.

Perhaps, but nothing like some of the very cheap sweep tube transceivers of
the late 1960's, and early '70's. Swans that drifted furiously, and practically
invented the term TVI...

What are the bad HF SSB rigs of today? I would bet that even the absolute
worst is cleaner than anything that was available in the '60's, and '70's...
If only because the regulations got tighter on spurious emissions from new
gear.

...
>>> Even 34 years ago, there were study guides that had questions from the
>>> pool used by the FCC. If you could memorize the answers to those
>>> questions, you were virtually assured of passing. I used the ARRL
>>> handbook as my guide.
>
> Do you mean the License Manual?

Nope, I did my Advanced from basic principles. I used the ARRL Radio
Amateur's Handbook as my guide to rules and regulations. The technical
side of my studying came from the handbook, and a variety of other radio
and engineering sources.

>
> It did not have the exact questions and answers in it.

I looked at friend's copy of one of the the license manuals that was available
after my test, and the questions and answers were very close. It was nothing
like the manuals that are available today, but still so close as to be a cheat.

>
>>> You didn't answer my questions about the home brew rig you are using.
>>>
>> Construction projects you or I have done aren't important.

>
> Yes they are!

That was Slow Code talking, not me. Are you perhaps confusing attributions?
>
>> Working to
>> insure ham radio doesn't turn into CB is important. Agreed?
>
> *BOTH* are important.

Again, Slow Code...
>
> If you're not running a homebrew or at least home-assembled rig, who
> are you to call someone else an appliance operator?
>
> What good are technical *discussions* if they don't translate into
> actual working radio systems?

I have built and operated a number of entirely home brew radios. Slow Code
is the one complaining about appliance operators, of which it appears
he is one.

-Chuck

4951. Re: hello from belgium

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-18 04:20:59 UTC
From: Mike Burch <Libertybell7@mchsi.com>
Message-ID: <LYhZg.1026740$084.759760@attbi_s22>
Source record: 9952

Hello from Mike Burch K8MB
Apache Junction, Arizona.

4952. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-18 10:14:44 UTC
From: N2EY@AOL.COM
Message-ID: <1161166484.704844.34910@m73g2000cwd.googlegroups.com>
Source record: 9953
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Chuck Harris wrote:
> N2EY@AOL.COM wrote:
> > Slow Code wrote:
> >> Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
> >> news:NN-dnexaGIaKeLPYnZ2dnUVZ_rydnZ2d@rcn.net:
> >>> Slow Code wrote:
> >>>> Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
> >>
> >>>>> While you are being all holier than thou, what did you design and
> >>>>> build for your main rig? I'm hoping to be impressed, but expecting to
> >>>>> be disappointed.
> >>
> >>>>> Did the code help you with the design?
> >>
> >>>>> I took my Advanced class test down at 1919 M street 36 years ago. I
> >>>>> had to sit at the desk and copy one solid minute out of five error
> >>>>> free at 13WPM. I passed it on the first try. I almost failed the
> >>>>> sending test, as I had never spent much time doing that. I had never
> >>>>> made a code contact before my test, and I have only made a couple
> >>>>> since.
> >>
> >>>>> The thing about code contacts is they never seem to want to say
> >>>>> anything beyond:
> >>
> >>>>> WA3XXX DE W6XX RST 5NN WX FB 73 W6XX SK
> >>
> > That's not the case when I operate Morse Code.
>
> I have listened to hundreds of CW contacts, and the above is mostly the norm.
> I exaggerate a bit, but it is rare that anyone talks about anything other
> than a few very simple things. I have yet to listen to a complex conversation
> on CW... The most complicated thing I have heard is W1AW code practice, and
> some of the traffic nets.

Listening is one thing, participating is another. I've had many, many
CW QSOs that were far more complex than your example. Discussions of
rigs, antennas, jobs, family, plans for the near future (vacation, home
improvement, etc.), experiences in the other's location, and much more.

The stereotypical hello/goodbye QSO is usually the result of these
factors: poor conditions, unskilled operator(s), nature of the QSO (DX,
contest, just checking a new rig)

Of course somebody has to initiate - to say something beyond hello...

> >>>>> How does that help the cause of amateur radio?
> >
> >>>>> I have designed and built numerous rf receivers and transmitters, many
> >>>>> are employed by the US Army for various uses. I have fixed many
> >>>>> different radios from tube stuff through DSP driven affairs.
> >
> >>>>> How exactly did the code help me to do this?

Well, I don't know about you. But for me, knowing Morse Code meant I
could build and use simple(r) radio systems to try out an idea.

If someone who isn't a trained electronics person wants to design and
build their amateur radio station, what sort of project should they
build? A complete multiband SSB transceiver? Or a simple CW rig?

> >>>>> For me code was a means to an end. I wanted my license, so I learned
> >>>>> the code.
> >
> >>>>> There were plenty of rude, profane, and generally unpleasant hams on
> >>>>> the air back when all had to pass the test in the offices of the FCC.
> >
> > I don't remember that at all.
>
> Well, you wouldn't if you spent all of your time on CW.

Good point!

> Things are very
> polite on those subbands.

Isn't that a reason to promote the mode?

> If however, you ever listened to 20 meters
> around 14.313, you might have a different idea of what ham radio was about.
> For some reason that frequency was full of profane garbage mouthed hams,
> and lots of infighting in the '70s and '80s.

Sure. But how many hams were involved, out of the hundreds of thousands
on the air?

> >>>>> I haven't noticed that things are any worse now. About the only real
> >>>>> difference is in the quality of the gear folks are running. It is
> >>>>> much better than the crappy stuff that was on the air back in the
> >>>>> early 70's.
> >
> > There were good and bad rigs then as well as now.
>
> Perhaps, but nothing like some of the very cheap sweep tube transceivers of
> the late 1960's, and early '70's. Swans that drifted furiously, and practically
> invented the term TVI...

Sure - but remember that those rigs were designed 40+ years ago. They
should be judged by the standards of their time.
>

> What are the bad HF SSB rigs of today? I would bet that even the absolute
> worst is cleaner than anything that was available in the '60's, and '70's...
> If only because the regulations got tighter on spurious emissions from new
> gear.

It depends on what you consider "bad". Last FD we had some rigs that
were unusable because they put out wideband phase noise that messed up
stations on adjacent bands! Those rigs might have met the letter of the
law when new, but they sure made a lot of hash in the real world.

OTOH, serviceability of many ham rigs is very low. Even if you can deal
with SMT, a lot of them use house-numbered parts that become unobtanium
in a few years.
> ...
> >>> Even 34 years ago, there were study guides that had questions from the
> >>> pool used by the FCC. If you could memorize the answers to those
> >>> questions, you were virtually assured of passing. I used the ARRL
> >>> handbook as my guide.
> >
> > Do you mean the License Manual?
>
> Nope, I did my Advanced from basic principles. I used the ARRL Radio
> Amateur's Handbook as my guide to rules and regulations. The technical
> side of my studying came from the handbook, and a variety of other radio
> and engineering sources.

Same here - all the way to Extra in 1970.

> > It did not have the exact questions and answers in it.
>
> I looked at friend's copy of one of the the license manuals that was available
> after my test, and the questions and answers were very close. It was nothing
> like the manuals that are available today, but still so close as to be a cheat.

There were a couple of different license manuals available back then.

The ARRL LM was a reprint of FCC's study guide. Those FCC study guides
were produced by FCC to indicate the areas of knowledge you needed to
have for the test. They were essay format even though the tests were
multiple-choice.

AMECO and others rewrote them into multiple choice format.

A fellow named Dick Bash stationed himself outside FCC offices and
bought information from people who had just taken the tests. He was
able to recreate a pretty close version of the actual test by that
method. FCC decided not to prosecute him even though he published books
that were very close to the actual tests.

Then it all became academic with the VE system.

> >>> You didn't answer my questions about the home brew rig you are using.
> >>>

> >> Construction projects you or I have done aren't important.
> >
> > Yes they are!
>
> That was Slow Code talking, not me. Are you perhaps confusing attributions?

I was responding to both of you. I disagree with "Slow Code"'s claim.

> >> Working to
> >> insure ham radio doesn't turn into CB is important. Agreed?
> >
> > *BOTH* are important.
>
> Again, Slow Code...

Yup.

> > If you're not running a homebrew or at least home-assembled rig, who
> > are you to call someone else an appliance operator?
> >
> > What good are technical *discussions* if they don't translate into
> > actual working radio systems?
>
> I have built and operated a number of entirely home brew radios.

Exactly. *You* are not an appliance operator - nor are you calling
anybody else an appliance operator.

> Slow Code
> is the one complaining about appliance operators, of which it appears
> he is one.

Exactly. I didn't mean to imply that *you* were an appliance operator,
Chuck. Just that if "Slow Code" is going to call other people names, he
should be ready to back up his claims with actions. So far, we see
nothing.

Of course, one should not take "Slow Code" too seriously - if at all.

73 de Jim, N2EY

4953. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-18 12:38:23 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <3fpZg.3343$Ka1.3007@news01.roc.ny>
Source record: 9954
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:
> gwatts <gwatts@frontiernet.net> wrote in
> news:Z4cXg.2828$ya1.2518@news02.roc.ny:
>
>
>>Slow Code wrote:
>>
>>>gwatts <gwatts@frontiernet.net> wrote in
>>>news:nOLWg.2685$Ka1.1928@news01.roc.ny:
>>>
>>>
>>>
>>>>Slow Code wrote:
>>>>
>>>>
>>>>>What do you like best about appliance operating?
>>>>
>>>>All the crotchety old farts are either off somewhere beep-beep-beeping
>>>>away on CW or bitching to each other on the lower half of the 80m phone
>>>>band, so it's easy to avoid them and talk to someone who enjoys ham
>>>>radio as it is instead of whining about how it was.
>>>>
>>>
>>>
>>>Big Ten-Four on that Good Buddy.
>>
>>It sounds like you run a lot of 11m, not surprising considering how much
>>you whine, and it's not alternator whine.
>
>
>
> I only typed like because I knew you would understand that style of
> communicating. So, after your license came in the mail what I appliance
> did you decide to buy? MFJ? Alinco? Cobra?

Kenwood TS-820S. I got a good deal because it had a few bugs. I spent
some of the evenings between the exam session and my ticket arriving
(that would be my GENERAL ticket, I skipped Novice and Technician) going
through it cleaning switches, adding ground straps to a couple circuit
boards and adding 17m to the 'AUX' position on the band switch. By the
time my ticket arrived in the mail it was ready. I worked Clipperton
Island the second day I was on the air and didn't realize it was quite
the DX catch until months later.

So, after your license came in the mail what did you start weenie whining about first?

W8LNA

4954. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-18 12:40:59 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <-7CdnaP-NvGNvKvYnZ2dnUVZ_qqdnZ2d@rcn.net>
Source record: 9955
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

N2EY@AOL.COM wrote:
> Chuck Harris wrote:

>>> I don't remember that at all.
>> Well, you wouldn't if you spent all of your time on CW.
>
> Good point!
>
>> Things are very
>> polite on those subbands.
>
> Isn't that a reason to promote the mode?

To promote the mode, sure, but to require it no. I could make the same claim
about RTTY, and Slow Scan. When they were popular, folks on those modes were
all as polite as could be.

The impolite behavior seems to center around SSB. Probably because the mode
requires essentially no effort.

>> If however, you ever listened to 20 meters
>> around 14.313, you might have a different idea of what ham radio was about.
>> For some reason that frequency was full of profane garbage mouthed hams,
>> and lots of infighting in the '70s and '80s.
>
> Sure. But how many hams were involved, out of the hundreds of thousands
> on the air?

It only takes a few. As I remember from those SSB wars in the '70's and
'80's, a several hams were prosecuted. They were all General Class or higher.
And because of the time frame, in which they were licensed, they had passed
the CW hurdle. I recall that playing with their keyers on the SSB segment was
part of their hijinks. A whole lot of "FU" and other acronyms were mixed in
with the echo boxes, and microphone raking.
>
>>>>>>> I haven't noticed that things are any worse now. About the only real
>>>>>>> difference is in the quality of the gear folks are running. It is
>>>>>>> much better than the crappy stuff that was on the air back in the
>>>>>>> early 70's.
>>> There were good and bad rigs then as well as now.
>> Perhaps, but nothing like some of the very cheap sweep tube transceivers of
>> the late 1960's, and early '70's. Swans that drifted furiously, and practically
>> invented the term TVI...
>
> Sure - but remember that those rigs were designed 40+ years ago. They

> should be judged by the standards of their time.

And I was. But today's rigs, when judged by the ear are more pleasant to
listen to.

>> What are the bad HF SSB rigs of today? I would bet that even the absolute
>> worst is cleaner than anything that was available in the '60's, and '70's...
>> If only because the regulations got tighter on spurious emissions from new
>> gear.
>
> It depends on what you consider "bad". Last FD we had some rigs that
> were unusable because they put out wideband phase noise that messed up
> stations on adjacent bands! Those rigs might have met the letter of the
> law when new, but they sure made a lot of hash in the real world.

Fortunately, that wideband phase noise doesn't carry beyond a few hundred
yards from the radio. It used to be a really big problem with the early
solid state radios... But not so much so with the newer rigs. Field Day was
where I first noticed the effect.... Key the mike, and all bands were awash
in hiss, even before the first word was spoken. Icom comes to mind.
Having a Clegg FM27B around on field day is a real treat too...not!

> OTOH, serviceability of many ham rigs is very low. Even if you can deal
> with SMT, a lot of them use house-numbered parts that become unobtanium
> in a few years.

Entirely the result of meeting the customer's demands for in expensive
feature laden radios that fit in packages smaller than a dictionary.

...
>>> It did not have the exact questions and answers in it.
>> I looked at friend's copy of one of the the license manuals that was available
>> after my test, and the questions and answers were very close. It was nothing
>> like the manuals that are available today, but still so close as to be a cheat.
>
> There were a couple of different license manuals available back then.
>
> The ARRL LM was a reprint of FCC's study guide. Those FCC study guides
> were produced by FCC to indicate the areas of knowledge you needed to
> have for the test. They were essay format even though the tests were
> multiple-choice.
>
> AMECO and others rewrote them into multiple choice format.

I think my friends "manual" might have been Ameco.

> A fellow named Dick Bash stationed himself outside FCC offices and
> bought information from people who had just taken the tests. He was
> able to recreate a pretty close version of the actual test by that
> method. FCC decided not to prosecute him even though he published books
> that were very close to the actual tests.

I don't think Bash was doing that until after the VE system came on line...
but I don't recall for sure.

...
>>> What good are technical *discussions* if they don't translate into
>>> actual working radio systems?
>> I have built and operated a number of entirely home brew radios.
>
> Exactly. *You* are not an appliance operator - nor are you calling
> anybody else an appliance operator.

Actually, these days for what little operating I do, I am an appliance
operator. Because of my early ham experience, and the fact that I am
an EE, I know how to design and build, even if I don't chose to do so
right now. Ham radio probably figures heavily in my being an EE.

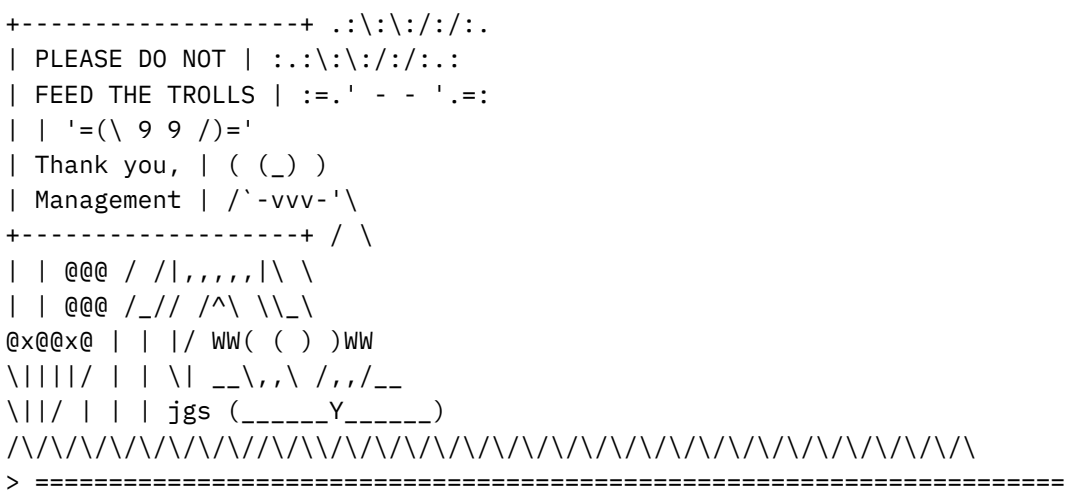
My general belief is if you have passed the test that is in force, you
are a ham... period. Beyond passing whatever is required, I don't care
how you got here, just what you do now that you are here.

-Chuck

4955. Please do not fed the trolls (was: Question for the group. Mainly new hams.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-18 13:43:38 UTC
From: William Warren <william_warren_nonoise@speakeasy.net>
Message-ID: <XNadnQqnOKUWsqvYnZ2dnUVZ_radnZ2d@speakeasy.net>
Source record: 9956
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:
> What do you like best about appliance operating?
>
> SC



4956. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-18 15:16:22 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <1161184582.772835.268470@i3g2000cwc.googlegroups.com>
Source record: 9957
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Chuck Harris wrote:
> N2EY@AOL.COM wrote:
> > Chuck Harris wrote:
>
> >>> I don't remember that at all.
> >> Well, you wouldn't if you spent all of your time on CW.
> >
> > Good point!
> >
> >> Things are very
> >> polite on those subbands.
> >
> > Isn't that a reason to promote the mode?
>
> To promote the mode, sure, but to require it no. I could make the same claim
> about RTTY, and Slow Scan. When they were popular, folks on those modes were
> all as polite as could be.
>
> The impolite behavior seems to center around SSB. Probably because the mode
> requires essentially no effort.
funny how the result now is to transfer a lot of the rudeness to CW

4957. Re: step motor info please

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-18 18:59:09 UTC
From: Dan Andersson <dan@andersson.co.uk>
Message-ID: <5NKdndFoBPbj5KvYnZ2dnUVZ8smdnZ2d@eclipse.net.uk>
Source record: 9958

larry d clark wrote:

>
> i have always wanted to build a step motor driven
> balanced tuner. i have acquired an excellent tx air capacitor
> and 2 matched 28 uh roller inductors. next step is
> to acquire 2 step motors with some kind of positioning
> indicator, either optical or a pot.
>
> any have any recommendations for a company site, or for
> anyting else related, pulleys, belts, encoders etc
>
> larry
> kd5foy

Why using stepmotors.

Try to get syngons (or synchrons) instead. These are motor-alike things that you feed with AC and when you turn one of them, the other reciproces. It's like a radio controlled servo but without the usual QRM from the motors.

Cheers

Dan / M0DFI

4958. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-18 23:14:25 UTC
From: N2EY@AOL.COM
Message-ID: <1161213265.621459.226780@k70g2000cwa.googlegroups.com>
Source record: 9959
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Chuck Harris wrote:
> N2EY@AOL.COM wrote:
> > Chuck Harris wrote:

> >> Things are very
> >> polite on those subbands.
> >
> > Isn't that a reason to promote the mode?
>
> To promote the mode, sure, but to require it no.

One way to promote a mode is to give it significant band space.

> I could make the same claim
> about RTTY, and Slow Scan. When they were popular, folks on those modes were
> all as polite as could be.

The difference is that only Morse Code requires skills that the average
person does not have.

> The impolite behavior seems to center around SSB. Probably because the mode
> requires essentially no effort.

Maybe. I think there are many causes.

> >> If however, you ever listened to 20 meters
> >> around 14.313, you might have a different idea of what ham radio was about.
> >> For some reason that frequency was full of profane garbage mouthed hams,
> >> and lots of infighting in the '70s and '80s.
> >
> > Sure. But how many hams were involved, out of the hundreds of thousands
> > on the air?
>
> It only takes a few. As I remember from those SSB wars in the '70's and
> '80's, a several hams were prosecuted. They were all General Class or higher.
> And because of the time frame, in which they were licensed, they had passed
> the CW hurdle. I recall that playing with their keyers on the SSB segment was
> part of their hijinks. A whole lot of "FU" and other acronyms were mixed in
> with the echo boxes, and microphone raking.

They were a few out of hundreds of thousands.

And yes, they all passed the Morse Code test - supposedly, anyhow. But
they also passed one or more *written* tests which included questions
on acceptable on-air behavior. Why don't the written tests get the
blame?

Look at the recent case of Jack Gerritsen, ex-KG6IRO. What possible
reason is there for his behavior?

> >>>>>>> I haven't noticed that things are any worse now. About the only real
> >>>>>>> difference is in the quality of the gear folks are running. It is
> >>>>>>> much better than the crappy stuff that was on the air back in the
> >>>>>>> early 70's.
> >>> There were good and bad rigs then as well as now.
> >> Perhaps, but nothing like some of the very cheap sweep tube transceivers of
> >> the late 1960's, and early '70's. Swans that drifted furiously, and practically
> >> invented the term TVI...
> >
> > Sure - but remember that those rigs were designed 40+ years ago. They
> > should be judged by the standards of their time.
>
> And I was. But today's rigs, when judged by the ear are more pleasant to
> listen to.

Some are, some aren't - IMHO.
>
> >> What are the bad HF SSB rigs of today? I would bet that even the absolute
> >> worst is cleaner than anything that was available in the '60's, and '70's...
> >> If only because the regulations got tighter on spurious emissions from new
> >> gear.
> >
> > It depends on what you consider "bad". Last FD we had some rigs that
> > were unusable because they put out wideband phase noise that messed up
> > stations on adjacent bands! Those rigs might have met the letter of the
> > law when new, but they sure made a lot of hash in the real world.
>
> Fortunately, that wideband phase noise doesn't carry beyond a few hundred
> yards from the radio. It used to be a really big problem with the early
> solid state radios... But not so much so with the newer rigs.

The rigs that gave us headaches were only a few years old.

> Field Day was
> where I first noticed the effect.... Key the mike, and all bands were awash
> in hiss, even before the first word was spoken. Icom comes to mind.

Bingo.

> Having a Clegg FM27B around on field day is a real treat too...not!
>
> > OTOH, serviceability of many ham rigs is very low. Even if you can deal
> > with SMT, a lot of them use house-numbered parts that become unobtanium
> > in a few years.
>
> Entirely the result of meeting the customer's demands for in expensive
> feature laden radios that fit in packages smaller than a dictionary.

Are those really customer demands, or are they driven by the
manufacturers who want to sell more radios?

> ...
> >>> It did not have the exact questions and answers in it.
> >> I looked at friend's copy of one of the the license manuals that was available
> >> after my test, and the questions and answers were very close. It was nothing
> >> like the manuals that are available today, but still so close as to be a cheat.
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> > There were a couple of different license manuals available back then.
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> > were produced by FCC to indicate the areas of knowledge you needed to
> > have for the test. They were essay format even though the tests were
> > multiple-choice.
> >
> > AMECO and others rewrote them into multiple choice format.
>
> I think my friends "manual" might have been Ameco.

Very possible.

>
> > A fellow named Dick Bash stationed himself outside FCC offices and
> > bought information from people who had just taken the tests. He was
> > able to recreate a pretty close version of the actual test by that
> > method. FCC decided not to prosecute him even though he published books
> > that were very close to the actual tests.
>
> I don't think Bash was doing that until after the VE system came on line...
> but I don't recall for sure.

It was the other way around. Bash did his thing in the early 1970s. The
VE system came to be in the early 1980s. The VE system put Bash out of
business because the question pools became public then.

> ...
> >>> What good are technical *discussions* if they don't translate into
> >>> actual working radio systems?
> >> I have built and operated a number of entirely home brew radios.
> >
> > Exactly. *You* are not an appliance operator - nor are you calling
> > anybody else an appliance operator.
>
> Actually, these days for what little operating I do, I am an appliance
> operator. Because of my early ham experience, and the fact that I am
> an EE, I know how to design and build, even if I don't chose to do so
> right now. Ham radio probably figures heavily in my being an EE.

Same here - except I'm still homebrewing.

> My general belief is if you have passed the test that is in force, you
> are a ham... period.

Agreed!

> Beyond passing whatever is required, I don't care
> how you got here, just what you do now that you are here.

Agreed again!

73 de Jim, N2EY

4959. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-18 23:29:21 UTC
From: Mark@kb9rqz.net
Message-ID: <m5edj29mr0a5m8vs7ujn1l4093i2qhg0ml@4ax.com>
Source record: 9960
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On 18 Oct 2006 16:14:25 -0700, N2EY@AOL.COM wrote:

>Chuck Harris wrote:
>> N2EY@AOL.COM wrote:
>> > Chuck Harris wrote:
>
>> >> Things are very
>> >> polite on those subbands.
>> >
>> > Isn't that a reason to promote the mode?
>>
>> To promote the mode, sure, but to require it no.
>
>One way to promote a mode is to give it significant band space.
>
>> I could make the same claim
>> about RTTY, and Slow Scan. When they were popular, folks on those modes were
>> all as polite as could be.
>
>The difference is that only Morse Code requires skills that the average
>person does not have.

why does that justify the rudeness of it operators Jim?
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4960. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-18 23:42:51 UTC
From: Spokesman <his@spam.net>
Message-ID: <p_KdnUSN5KmdIavYnZ2dnUVZ_qqdnZ2d@wightman.ca>
Source record: 9961
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"Chuck Harris" <cf-NO-SPAM-harris@erols.com> wrote in message
news:bLydncmhdskF2KnYnZ2dnUVZ_o-dnZ2d@rcn.net...
> Slow Code wrote:
>
> >> Even 34 years ago, there were study guides that had questions from the
> >> pool used by the FCC. If you could memorize the answers to those
> >> questions, you were virtually assured of passing. I used the ARRL
> >> handbook as my guide.
> >>
> >> You didn't answer my questions about the home brew rig you are using.
> >>
> >> -Chuck
> >
> >
> > Construction projects you or I have done aren't important. Working to
> > insure ham radio doesn't turn into CB is important. Agreed?
>
> Oh, I agree, but if you do too, then I have trouble understanding why
> you are ragging on folks that are using store bought radios.

Slow Mind does not know that a Real Ham only uses a radio he built
himself. A Real Ham would not use one of those crappy store-bought
things.

>
> -Chuck

4961. Re: Please do not fed the trolls (was: Question for the group. Mainly new hams.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-19 00:12:01 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <lpzZg.8963$Lv3.6474@newsread1.news.pas.earthlink.net>
Source record: 9962
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

William Warren <william_warren_nonoise@speakeasy.net> wrote in
news:XNadnQqnOKUWsqvYnZ2dnUVZ_radnZ2d@speakeasy.net:

> Slow Code wrote:
>> What do you like best about appliance operating?
>>
>> SC
>
> +------------------+ .:\:\:/:/:.
> | PLEASE DO NOT | :.:\:\:/:/:.:
> | FEED THE TROLLS | :=.' - - '.=:
> | | '=(\ 9 9 /)='
> | Thank you, | ((_))
> | Management | /`-vvv-'\
> +------------------+ / \
> | | @@@ / /|,,,,,|\ \
> | | @@@ /_// /^\ _\
> @x@@x@ | | |/ WW(( ))WW
> \|||||/ | | \| __\,,\ /,,/__
> \|||/ | | | jgs (______Y______)
> /\/\/\/\/\/\/\/\//\
> > ==

****
****
ATTENTION USENET VISITORS, THIS AREA HAS BEEN
DECLARED A TROLL WILDLIFE REFUGE. TO LEARN ABOUT
THE TROLL, ITS HABITAT, AND ITS WAY OF LIFE, PLEASE
READ THE SIGN-POST BELOW. IF YOU WOULD LIKE TO LEARN
MORE ABOUT THE TROLL, YOU CAN PICK UP BOOKS AND
SOUVENIRS IN THE GIFT SHOP AT THE END OF THE TOUR.
THANK YOU IN ADVANCE FOR OBSERVING ALL TROLL WILDLIFE
REFUGE RULES, HAVE A NICE DAY.

****
****

| Common name: Woodland Troll |
| Scientific name: Trollus Useneticus |

```
##################################################################
# #
# PHYSICAL CHARACTERISTICS: #
# #
# The common woodland troll (Trollus Useneticus) is an #
# approximately 1.7m long nocturnal furry creature that #
# has been found to exist in nearly every climate and #
# latitude. Predominant features include: a very pale #
# complexion, a large bony ridge above the eyes, a dense #
# cranium, dragging knuckles, and a pungent odor. #
# #
##################################################################

##################################################################
# #
# HABITAT: #
# #
# Most trolls spend the daylight hours under a large rock #
# sleeping. Unfortunately, the natural habitat of the #
# troll has been encroached by development (as is all too #
# common these days). The modern troll has to make due #
# with a slimy, moss covered rock. Often, trolls are #
# forced to endure poor sanitation and filthy living #
# conditions. Combined with the general lack of hygiene #
# among trolls, this results in a very unpleasant odor. #
# #
##################################################################

##################################################################
# #
# ACTIVITIES AND DIET: #
# #
# During their active period at night, the common troll #
# engages in numerous activities, though the most #
# important of these is foraging for food. The one #
# characteristic that ties all different troll species #
# and sub-species together is their diet. Trolls #
# invariably survive off of a combination of cheetos, #
# arguments, and annoying others. A typical troll #
# requires approximately 10 arguments and flames per day #
# just to stay alive. With the increasing use of #
# killfiles and just regular ignoring of trolls, it has #
# become more and more difficult for trolls to eke out a #
# basic sustenance. #
# #
##################################################################

##################################################################
# #
# KNOWN PREDATORS: #
# #
# Unfortunately, trolls have many predators. Most common #
```

```
# among them are the helpful researcher, the informative #
# poster, the cool headed responder, and the kill-filer. #
# The cool header responder is technically not a troll #
# predator however. Trolls are typically unfazed by #
# logical counter arguments and cool headed reason. #
# However, even though their posts do not deliver the #
# same level of sustenance that a "flamer" or an "annoyed #
# poster" may provide, they still provide a valuable #
# source of dietary fiber for the troll. #
# #
# The most dangerous predators for the trolls are the #
# helpful researcher, the informative poster, and the #
# kill-filer. The common troll is highly allergic to #
# fact, real data, and research. Upon skin contact with #
# actual hard evidence and real data, the troll will #
# experience intense itching and burning at the site of #
# contact, followed by lesions and blisters. Eventually, #
# this results in loss of skin near the area of contact, #
# and usually to loss of a limb (in the example of #
# contact near the arm or leg). Contact with facts and #
# data near the facial area usually results in a slow #
# painful death. Contact with extremely high doses of #
# fact and hard data can cause temporary loss of #
# consciousness and even permanent brain damage for the #
# troll. #
# #
# The kill-filer poses a much more insidious threat to #
# the troll. Not posing a direct threat to the troll per #
# se, the kill-filer simply deprives the troll of yet #
# another source of nourishment. Some trolls have #
# developed counter measures to thwart the kill-filers, #
# usually this takes the form of a type of camoflage. #
# #
# The trolls' predators have reaped a terrible slaughter #
# over the years, resulting in the death of great hordes #
# of trolls. Trolls continue to breed rapidly though and #
# their population is stable. However, it is unknown how #
# long this situation can persist. Eventually, natural #
# predators and poachers may result in lower numbers of #
# trolls. Already we are seeing lower diversity among #
# the different troll species. That is why this troll #
# habitat refuge exists, to ensure the preservation of #
# the troll for not only our future, but the future of #
# our children. #
# #
#################################################################

 ========================================================
/ This troll habitat refuge has been paid for in part by /
/ the anti Troll-Defamation League, the International /
```

/ Society for the Advancement of Trolls, and the Troll /
/ Habitat Preservation Alliance. /
==========

4962. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-19 00:12:13 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <xpzZg.8965$Lv3.3214@newsread1.news.pas.earthlink.net>
Source record: 9963
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"U-Know-Who" <no-one@nowhere.com> wrote in
news:XcYYg.900$um6.99@tornado.texas.rr.com:

>
> "Slow Code" <my.mail@no.spam> wrote in message
> news:AEVYg.10362$Y24.1904@newsread4.news.pas.earthlink.net...
>> Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
>> news:NN-dnexaGIaKeLPYnZ2dnUVZ_rydnZ2d@rcn.net:
>>
>>> Slow Code wrote:
>>>> Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
>>>
>>>>> While you are being all holier than thou, what did you design and
>>>>> build for your main rig? I'm hoping to be impressed, but expecting
>>>>> to be disappointed.
>>>>>
>>>>> Did the code help you with the design?
>>>>>
>>>>> I took my Advanced class test down at 1919 M street 36 years ago. I
>>>>> had to sit at the desk and copy one solid minute out of five error
>>>>> free at 13WPM. I passed it on the first try. I almost failed the
>>>>> sending test, as I had never spent much time doing that. I had
>>>>> never made a code contact before my test, and I have only made a
>>>>> couple since.
>>>>>
>>>>> The thing about code contacts is they never seem to want to say
>>>>> anything beyond:
>>>>>
>>>>> WA3XXX DE W6XX RST 5NN WX FB 73 W6XX SK
>>>>>
>>>>> How does that help the cause of amateur radio?
>>>>>
>>>>> I have designed and built numerous rf receivers and transmitters,
>>>>> many are employed by the US Army for various uses. I have fixed
>>>>> many different radios from tube stuff through DSP driven affairs.
>>>>>
>>>>> How exactly did the code help me to do this?
>>>>>
>>>>> For me code was a means to an end. I wanted my license, so I
>>>>> learned the code.
>>>>>
>>>>> There were plenty of rude, profane, and generally unpleasant hams on
>>>>> the air back when all had to pass the test in the offices of the

>>>>> FCC. I haven't noticed that things are any worse now. About the
>>>>> only real difference is in the quality of the gear folks are
>>>>> running. It is much better than the crappy stuff that was on the
>>>>> air back in the early 70's.
>>>>>
>>>>> -Chuck
>>>>
>>>>
>>>> Are conversations on repeaters as technical as they were twenty-five
>>>> years ago?
>>>
>>> Oh, easily. 25 years ago, technical conversations were dominated by
>>> such earth shatteringly important stuff as having a ham down at the
>>> repeater site helping other hams tune their transmitters to be on
>>> frequency. Other wonderkind were hitting the repeater with a full
>>> quieting signal, and turning their power up to try and get a better
>>> signal to that DX mobile that breaking up.
>>>
>>> If it wasn't that, it was an endless sea of autopatches calling the
>>> xyl to tell her that traffic was bad, could she start dinner... or
>>> ordering pizza.
>>>
>>>>
>>>> Me? I hear no-codes and nickle extras arguing how long a half wave
>>>> dipole should be.
>>>
>>> I heard the same things 25 years ago from Generals that got their
>>> licenses at the offices of the FCC.
>>>
>>> Even 34 years ago, there were study guides that had questions from the
>>> pool used by the FCC. If you could memorize the answers to those
>>> questions, you were virtually assured of passing. I used the ARRL
>>> handbook as my guide.
>>>
>>> You didn't answer my questions about the home brew rig you are using.
>>>
>>> -Chuck
>>
>>
>> Construction projects you or I have done aren't important. Working to
>> insure ham radio doesn't turn into CB is important. Agreed?
>>
>> SC
>
> SC, tell us all, and don't lie. Do you not agree that a LOT of hams
> today were CB'ers in the '70's and chose to advance their radio skills
> by advancing to ham radio? If you disagree, then 1) you're a liar, and
> 2) did this not help the service? And thusly, if you disagree I suspect
> you fit into this mold, and choose to deny your past.

I'm sure a lot of hams migrated from citizens band, but up until about the last 16 years, they had to pass a real ham test to get in. Not dumbed down tests like we have today.

SC

4963. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-19 00:12:25 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <JpzZg.8966$Lv3.8914@newsread1.news.pas.earthlink.net>
Source record: 9964
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

hot-ham-and-cheese@hotmail.com wrote in
news:1161119301.113067.200270@b28g2000cwb.googlegroups.com:

>
> Caveat Lector wrote:
>> When you passed the FCC exam - you are an Amateur Radio Operator period
>> -- plain and simple.
>>
>> Whether you passed a 20 wpm code test or no code - you are a Ham
>>
>> Whether you had to draw the schematic for a Colpitts Oscillator or not
>> - you are a Ham
>>
>> Whether you faced the steely-eyed FCC examiner or a VE -- you are a Ham
>>
>> Those who say otherwise are shrouded in elitism and a synonym for
>> elitism is snobbery - plain and simple
>>
>> This is 2006, not 1920
>>
>> CL
>
> You got that right.

It's nice to see a couple 11 meter jockeys agreeing with each other.

SC

4964. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-19 00:12:38 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <WpzZg.8967$Lv3.8193@newsread1.news.pas.earthlink.net>
Source record: 9965
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

gwatts <gwatts@frontiernet.net> wrote in
news:3fpZg.3343$Ka1.3007@news01.roc.ny:

> Slow Code wrote:
>> gwatts <gwatts@frontiernet.net> wrote in
>> news:Z4cXg.2828$ya1.2518@news02.roc.ny:
>>
>>
>>>Slow Code wrote:
>>>
>>>>gwatts <gwatts@frontiernet.net> wrote in
>>>>news:nOLWg.2685$Ka1.1928@news01.roc.ny:
>>>>
>>>>
>>>>
>>>>>Slow Code wrote:
>>>>>
>>>>>
>>>>>>What do you like best about appliance operating?
>>>>>
>>>>>All the crotchety old farts are either off somewhere
>>>>>beep-beep-beeping away on CW or bitching to each other on the lower
>>>>>half of the 80m phone band, so it's easy to avoid them and talk to
>>>>>someone who enjoys ham radio as it is instead of whining about how it
>>>>>was.
>>>>>
>>>>
>>>>
>>>>Big Ten-Four on that Good Buddy.
>>>
>>>It sounds like you run a lot of 11m, not surprising considering how
>>>much you whine, and it's not alternator whine.
>>
>>
>>
>> I only typed like because I knew you would understand that style of
>> communicating. So, after your license came in the mail what I
>> appliance did you decide to buy? MFJ? Alinco? Cobra?
>
> Kenwood TS-820S. I got a good deal because it had a few bugs. I spent
> some of the evenings between the exam session and my ticket arriving
> (that would be my GENERAL ticket, I skipped Novice and Technician) going
> through it cleaning switches, adding ground straps to a couple circuit

> boards and adding 17m to the 'AUX' position on the band switch. By the
> time my ticket arrived in the mail it was ready. I worked Clipperton
> Island the second day I was on the air and didn't realize it was quite
> the DX catch until months later.
>
> So, after your license came in the mail what did you start weenie
> whining about first?
>
> W8LNA

I made a lot of contacts on CW. I knew it was what I had to do to be a valuable asset to the service and I had a lot of fun communicating with other CW ops around the world. I was always surprised at how good the Russians were at CW. Doing CW helped me get get my skills up and I quickly passed my 20 wpm Extra. (the real Extra)

Now I try to help other hams and potential hams on radio and on usenet, but the usenet hams are so lazy they don't want to learn anything. They want licensing to be dumbed down some more.

SC

4965. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-19 01:04:38 UTC
From: Mark@kb9rqz.net
Message-ID: <fojdj2d1h31am5kj8s3jg7l8ibmta27l06@4ax.com>
Source record: 9966
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Thu, 19 Oct 2006 00:12:38 GMT, Slow Code <my.mail@no.spam> wrote:

>gwatts <gwatts@frontiernet.net> wrote in
>news:3fpZg.3343$Ka1.3007@news01.roc.ny:
>

>Now I try to help other hams and potential hams on radio and on usenet,
>but the usenet hams are so lazy they don't want to learn anything. They
>want licensing to be dumbed down some more.
speack for yourself only please
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4966. question about self resonant frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-19 23:53:13 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <6aSdnfruI_Z3kqXYnZ2dnUVZ_r6dnZ2d@bright.net>
Source record: 9967

I want to build a low pass filter for 1296 and have scaled a design out of the handbook. I would like to use chip inductors and chip capacitors for the filter. I was looking at thin film chip inductors (Digi-Key) and they list the self resonant frequency. For an inductor passing 1296, what should the minimum self resonant frequency be? Is 10 GHz enough? The filter is a 5 element Chebyshev Low Pass Filter, inductive input (3 coils in series with a cap at each inner junction to ground), Fco=1290 MHz, F-20dB=2600 MHz. Any other component specs I need to be aware of?

Scott
N0EDV

4967. Re: question about self resonant frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 00:43:21 UTC
From: ab0wr <tgorman2@cox.net>
Message-ID: <qj99he.a6p.ln@tg6124.ab0wr.net>
Source record: 9968

Scott wrote:

>
>
> I want to build a low pass filter for 1296 and have scaled a design out
> of the handbook. I would like to use chip inductors and chip capacitors
> for the filter. I was looking at thin film chip inductors (Digi-Key)
> and they list the self resonant frequency. For an inductor passing
> 1296, what should the minimum self resonant frequency be? Is 10 GHz
> enough? The filter is a 5 element Chebyshev Low Pass Filter, inductive
> input (3 coils in series with a cap at each inner junction to ground),
> Fco=1290 MHz, F-20dB=2600 MHz. Any other component specs I need to be
> aware of?
>
> Scott
> N0EDV

10Ghz would be *almost* an order of magnitude away from the frequency of interest. That should be more than sufficient. The higher the self-resonant frequency, the less parallel capacitance is involved which makes "trimming" the filter less involved. At this frequency your capacitors are going to be pretty small. Parasitic capacitances, such as in the inductor, can make things look pretty screwy in a big hurry.

tim ab0wr

4968. Re: question about self resonant frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 01:15:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12jg8pr4ioq0f0@corp.supernews.com>
Source record: 9969

Scott wrote:
> I want to build a low pass filter for 1296 and have scaled a design out
> of the handbook. I would like to use chip inductors and chip capacitors
> for the filter. I was looking at thin film chip inductors (Digi-Key)
> and they list the self resonant frequency. For an inductor passing
> 1296, what should the minimum self resonant frequency be? Is 10 GHz
> enough? The filter is a 5 element Chebyshev Low Pass Filter, inductive
> input (3 coils in series with a cap at each inner junction to ground),
> Fco=1290 MHz, F-20dB=2600 MHz. Any other component specs I need to be
> aware of?
>
> Scott
> N0EDV

Inductance of the capacitors, capacitance of the inductors, and loss of both will all affect the quality of the filter. Parasitic inductances and capacitances in the connecting lines and mounting pads will play a role also. Your problem probably won't be so much getting decent response to 2600 MHz (although it won't be easy), but maintaining good attenuation for some range above that. Take a careful look at the highest frequency you have to reject and the required attenuation at that frequency, then decide whether your components will behave as expected up there.

Roy Lewallen, W7EL

4969. Re: question about self resonant frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 01:30:37 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <CLadnXLYYbMiu6XYnZ2dnUVZ_oOdnZ2d@bright.net>
Source record: 9970

Thanks for the replies...I will probably give it a go and see what happens. I will order values of inductors and capacitors on both sides of my calculated values and play with the circuit until (if) I can get it to work OK. Maybe an appropriate helical filter might be the way to go...

Scott
N0EDV

Scott wrote:
> I want to build a low pass filter for 1296 and have scaled a design out
> of the handbook. I would like to use chip inductors and chip capacitors
> for the filter. I was looking at thin film chip inductors (Digi-Key)
> and they list the self resonant frequency. For an inductor passing
> 1296, what should the minimum self resonant frequency be? Is 10 GHz
> enough? The filter is a 5 element Chebyshev Low Pass Filter, inductive
> input (3 coils in series with a cap at each inner junction to ground),
> Fco=1290 MHz, F-20dB=2600 MHz. Any other component specs I need to be
> aware of?
>
> Scott
> N0EDV

4970. Re: What Is Ham Radio?.....The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 10:06:08 UTC
From: RuneM <runemadsen@operamail.com>
Message-ID: <aq2dnQqvpNIZAqXY4p2dnA@telenor.com>
Source record: 9971
Cross-posted to: uk.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Believe me, you do NOT want that to happen, even if it brings
back "civility"! Do you want to live in a police state? One thing is for
sure: I WILL go to WAR (on all levels. it depends) agains my own government
if and when that happens.

Rick Frazier wrote:
> Someday, when we all pay for our posts (it's
> coming, believe me) and we all digitally sign our posts to ensure we are
> who we say we are, then maybe we'll have civility and normalcy come back
> to the newsgroups.

4971. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 12:59:30 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <SK3_g.3523$ya1.3365@news02.roc.ny>
Source record: 9972
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:
...
>
> Now I try to help other hams and potential hams on radio and on usenet,

No you don't, you come here and grind your ax for some reason. You want to help? Be positive about ham radio, all of ham radio and not just the niche you want to inhabit. Open your eyes, see the whole hobby and realize those that don't share your tastes are just as competent or incompetent as you.

> but the usenet hams are so lazy they don't want to learn anything. They
> want licensing to be dumbed down some more.

Translation: They want to keep up with technology and eliminate testing on methods that are plainly antiquated and waning in usefulness and I don't want things to change so I don't lose my relative (perceived) status among hams.

W8LNA

4972. Re: New Web Site Up & Running...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 14:25:38 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <H%4_g.2043$_z4.961@newsfe07.lga>
Source record: 9973

This website has appeared here a number of times before, so it is hardly "new". It's main purpose seems to be to peddle an amplifier which violates 97.315 and 97.317 ... in fact, it seems designed to maximize the number of subparagraphs that may be violated in a single piece of equipment. The website owner appears to be a U.S. based manufacturer (Illinois).

..

"Telstar Electronics" <briangriffey@sbcglobal.net> wrote in message news:1161344878.840893.269270@m7g2000cwm.googlegroups.com...
> All comments welcome...
>
> www.telstar-electronics.com
>

4973. Re: question about self resonant frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 15:00:05 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <-Ludnf8Og5LxeaXYnZ2dnUVZ_qSdnZ2d@web-ster.com>
Source record: 9974

Scott wrote:

> I want to build a low pass filter for 1296 and have scaled a design out
> of the handbook. I would like to use chip inductors and chip capacitors
> for the filter. I was looking at thin film chip inductors (Digi-Key)
> and they list the self resonant frequency. For an inductor passing
> 1296, what should the minimum self resonant frequency be? Is 10 GHz
> enough? The filter is a 5 element Chebyshev Low Pass Filter, inductive
> input (3 coils in series with a cap at each inner junction to ground),
> Fco=1290 MHz, F-20dB=2600 MHz. Any other component specs I need to be
> aware of?
>
> Scott
> N0EDV

Why not a microstrip filter? Is it that you must have response from DC
all the way to 1296? Would a "no-tune" bandpass filter be more appropriate?

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

4974. Preamp, RF amp and LNA.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 16:46:01 UTC
From: sjones <radiofreeq@gmail.com>
Message-ID: <1161362761.492671.151060@m73g2000cwd.googlegroups.com>
Source record: 9975

Hello All,
I was wondering what are the differences between a preamp, RF amp and
an LNA.

I was thinking they are all one and the same. Are there any subtle
differences among them for these names?

Thanks.

4975. Re: Preamp, RF amp and LNA.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 16:59:01 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1161363541.363183.175980@m7g2000cwm.googlegroups.com>
Source record: 9976

sjones wrote:
> Hello All,
> I was wondering what are the differences between a preamp, RF amp and
> an LNA.
>
> I was thinking they are all one and the same. Are there any subtle
> differences among them for these names?
>
> Thanks.

They all refer to amplifiers, and might be used interchangeably in some cases.

A "preamp" is generally a low-level amplifier, and to be practical I'd expect it would have reasonably low noise. Like the name suggests, it goes at the front of a signal chain. It's a name used at RF, but also for audio and even sub-audio work.

An RF amp presumably amplifies radio frequencies. That's a pretty broad frequency range, and the particular amplifier might well be tuned to a very narrow band, or optimized for some modest range of frequencies (such as 140-150MHz). There's nothing in the name that says it's low power. It could be an RF power amplifier, delivering kilowatts of output. The term isn't very descriptive, but you could add adjectives to narrow it down, like "a low-noise 2-meter mast mounted receiver RF amp."

A LNA -- low noise amplifier -- generally refers to an RF preamp with good to very good noise figure, commonly mounted at the antenna so as to not degrade the system noise figure with the loss from a transmission line. Because they are most useful at frequencies where the atmospheric noise is low, you probably wouldn't find LNAs for use at 4MHz, but they are very commonly used on dishes at microwave frequencies. But again, there's nothing in the name that really tells you the frequency range. The name could reasonably be adopted by audio folk dealing with tiny signals from transducers like moving-coil phono cartridges.

And of course, others may have slightly different (or even very different) slants on the meanings.

Cheers,
Tom

4976. Re: question about self resonant frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 17:11:10 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1161364270.585227.250760@m73g2000cwd.googlegroups.com>
Source record: 9977

Scott wrote:
> I want to build a low pass filter for 1296 and have scaled a design out
> of the handbook. I would like to use chip inductors and chip capacitors
> for the filter. I was looking at thin film chip inductors (Digi-Key)
> and they list the self resonant frequency. For an inductor passing
> 1296, what should the minimum self resonant frequency be? Is 10 GHz
> enough? The filter is a 5 element Chebyshev Low Pass Filter, inductive
> input (3 coils in series with a cap at each inner junction to ground),
> Fco=1290 MHz, F-20dB=2600 MHz. Any other component specs I need to be
> aware of?
>
> Scott
> N0EDV

Adding to what others have already posted, you can simulate the filter, with parasitic resistances and reactances and the inevitable transmission line effects, in the freeware RFSim99. You have to be careful to think about the physical layout, and see everything longer than a couple millimeters as a transmission line. The data sheets on the discrete parts should give you a decent idea about the parasitic R/L/C of each package. RFSim99 includes the ability to model self-resonance and Q in inductors and capacitors without adding more parts to the schematic; just check the "use physical model" box for those parts you want to specify for Q and SRF.

And I'd echo what Tim wrote, too: you might want to consider a distributed filter, especially if you can make a PC board with reasonable accuracy. Also, if the goal is to kill harmonics of a single narrow band, you may do better with notches at the harmonic frequencies.

Cheers,
Tom

4977. maxtronics/rf parts (cali) pcb

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 18:32:03 UTC
From: zinda <zen@lineisp.co.uk>
Message-ID: <1161369123.693710.136390@e3g2000cwe.googlegroups.com>
Source record: 9978

well i bought the pcb from rf parts..it arrived today..but i forgot to order the pcb layout info..its for the 140w push pull amp based on the motorola design..anyone got the pcb layout info please?????

i wanna build it,and i know i could work it all out ,but it will save hours of work if someone (prehaps in the usa)has the info...

thanks g0zen

4978. PSUs: current-limiting and crowbarring - incompatible?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 20:28:19 UTC
From: paul@burridge8333.fsbusiness.co.uk
Message-ID: <1161376099.831229.27070@b28g2000cwb.googlegroups.com>
Source record: 9979
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hi gang,

Is it not feasible to use a crowbar circuit across a PSU's output if that PSU has a current-limiting feature? I can imagine a situation arising where an over-voltage causes the crowbar to close, generating a short-circuit condition which activates the current limiting. The output will then be stuck at not enough amps to blow the upstream fuse, but enough current to smoke the crowbar (which is not designed to be kept conducting for any length of time of course). Is there some way to have both over-current and over-voltage protection working together in harmony?
Thanks.
p.

4979. Re: PSUs: current-limiting and crowbarring - incompatible?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 20:51:24 UTC
From: nico@puntnl.niks
Message-ID: <4539362e.1382290348@news.kpnplanet.nl>
Source record: 9980
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

paul@burridge8333.fsbusiness.co.uk wrote:

>Hi gang,
>
>Is it not feasible to use a crowbar circuit across a PSU's output if
>that PSU has a current-limiting feature? I can imagine a situation
>arising where an over-voltage causes the crowbar to close, generating a
>short-circuit condition which activates the current limiting. The
>output will then be stuck at not enough amps to blow the upstream fuse,
>but enough current to smoke the crowbar (which is not designed to be
>kept conducting for any length of time of course). Is there some way to
>have both over-current and over-voltage protection working together in
>harmony?
>Thanks.

I see no problem. If the crowbar is active, the voltage accross it is
about 0V so power dissipation in the crowbar device is minimal. You
could probably use a SOT23 trenchFET as a crowbar which would be
capable of handling a few amps.

--
Reply to nico@nctdevpuntnl (punt=.)
Bedrijven en winkels vindt U op www.adresboekje.nl

4980. Re: PSUs: current-limiting and crowbarring - incompatible?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 21:17:42 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12jif7pd4ortmde@corp.supernews.com>
Source record: 9981
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Most supplies I've seen with both crowbar and current limiting use fold-back current limiting. When the current exceeds the set limit (due to too heavy a load or to the crowbar firing), the current drops back to a level considerably lower than the limit current, and one which the crowbar can tolerate indefinitely.

Roy Lewallen

paul@burridge8333.fsbusiness.co.uk wrote:
> Hi gang,
>
> Is it not feasible to use a crowbar circuit across a PSU's output if
> that PSU has a current-limiting feature? I can imagine a situation
> arising where an over-voltage causes the crowbar to close, generating a
> short-circuit condition which activates the current limiting. The
> output will then be stuck at not enough amps to blow the upstream fuse,
> but enough current to smoke the crowbar (which is not designed to be
> kept conducting for any length of time of course). Is there some way to
> have both over-current and over-voltage protection working together in
> harmony?
> Thanks.
> p.
>

4981. Re: question about self resonant frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 21:34:43 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <4qadnVbHGMBp3aTYnZ2dnUVZ_qadnZ2d@bright.net>
Source record: 9982

Well, it might, but I'm not 100% sure how to determine the lengths and widths of the microstrips. (On my present project, I'm trying an open 1/4 wavelength 50 ohm stripline that I can trim down in length in an attempt to make that line a "short" at the 2nd harmonic.)

The filter only needs to pass from about 1296 to 1300 MHz. I like the idea of a helical filter (except for the cost!) with steep skirts and since my I.F. will be 432 MHz, it will be far enough away so the image will be quite a ways removed and should be way down in level after the filter.

Scott
N0EDV

Tim Wescott wrote:

>
>
> Why not a microstrip filter? Is it that you must have response from DC
> all the way to 1296? Would a "no-tune" bandpass filter be more
> appropriate?
>

4982. Re: question about self resonant frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 21:41:29 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <-eOdnXCaosoW36TYnZ2dnUVZ_u2dnZ2d@bright.net>
Source record: 9983

That's exactly what I'm trying on my present project at 902. I have a
50 microstrip line on the circuit board where the RF connector hooks up.
I will etch it to be a 1/4 wavelength at 1802 MHz (2nd harmonic) and
see how that works. If it works OK, I may try the same at 1296...I
might also go with a helical filter...they work nice but can be a bit
pricey!

Scott
N0EDV

K7ITM wrote:

Also, if the goal is to kill harmonics of a
> single narrow band, you may do better with notches at the harmonic
> frequencies.
>
> Cheers,
> Tom
>

4983. Re: PSUs: current-limiting and crowbarring - incompatible?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 21:53:39 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1161381219.299054.54110@k70g2000cwa.googlegroups.com>
Source record: 9984
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

paul@burridge8333.fsbusiness.co.uk wrote:
> Hi gang,
>
> Is it not feasible to use a crowbar circuit across a PSU's output if
> that PSU has a current-limiting feature? I can imagine a situation
> arising where an over-voltage causes the crowbar to close, generating a
> short-circuit condition which activates the current limiting. The
> output will then be stuck at not enough amps to blow the upstream fuse,
> but enough current to smoke the crowbar (which is not designed to be
> kept conducting for any length of time of course). Is there some way to
> have both over-current and over-voltage protection working together in
> harmony?
> Thanks.

Look up "Foldback current limiting".

Tim.

4984. Re: PSUs: current-limiting and crowbarring - incompatible?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 21:55:56 UTC
From: Tom Bruhns <k7itm@msn.com>
Message-ID: <1161381356.461962.287640@b28g2000cwb.googlegroups.com>
Source record: 9985
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Roy Lewallen wrote:
> Most supplies I've seen with both crowbar and current limiting use
> fold-back current limiting. When the current exceeds the set limit (due
> to too heavy a load or to the crowbar firing), the current drops back to
> a level considerably lower than the limit current, and one which the
> crowbar can tolerate indefinitely.

Yeah, and not only the crowbar, but the supply itself can likely tolerate it better! :-) Especially if it's a linear supply. Paul: imagine a linear supply designed to deliver 24V at a couple amps. The input to the regulator part might well be nominally 30 volts or more, to accomodate low line input and drop in the regulator pass element. At high line, it might be 33V. In normal operation, the regulator might drop 9 volts at a couple amps, dissipating 18 watts. An SCR crowbar might drop 1.5V. At 2 amps, that only 3 watts, but the regulator would be dissipating over 60 watts. But with foldback limiting, the dissipation would drop in both the SCR and the regulator, staying in pretty much a constant ratio. With a switching regulator, things probably wouldn't be nearly as bad, but the dissipation may still go up in the switching parts if you short the output.

The other thing I've seen is a crowbar for fast response, and a latching shutdown fed back to the supply that holds it off until something is reset.

Cheers,
Tom

4985. Re: current-limiting and crowbarring - incompatible?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 22:35:04 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <sac_g.10038$Lv3.222@newsread1.news.pas.earthlink.net>
Source record: 9986
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

<paul@burridge8333.fsbusiness.co.uk> wrote in message
news:1161376099.831229.27070@b28g2000cwb.googlegroups.com...
> Hi gang,
>
> Is it not feasible to use a crowbar circuit across a PSU's output if
> that PSU has a current-limiting feature? I can imagine a situation
> arising where an over-voltage causes the crowbar to close, generating a
> short-circuit condition which activates the current limiting. The
> output will then be stuck at not enough amps to blow the upstream fuse,
> but enough current to smoke the crowbar (which is not designed to be
> kept conducting for any length of time of course). Is there some way to
> have both over-current and over-voltage protection working together in
> harmony?
> Thanks.
> p.
>

Look up the Astron supplies. They will go into a current limiating mode if
the over voltage protection activates. That is if there is a spike or
something. Most of the time something fails (say the pass transistors) that
makes the supply go into the over voltage condition and due to the failed
component the supply can not go into the current limit mode.

4986. Re: maxtronics/rf parts (cali) pcb

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 23:03:33 UTC
From: w9gb <spam_protect@arrl.net>
Message-ID: <JbednSNxMZcjyKTYnZ2dnUVZ_sudnZ2d@comcast.com>
Source record: 9987

"zinda" <zen@lineisp.co.uk> wrote in message
news:1161369123.693710.136390@e3g2000cwe.googlegroups.com...
> well i bought the pcb from rf parts..it arrived today..but i forgot to
> order the pcb layout info..its for the 140w push pull amp based on the
> motorola design..anyone got the pcb layout info please?????
>
> i wanna build it,and i know i could work it all out ,but it will save
> hours of work if someone (prehaps in the usa)has the info...
>
> thanks g0zen
>

Well, most of Helge Granberg's Application Notes are on the Internet (in
various places)

Mike Grierson G3TSO built his 140 watt HF amplifier also based upon Helge's
design,
using the Communication Concepts (CCI) printed circuit board.

Was this the VHF (2-meter) or HF amplifier TX100F from RF Parts ?

http://www.rfparts.com/caoml.html

http://www.rfparts.com/pcb.html#pcbf1

w9gb

4987. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 23:45:02 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <2cd_g.10071$Lv3.763@newsread1.news.pas.earthlink.net>
Source record: 9988
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

gwatts <gwatts@frontiernet.net> wrote in
news:SK3_g.3523$ya1.3365@news02.roc.ny:

> Slow Code wrote:
> ...
>>
>> Now I try to help other hams and potential hams on radio and on usenet,
>
> No you don't, you come here and grind your ax for some reason. You want
> to help? Be positive about ham radio, all of ham radio and not just the
> niche you want to inhabit. Open your eyes, see the whole hobby and
> realize those that don't share your tastes are just as competent or
> incompetent as you.
>
>> but the usenet hams are so lazy they don't want to learn anything. They
>> want licensing to be dumbed down some more.
>
> Translation: They want to keep up with technology and eliminate testing
> on methods that are plainly antiquated and waning in usefulness and I
> don't want things to change so I don't lose my relative (perceived)
> status among hams.
>
> W8LNA
>

What has everyone got against having good effective communicators?
Sheesh, I'm I the only one that wants good hams?

SC

4988. Re: maxtronics/rf parts (cali) pcb

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-20 23:52:14 UTC
From: zinda <zen@lineisp.co.uk>
Message-ID: <1161388334.181375.127880@h48g2000cwc.googlegroups.com>
Source record: 9989

w9gb wrote:
> "zinda" <zen@lineisp.co.uk> wrote in message
> news:1161369123.693710.136390@e3g2000cwe.googlegroups.com...
> > well i bought the pcb from rf parts..it arrived today..but i forgot to
> > order the pcb layout info..its for the 140w push pull amp based on the
> > motorola design..anyone got the pcb layout info please?????
> >
> > i wanna build it,and i know i could work it all out ,but it will save
> > hours of work if someone (prehaps in the usa)has the info...
> >
> > thanks g0zen
> >
>
> Well, most of Helge Granberg's Application Notes are on the Internet (in
> various places)
>
> Mike Grierson G3TSO built his 140 watt HF amplifier also based upon Helge's
> design,
> using the Communication Concepts (CCI) printed circuit board.
>
> Was this the VHF (2-meter) or HF amplifier TX100F from RF Parts ?
>
> http://www.rfparts.com/caoml.html
>
> http://www.rfparts.com/pcb.html#pcbf1
>
> w9gb

it was the tx100 i guess...anyway the links you put up are the ones i
have..(except the component layout ,as i forgot to order!!)

yes you are correct in stating they are based on h.granbergs
designs,which i have,as i stated i guess i could work it out,but it
would be much easier to know the component layout for this pcb..as it
is not exactly as per his design..

regards

4989. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-21 00:20:01 UTC
From: Mark@kb9rqz.org
Message-ID: <fspij291c7ulmrfoe6h6uogqe8j62os27s@4ax.com>
Source record: 9990
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Fri, 20 Oct 2006 23:45:02 GMT, Slow Code <my.mail@no.spam> wrote:

>gwatts <gwatts@frontiernet.net> wrote in
>news:SK3_g.3523$ya1.3365@news02.roc.ny:
>
>> Slow Code wrote:
>> ...
>>>
>>> Now I try to help other hams and potential hams on radio and on usenet,
>>
>> No you don't, you come here and grind your ax for some reason. You want
>> to help? Be positive about ham radio, all of ham radio and not just the
>> niche you want to inhabit. Open your eyes, see the whole hobby and
>> realize those that don't share your tastes are just as competent or
>> incompetent as you.
>>
>>> but the usenet hams are so lazy they don't want to learn anything. They
>>> want licensing to be dumbed down some more.
>>
>> Translation: They want to keep up with technology and eliminate testing
>> on methods that are plainly antiquated and waning in usefulness and I
>> don't want things to change so I don't lose my relative (perceived)
>> status among hams.
>>
>> W8LNA
>>
>
>
>What has everyone got against having good effective communicators?
no body but you is aginst effective comms
>Sheesh, I'm I the only one that wants good hams?

you are one those that wants to exclude Good hams
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4990. Re: maxtronics/rf parts (cali) pcb

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-21 00:55:56 UTC
From: w9gb <spam_protect@arrl.net>
Message-ID: <vvadnZowSceI7aTYnZ2dnUVZ_tOdnZ2d@comcast.com>
Source record: 9991

"zinda" <zen@lineisp.co.uk> wrote in message
news:1161388334.181375.127880@h48g2000cwc.googlegroups.com...
>
> w9gb wrote:
>>
>> Was this the VHF (2-meter) or HF amplifier TX100F from RF Parts ?
>>
>> http://www.rfparts.com/caoml.html
>>
>> http://www.rfparts.com/pcb.html#pcbf1
>>
>> w9gb
>
>
> it was the tx100 i guess...anyway the links you put up are the ones i
> have..(except the component layout ,as i forgot to order!!)
>
> yes you are correct in stating they are based on h.granbergs
> designs,which i have,as i stated i guess i could work it out,but it
> would be much easier to know the component layout for this pcb..as it
> is not exactly as per his design..
>
> regards
>
You are correct -- this RF Parts kit product is NOT a duplicate of Helge's
design as found in the Application bulletins.

As you have realized you should have ordered the "Plans kit" -- which
included the TX100 circuit board
and the component layout instructions/building that you need.
They just went home (California) for weekend about 2 hours ago --
so send them an e-mail or contact them next week.
http://www.rfparts.com/Contact.html

w9gb

4991. Re: maxtronics/rf parts (cali) pcb

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-21 00:57:31 UTC
From: w9gb <spam_protect@arrl.net>
Message-ID: <StCdnQkQG_ro7aTYnZ2dnUVZ_rmdnZ2d@comcast.com>
Source record: 9992

"zinda" <zen@lineisp.co.uk> wrote in message
news:1161388334.181375.127880@h48g2000cwc.googlegroups.com...
>
> it was the tx100 i guess...anyway the links you put up are the ones i
> have..(except the component layout ,as i forgot to order!!)
>
> yes you are correct in stating they are based on h.granbergs
> designs,which i have,as i stated i guess i could work it out,but it
> would be much easier to know the component layout for this pcb..as it
> is not exactly as per his design..
>
> regards
>
All Customer Service, please e-mail: mailto:customerservice@rfparts.com

We endeavor to respond to all e-mails within 24 hours (with the exception of
weekends). To help, please keep this in mind:
. E-mails sent Monday-Friday before noon PST are usually answered same
day.
. E-mails sent Friday after noon are usually answered on Monday.
. E-mails sent on Saturday and Sunday are answered on Monday.

While e-mail is very convenient, it is not the quickest method to reach us.
For faster service, or in case of emergency, please call us at (760)
744-0700.

4992. Re: question about self resonant frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-21 01:13:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12jit1t2sl5icc0@corp.supernews.com>
Source record: 9993

Scott wrote:
> That's exactly what I'm trying on my present project at 902. I have a
> 50 microstrip line on the circuit board where the RF connector hooks up.
> I will etch it to be a 1/4 wavelength at 1802 MHz (2nd harmonic) and
> see how that works. If it works OK, I may try the same at 1296...I
> might also go with a helical filter...they work nice but can be a bit
> pricey!

Isn't it possible to make a helical resonator with a helix of wire inside a box made from soldered-together pieces of PC board?(*) A filter could be made from a series of these. The Q might not be optimum, but should be good enough for a lot of purposes.

(*) I actually made a two-resonator filter for 450 MHz using this method long ago, but it didn't work well. I came across it recently and checked it with a network analyzer -- I had no decent test equipment back when I made it -- and found that the sections were severely undercoupled. But I haven't tried modifying it to see if it could have been made to work as intended.

Roy Lewallen, W7EL

4993. Re: question about self resonant frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-21 01:36:46 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <O7idnQMFRagt5KTYnZ2dnUVZ_vqdnZ2d@bright.net>
Source record: 9994

Yes, that's all a helical filter appears to be...a coil inside a metal box. I have no idea how many turns, turn spacing and anything else that might be important to the design of one. Fortunately, Downeast Microwave sells a bunch of different helicals for a LOT less than Digikey, but I need the 1305 MHz set and I don't see them at DEMI, so I'll have to fork out $26 each from Digikey (and probably will end up using two) ;(

Scott
N0EDV

Roy Lewallen wrote:
> Scott wrote:
>
>> That's exactly what I'm trying on my present project at 902. I have a
>> 50 microstrip line on the circuit board where the RF connector hooks
>> up. I will etch it to be a 1/4 wavelength at 1802 MHz (2nd harmonic)
>> and see how that works. If it works OK, I may try the same at
>> 1296...I might also go with a helical filter...they work nice but can
>> be a bit pricey!
>
>
> Isn't it possible to make a helical resonator with a helix of wire
> inside a box made from soldered-together pieces of PC board?(*) A filter
> could be made from a series of these. The Q might not be optimum, but
> should be good enough for a lot of purposes.
>
> (*) I actually made a two-resonator filter for 450 MHz using this method
> long ago, but it didn't work well. I came across it recently and checked
> it with a network analyzer -- I had no decent test equipment back when I
> made it -- and found that the sections were severely undercoupled. But I
> haven't tried modifying it to see if it could have been made to work as
> intended.
>
> Roy Lewallen, W7EL

4994. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-21 03:04:36 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1161399876.591042.314920@k70g2000cwa.googlegroups.com>
Source record: 9995
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:
> hot-ham-and-cheese@hotmail.com wrote in
> news:1161119301.113067.200270@b28g2000cwb.googlegroups.com:
>
> >
> > Caveat Lector wrote:
> >> When you passed the FCC exam - you are an Amateur Radio Operator period
> >> -- plain and simple.
> >>
> >> Whether you passed a 20 wpm code test or no code - you are a Ham
> >>
> >> Whether you had to draw the schematic for a Colpitts Oscillator or not
> >> - you are a Ham
> >>
> >> Whether you faced the steely-eyed FCC examiner or a VE -- you are a Ham
> >>
> >> Those who say otherwise are shrouded in elitism and a synonym for
> >> elitism is snobbery - plain and simple
> >>
> >> This is 2006, not 1920
> >>
> >> CL
> >
> > You got that right.
>
> It's nice to see a couple 11 meter jockeys agreeing with each other.
>
> SC

Looks like Bruce and Dan are back...

4995. Re: question about self resonant frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-21 04:04:52 UTC
From: Jim <kill-spam@no-spam.org>
Message-ID: <WuudnZUWMZT4AaTYnZ2dnUVZ_qadnZ2d@comcast.com>
Source record: 9996

Offhand, I'd be tempted to use an interdigital filter. There was a nice article about this, including a computer program in basic for the caculations in Ham Radio magizine, Ummm... November 1985 (?).

I used this in a 2400 MHz filter I needed one time and I found the skirt selectivity to be pretty good. Of course, like a lot of wavelength related filters, it had harmonic responses, but a low pass filter fixed that quite nicely.

Jim Pennell
N6BIU

--

21:05 Pacific Time Zone
Oct 20 2006

International Time
04:05 UTC
21.10.2006

4996. Re: PSUs: current-limiting and crowbarring - incompatible?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-21 10:00:56 UTC
From: Fred Bartoli <fred._canxxxel_this_bartoli@RemoveThatAlso_free.fr_AndThisToo>
Message-ID: <4539efeb$0$21893$426a74cc@news.free.fr>
Source record: 9997
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Tom Bruhns a ï¿½crit :
<>

> With a switching regulator,
> things probably wouldn't be nearly as bad, but the dissipation may
> still go up in the switching parts if you short the output.
>

One pb with SMPS is that when you crowbar its output the input current
is lowered since you ask for lower output power. You'll never blow the fuse.
Another point, depending on the SMPS structure and on the controller
minimum on time is that you have pretty low output voltage when
crowbared (?) which may be too low to reset the inductor current (for
ex. flyback, buck).
In some poorly design supplies this might lead to higher and higher
switch/diode currents, inductor saturation, sill higher currents and
then fireworks.
I prefer latching the fault condition then inhibit the controller, with
crowbar or not, which is what you recommend below.
> The other thing I've seen is a crowbar for fast response, and a
> latching shutdown fed back to the supply that holds it off until
> something is reset.
>

--
Thanks,
Fred.

4997. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-21 23:33:19 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <37y_g.10648$Lv3.6001@newsread1.news.pas.earthlink.net>
Source record: 9798
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

hot-ham-and-cheese@hotmail.com wrote in
news:1161399876.591042.314920@k70g2000cwa.googlegroups.com:

>
> Slow Code wrote:
>> hot-ham-and-cheese@hotmail.com wrote in
>> news:1161119301.113067.200270@b28g2000cwb.googlegroups.com:
>>
>> >
>> > Caveat Lector wrote:
>> >> When you passed the FCC exam - you are an Amateur Radio Operator
>> >> period -- plain and simple.
>> >>
>> >> Whether you passed a 20 wpm code test or no code - you are a Ham
>> >>
>> >> Whether you had to draw the schematic for a Colpitts Oscillator or
>> >> not - you are a Ham
>> >>
>> >> Whether you faced the steely-eyed FCC examiner or a VE -- you are a
>> >> Ham
>> >>
>> >> Those who say otherwise are shrouded in elitism and a synonym for
>> >> elitism is snobbery - plain and simple
>> >>
>> >> This is 2006, not 1920
>> >>
>> >> CL
>> >
>> > You got that right.
>>
>> It's nice to see a couple 11 meter jockeys agreeing with each other.
>>
>> SC
>
> Looks like Bruce and Dan are back...

I hope 11 meters opens up so you can get back on the band again and leave
the net for awhile. You're a bad influence on Mark in the Dark.

4998. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-22 01:52:45 UTC
From: Mark@kb9rqz.ars
Message-ID: <fmjlj29sdkb2a3137g56ee2mgpv72em5g9@4ax.com>
Source record: 9799
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Sat, 21 Oct 2006 23:33:19 GMT, Slow Code <my.mail@no.spam> wrote:

>hot-ham-and-cheese@hotmail.com wrote in
>news:1161399876.591042.314920@k70g2000cwa.googlegroups.com:
>
>>
>> Slow Code wrote:
>>> hot-ham-and-cheese@hotmail.com wrote in
>>> news:1161119301.113067.200270@b28g2000cwb.googlegroups.com:
>>>
>>> >
>>> > Caveat Lector wrote:
>>> >> When you passed the FCC exam - you are an Amateur Radio Operator
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>>> >> Whether you had to draw the schematic for a Colpitts Oscillator or
>>> >> not - you are a Ham
>>> >>
>>> >> Whether you faced the steely-eyed FCC examiner or a VE -- you are a
>>> >> Ham
>>> >>
>>> >> Those who say otherwise are shrouded in elitism and a synonym for
>>> >> elitism is snobbery - plain and simple
>>> >>
>>> >> This is 2006, not 1920
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>>> >> CL
>>> >
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>>>
>>> It's nice to see a couple 11 meter jockeys agreeing with each other.
>>>
>>> SC
>>
>> Looks like Bruce and Dan are back...
>
>
>I hope 11 meters opens up so you can get back on the band again and leave
>the net for awhile. You're a bad influence on Mark in the Dark.
BB is a general class opertor with access to ham HF
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

4999. Re: Preamp, RF amp and LNA.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-22 11:07:50 UTC
From: rrah@pencoys.org.uk
Message-ID: <453b4ffd.675279137@news.madasafish.com>
Source record: 9800

On 20 Oct 2006 09:46:01 -0700, "sjones" <radiofreeq@gmail.com> wrote:

>Hello All,
>I was wondering what are the differences between a preamp, RF amp and
>an LNA.
>
>I was thinking they are all one and the same. Are there any subtle
>differences among them for these names?
>
>Thanks.
>
AFIK a Preamp is used when referring to HF and VHF communciation
receivers. An RF Amp refers to the final stage of a transmitter and an
LNA is generally used when referring to Microwave or sattelite
receiver. I note that the preamp/frontend of the R2 is referred to as
an LNA.

5000. FA: MORE EF JOHNSON STUFF

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-22 19:03:17 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <VfP_g.101445$QZ1.38904@bgtnsc04-news.ops.worldnet.att.net>
Source record: 9801

More EF Johnson parts listed: feet + 6N2 VFO; see at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking: have some National items coming soon: NCX-5 + PS,
NCL-2000

HEYTUBEGUY

5001. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-23 11:00:54 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1161601254.507316.321040@f16g2000cwb.googlegroups.com>
Source record: 9802
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

```
Slow Code wrote:
> hot-ham-and-cheese@hotmail.com wrote in
> news:1161399876.591042.314920@k70g2000cwa.googlegroups.com:
>
> >
> > Slow Code wrote:
> >> hot-ham-and-cheese@hotmail.com wrote in
> >> news:1161119301.113067.200270@b28g2000cwb.googlegroups.com:
> >>
> >> >
> >> > Caveat Lector wrote:
> >> >> When you passed the FCC exam - you are an Amateur Radio Operator
> >> >> period -- plain and simple.
> >> >>
> >> >> Whether you passed a 20 wpm code test or no code - you are a Ham
> >> >>
> >> >> Whether you had to draw the schematic for a Colpitts Oscillator or
> >> >> not - you are a Ham
> >> >>
> >> >> Whether you faced the steely-eyed FCC examiner or a VE -- you are a
> >> >> Ham
> >> >>
> >> >> Those who say otherwise are shrouded in elitism and a synonym for
> >> >> elitism is snobbery - plain and simple
> >> >>
> >> >> This is 2006, not 1920
> >> >>
> >> >> CL
> >> >
> >> > You got that right.
> >>
> >> It's nice to see a couple 11 meter jockeys agreeing with each other.
> >>
> >> SC
> >
> > Looks like Bruce and Dan are back...
>
> I hope 11 meters opens up

I'm sure that you do.
```

5002. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-23 11:52:41 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1161604361.899607.251240@m7g2000cwm.googlegroups.com>
Source record: 9803
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

hot-ham-and-cheese@hotmail.com wrote:
> Slow Code wrote:
> > hot-ham-and-cheese@hotmail.com wrote in
> > news:1161399876.591042.314920@k70g2000cwa.googlegroups.com:

> > >
> > > Looks like Bruce and Dan are back...
> >
> > I hope 11 meters opens up
>
> I'm sure that you do.

indeed it is likely the sole we see SC is that we are at the bottom of
the sunspot cyle and cb just isn't fun those ilgeal op like SC

5003. Re: PSUs: current-limiting and crowbarring - incompatible?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-24 00:12:54 UTC
From: legg <legg@nospam.magma.ca>
Message-ID: <e0mqj2p0ha1f92rv32r14i22iq3c6kk4sk@4ax.com>
Source record: 9804
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On 20 Oct 2006 13:28:19 -0700, paul@burridge8333.fsbusiness.co.uk
wrote:

>Hi gang,
>
>Is it not feasible to use a crowbar circuit across a PSU's output if
>that PSU has a current-limiting feature? I can imagine a situation
>arising where an over-voltage causes the crowbar to close, generating a
>short-circuit condition which activates the current limiting. The
>output will then be stuck at not enough amps to blow the upstream fuse,
>but enough current to smoke the crowbar (which is not designed to be
>kept conducting for any length of time of course). Is there some way to
>have both over-current and over-voltage protection working together in
>harmony?

A properly designed crowbar should be able to handle the current and
stored charge of the supply it's monitoring. If a crowbar fails short
in the process, it's still doing it's job, but that is unlikely to
happen if foldback limiting occurs.

OVP and current limiting are both possible using small-signal
techniques, but the OVP's latch may require an independant method of
crossing the isolation barrier for effect.

RL

5004. Re: PSUs: current-limiting and crowbarring - incompatible?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-24 16:50:40 UTC
From: You <You@shadow.orgs>
Message-ID: <You-EBF96C.08504924102006@netnews.worldnet.att.net>
Source record: 9805
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <e0mqj2p0ha1f92rv32r14i22iq3c6kk4sk@4ax.com>,
legg <legg@nospam.magma.ca> wrote:

> A properly designed crowbar should be able to handle the current and
> stored charge of the supply it's monitoring. If a crowbar fails short
> in the process, it's still doing it's job, but that is unlikely to
> happen if foldback limiting occurs.

Actually, a Crowbar System ONLY needs to be able to blow the fuse,
or circuitbreaker that protects the LOAD from the overvoltage
condition that the Crowbar is monitoring. Protecting the supply
from overcurrent draw condition is the Foldback Current Limiter's
Job. Two completely different senerios.

5005. Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-24 20:38:18 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <453e7a1c$0$27608$9b4e6d93@newsspool2.arcor-online.net>
Source record: 9806
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello all -

I built a simple ferrite antenna communication system. Unfortunately it
won't work if I set the sender more distanced than about a meter. That is
even true with different transmitter configurations.

Here the details:
Transmitter:
ferrite antenna: diameter 8mm , 50mm long
frequency is 77.5KHz, digital modulation is AM 25%
bit-rate is 1 bit/sec (0 is 100ms carrier 25%, 1 is 200ms carrier 25%)
insulated copper wire coil 10 turns

The transmitter is self-constructed and delivers a very good signal.

Receiver:
same antenna copied, but a built-in resonating capacitor.
ready-to-use WWVB 77.5KHz receiver. Demodulated signal goes to scope.

The transmission works over about one meter without any shortage.

Now the problem is that I can change the transmitter parameters but I cannot
reach a substancial greater distance. I changed:
- the coil wound times
- output current to the antenna (measured across a series resistor)
- added an antenna current sensor coil to sense the antenna current and to
see if the ferrite antenna saturizes (NO! Very clean sinusoid)

Googling around to find theoretical aspects of ferrite antenne got no good
results. I spent several hours and read all I can read.

Have someone suggestions to try or good links to read? Especially for:
- when a ferrite or iron powder rod/bar goes in saturation?
- optimal rod dimensions
- optimal coil design (I suggest single layer, resonating with good Q
capacitor, about 3 to 10 turns)
- LNA design for such a low frequency?
- antenna field theory in near-field.

If you need further details please ask.

Thanks in advance.

Regards -
Henry

5006. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-24 21:39:44 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <rn1tj218vgh178v9uh63eifjmi8bvugm9u@4ax.com>
Source record: 9807
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Tue, 24 Oct 2006 22:38:18 +0200, "Henry Kiefer"
<otc_friend@gmx.net> wrote:

>Hello all -
>
>I built a simple ferrite antenna communication system. Unfortunately it
>won't work if I set the sender more distanced than about a meter. That is
>even true with different transmitter configurations.
>
>Here the details:
>Transmitter:
>ferrite antenna: diameter 8mm , 50mm long
>frequency is 77.5KHz, digital modulation is AM 25%
>bit-rate is 1 bit/sec (0 is 100ms carrier 25%, 1 is 200ms carrier 25%)
>insulated copper wire coil 10 turns
>
>The transmitter is self-constructed and delivers a very good signal.
>
>Receiver:
>same antenna copied, but a built-in resonating capacitor.
>ready-to-use WWVB 77.5KHz receiver. Demodulated signal goes to scope.
>
>The transmission works over about one meter without any shortage.
>
>
>Now the problem is that I can change the transmitter parameters but I cannot
>reach a substancial greater distance. I changed:
>- the coil wound times
>- output current to the antenna (measured across a series resistor)
>- added an antenna current sensor coil to sense the antenna current and to
>see if the ferrite antenna saturizes (NO! Very clean sinusoid)
>
>
>Googling around to find theoretical aspects of ferrite antenne got no good
>results. I spent several hours and read all I can read.
>
>
>Have someone suggestions to try or good links to read? Especially for:
>- when a ferrite or iron powder rod/bar goes in saturation?
>- optimal rod dimensions
>- optimal coil design (I suggest single layer, resonating with good Q
>capacitor, about 3 to 10 turns)
>- LNA design for such a low frequency?

>- antenna field theory in near-field.
>
>If you need further details please ask.
>
>Thanks in advance.
>
>Regards -
>Henry
>

The propagation mode here is pure magnetic coupling, not a proper electromagnetic "radio" wave, because the antennas are so small compared to a wavelength. Dipole magnetic fields fall off with the cube of distance.

A lot more turns on the rods, and resonating with a cap, will help some. Longer rods would help some, too, but 1/d^3 is a cruel function.

How far do you need to go?

John

5007. Re: PSUs: current-limiting and crowbarring - incompatible?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-24 22:48:13 UTC
From: legg <legg@nospam.magma.ca>
Message-ID: <f15tj2lug3sjd4qcfajl2b9gbl8hgte7ft@4ax.com>
Source record: 9808
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Tue, 24 Oct 2006 16:50:40 GMT, You <You@shadow.orgs> wrote:

>In article <e0mqj2p0ha1f92rv32r14i22iq3c6kk4sk@4ax.com>,
> legg <legg@nospam.magma.ca> wrote:
>
>> A properly designed crowbar should be able to handle the current and
>> stored charge of the supply it's monitoring. If a crowbar fails short
>> in the process, it's still doing it's job, but that is unlikely to
>> happen if foldback limiting occurs.
>
>Actually, a Crowbar System ONLY needs to be able to blow the fuse,
>or circuitbreaker that protects the LOAD from the overvoltage
>condition that the Crowbar is monitoring. Protecting the supply
>from overcurrent draw condition is the Foldback Current Limiter's
>Job. Two completely different senerios.

The aim is to protect downstream components from overvoltage.
Overvoltage is an indication of loss of control. To count on the
presence of other limiting circuitry, completely independent of the
voltage regulator, may be whistlng for it.

At one time, thyristors with large I^2t characteristics were marketed
for crowbar applications. Nowadays, it might be more sensible to make
use of a semiconductor circuit breaker, integrated into bus sequencing
circuitry.

RL

5008. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-24 23:03:21 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <453e9c2a$0$5713$9b4e6d93@newsspool3.arcor-online.net>
Source record: 9809
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

> The propagation mode here is pure magnetic coupling, not a proper
> electromagnetic "radio" wave, because the antennas are so small
> compared to a wavelength. Dipole magnetic fields fall off with the
> cube of distance.
>
> A lot more turns on the rods, and resonating with a cap, will help
> some. Longer rods would help some, too, but 1/d^3 is a cruel function.
>
> How far do you need to go?

Hi!

I remember 1/d^4 for a full EM-field here.

The receiver is a WORKING time-code receiver. Working in distance at least 2000km from the time-code transmitter with an EIRP of 30KW. The time-code transmitter have of course a VERY BIG antenna (120m height).
So I'm a little confused of your capacitor idea. That is true?: The transmitter is NOT sending an electromagnetic wave but the same antenna system at the receiving end reads it as an full established EM field?

How far: Hm, several km's if possible. Maybe I should go higher in frequency?
What other small effective antennas work here?

I think the problem is not the minimum turns because I tested it with an original ferrite rod - the same as in the original time-code receiver. It have a lot of turns, probably 100 or more. The same behaviour with 100 turns AND with 10 turns. No difference!

What I understand of ferrrite antenna theory is:
That the coil is simply an impedance transformer and bandpass (with a parallel capacitor for narrow-band reception) to couple the preamplifier to the antenna system (= ferrite rod).

But I miss something. Maybe something with differences between transmitting and receiving with a ferrite antenna. The antenna is not pure reciprocal - because the ferrite (or iron powder) can be nonlinear!

- Henry

5009. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 00:19:47 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2006.10.24.17.20.44.253605@example.net>
Source record: 9810
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Wed, 25 Oct 2006 01:03:21 +0200, Henry Kiefer wrote:

>
>> The propagation mode here is pure magnetic coupling, not a proper
>> electromagnetic "radio" wave, because the antennas are so small
>> compared to a wavelength. Dipole magnetic fields fall off with the
>> cube of distance.
>>
>> A lot more turns on the rods, and resonating with a cap, will help
>> some. Longer rods would help some, too, but 1/d^3 is a cruel function.
>>
>> How far do you need to go?
>
> Hi!
>
> I remember 1/d^4 for a full EM-field here.
>
> The receiver is a WORKING time-code receiver. Working in distance at least
> 2000km from the time-code transmitter with an EIRP of 30KW. The time-code
> transmitter have of course a VERY BIG antenna (120m height).
> So I'm a little confused of your capacitor idea. That is true?: The
> transmitter is NOT sending an electromagnetic wave but the same antenna
> system at the receiving end reads it as an full established EM field?
>
> How far: Hm, several km's if possible. Maybe I should go higher in
> frequency?
> What other small effective antennas work here?
>
> I think the problem is not the minimum turns because I tested it with an
> original ferrite rod - the same as in the original time-code receiver. It
> have a lot of turns, probably 100 or more. The same behaviour with 100 turns
> AND with 10 turns. No difference!
>
> What I understand of ferrrite antenna theory is:
> That the coil is simply an impedance transformer and bandpass (with a
> parallel capacitor for narrow-band reception) to couple the preamplifier to
> the antenna system (= ferrite rod).
>
> But I miss something. Maybe something with differences between transmitting
> and receiving with a ferrite antenna. The antenna is not pure reciprocal -
> because the ferrite (or iron powder) can be nonlinear!
>

Yes, a ferrite stick antenna works quite well for receivers, but not for transmitters. Try winding a few dozen turns around the whole room - i.e., up the wall, across the ceiling, down the other wall, across the floor, and so on. Or, you could wrap a piece of 50-conductor ribbon cable, and make loops by soldering the ends together offset by 1. ;-)

I don't know very much about antenna theory, but I know that the bigger the better. ;-)

Something's telling me that it's theoretically possible to transmit with a ferrite stick, but from the kind of power you'd have to run through it, it would probably blow up. =:-O

Good Luck!
Rich

5010. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 00:29:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12jtc01a1fatce0@corp.supernews.com>
Source record: 9811
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Henry Kiefer wrote:
> . . .
> But I miss something. Maybe something with differences between transmitting
> and receiving with a ferrite antenna. The antenna is not pure reciprocal -
> because the ferrite (or iron powder) can be nonlinear!

1. Ferrite and powdered iron are entirely different materials, with different physical and magnetic characteristics. Powdered iron isn't a good choice for this application.
2. You're not likely to drive either one into a nonlinear region when they're in the form of a rod because of the large air gap in the magnetic path.

Roy Lewallen, W7EL

5011. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 02:17:35 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <vladnRax7Kd4W6PYnZ2dnUVZ_u-dnZ2d@adelphia.com>
Source record: 9812
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Henry Kiefer wrote:
> Hello all -
>
> I built a simple ferrite antenna communication system. Unfortunately it
> won't work if I set the sender more distanced than about a meter. That is
> even true with different transmitter configurations.
>
> Here the details:
> Transmitter:
> ferrite antenna: diameter 8mm , 50mm long
> frequency is 77.5KHz, digital modulation is AM 25%
> bit-rate is 1 bit/sec (0 is 100ms carrier 25%, 1 is 200ms carrier 25%)
> insulated copper wire coil 10 turns
>
> The transmitter is self-constructed and delivers a very good signal.
>
> Receiver:
> same antenna copied, but a built-in resonating capacitor.
> ready-to-use WWVB 77.5KHz receiver. Demodulated signal goes to scope.
>
> The transmission works over about one meter without any shortage.
>
>
> Now the problem is that I can change the transmitter parameters but I cannot
> reach a substancial greater distance. I changed:
> - the coil wound times
> - output current to the antenna (measured across a series resistor)
> - added an antenna current sensor coil to sense the antenna current and to
> see if the ferrite antenna saturizes (NO! Very clean sinusoid)

In addition to what others have said, the most field you can
generate with the ferrite rod antenna will occur when it is
almost reaching saturation, and that takes a lot of ampere
turns. You can deliver more ampere turns to the rod than
your transmitter output can deliver if you resonate the coil
with a capacitor. That way, you have the current bouncing
back and forth through the capacitor added to the current
from the amplifier. If the coil-capacitor Q is, say, 100,
there will be 100 times more current through the coil than
the transmitter is delivering. This will probably take a
coil with a considerable mass of copper in it.

With this approach, you might reach 10 meters.

5012. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 06:54:57 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <e6ttj2lpf1dt6mvvl4tumrlf69k0p6m7tl@4ax.com>
Source record: 9813
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Tue, 24 Oct 2006 22:38:18 +0200, "Henry Kiefer"
<otc_friend@gmx.net> wrote:

>Have someone suggestions to try or good links to read? Especially for:
>- when a ferrite or iron powder rod/bar goes in saturation?
>- optimal rod dimensions
>- optimal coil design (I suggest single layer, resonating with good Q
>capacitor, about 3 to 10 turns)

So there is a resonant circuit at the transmitter and not just a coil?

With such low number of turns (and hence low inductance), the
capacitor would have to be huge to resonate it at 77.5 kHz. Where do
you get high Q capacitors with such capacitances ?

The resonant circuit impedance levels are quite low in this
configuration (small L/large C), how do you effectively couple power
from the transmitter to this low impedance level at the resonant
circuit ?

The skin depth at this frequency is about 0.25 mm, so any wire thicker
than 0.5 mm will not utilise the full copper wire, so some kind of
Litz wire with separately insulated strands could be used to keep the
coil resistance low.

The inductance of some ferrites varies if there is some DC field
present. This inductance change could detune the resonant circuit and
drop the radiated power. Are you sure that the transmitter coil is not
carrying any DC components or some even harmonic distortion, which
would cause an unbalanced magnetic field in the ferrite rod ?

>- LNA design for such a low frequency?

The band noise is the dominant (compared to "white" amplifier) noise
when listening to the band with your transmitter switched off, the
receiver noise performance should be adequate.

Paul OH3LWR

5013. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 12:56:43 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1161781003.756985.319530@b28g2000cwb.googlegroups.com>
Source record: 9814
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Henry Kiefer wrote:
> I built a simple ferrite antenna communication system. Unfortunately it
> won't work if I set the sender more distanced than about a meter. That is
> even true with different transmitter configurations.
>
> Here the details:
> Transmitter:
> ferrite antenna: diameter 8mm , 50mm long
> frequency is 77.5KHz, digital modulation is AM 25%
> bit-rate is 1 bit/sec (0 is 100ms carrier 25%, 1 is 200ms carrier 25%)
> insulated copper wire coil 10 turns
>
> The transmitter is self-constructed and delivers a very good signal.
>
> Receiver:
> same antenna copied, but a built-in resonating capacitor.
> ready-to-use WWVB 77.5KHz receiver. Demodulated signal goes to scope.
>
> The transmission works over about one meter without any shortage.
>
>
> Now the problem is that I can change the transmitter parameters but I cannot
> reach a substancial greater distance. I changed:
> - the coil wound times
> - output current to the antenna (measured across a series resistor)
> - added an antenna current sensor coil to sense the antenna current and to
> see if the ferrite antenna saturizes (NO! Very clean sinusoid)
>
>
> Googling around to find theoretical aspects of ferrite antenne got no good
> results. I spent several hours and read all I can read.
>
>
> Have someone suggestions to try or good links to read? Especially for:
> - when a ferrite or iron powder rod/bar goes in saturation?
> - optimal rod dimensions
> - optimal coil design (I suggest single layer, resonating with good Q
> capacitor, about 3 to 10 turns)
> - LNA design for such a low frequency?
> - antenna field theory in near-field.

I can't really help you with ferrite antennas for transmitting, but can
tell you that if you google around for "lowfer" and the Longwave Club

of America http://www.lwca.org/ you will find a lot about antenna designs that are suitable for this band. They will also might have recommendations for frequencies of operation that are legal for transmission in your home country (I don't even know what that is!)

LNA isn't really applicable here because there is so so so much man-made and natural noise in this band.

I'm a little surprised that your achieved range was so small from a ferrite rod antenna, actually. Did you really tune both antennas, in place and in circuit, for resonance? The resonance is so so super narrow that strays between design and circuit make a big difference. I mean, CRT screens with flybacks, and faulty flourescent lamp ballasts, and incadescent dimmers radiate all sorts of crap around the LF spectrum for blocks, and they aren't even trying to be intentional transmitters! And don't get me started about induction heaters and welding machines, those can be heard across several states!

Tim.

5014. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 15:57:21 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <453f8c53$0$27606$9b4e6d93@newsspool2.arcor-online.net>
Source record: 9815
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

> > But I miss something. Maybe something with differences between
transmitting
> > and receiving with a ferrite antenna. The antenna is not pure
reciprocal -
> > because the ferrite (or iron powder) can be nonlinear!
> >
>
> Yes, a ferrite stick antenna works quite well for receivers, but not for
> transmitters. Try winding a few dozen turns around the whole room - i.e.,
> up the wall, across the ceiling, down the other wall, across the floor,
> and so on. Or, you could wrap a piece of 50-conductor ribbon cable, and
> make loops by soldering the ends together offset by 1. ;-)

You made my day :)
BTW: Your idea with the ribbon cable gives you a very easy made
transformator if using clamping connectors. This works very good. I
practiced it 10 years ago.

I heart it several times that a ferrite stick antenna cannot work as a
useful transmitter antenna. But why?????

>
> I don't know very much about antenna theory, but I know that the bigger
> the better. ;-)
Sure, for reasonable antennas. But if the antenna is very VERY big in
relation to wavelength it even cannot work! Read somewhere.

>
> Something's telling me that it's theoretically possible to transmit with
> a ferrite stick, but from the kind of power you'd have to run through it,
> it would probably blow up. =:-O
I found no saturation state but I have not enough power at the moment to
drive it very powerful. Something I try later ...

Regards -
Henry

5015. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 15:59:43 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <453f8c54$0$27606$9b4e6d93@newsspool2.arcor-online.net>
Source record: 9817
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

> 1. Ferrite and powdered iron are entirely different materials, with
> different physical and magnetic characteristics. Powdered iron isn't a
> good choice for this application.

Powdered iron should work better because of the higher permeability even
under heavy load in comparision to ferrite. I think so in theory - not
tested.

> 2. You're not likely to drive either one into a nonlinear region when
> they're in the form of a rod because of the large air gap in the
> magnetic path.

Can you explain this more detailed Ron? What will happen with the air gap?
The losses in the air gap radiates and that is the antenna function?

- Henry

5016. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 16:04:00 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <453f8c54$1$27606$9b4e6d93@newsspool2.arcor-online.net>
Source record: 9816
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

> In addition to what others have said, the most field you can
> generate with the ferrite rod antenna will occur when it is
> almost reaching saturation, and that takes a lot of ampere
> turns. You can deliver more ampere turns to the rod than
> your transmitter output can deliver if you resonate the coil
> with a capacitor. That way, you have the current bouncing
> back and forth through the capacitor added to the current
> from the amplifier. If the coil-capacitor Q is, say, 100,
> there will be 100 times more current through the coil than
> the transmitter is delivering. This will probably take a
> coil with a considerable mass of copper in it.

John, that is what I have seen! I resonated the antenna coil and driven it with it's resonance frequency. Seems that the achievable distance was a little more than the circuit without resonating capacitor.

You say, that driving the ferrite rod into saturation will force it to leave more power into air? Why?

- Henry

5017. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 16:23:07 UTC
From: Iwo Mergler <Iwo.Mergler@soton.sc.philips.com>
Message-ID: <bkf414-hkb.ln1@c2968.soton.sc.philips.com>
Source record: 9819
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Henry Kiefer wrote:

> Hello all -
>
> I built a simple ferrite antenna communication system. Unfortunately it
> won't work if I set the sender more distanced than about a meter. That is
> even true with different transmitter configurations.
>
> Here the details:
> Transmitter:
> ferrite antenna: diameter 8mm , 50mm long
> frequency is 77.5KHz, digital modulation is AM 25%
> bit-rate is 1 bit/sec (0 is 100ms carrier 25%, 1 is 200ms carrier 25%)
> insulated copper wire coil 10 turns
>
> The transmitter is self-constructed and delivers a very good signal.
>
> Receiver:
> same antenna copied, but a built-in resonating capacitor.
> ready-to-use WWVB 77.5KHz receiver. Demodulated signal goes to scope.
>
> The transmission works over about one meter without any shortage.
>
>
> Now the problem is that I can change the transmitter parameters but I
> cannot reach a substancial greater distance. I changed:
> - the coil wound times
> - output current to the antenna (measured across a series resistor)
> - added an antenna current sensor coil to sense the antenna current and to
> see if the ferrite antenna saturizes (NO! Very clean sinusoid)
>
>
> Googling around to find theoretical aspects of ferrite antenne got no good
> results. I spent several hours and read all I can read.
>
>
> Have someone suggestions to try or good links to read? Especially for:
> - when a ferrite or iron powder rod/bar goes in saturation?
> - optimal rod dimensions
> - optimal coil design (I suggest single layer, resonating with good Q
> capacitor, about 3 to 10 turns)
> - LNA design for such a low frequency?
> - antenna field theory in near-field.

>
> If you need further details please ask.
>
> Thanks in advance.
>
> Regards -
> Henry

Efficient antennas at that frequency are effectively very long
bits of wire. The ferrite rod is small compared to the wavelength
and very inefficient at generating a far field.

This is the antenna of the DCF77 transmitter (same frequency):
http://de.wikipedia.org/wiki/Bild:Dcf77.jpg

Kind regards,

Iwo

5018. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 16:36:48 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <453f9398$0$27619$9b4e6d93@newsspool2.arcor-online.net>
Source record: 9818
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

> >Have someone suggestions to try or good links to read? Especially for:
> >- when a ferrite or iron powder rod/bar goes in saturation?
> >- optimal rod dimensions
> >- optimal coil design (I suggest single layer, resonating with good Q
> >capacitor, about 3 to 10 turns)
>
> So there is a resonant circuit at the transmitter and not just a coil?
>

I tested it as resonating circuit using the original time-code receiver
antenna AND a second time without the capacitor.
Maybe I got a little more power in the air with the resonating circuit, but
it was not very distingiuable.

> With such low number of turns (and hence low inductance), the
> capacitor would have to be huge to resonate it at 77.5 kHz. Where do
> you get high Q capacitors with such capacitances ?

I don't know the exact manufacturer of the time-code receiver ferrite
antenna but I comparable model reads:
L=900uH
bandwidth=700Hz
n=94
see original data
http://www.hkw-elektronik.de/pdfenglisch/AFET100-77,5-DE.pdf
It is not the same antenna but very similar.

The original foil-capacitor is 682 labeled. I don't measured it but I think
it should be 6800pF reading.

For my second experiment I used no capacitor and turns=10.

If I would find a PSPICE model for an ferrite antenna ...

>
> The resonant circuit impedance levels are quite low in this
> configuration (small L/large C), how do you effectively couple power
> from the transmitter to this low impedance level at the resonant
> circuit ?

Hm. I thought here: just trying different turns value to achieve this. The
coil is the impedance transformer for the ferrite rod (=antenna). I'm wrong
here?

>
> The skin depth at this frequency is about 0.25 mm, so any wire thicker

> than 0.5 mm will not utilise the full copper wire, so some kind of
> Litz wire with separately insulated strands could be used to keep the
> coil resistance low.

The original coil is thinner than 0.3mm. If I compare it to my 0.3mm wire
maybe it is 0.18mm. The second experiment with the 10 turns coil is 0.3mm
enamelled copper wire.
I will give Litz wire a try if the system as such works...

>
> The inductance of some ferrites varies if there is some DC field
> present. This inductance change could detune the resonant circuit and
> drop the radiated power. Are you sure that the transmitter coil is not
> carrying any DC components or some even harmonic distortion, which
> would cause an unbalanced magnetic field in the ferrite rod ?

Good question. I series blocked DC with a WIMA MKS4 1.0uF 100VDC
high-quality capacitor. As measured the "big" capacitor is outside the
bandwidth of the antenna.

I don't think there is any DC component left. And yes, there is no magnet on
my desk laying around :-)
Is there any internal rectifiation phanomen in the ferrite possible?

>
> >- LNA design for such a low frequency?
>
> The band noise is the dominant (compared to "white" amplifier) noise
> when listening to the band with your transmitter switched off, the
> receiver noise performance should be adequate.
How much band noise should I expect?

- Henry

5019. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 16:52:09 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <453f9ac8$0$27625$9b4e6d93@newsspool2.arcor-online.net>
Source record: 9823
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

> I can't really help you with ferrite antennas for transmitting, but can
> tell you that if you google around for "lowfer" and the Longwave Club
> of America http://www.lwca.org/ you will find a lot about antenna
> designs that are suitable for this band. They will also might have
> recommendations for frequencies of operation that are legal for
> transmission in your home country (I don't even know what that is!)

Thanks. I will look there.

> I'm a little surprised that your achieved range was so small from a
> ferrite rod antenna, actually. Did you really tune both antennas, in
> place and in circuit, for resonance? The resonance is so so super
> narrow that strays between design and circuit make a big difference. I
> mean, CRT screens with flybacks, and faulty flourescent lamp ballasts,
> and incadescent dimmers radiate all sorts of crap around the LF
> spectrum for blocks, and they aren't even trying to be intentional
> transmitters! And don't get me started about induction heaters and
> welding machines, those can be heard across several states!

Maybe the time-code receiving IC is a bad design. I don't know. It's
operating current is 500uA only. That is very small. It can receive the
time-code over 2000km with such an antenna with an transmitter EIRP of 30KW.
The receiving antenna is 700Hz bandwidth. I don't think this is super
narrow. Even if we look at the time-code receiver quartz filter with a
bandwidth of about 10Hz I can met it with my stable wave generator. It is a
PLL-design with a clock quartz. Should be typical 10ppm. I don't have a very
good frequency meter to verify it.

In my second transmitter experiment I used a not-resonated driver design. So
there are no problems with detuning the transmit antenna expected. It is
just driven by the 77.5KHz power signal.

CRT screen is off if I experiment. Otherwise I seen a very big CRT signal at
the receiver...

If the two ferrite rods will detune because of the close proximity I cannot
control it. I don't think so.

If you can hear induction heaters or something this is surely with a very
big antenna and a resonable good receiver design.

- Henry

5020. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 16:55:14 UTC
From: jpopelish@rica.net
Message-ID: <1161795314.438145.225230@e3g2000cwe.googlegroups.com>
Source record: 9820
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Henry Kiefer wrote:
and that takes a lot of ampere
> > turns. You can deliver more ampere turns to the rod than
> > your transmitter output can deliver if you resonate the coil
> > with a capacitor. That way, you have the current bouncing
> > back and forth through the capacitor added to the current
> > from the amplifier. If the coil-capacitor Q is, say, 100,
> > there will be 100 times more current through the coil than
> > the transmitter is delivering. This will probably take a
> > coil with a considerable mass of copper in it.
>
> John, that is what I have seen! I resonated the antenna coil and driven it
> with it's resonance frequency. Seems that the achievable distance was a
> little more than the circuit without resonating capacitor.
>
> You say, that driving the ferrite rod into saturation will force it to leave
> more power into air? Why?

You misunderstood what I said. It was, " the most field you can
generate with the ferrite rod antenna will occur when it is
almost reaching saturation,"

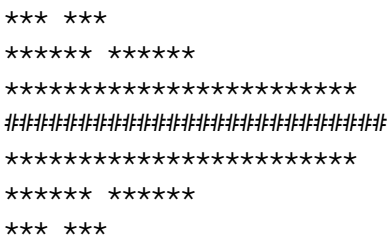
If you saturate the rod, the field you generate will have lotsof 3rd
harmonic components in it, but little more of the fundamental. I was
trying to emphasize that you will need as strong a magnitic field as
possible aat the transmitting antenna, and just below saturation is
that limit, when a ferrite core is involved.

If the rod has a large lenght to diameter ratio (say , above 10) then I
think the uptimum coil arrangement on the rod also doffers considerably
for the transmitting and receiving cases, since the receiving case does
not deal with saturation.

In the receiving case, the end sections of the rod act as flux
collectors, and only the middle thirs or so has almost all the
collected flux passing through it, so this third is the optimum place
for the coil. /in the transmitting case, the rod has a tendency to
saturate at the center, first, with this arrangement, and you want
essentially the whole rod to approach satuation at the same ampere
turns. This will produce a field that acts as if it has been produced
by the full length of the rod. You can achieve something close ot this
by spreading the turns out, all over the rod, with an extra
concentration (a second or third layer layer, perhaps) at the ends.
Something like this (shown in cross section. View with fixed width

font i.e. Courier, so charcters are on grid pattern):

* = wire in cross section
# = rod



5021. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 16:55:18 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <453f9ac9$0$27625$9b4e6d93@newsspool2.arcor-online.net>
Source record: 9822

> Efficient antennas at that frequency are effectively very long
> bits of wire. The ferrite rod is small compared to the wavelength
> and very inefficient at generating a far field.
>
> This is the antenna of the DCF77 transmitter (same frequency):
> http://de.wikipedia.org/wiki/Bild:Dcf77.jpg

OK Iwo. But why a small receiving ferrite antenna works here? A
non-saturated (=linear, and that means the superposition theorem works)
antenna system is reciprocal as antenna theory predicts. So you should
explain where the difference is!

- Henry

5022. Amplifier output matching

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 17:02:29 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12jv656e84fgeeb@corp.supernews.com>
Source record: 9821

On a reciever, I'm using a MMIC LNA at VHF (2m), and while it's quite clear to me why I need to match at the amplifier's input -- to minimize VSWR and get as much of the signal from the antenna into the system -- it's not quite to clear to me just how important output matching is. The S22 parameters for this LNA are very close to an open circuit with a little capacitance -- I expect the output looks back into a drain or something else that's a reasonably decent current source at RF, and you see that shunted by parasitic capacitances.

So... how important is it that I bother to build a matching network at the output? (I'll be "outputting" to another ~50 ohm input.) It doesn't really seem that important, and building something like an L-match with de-Q-ing resistor drops the gain a couple dB anyway.

I know that for a transmitter output matching is important so that reflections from poor or non-existant terminations don't blow up the output amplifier, but for low-level signals as in a receiver it wouldn't seem to matter so much?

Thanks,
---Joel Kolstad

5023. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 17:05:47 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <453f9ac9$1$27625$9b4e6d93@newsspool2.arcor-online.net>
Source record: 9824
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

>
> If you saturate the rod, the field you generate will have lotsof 3rd
> harmonic components in it, but little more of the fundamental. I was
> trying to emphasize that you will need as strong a magnitic field as
> possible aat the transmitting antenna, and just below saturation is
> that limit, when a ferrite core is involved.

I understand that. I added a second coil on the ferrite rod to measure the antenna current and set it just below the point where I saw harmonics (or say non-sinusial) waveform on the scope.

>
> If the rod has a large lenght to diameter ratio (say , above 10) then I
> think the uptimum coil arrangement on the rod also doffers considerably
> for the transmitting and receiving cases, since the receiving case does
> not deal with saturation.
>
> In the receiving case, the end sections of the rod act as flux
> collectors, and only the middle thirs or so has almost all the
> collected flux passing through it, so this third is the optimum place
> for the coil. /in the transmitting case, the rod has a tendency to
> saturate at the center, first, with this arrangement, and you want
> essentially the whole rod to approach satuation at the same ampere
> turns. This will produce a field that acts as if it has been produced
> by the full length of the rod. You can achieve something close ot this
> by spreading the turns out, all over the rod, with an extra
> concentration (a second or third layer layer, perhaps) at the ends.
> Something like this (shown in cross section. View with fixed width
> font i.e. Courier, so charcters are on grid pattern):

That is a very interesting configuration. Never seen such a design. I read about a old-fashion remote controller system having a ferrite antenna transmitter. There someone wrote, the transmitter antenna was a mignon battery-shaped ferrite rod. e.g. much shorter but wider than mine. So an optimum ferrite transmitter antenna is maybe more like a fat battery shaped.

- Henry

5024. Re: Amplifier output matching

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 17:25:16 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1161797115.954756.14850@e3g2000cwe.googlegroups.com>
Source record: 9825

Joel Kolstad wrote:
> On a reciever, I'm using a MMIC LNA at VHF (2m), and while it's quite clear to
> me why I need to match at the amplifier's input -- to minimize VSWR and get as
> much of the signal from the antenna into the system -- it's not quite to clear
> to me just how important output matching is. The S22 parameters for this LNA
> are very close to an open circuit with a little capacitance -- I expect the
> output looks back into a drain or something else that's a reasonably decent
> current source at RF, and you see that shunted by parasitic capacitances.
>
> So... how important is it that I bother to build a matching network at the
> output? (I'll be "outputting" to another ~50 ohm input.) It doesn't really
> seem that important, and building something like an L-match with de-Q-ing
> resistor drops the gain a couple dB anyway.
>
> I know that for a transmitter output matching is important so that reflections
> from poor or non-existant terminations don't blow up the output amplifier, but
> for low-level signals as in a receiver it wouldn't seem to matter so much?
>
> Thanks,
> ---Joel Kolstad

OK, since you called it an LNA, I assume you want to take advantage of the low noise. In that case, you do NOT necessarily want to match the input for low SWR. You want to match to the amplifier's input noise resistance: the equivalent input noise voltage divided by the equivalent input noise current. This in general is NOT the same as the input impedance. Adjust the input match for the lowest noise figure, not the lowest SWR, if it's low noise you want.

Output matching will transfer the greatest power to the load. Assuming S12 is very low, adjusting the output matching will not materially affect the input power, so maximizing the output power will maximize the gain. You may or may not have a need to do that. And you need to pay attention to amplifier stability: is it unconditionally stable, or must you keep the load within some bounds to keep it stable? Have a look for articles about "maximum available gain" and "maximum usable gain." For example, see http://www.microwaves101.com/encyclopedia/kfactor.cfm#mag.

Cheers,
Tom

5025. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 17:41:06 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <nu7vj292krjbt5funrbn09kcflbrvevn1n@4ax.com>
Source record: 9826
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Wed, 25 Oct 2006 17:57:21 +0200, "Henry Kiefer"
<otc_friend@gmx.net> wrote:

>> Yes, a ferrite stick antenna works quite well for receivers, but not for
>> transmitters. Try winding a few dozen turns around the whole room - i.e.,
>> up the wall, across the ceiling, down the other wall, across the floor,
>> and so on. Or, you could wrap a piece of 50-conductor ribbon cable, and
>> make loops by soldering the ends together offset by 1. ;-)
>
>You made my day :)
>BTW: Your idea with the ribbon cable gives you a very easy made
>transformator if using clamping connectors. This works very good. I
>practiced it 10 years ago.

The problem with loop antennas made of ribbon cable (or other
multiconductor cable connected this way) is the stray capacitance
between turns. The self resonance frequency (without external
capacitor) may be below the band of interest, so you can not resonate
such antenna with an external capacitor.

Paul OH3LWR

5026. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 17:41:59 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <453fa6e7$0$18846$9b4e6d93@newsspool4.arcor-online.net>
Source record: 9827
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

> The problem with loop antennas made of ribbon cable (or other
> multiconductor cable connected this way) is the stray capacitance
> between turns. The self resonance frequency (without external
> capacitor) may be below the band of interest, so you can not resonate
> such antenna with an external capacitor.

I found it very useful for design of hard-driven Power MOSFET driver
transformator till 400KHz without problems.

- Henry

5027. Re: Amplifier output matching

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 18:09:52 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12jva3hp0qkbef@corp.supernews.com>
Source record: 9828

Hi Tom,

Thanks for the information; someone else pointed me yesterday to the idea that you'd generally match the input for optimum noise performance rather than optimum power transfer. The data sheet claims that the optimum noise figure is 0.8dB, but the part itself is marketed as "typical 1.8dB NF" -- which they obtained from their own eval board that, as far as I can tell, was matched pretty close to optimum power transfer. In any case, at present mine is also matched at the input for optimum power transfer, and I'll measure its noise figure and see whether or not I'm around 1.8dB or better... if so I don't think I'm going to worry about it too much.

> Output matching will transfer the greatest power to the load.

Yeah, but it's not practical, is it? I'm looking back at (approximately) a current source, and my load is dictated as (approximately) 50 ohms, so the load itself is what's driving the power transferred, no?

> Assuming
> S12 is very low

It is, <0.01 everywhere.

> And you need to
> pay attention to amplifier stability: is it unconditionally stable, or
> must you keep the load within some bounds to keep it stable?

I haven't calculated its k factor; I'll do that soon -- thanks for the link.

---Joel

5028. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 19:47:11 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1161805631.198847.193790@f16g2000cwb.googlegroups.com>
Source record: 9829

Henry Kiefer wrote:
> > Efficient antennas at that frequency are effectively very long
> > bits of wire. The ferrite rod is small compared to the wavelength
> > and very inefficient at generating a far field.
> >
> > This is the antenna of the DCF77 transmitter (same frequency):
> > http://de.wikipedia.org/wiki/Bild:Dcf77.jpg
>
> OK Iwo. But why a small receiving ferrite antenna works here? A
> non-saturated (=linear, and that means the superposition theorem works)
> antenna system is reciprocal as antenna theory predicts. So you should
> explain where the difference is!

At LF, rarely is the problem "not enough amplitude of received signal",
so past a certain point there isn't much need to make the receiver
antenna more efficient. The problem is always "too much noise!". So
antenna designs are usually built around nulling out local noise, and
loop antennas will get rid of the mostly electric-field local noise.
And they have some directionality (notably sharp nulls) which can help
get rid of specific further-away noise.

Tim.

5029. Re: Amplifier output matching

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 20:09:51 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1161806991.334799.321720@e3g2000cwe.googlegroups.com>
Source record: 9830

Joel Kolstad wrote:
> Hi Tom,
>
> Thanks for the information; someone else pointed me yesterday to the idea that
> you'd generally match the input for optimum noise performance rather than
> optimum power transfer. The data sheet claims that the optimum noise figure
> is 0.8dB, but the part itself is marketed as "typical 1.8dB NF" -- which they
> obtained from their own eval board that, as far as I can tell, was matched
> pretty close to optimum power transfer. In any case, at present mine is also
> matched at the input for optimum power transfer, and I'll measure its noise
> figure and see whether or not I'm around 1.8dB or better... if so I don't
> think I'm going to worry about it too much.
>
> > Output matching will transfer the greatest power to the load.
>
> Yeah, but it's not practical, is it? I'm looking back at (approximately) a
> current source, and my load is dictated as (approximately) 50 ohms, so the
> load itself is what's driving the power transferred, no?

Well, no... Clearly it's not exactly a current source. Perhaps it's
1000 ohms, or 10000 ohms, (plus some reactance, of course) which is
high but not a pure current source. Then a network that matches 1000
ohms, or 10000 ohms, to 50 ohms (and cancels the reactance), will give
you the most power output. That is a linear, small-signal model, but
that should be a pretty good approximation for any application where
you need a low-noise preamp.

You do need to consider losses in whatever matching network you use;
and many matching networks will be highly resonant to transform between
impedances that are in a large ratio. Realize that the match at the
operating frequency may give you a load at some other frequency which
causes instability...

If the source (the output impedance) was really a current source, you
could get near-infinite power gain (again, assuming that S12 is zero)
by transforming the load to as high an impedance as possible. Consider
the small-signal low-frequency model of a bipolar transistor where the
output is a current source shunted by a resistance. Assume that
(internal effective) resistance is infinite. Now the current from the
current source all flows into the load. Since power is i^2*R,
increasing R increases the power without bound. A matching network
just transforms your practical load (e.g. 50 ohms) to the desired load
R.

What's practical depends on how wide a bandwidth you want, and how good you are at designing and building impedance matching networks. (I can personally come up with lots of IMpractical networks! ;-)

Cheers,
Tom

5030. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 20:10:56 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12jvh6h7qne1lae@corp.supernews.com>
Source record: 9831
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"Paul Keinanen" <keinanen@sci.fi> wrote in message
news:nu7vj292krjbt5funrbn09kcflbrvevn1n@4ax.com...
> The problem with loop antennas made of ribbon cable (or other
> multiconductor cable connected this way) is the stray capacitance
> between turns. The self resonance frequency (without external
> capacitor) may be below the band of interest, so you can not resonate
> such antenna with an external capacitor.

Ob-flippant remark: Sure you can, you just need a negative capacitor! ;-)

I suppose if one actually built a negative capacitor out of, e.g., a gyrator, the noise performance would be pretty much shot? Might be OK for a transmitting antenna, though?

5031. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 20:14:02 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12jvhcciaj4vee@corp.supernews.com>
Source record: 9832
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Henry Kiefer wrote:
>> 1. Ferrite and powdered iron are entirely different materials, with
>> different physical and magnetic characteristics. Powdered iron isn't a
>> good choice for this application.
>
> Powdered iron should work better because of the higher permeability even
> under heavy load in comparision to ferrite. I think so in theory - not
> tested.

The effective permeability of a rod is dictated largely by the air gap in the magnetic path, which is a function of the length/diameter ratio of the rod. Powdered iron in general has very low permeability compared to ferrite. If you really wanted to apply a huge amount of power to a rod antenna, powdered iron might be a better choice because of its high saturation flux density. But I doubt you could get the Q of a ferrite rod antenna at the frequency in question, so it would be considerably less efficient. You'd probably end up with less power radiated than if you ran less power to a ferrite rod antenna, and a less efficient antenna would impact your received signal. You'd have to crunch some numbers or make measurements to find out for sure.

>> 2. You're not likely to drive either one into a nonlinear region when
>> they're in the form of a rod because of the large air gap in the
>> magnetic path.
>
> Can you explain this more detailed Ron? What will happen with the air gap?
> The losses in the air gap radiates and that is the antenna function?

The presence of even a small air gap has the effect of reducing the effective permeability of the core and therefore the inductance of the winding. It also dramatically reduces the core flux density for a given number of winding amp-turns. This makes it very hard to saturate. Inductors used for power applications commonly have a small core gap for this reason. A rod has a very large air gap in the path -- from one end of the rod, curving around outside the rod, to the other. And for many ferrites used at radio frequency, the material loss is high enough that the core would be hot enough to explode well before you reach a flux level anywhere close to saturation. This isn't true of all materials at all frequencies, of course.

The radiation takes place from the field outside the core, i.e., in the air gap. If you didn't have a gap, you wouldn't have any significant radiation.

And it's Roy, not Ron.

Roy Lewallen, W7EL

5032. Re: Amplifier output matching

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 21:50:55 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12jvn20kv9omm56@corp.supernews.com>
Source record: 9833

Thanks again Tom, you've really cleared things up for me here.

Here's the concrete numbers... in the center of the band, S22 -- converted back to an impedance -- is 119.5-j90 ohms. With a 2V source, if I conjugate match my 50 ohm load obviously I get 1V across the resistor or 20mW = 13dBm. Without a match... let's see... current around the loop is 2/(119.5-j90+50) = 9.2+j4.89 mA, and power in the 50 ohm load is I^2*R = 3.04+j4.5mW = (looking just at real power) 4.83dBm. So... without a match... I'd be leaving 13-4.83 = 8.18dB of gain "on the floor"... ouch!

---Joel

5033. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 22:03:58 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <453fe0c8$0$5715$9b4e6d93@newsspool3.arcor-online.net>
Source record: 9835
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Sorry "Roy" -

> The effective permeability of a rod is dictated largely by the air gap
> in the magnetic path, which is a function of the length/diameter ratio
> of the rod. Powdered iron in general has very low permeability compared
> to ferrite. If you really wanted to apply a huge amount of power to a
> rod antenna, powdered iron might be a better choice because of its high
> saturation flux density. But I doubt you could get the Q of a ferrite
> rod antenna at the frequency in question, so it would be considerably
> less efficient. You'd probably end up with less power radiated than if
> you ran less power to a ferrite rod antenna, and a less efficient
> antenna would impact your received signal. You'd have to crunch some
> numbers or make measurements to find out for sure.

Surely.

>
> >> 2. You're not likely to drive either one into a nonlinear region when
> >> they're in the form of a rod because of the large air gap in the
> >> magnetic path.
> >
> > Can you explain this more detailed Ron? What will happen with the air
gap?
> > The losses in the air gap radiates and that is the antenna function?
>
> The presence of even a small air gap has the effect of reducing the
> effective permeability of the core and therefore the inductance of the
> winding. It also dramatically reduces the core flux density for a given
> number of winding amp-turns. This makes it very hard to saturate.
> Inductors used for power applications commonly have a small core gap for
> this reason. A rod has a very large air gap in the path -- from one end
> of the rod, curving around outside the rod, to the other. And for many
> ferrites used at radio frequency, the material loss is high enough that
> the core would be hot enough to explode well before you reach a flux
> level anywhere close to saturation. This isn't true of all materials at
> all frequencies, of course.
>
> The radiation takes place from the field outside the core, i.e., in the
> air gap. If you didn't have a gap, you wouldn't have any significant
> radiation.

I'm not so theory funded to explain why a gap in the core transmits
electromagnetic wave. That is an open question for me.
I even don't understand why a ferrite rod will accumulate magnetic field

lines. There is the explanation of "shorten" the field lines way. Some mysterical!

If you talk about explosion: What is the power level you mean?
Currently I have a ferrite rod of 9mm diameter and 50mm length, driven by 40mA against 2Vpp.
Do you think it is impossible to pump maybe 5watts into the rod?

- Henry

5034. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 22:08:19 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <453fe0c8$1$5715$9b4e6d93@newsspool3.arcor-online.net>
Source record: 9834

> > OK Iwo. But why a small receiving ferrite antenna works here? A
> > non-saturated (=linear, and that means the superposition theorem works)
> > antenna system is reciprocal as antenna theory predicts. So you should
> > explain where the difference is!
>
> At LF, rarely is the problem "not enough amplitude of received signal",
> so past a certain point there isn't much need to make the receiver
> antenna more efficient. The problem is always "too much noise!". So
> antenna designs are usually built around nulling out local noise, and
> loop antennas will get rid of the mostly electric-field local noise.
> And they have some directionality (notably sharp nulls) which can help
> get rid of specific further-away noise.

The problem is to pump enough energy in the air to overcome the atmospheric noise seen by the receiver.

BTW: The mentioned antenna array picture is NOT the DCF77 sender. DCF77 is exactly two antennas there only. And they have a very good performance thanks to there big outline. They radiate about 30KW out of the 50KW output power of the final amplifier. If I get 1% performance I think I'm good.

- Henry

5035. Re: Amplifier output matching

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 22:59:19 UTC
From: nx7u <nx7u@cox.net>
Message-ID: <1161817159.262542.230750@m73g2000cwd.googlegroups.com>
Source record: 9836

To chime in late: typically the routine in LNA design is noise match
at the input, then conjugate match at the output considering the
effects of the noise match. Really the only reason to play games with
the input noise match is either for broadbanding or to address a
specific stability issue, which usually is better handled by judicious
feedback.

Joel Kolstad wrote:
> Thanks again Tom, you've really cleared things up for me here.
>
> Here's the concrete numbers... in the center of the band, S22 -- converted
> back to an impedance -- is 119.5-j90 ohms. With a 2V source, if I conjugate
> match my 50 ohm load obviously I get 1V across the resistor or 20mW = 13dBm.
> Without a match... let's see... current around the loop is 2/(119.5-j90+50) =
> 9.2+j4.89 mA, and power in the 50 ohm load is I^2*R = 3.04+j4.5mW = (looking
> just at real power) 4.83dBm. So... without a match... I'd be leaving 13-4.83
> = 8.18dB of gain "on the floor"... ouch!
>
> ---Joel

5036. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 23:40:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12jvtehgu2lsla3@corp.supernews.com>
Source record: 9837
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Henry Kiefer wrote:
> . . .
> If you talk about explosion: What is the power level you mean?
> Currently I have a ferrite rod of 9mm diameter and 50mm length, driven by
> 40mA against 2Vpp.
> Do you think it is impossible to pump maybe 5watts into the rod?

Dunno. If it had to dissipate most of the 5 watts (which is likely), it would get as hot as a resistor that size dissipating the same power, and that would be pretty hot. Just how hot depends on how well insulated it is, how good the air flow is around it, and how much heat is conducted away through the wires or any other physical connection. The first thing I'd check would be the Curie temperature of the ferrite. If you reach that temperature, the material will lose its magnetic properties, so the antenna impedance will abruptly and dramatically change. At some higher temperature, the ferrite will fracture, maybe violently.

If that gets to be a problem, a lower loss ferrite might be necessary. That usually means lower initial permeability, and probably a lower Q inductor. You'll have to determine what the optimum trade would be.

Shouldn't be any trick to feed some power to one and watch its temperature with a thermocouple.

Roy Lewallen, W7EL

5037. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-25 23:51:17 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <VLS%g.19224$UG4.10081@newsread2.news.pas.earthlink.net>
Source record: 9838
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
news:MNGdnVFG3tY7ArDYnZ2dnUVZ_qudnZ2d@rcn.net:

> Slow Code wrote:
>
>>>> Big Ten-Four on that Good Buddy.
>>> It sounds like you run a lot of 11m, not surprising considering how
>>> much you whine, and it's not alternator whine.
>>
>>
>> I only typed like because I knew you would understand that style of
>> communicating. So, after your license came in the mail what I
>> appliance did you decide to buy? MFJ? Alinco? Cobra?
>
>
> While you are being all holier than thou, what did you design and build
> for your main rig? I'm hoping to be impressed, but expecting to be
> disappointed.
>
> Did the code help you with the design?
>
> I took my Advanced class test down at 1919 M street 36 years ago. I had
> to sit at the desk and copy one solid minute out of five error free at
> 13WPM. I passed it on the first try. I almost failed the sending test,
> as I had never spent much time doing that. I had never made a code
> contact before my test, and I have only made a couple since.
>
> The thing about code contacts is they never seem to want to say anything
> beyond:
>
> WA3XXX DE W6XX RST 5NN WX FB 73 W6XX SK

Contacts like that still help maintain receiving skill. That's important
if you ever have to use CW to save a life.

SC

5038. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-26 00:13:11 UTC
From: Mark@kb9rqz.aprs
Message-ID: <nbvvj2lkthm4n6q28i6oc97bq4150dvmba@4ax.com>
Source record: 9839
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Wed, 25 Oct 2006 23:51:17 GMT, Slow Code <my.mail@no.spam> wrote:

>Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
>news:MNGdnVFG3tY7ArDYnZ2dnUVZ_qudnZ2d@rcn.net:
>
>> Slow Code wrote:
>>
>>>>>> Big Ten-Four on that Good Buddy.
>>>> It sounds like you run a lot of 11m, not surprising considering how
>>>> much you whine, and it's not alternator whine.
>>>
>>>
>>> I only typed like because I knew you would understand that style of
>>> communicating. So, after your license came in the mail what I
>>> appliance did you decide to buy? MFJ? Alinco? Cobra?
>>
>>
>> While you are being all holier than thou, what did you design and build
>> for your main rig? I'm hoping to be impressed, but expecting to be
>> disappointed.
>>
>> Did the code help you with the design?
>>
>> I took my Advanced class test down at 1919 M street 36 years ago. I had
>> to sit at the desk and copy one solid minute out of five error free at
>> 13WPM. I passed it on the first try. I almost failed the sending test,
>> as I had never spent much time doing that. I had never made a code
>> contact before my test, and I have only made a couple since.
>>
>> The thing about code contacts is they never seem to want to say anything
>> beyond:
>>
>> WA3XXX DE W6XX RST 5NN WX FB 73 W6XX SK
>
>
>Contacts like that still help maintain receiving skill. That's important
>if you ever have to use CW to save a life.
but it will never happen since there is no one to send the distress
call
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5039. Help Pse: DSI 5600a freq Counter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-26 06:21:07 UTC
From: rrah@pencoys.org.uk
Message-ID: <4540523e.147990815@news.madasafish.com>
Source record: 9840

Hi Folks, I have a need for the circuit diagram of the crystal timebase oscillator for the DSI 5600A frequency counter. I have diagrams of the main board and the display board but, as Murphys law states, the fault is in the bit I don't have the diagrams for. Any help appreciated.
Thanks, Mike G8NXD

5040. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-26 06:59:11 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <krm0k2hiadqu4r5gsg70veeo67am4homor@4ax.com>
Source record: 9841
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Wed, 25 Oct 2006 18:36:48 +0200, "Henry Kiefer"
<otc_friend@gmx.net> wrote:

>> >- LNA design for such a low frequency?
>>
>> The band noise is the dominant (compared to "white" amplifier) noise
>> when listening to the band with your transmitter switched off, the
>> receiver noise performance should be adequate.
>How much band noise should I expect?

When listening at the signal e.g. through an SSB receiver, it is quite
easy to know the difference. The equipment noise is more or less
constant "hiss", while the band noise is mainly through numerous
distant lightnings.

Some field strength measurements made in England at 73 kHz during the
summer, using a calibrated meter indicated 25 uV/m in 200 Hz
bandwidth, which would produce about 120 dB more power from a full
sized (2 km) dipole than a single matched resistor at the receiver
input.

Thus, even if the actual antenna efficiency was -100 dB and the LNA
noise figure as bad as 10 dB, the band noise would still be stronger
than the amplifier noise.

While an antenna with -100 dB gain would be usable for receiving, such
antenna would be useless for transmitting.

Paul OH3LWR

5041. Re: Amplifier output matching

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-26 10:00:48 UTC
From: Fred Bartoli <fred._canxxxel_this_bartoli@RemoveThatAlso_free.fr_AndThisToo>
Message-ID: <45408760$0$30734$426a34cc@news.free.fr>
Source record: 9842

K7ITM a ï¿½crit :
<...>
>
> What's practical depends on how wide a bandwidth you want, and how good
> you are at designing and building impedance matching networks. (I can
> personally come up with lots of IMpractical networks! ;-)
>
1Meg is a pretty high value so we all can conclude that you're excellent :-)

--
Thanks,
Fred.

5042. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-26 13:46:44 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4540bdd0$0$5723$9b4e6d93@newsspool3.arcor-online.net>
Source record: 9843
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hi Paul -

> Some field strength measurements made in England at 73 kHz during the
> summer, using a calibrated meter indicated 25 uV/m in 200 Hz
> bandwidth, which would produce about 120 dB more power from a full
> sized (2 km) dipole than a single matched resistor at the receiver
> input.

My receiver bandwidth is about 10Hz because of the 77.5KHz quartz crystal filter. So the sensitivity is better. Is 10*lg(200/10) here correct?

>
> Thus, even if the actual antenna efficiency was -100 dB and the LNA
> noise figure as bad as 10 dB, the band noise would still be stronger
> than the amplifier noise.
>
> While an antenna with -100 dB gain would be usable for receiving, such
> antenna would be useless for transmitting.

It is interesting to learn, that antennas can be noise limited. So reciprocal theorem is not all to know.

Thanks -
Henry

5043. Re: Ferrite antenna com system

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-26 13:52:05 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4540bdd1$0$5723$9b4e6d93@newsspool3.arcor-online.net>
Source record: 9844
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Roy -

I will try your suggestions when I build a more powerful power amp.

As the modulation is AM with known 25% there is a interesting measurement methode possible:
Ramp the amplifier from low to high power and make a curve of the AM modulation depth at the receiver or just with a measurement coil at the transmitter ferrite rod. It should show a saturation if the ferrite goes in saturation. I will try this.
There is an open question what a time constant the ferrite will have if it goes into saturation or out of it. And if this is very different if iron powder is used.

- Henry

"Roy Lewallen" <w7el@eznec.com> schrieb im Newsbeitrag news:12jvtehgu2lsla3@corp.supernews.com...
> Henry Kiefer wrote:
> > . . .
> > If you talk about explosion: What is the power level you mean?
> > Currently I have a ferrite rod of 9mm diameter and 50mm length, driven by
> > 40mA against 2Vpp.
> > Do you think it is impossible to pump maybe 5watts into the rod?
>
> Dunno. If it had to dissipate most of the 5 watts (which is likely), it
> would get as hot as a resistor that size dissipating the same power, and
> that would be pretty hot. Just how hot depends on how well insulated it
> is, how good the air flow is around it, and how much heat is conducted
> away through the wires or any other physical connection. The first thing
> I'd check would be the Curie temperature of the ferrite. If you reach
> that temperature, the material will lose its magnetic properties, so the
> antenna impedance will abruptly and dramatically change. At some higher
> temperature, the ferrite will fracture, maybe violently.
>
> If that gets to be a problem, a lower loss ferrite might be necessary.
> That usually means lower initial permeability, and probably a lower Q
> inductor. You'll have to determine what the optimum trade would be.
>
> Shouldn't be any trick to feed some power to one and watch its
> temperature with a thermocouple.
>
> Roy Lewallen, W7EL

5044. Re: Amplifier output matching

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-26 15:27:04 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1161876424.307642.174780@b28g2000cwb.googlegroups.com>
Source record: 9845

On Oct 25, 2:50 pm, "Joel Kolstad" <JKolstad71HatesS...@yahoo.com>
wrote:
> Thanks again Tom, you've really cleared things up for me here.
>
> Here's the concrete numbers... in the center of the band, S22 -- converted
> back to an impedance -- is 119.5-j90 ohms. With a 2V source, if I conjugate
> match my 50 ohm load obviously I get 1V across the resistor or 20mW = 13dBm.
> Without a match... let's see... current around the loop is 2/(119.5-j90+50) =
> 9.2+j4.89 mA, and power in the 50 ohm load is I^2*R = 3.04+j4.5mW = (looking
> just at real power) 4.83dBm. So... without a match... I'd be leaving 13-4.83
> = 8.18dB of gain "on the floor"... ouch!
>
> ---Joel

OK, things aren't quite as bad as you've painted them, Joel. Given the
analysis you did for the second half, what you need to do for the first
half is to look at the power delivered to 119.5 ohms with 1 volt across
it. That's 1/119.5 watts, or about 8.4 milliwatts. That's about
+9.23dBm That's the maximum power you can get from that source. Into
50 ohms with no matching, the magnitude of the current is 10.42mA.
The resistor does NOT care what phase angle relative to your arbitrary
reference that is. So the power in that case is 5.43mW, or +7.35dBm.
You've left not 8dB, but just under 2dB, of gain "on the floor."
Things don't get really bad till the mismatch is quite a bit worse than
that. Note that your 2dB occurs with an SWR of about 4:1. At 2:1 SWR,
you only lose half a dB.

Cheers,
Tom

5045. Am transmitter - vlsi project

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-26 16:48:46 UTC
From: hananl <hlepek@gmail.com>
Message-ID: <1161881326.381418.198670@f16g2000cwb.googlegroups.com>
Source record: 9846

Hi,
I need to design an AM transmitter as a vlsi project (it needs to be
located on smart dust later on).
Does anyone have any good suggestions were to start from? I am familiar
with vlsi, but don't really know how to implement such a big idea, into
a vlsi simulation and circuit design.
Looking on trasmitter's schemes didn't help, 'cause that's all
resistors, amplifiers and capacitors. How do I translate it into vlsi
design?
Be very glad to any guidance...
Thanks.

5046. Re: Help Pse: DSI 5600a freq Counter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-26 17:54:23 UTC
From: Telstar Electronics <briangriffey@sbcglobal.net>
Message-ID: <1161885263.254873.3230@e3g2000cwe.googlegroups.com>
Source record: 9847

Mike W wrote:
> Hi Folks, I have a need for the circuit diagram of the crystal
> timebase oscillator for the DSI 5600A frequency counter. I have
> diagrams of the main board and the display board but, as Murphys law
> states, the fault is in the bit I don't have the diagrams for. Any
> help appreciated.
> Thanks, Mike G8NXD

Can we assume you've contacted the manufacturer?

www.telstar-electronics.com

5047. Re: Am transmitter - vlsi project

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-26 18:08:34 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1161886114.780096.19650@m7g2000cwm.googlegroups.com>
Source record: 9898

hananl wrote:
> Hi,
> I need to design an AM transmitter as a vlsi project (it needs to be
> located on smart dust later on).
> Does anyone have any good suggestions were to start from? I am familiar
> with vlsi, but don't really know how to implement such a big idea, into
> a vlsi simulation and circuit design.
> Looking on trasmitter's schemes didn't help, 'cause that's all
> resistors, amplifiers and capacitors. How do I translate it into vlsi
> design?
> Be very glad to any guidance...
> Thanks.

Why is this so difficult? Just consider what an AM signal is. Please note that Motorola and I'm sure others have made analog AM transmitter chips beginning a long time ago; they are not "VLSI" by any means. If you'd like to do it more digitally, have a look at the offerings from folk like Analog Devices. Look at their line of TxDACs. Inside some of those chips, you'll find everything you need to make an AM transmitter, given a stream of words representing the modulation you want to apply, and then some.

Is "VLSI" compatible with "smart dust"? Is the power dissipation of a universal all-digital solution compatible with "smart dust"?

You might do well to first list some of the key requirements: output power, size, carrier frequency, modulation bandwidth...

Cheers,
Tom

5048. Re: Help Pse: DSI 5600a freq Counter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-26 19:28:18 UTC
From: Al Parker <anchor@ec.rr.com>
Message-ID: <m%70h.13288$_u4.10923@tornado.southeast.rr.com>
Source record: 9899

Hi Mike,
Good luck. I just pulled out my manual, it's an original, and like
you say, there's no info at all on the 10mc timebase ossc. exc. that it's
"ovenized" and takes 9vdc & (I think) 5vdc inputs, and puts out 10mc. I
got mine used at a hamfest probably 15 yrs ago, it was built as a kit,
looking at the marks in the manual. It's worked for me since, after I did
something (can't remember what) in repair.
73,
Al, W8UT
"Mike W" <rrah@pencoys.org.uk> wrote in message
news:4540523e.147990815@news.madasafish.com...
> Hi Folks, I have a need for the circuit diagram of the crystal
> timebase oscillator for the DSI 5600A frequency counter. I have
> diagrams of the main board and the display board but, as Murphys law
> states, the fault is in the bit I don't have the diagrams for. Any
> help appreciated.
> Thanks, Mike G8NXD

5049. WTD: QUALCOMM SYNTHESIZER BOARD (750 - 1000 MHz)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-26 21:00:31 UTC
From: "Richard W. Solomon, W1KSZ" <w1ksz@earthlink.net>
Message-ID: <id82k212n2ovdt8u0kv9mobim3cj5uoik0@4ax.com>
Source record: 9900

Anyone have one or know where I can get one ?

Thanks, Dick, W1KSZ

5050. Anderson Powerpoles on Front Panel

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-26 23:03:46 UTC
From: Al Lorona <al_lorona@agilent.com>
Message-ID: <1161903099.814059@newsreg.cos.agilent.com>
Source record: 9901

Hi, Everybody,

I am interested to hear how you have solved the problem of panel-mounting Anderson Powerpole connectors.

I have already ruled out the Anderson 4-pole "Powerpole Pak" connectors. Too bulky. Don't need four. Just need two. I know about these. I am interested in other solutions.

Thanks very much.

Regards,

Al W6LX

5051. Re: Amplifier output matching

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-26 23:11:09 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12k2g4doc45jid1@corp.supernews.com>
Source record: 9902

Thanks for the correction, Tom. They really did give me a EE at one point in time, believe it or not, it's just been forever since I've had to do Real Work!
---Joel

5052. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 00:51:31 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1161910291.145244.72190@e3g2000cwe.googlegroups.com>
Source record: 9903
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

an_old_friend wrote:
> hot-ham-and-cheese@hotmail.com wrote:
> > Slow Code wrote:
> > > hot-ham-and-cheese@hotmail.com wrote in
> > > news:1161399876.591042.314920@k70g2000cwa.googlegroups.com:
>
> > > > Looks like Bruce and Dan are back...
> > >
> > > I hope 11 meters opens up
> >
> > I'm sure that you do.
>
> indeed it is likely the sole we see SC is that we are at the bottom of
> the sunspot cyle and cb just isn't fun those ilgeal op like SC

I'm sure that he listens to 75M on shortwave and wishes he could
participate.

5053. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 00:54:56 UTC
From: Mark@kb9rqz.aprs
Message-ID: <g5m2k2hfv0n4o0blv6j55tcupiejhjk95j@4ax.com>
Source record: 9904
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On 26 Oct 2006 17:51:31 -0700, hot-ham-and-cheese@hotmail.com wrote:

>
>an_old_friend wrote:
>> hot-ham-and-cheese@hotmail.com wrote:
>> > Slow Code wrote:
>> > > hot-ham-and-cheese@hotmail.com wrote in
>> > > news:1161399876.591042.314920@k70g2000cwa.googlegroups.com:
>>
>> > > > Looks like Bruce and Dan are back...
>> > >
>> > > I hope 11 meters opens up
>> >
>> > I'm sure that you do.
>>
>> indeed it is likely the sole we see SC is that we are at the bottom of
>> the sunspot cyle and cb just isn't fun those ilgeal op like SC
>
>I'm sure that he listens to 75M on shortwave and wishes he could
>participate.
yep or that he does and that is why he refuses to give out his call
althought frankly I become increasing persaded that his call is K4YZ
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5054. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 03:21:03 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <oYe0h.46828$vi3.35500@bignews3.bellsouth.net>
Source record: 9905
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

<Mark@kb9rqz.aprs> wrote in message
news:nbvvj2lkthm4n6q28i6oc97bq4150dvmba@4ax.com...
> On Wed, 25 Oct 2006 23:51:17 GMT, Slow Code <my.mail@no.spam> wrote:
>
>>Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
>>news:MNGdnVFG3tY7ArDYnZ2dnUVZ_qudnZ2d@rcn.net:
>>
>>> Slow Code wrote:
>>>
>>>>>>> Big Ten-Four on that Good Buddy.
>>>>> It sounds like you run a lot of 11m, not surprising considering how
>>>>> much you whine, and it's not alternator whine.
>>>>
>>>>
>>>> I only typed like because I knew you would understand that style of
>>>> communicating. So, after your license came in the mail what I
>>>> appliance did you decide to buy? MFJ? Alinco? Cobra?
>>>
>>>
>>> While you are being all holier than thou, what did you design and build
>>> for your main rig? I'm hoping to be impressed, but expecting to be
>>> disappointed.
>>>
>>> Did the code help you with the design?
>>>
>>> I took my Advanced class test down at 1919 M street 36 years ago. I had
>>> to sit at the desk and copy one solid minute out of five error free at
>>> 13WPM. I passed it on the first try. I almost failed the sending test,
>>> as I had never spent much time doing that. I had never made a code
>>> contact before my test, and I have only made a couple since.
>>>
>>> The thing about code contacts is they never seem to want to say anything
>>> beyond:
>>>
>>> WA3XXX DE W6XX RST 5NN WX FB 73 W6XX SK
>>
>>
>>Contacts like that still help maintain receiving skill. That's important
>>if you ever have to use CW to save a life.
> but it will never happen since there is no one to send the distress
> call
>>
>>SC

> http://kb9rqz.blogspot.com/

Oh, really????
How about THIS one? (QRZ) and a newstory from England?

Quote
Morse code used in rescue!

London, 20 October/GNN/ -- MARITIME AND COASTGUARD AGENCY News Release (Press Notice: 368_06) issued by The Government News Network on 20 October 2006

Yesterday afternoon just after 5.30pm Hayling Island Coastguard team member, Steve Mann, witnessed what he thought was a SOS message flashed by torchlight towards the Control Tower at Hayling Island Sailing Club. Steve responded to the SOS message by switching the lights on and off in the Control Tower.

The casualty was identified and was indeed using Morse code as he had recently transferred all of his safety equipment from his 28ft fishing vessel onto a newly acquired boat. He was running this vessel from Emsworth to Thorneham Marina, a distance of about 4 miles, when he ran aground and started to take on water. Steve Mann then alerted Solent Coastguard Marine Rescue Coordination Centre who requested the launch of the RNLI inshore and D-class lifeboats from Hayling island to the casualty who was transferred to Hayling Island Lifeboat Station, where he was checked over by a crewman who is also a paramedic. His vessel was towed back to Sparks Marina by the inshore lifeboat.

Steve Mann said afterwards, "I was absolutely amazed to see the flashed SOS message. This man was caught out on the one occasion he went to sea with absolutely no safety equipment. Even without radio communication going to sea without even a portable flare is extremely dangerous and could cost you your life."

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14419 Greenwood Ave N Seattle WA 98113 USA

>
> --
> Posted via a free Usenet account from http://www.teranews.com
>

5055. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 03:27:34 UTC
From: Mark@kb9rqz.aprs
Message-ID: <l3v2k29bvsb2i8if1pude179mmvrspa0e7@4ax.com>
Source record: 9906
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Thu, 26 Oct 2006 23:21:03 -0400, "Jerry" <joxendi@bellsouth.net>
wrote:

>
><Mark@kb9rqz.aprs> wrote in message
>news:nbvvj2lkthm4n6q28i6oc97bq4150dvmba@4ax.com...
>> On Wed, 25 Oct 2006 23:51:17 GMT, Slow Code <my.mail@no.spam> wrote:
>>
>>>Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
>>>news:MNGdnVFG3tY7ArDYnZ2dnUVZ_qudnZ2d@rcn.net:
>>>
>>>> Slow Code wrote:
>>>>
>>>>> Big Ten-Four on that Good Buddy.
>>>>> It sounds like you run a lot of 11m, not surprising considering how
>>>>> much you whine, and it's not alternator whine.
>>>>>
>>>>>
>>>>> I only typed like because I knew you would understand that style of
>>>>> communicating. So, after your license came in the mail what I
>>>>> appliance did you decide to buy? MFJ? Alinco? Cobra?
>>>>
>>>>
>>>> While you are being all holier than thou, what did you design and build
>>>> for your main rig? I'm hoping to be impressed, but expecting to be
>>>> disappointed.
>>>>
>>>> Did the code help you with the design?
>>>>
>>>> I took my Advanced class test down at 1919 M street 36 years ago. I had
>>>> to sit at the desk and copy one solid minute out of five error free at
>>>> 13WPM. I passed it on the first try. I almost failed the sending test,
>>>> as I had never spent much time doing that. I had never made a code
>>>> contact before my test, and I have only made a couple since.
>>>>
>>>> The thing about code contacts is they never seem to want to say anything
>>>> beyond:
>>>>
>>>> WA3XXX DE W6XX RST 5NN WX FB 73 W6XX SK
>>>
>>>
>>>Contacts like that still help maintain receiving skill. That's important
>>>if you ever have to use CW to save a life.

>> but it will never happen since there is no one to send the distress
>> call
>>>
>>>SC
>> http://kb9rqz.blogspot.com/
>
>
>Oh, really????
>How about THIS one? (QRZ) and a newstory from England?
nothing there about RADIO still no one radio equiped to send a Radio
message of distress for hams to hear
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5056. Re: Am transmitter - vlsi project

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 03:41:58 UTC
From: jawod <jawod@fuse.net>
Message-ID: <45418006.4080705@fuse.net>
Source record: 9907

K7ITM wrote:
> hananl wrote:
>
>>Hi,
>>I need to design an AM transmitter as a vlsi project (it needs to be
>>located on smart dust later on).
>>Does anyone have any good suggestions were to start from? I am familiar
>>with vlsi, but don't really know how to implement such a big idea, into
>>a vlsi simulation and circuit design.
>>Looking on trasmitter's schemes didn't help, 'cause that's all
>>resistors, amplifiers and capacitors. How do I translate it into vlsi
>>design?
>>Be very glad to any guidance...
>>Thanks.
>
>
> Why is this so difficult? Just consider what an AM signal is. Please
> note that Motorola and I'm sure others have made analog AM transmitter
> chips beginning a long time ago; they are not "VLSI" by any means. If
> you'd like to do it more digitally, have a look at the offerings from
> folk like Analog Devices. Look at their line of TxDACs. Inside some
> of those chips, you'll find everything you need to make an AM
> transmitter, given a stream of words representing the modulation you
> want to apply, and then some.
>
> Is "VLSI" compatible with "smart dust"? Is the power dissipation of a
> universal all-digital solution compatible with "smart dust"?
>
> You might do well to first list some of the key requirements: output
> power, size, carrier frequency, modulation bandwidth...
>
> Cheers,
> Tom
>
Apologies for asking...
Please explain vlsi and smart dust to a newbie.

Thanks for taking the time.

John
AB8O

5057. Re: Am transmitter - vlsi project

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 05:00:19 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <QOmdnUpzcPPBD9zYnZ2dnUVZ_rudnZ2d@web-ster.com>
Source record: 9908

hananl wrote:

> Hi,
> I need to design an AM transmitter as a vlsi project (it needs to be
> located on smart dust later on).
> Does anyone have any good suggestions were to start from? I am familiar
> with vlsi, but don't really know how to implement such a big idea, into
> a vlsi simulation and circuit design.
> Looking on trasmitter's schemes didn't help, 'cause that's all
> resistors, amplifiers and capacitors. How do I translate it into vlsi
> design?
> Be very glad to any guidance...
> Thanks.
>

Please look up "cross posting" on Wikipedia, and note what they have to say about "multiple posting".

Then if you feel the need to cross post (which would have been appropriate here), do so.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

5058. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 05:00:47 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <7N2dnb_RFcRsD9zYnZ2dnUVZ_qOdnZ2d@rcn.net>
Source record: 9909
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Jerry wrote:

>>> Contacts like that still help maintain receiving skill. That's important
>>> if you ever have to use CW to save a life.
>> but it will never happen since there is no one to send the distress
>> call
>>> SC
>> http://kb9rqz.blogspot.com/
>
>
> Oh, really????
> How about THIS one? (QRZ) and a newstory from England?
>
> Quote
> Morse code used in rescue!
>
> London, 20 October/GNN/ -- MARITIME AND COASTGUARD AGENCY News Release
> (Press Notice: 368_06) issued by The Government News Network on 20 October
> 2006
>
> Yesterday afternoon just after 5.30pm Hayling Island Coastguard team
> member, Steve Mann, witnessed what he thought was a SOS message flashed by
> torchlight towards the Control Tower at Hayling Island Sailing Club. Steve
> responded to the SOS message by switching the lights on and off in the
> Control Tower.

I would bet that the person flashing SOS knows little, or no morse code other
than SOS.

This, as an argument for hams using CW, is kind of like "mayday" being an
argument for hams being conversant in French.

-Chuck

5059. Re: Help Pse: DSI 5600a freq Counter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 08:02:56 UTC
From: rrah@pencoys.org.uk
Message-ID: <4541bcfe.240868039@news.madasafish.com>
Source record: 9910

On 26 Oct 2006 10:54:23 -0700, "Telstar Electronics"
<briangriffey@sbcglobal.net> wrote:

>Mike W wrote:
>> Hi Folks, I have a need for the circuit diagram of the crystal
>> timebase oscillator for the DSI 5600A frequency counter. I have
>> diagrams of the main board and the display board but, as Murphys law
>> states, the fault is in the bit I don't have the diagrams for. Any
>> help appreciated.
>> Thanks, Mike G8NXD
>
>Can we assume you've contacted the manufacturer?
>
>www.telstar-electronics.com
>
Not Yet. I did'nt know who was the owner of the design these days,
Thankyou

5060. Double AD99XX to make IQ local oscillator. Help needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 10:33:23 UTC
From: OH1GTF <spam99@suomi24.fi>
Message-ID: <1161945203.565532.248130@i42g2000cwa.googlegroups.com>
Source record: 9911

Hi fellows!

I'm building a software defined radio that is mostly based on the "Software Defined Radios For The Masses" -articles and are at the point of designing the DDS board. I have two units of AD9954 DDS chips and my idea was to use them parallel, other one with 90 degree phase shift to generate the quadrature signal. This is my first time with DDS, so understanding the control seem to be a little bit difficult for a first timer.

Two questions to start with:

1. I suppose for proper control I need four pins connected from the DDS to the computer (through buffers) I/O update, SDIO, SCLK and Reset, am I correct?

2. Do I have to drive two SDIO serial signals separately for each DDS chip from computer so, that I can define the phase shift for the other DDS (while other one has no phase shift, obivously) ? This came to my mind since the chips don't have any addresses to indentify them.

Thanks a lot!!!

73 de Janne, OH1GTF

5061. Re: Amplifier output matching

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 10:53:57 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1161946436.970815.32250@f16g2000cwb.googlegroups.com>
Source record: 9912

Joel Kolstad wrote:
> On a reciever, I'm using a MMIC LNA at VHF

Andy writes:
Joel, all of the advice I've read on this post is good advice, but
I didn't see any reference to the Linville or Stern stability factors.

Devices, ESPECIALLY at VHF, which are matched into source
and load often oscillate. Hell, they USUALLY oscillate.
Hence , S12 is a major factor in these designs....

Most of the time, devices in this range must be mismatched
to some degree to provide stability.

Motorola used to have an excellent App Note on amplifier
matching, and the degree of mis-matching to ensure stability
It was called " Effects of Y parameters" or " Calculating Stability
in... " or some such, and the number was in the 100s or 200s.

If you know the Sparamters (or Y parameters, for the app note)
you can easily do a Linville on the numbers to see if the LNA
is unconditionally stable for all source and loads.....

It probly won't be.....

Then, you can do a Stern to see what degree of mismatching is
needed to just reach the stability threshold.... If you program
the equations into a computer (I use BASIC but an EXCEL
spreadsheet will work well also) you can quickly decide what you
want to do. Note that the amplifier configuration is the source
of the parameters and not just the device. For instance, common
base is often unconditionally stable while common emitter more
often than not is never unconditionally stable. The S or Y
parameters for the amp in these configurations show it
when a Linville is applied.

It may be that optimum noise figure can't be reached with
unconditional stability..... so you just do the best you can.....
Personally, I've always found the best noise figure while
diddling the circuit, rather than calculating it..... but that's
just my own experience...

Good luck on your design. And don't get so hung up on this
"maximum power transfer Thevin" stuff, since any amplifier that
is Thevenin matched on it's output could only achieve 50% efficiency,
and most amplifiers do a lot better than that..... for the simple
reason that max power transfer isn't the main goal of an amplifier.....

Andy W4OAH in Eureka, Texas

5062. Re: Anderson Powerpoles on Front Panel

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 10:54:56 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <eOSdnSzDT5cdeNzYnZ2dnUVZ_rudnZ2d@bright.net>
Source record: 9913

Can you cut a rectangular hole in the panel, slip the Powerpole
connector through (far enough so you can connect its mating plug) and
use a glob of epoxy on the back side to hold the plug to the backside of
the panel?

Scott
N0EDV

Al Lorona wrote:
> Hi, Everybody,
>
> I am interested to hear how you have solved the problem of panel-mounting
> Anderson Powerpole connectors.
>
> I have already ruled out the Anderson 4-pole "Powerpole Pak" connectors. Too
> bulky. Don't need four. Just need two. I know about these. I am interested
> in other solutions.
>
> Thanks very much.
>
> Regards,
>
> Al W6LX
>
>
>
>
>

5063. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 12:03:13 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <5Am0h.4067$ya1.1370@news02.roc.ny>
Source record: 9914
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Chuck Harris wrote:
> Jerry wrote:
>
>>>> Contacts like that still help maintain receiving skill. That's
>>>> important
>>>> if you ever have to use CW to save a life.
>>>
>>> but it will never happen since there is no one to send the distress
>>> call
>>>
>>>> SC
>>>
>>> http://kb9rqz.blogspot.com/
>>
>>
>>
>> Oh, really????
>> How about THIS one? (QRZ) and a newstory from England?
>>
>> Quote
>> Morse code used in rescue!
>>
>> London, 20 October/GNN/ -- MARITIME AND COASTGUARD AGENCY News
>> Release (Press Notice: 368_06) issued by The Government News Network
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>> Yesterday afternoon just after 5.30pm Hayling Island Coastguard
>> team member, Steve Mann, witnessed what he thought was a SOS message
>> flashed by torchlight towards the Control Tower at Hayling Island
>> Sailing Club. Steve responded to the SOS message by switching the
>> lights on and off in the Control Tower.
>
>
> I would bet that the person flashing SOS knows little, or no morse code
> other
> than SOS.
>
> This, as an argument for hams using CW, is kind of like "mayday" being an
> argument for hams being conversant in French.
>
> -Chuck

Sacre bleu!

Avec des frites!

Le Grande fromage!

Over.

5064. QSK switching for HF Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 13:07:41 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <xwn0h.3953$GJ.1983@trnddc07>
Source record: 9915

Anyone have any sites or information on either PIN diode or reed relay fast switching for my 150W SS homebrew HF amp?
Found a few through Google but thought some of you might have already done this.

Tnx,
Dale W4OP

5065. Re: Amplifier output matching

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 16:32:01 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12k4d42693lhk35@corp.supernews.com>
Source record: 9916

Lots of good input there, Andy; I appaeciate it.

The part in question claims it is stable working into and from 50 ohms; I do put too much emphasis on matching to that somewhat arbitrary value at times.

---Joel

5066. Re: Am transmitter - vlsi project

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 16:37:30 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12k4deb7s88j829@corp.supernews.com>
Source record: 9917

"jawod" <jawod@fuse.net> wrote in message news:45418006.4080705@fuse.net...
> Please explain vlsi and smart dust to a newbie.

Think "nanites" from Star Trek: The Borg Generation.

See: http://en.wikipedia.org/wiki/Smart_dust

It's a popular research topic these days, but as far as I'm aware all the commercial applications are still nowhere near the "grain of rice" size that the proponents would like to achieve -- power sources become a real problem at that size, even if you only do need to communicate with the next node that's only, say, 10' away.

Oh... VLSI is "very large scale integration." It just indicates an IC that has "[mumble]-many million transistor," where the actual number is subjective. A 32 bit CPU is VLSI, a 74LS00 ain't.

---Joel

5067. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 16:41:39 UTC
From: Mark@kb9rqz.aprs
Message-ID: <ukd4k2pe8lj8uv9tmu16moib3293fm9igg@4ax.com>
Source record: 9918
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Fri, 27 Oct 2006 01:00:47 -0400, Chuck Harris
<cf-NO-SPAM-harris@erols.com> wrote:

>Jerry wrote:
>
>>>> Contacts like that still help maintain receiving skill. That's important
>>>> if you ever have to use CW to save a life.
>>> but it will never happen since there is no one to send the distress
>>> call
>>>> SC
>>> http://kb9rqz.blogspot.com/
>>
>>
>> Oh, really????
>> How about THIS one? (QRZ) and a newstory from England?
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>> Quote
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>> responded to the SOS message by switching the lights on and off in the
>> Control Tower.
>
>I would bet that the person flashing SOS knows little, or no morse code other
>than SOS.

indeeed in fact do we know he sent Sos as opposed to OSO

BTW If I heard ether on the Air I could respond
>
>This, as an argument for hams using CW, is kind of like "mayday" being an
>argument for hams being conversant in French.
>
>-Chuck
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5068. Re: Amplifier output matching

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 16:53:46 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1161968026.184103.133300@e3g2000cwe.googlegroups.com>
Source record: 9919

AndyS wrote:
> Joel Kolstad wrote:
> > On a reciever, I'm using a MMIC LNA at VHF
>
> Andy writes:
> Joel, all of the advice I've read on this post is good advice, but
> I didn't see any reference to the Linville or Stern stability factors.
>
> Devices, ESPECIALLY at VHF, which are matched into source
> and load often oscillate. Hell, they USUALLY oscillate.
> Hence , S12 is a major factor in these designs....
>
> Most of the time, devices in this range must be mismatched
> to some degree to provide stability.
>
> Motorola used to have an excellent App Note on amplifier
> matching, and the degree of mis-matching to ensure stability
> It was called " Effects of Y parameters" or " Calculating Stability
> in... " or some such, and the number was in the 100s or 200s.
>
> If you know the Sparamters (or Y parameters, for the app note)
> you can easily do a Linville on the numbers to see if the LNA
> is unconditionally stable for all source and loads.....
>
> It probly won't be.....
>
> Then, you can do a Stern to see what degree of mismatching is
> needed to just reach the stability threshold.... If you program
> the equations into a computer (I use BASIC but an EXCEL
> spreadsheet will work well also) you can quickly decide what you
> want to do. Note that the amplifier configuration is the source
> of the parameters and not just the device. For instance, common
> base is often unconditionally stable while common emitter more
> often than not is never unconditionally stable. The S or Y
> parameters for the amp in these configurations show it
> when a Linville is applied.
>
> It may be that optimum noise figure can't be reached with
> unconditional stability..... so you just do the best you can.....
> Personally, I've always found the best noise figure while
> diddling the circuit, rather than calculating it..... but that's
> just my own experience...
>
>

> Good luck on your design. And don't get so hung up on this
> "maximum power transfer Thevin" stuff, since any amplifier that
> is Thevenin matched on it's output could only achieve 50% efficiency,
> and most amplifiers do a lot better than that..... for the simple
> reason that max power transfer isn't the main goal of an amplifier.....
>
> Andy W4OAH in Eureka, Texas

Note that the free RFSim99 can display stability circles on the Smith chart display of S11 and S22. They change as you move the cursor frequency, and redraw quickly so it's easy to check over a frequency range.

I don't know why the myth persists that you can achieve no more than 50% efficiency if a load is matched to the source impedance. A Thevenin-equivalent source does not necessarily look anything like the Thevenin circuit inside; it simply behaves WITH RESPECT TO THE LOAD in the same way (over the range of loads and outputs for which it behaves linearly, since the Thevenin model is a linear one). But that's all a red herring anyway: in an LNA, "efficiency" is probably one of the LAST things you should worry about. You should worry about noise. You should worry about stability. And you should worry about distortion. You should even worry about where you'll put it in the system. All those would normally come a long ways ahead of concerns about efficiency.

Cheers,
Tom

5069. Re: Amplifier output matching

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 16:58:40 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1161968320.516579.35900@k70g2000cwa.googlegroups.com>
Source record: 9920

Joel Kolstad wrote:
> Lots of good input there, Andy; I appaeciate it.
>
> The part in question claims it is stable working into and from 50 ohms; I do
> put too much emphasis on matching to that somewhat arbitrary value at times.
>
> ---Joel

Put its S-parameters into a two-port instantiation in RFSim99, Joel,
and you can play with matching and stability to your heart's content.
It won't help you directly with noise, but if the data sheet tells you
about how to match the input for lowest noise, that would be at least a
good starting point for the input network. I think you posted that
it's an MMIC; they often don't provide as good a set of info as do
"bare" transistor data sheets. NEC, for example, seem to do a good job
providing data about S-parameters versus frequency and operating
conditions, and about noise figure versus input matching as well.

Cheers,
Tom

5070. Re: Double AD99XX to make IQ local oscillator. Help needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 19:52:23 UTC
From: john jardine <john@jjdesigns.fsnet.co.uk>
Message-ID: <45425684$0$12183$88260bb3@free.teranews.com>
Source record: 9921

"OH1GTF" <spam99@suomi24.fi> wrote in message
news:1161945203.565532.248130@i42g2000cwa.googlegroups.com...
> Hi fellows!
>
> I'm building a software defined radio that is mostly based on the
> "Software Defined Radios For The Masses" -articles and are at the point
> of designing the DDS board. I have two units of AD9954 DDS chips and
> my idea was to use them parallel, other one with 90 degree phase shift
> to generate the quadrature signal. This is my first time with DDS, so
> understanding the control seem to be a little bit difficult for a first
> timer.
>
> Two questions to start with:
>
> 1. I suppose for proper control I need four pins connected from the DDS
> to the computer (through buffers) I/O update, SDIO, SCLK and Reset, am
> I correct?
>
> 2. Do I have to drive two SDIO serial signals separately for each DDS
> chip from computer so, that I can define the phase shift for the other
> DDS (while other one has no phase shift, obivously) ? This came to my
> mind since the chips don't have any addresses to indentify them.
>
> Thanks a lot!!!
>
> 73 de Janne, OH1GTF
>
Don't know that particular DDS but did it with two AD9832 used in a vector
impedance arrangement. The master clock and serial clock/data lines were
wired to both chips. Common serial data was sent to both chips but made
'valid' only for the wanted DDS by use of individual "Fsync"(?) lines.
Worked no problem. Chips never got out of step. Phase could be varied at
will.
john

--
Posted via a free Usenet account from http://www.teranews.com

5071. stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 20:29:53 UTC
From: Radiosrfun <radiosrfun@radiosrfun.com>
Message-ID: <45426b87$0$13830$ecde5a14@news.coretel.net>
Source record: 9922

Hi,

I am wanting to clean out some "junk" boxes of many many types of assorted parts - new, used, salvage, etc.
They're from/for Radio, TV, computer, printer, inventory buyouts, etc.

If you have any parts in mind, PLEASE let me know if in need of any. I'm planning to do some grab bags - relatively CHEAP. The only cost "I" have no control over is "shipping". Though I DO try to ship as cheap as I can and the shipper is usually up to the buyer. Insurance is required - lest you take responsibility for lost, stolen, damaged shipments.

Payments via Postal MO, Pay - Pal, Certified Bank Funds. Personal checks - allow 2 weeks to clear.

Any parts requests?

Some other things among my pile are miscellaneous gauges and colors of wire, AC line cords, hardware, etc.
Not to mention a ton of parts bought from a "closing" Radio Shack. They're going pretty cheap too - certainly cheaper than retail. You can almost get two for the price of one. I have some PC Board material as well. Most is Single sided. SPEAK UP with needs.

Thanks

Lou!

www.clfurent.com

5072. Re: APOLOGIES AND CORRECTION - FS - stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 20:32:51 UTC
From: Radiosrfun <radiosrfun@radiosrfun.com>
Message-ID: <45426c3a$0$13825$ecde5a14@news.coretel.net>
Source record: 9923

my apologies, header should have been FS - stuff.

"Radiosrfun" <radiosrfun@radiosrfun.com> wrote in message
news:45426b87$0$13830$ecde5a14@news.coretel.net...
> Hi,
>
> I am wanting to clean out some "junk" boxes of many many types of assorted
> parts - new, used, salvage, etc.
> They're from/for Radio, TV, computer, printer, inventory buyouts, etc.
>
> If you have any parts in mind, PLEASE let me know if in need of any. I'm
> planning to do some grab bags - relatively CHEAP. The only cost "I" have
> no control over is "shipping". Though I DO try to ship as cheap as I can
> and the shipper is usually up to the buyer. Insurance is required - lest
> you take responsibility for lost, stolen, damaged shipments.
>
> Payments via Postal MO, Pay - Pal, Certified Bank Funds. Personal checks -
> allow 2 weeks to clear.
>
> Any parts requests?
>
> Some other things among my pile are miscellaneous gauges and colors of
> wire, AC line cords, hardware, etc.
> Not to mention a ton of parts bought from a "closing" Radio Shack. They're
> going pretty cheap too - certainly cheaper than retail. You can almost get
> two for the price of one. I have some PC Board material as well. Most is
> Single sided. SPEAK UP with needs.
>
> Thanks
>
> Lou!
>
> www.clfurent.com
>

5073. More on matching -- Xtal filters this time

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-27 20:39:18 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12k4rjn1n65i834@corp.supernews.com>
Source record: 9924

For an IF filter, I'm planning on using a an off-the-DigiKey-shelf crystal filter. I need (well, want) to match the filter to 50 ohms.

Could someone verify I'm interpreting the data sheets & terminology correctly?

Say I'm getting an ECS-10.7-7.5A filter, data sheet here: http://www.ecsxtal.com/pdf/mono.pdf ... I'm reading the "termination impedance" as 1800 ohms in parallel with 5pF or, at 10.7MHz, 1800 || -j2975 = 1318 - j797.2 ohms. From reading the application notes on ECS's site, the idea here is that -- for the filter to work as designed -- it wants to "see" 1318 - j797.2 ohms on both the input and output, correct?

I'm also thinking that just because the filter wants to see a certain impedance doesn't necessarily imply that the filter's own internal impedance is the complex conjugate.

Thanks,
---Joel

5074. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-28 00:30:45 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <Vwx0h.347$LI4.234@newsread2.news.pas.earthlink.net>
Source record: 9925
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

hot-ham-and-cheese@hotmail.com wrote in
news:1161910291.145244.72190@e3g2000cwe.googlegroups.com:

>
> an_old_friend wrote:
>> hot-ham-and-cheese@hotmail.com wrote:
>> > Slow Code wrote:
>> > > hot-ham-and-cheese@hotmail.com wrote in
>> > > news:1161399876.591042.314920@k70g2000cwa.googlegroups.com:
>>
>> > > > Looks like Bruce and Dan are back...
>> > >
>> > > I hope 11 meters opens up
>> >
>> > I'm sure that you do.
>>
>> indeed it is likely the sole we see SC is that we are at the bottom of
>> the sunspot cyle and cb just isn't fun those ilgeal op like SC
>
> I'm sure that he listens to 75M on shortwave and wishes he could
> participate.

I don't do much 80 meters, not even listen much.

I enjoy satellite. Amsat life member.

SC

5075. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-28 00:30:46 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <Wwx0h.348$LI4.52@newsread2.news.pas.earthlink.net>
Source record: 9926
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
news:7N2dnb_RFcRsD9zYnZ2dnUVZ_qOdnZ2d@rcn.net:

> Jerry wrote:
>
>>>> Contacts like that still help maintain receiving skill. That's
>>>> important if you ever have to use CW to save a life.
>>> but it will never happen since there is no one to send the distress
>>> call
>>>> SC
>>> http://kb9rqz.blogspot.com/
>>
>>
>> Oh, really????
>> How about THIS one? (QRZ) and a newstory from England?
>>
>> Quote
>> Morse code used in rescue!
>>
>> London, 20 October/GNN/ -- MARITIME AND COASTGUARD AGENCY News
>> Release
>> (Press Notice: 368_06) issued by The Government News Network on 20
>> October 2006
>>
>> Yesterday afternoon just after 5.30pm Hayling Island Coastguard
>> team
>> member, Steve Mann, witnessed what he thought was a SOS message flashed
>> by torchlight towards the Control Tower at Hayling Island Sailing Club.
>> Steve responded to the SOS message by switching the lights on and off
>> in the Control Tower.
>
> I would bet that the person flashing SOS knows little, or no morse code
> other than SOS.
>
> This, as an argument for hams using CW, is kind of like "mayday" being
> an argument for hams being conversant in French.
>
> -Chuck

Spoken like a true "I-Hate-CW" Whiner. Why you even worried about it
anyway, you don't even have a welfare license.

SC

5076. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-28 01:45:56 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <18SdncXAx4hSK9_YnZ2dnUVZ_tydnZ2d@rcn.net>
Source record: 9927
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:
> Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in

>> I would bet that the person flashing SOS knows little, or no morse code
>> other than SOS.
>>
>> This, as an argument for hams using CW, is kind of like "mayday" being
>> an argument for hams being conversant in French.
>>
>> -Chuck
>
>
> Spoken like a true "I-Hate-CW" Whiner. Why you even worried about it
> anyway, you don't even have a welfare license.

Actually, I have held an advanced class ticket for more than 30 years.

I took my test at 1919 M Street, NW? Washington, DC. Under the watchful
eye of an FCC examiner. My code test came off of an old signal corps
paper tape driven code practice machine. The key they gave me to use was
from the same set.

My receiving speed was somewhere around 40wpm, and my sending sucks rope.
I never could master an Iambic keyer.

-Chuck

5077. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-28 02:55:22 UTC
From: Mark@kb9rqz.aprs
Message-ID: <ckh5k2t5ha18hja1s0jobp9ue03un6a2i7@4ax.com>
Source record: 9928
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Sat, 28 Oct 2006 00:30:45 GMT, Slow Code <my.mail@no.spam> wrote:

>hot-ham-and-cheese@hotmail.com wrote in
>news:1161910291.145244.72190@e3g2000cwe.googlegroups.com:
>
>>
>> an_old_friend wrote:
>>> hot-ham-and-cheese@hotmail.com wrote:
>>> > Slow Code wrote:
>>> > > hot-ham-and-cheese@hotmail.com wrote in
>>> > > news:1161399876.591042.314920@k70g2000cwa.googlegroups.com:
>>>
>>> > > > Looks like Bruce and Dan are back...
>>> > >
>>> > > I hope 11 meters opens up
>>> >
>>> > I'm sure that you do.
>>>
>>> indeed it is likely the sole we see SC is that we are at the bottom of
>>> the sunspot cyle and cb just isn't fun those ilgeal op like SC
>>
>> I'm sure that he listens to 75M on shortwave and wishes he could
>> participate.
>
>
>I don't do much 80 meters, not even listen much.
>
>I enjoy satellite. Amsat life member.
prove it
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5078. Re: More on matching -- Xtal filters this time

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-28 10:00:03 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1162029602.978485.26040@h48g2000cwc.googlegroups.com>
Source record: 9929

Joel Kolstad wrote:
> For an IF filter, I'm planning on using a an off-the-DigiKey-shelf crystal
> filter. I need (well, want) to match the filter to 50 ohms.
>
> Could someone verify I'm interpreting the data sheets & terminology correctly?
>
> Say I'm getting an ECS-10.7-7.5A filter, data sheet here:
> http://www.ecsxtal.com/pdf/mono.pdf ... I'm reading the "termination
> impedance" as 1800 ohms in parallel with 5pF or, at 10.7MHz, 1800 || -j2975 =
> 1318 - j797.2 ohms. From reading the application notes on ECS's site, the
> idea here is that -- for the filter to work as designed -- it wants to "see"
> 1318 - j797.2 ohms on both the input and output, correct?
>
> I'm also thinking that just because the filter wants to see a certain
> impedance doesn't necessarily imply that the filter's own internal impedance
> is the complex conjugate.
>
> Thanks,
> ---Joel

Andy writes:
Joel, whenever I put in a Xtal filter, I make a parallel tank on the
input
and output so I can tune the reactance of the tank to minimize the
ripple in the filter. This is usually part of the source amp, anyway,
and having a high Q tank on the output is only a couple more parts.

You are correct in that the filter "wants" an 1800 ohm source and
load resistance. This can be achieved by impedance matching, or
by termination resistors (whilch will lose a lot of your power). It
is
good for the entire termination to be the input of the next device,
transformed up or down.

The same can be done with the source impedance. However,
the source may not like the Xtal filter as a load, since, even tho you
may have the transformation exactly right, the load presented to
the source is very complex, and may be very high (or low) as soon
as you leave the xtal filter bandpass frequency..... Consequently ,
I have always used a load resistor in the output of the source
amplifier, either as part of the coil Q, or as a fixed value resistor
...... just to
keep the load from going very very high outside of the bandpass
and making the source amplifier go unstable......Sure, I lose a bit
of gain, but a stable amp is more important than an extra few db

of gain....

Finally, the last adjustment is made by sweeping the bandpass
while diddling the input and output tuning until the flattest response
is noted, or at least the response the manufacturer specifies......
I peak the response at the center of the banpass first, then
sweep back and forth to get a flatter response. Usually the
peaking at the center is very close, tho..and if you have no
way to sweep, it will probly work well for voice type signals...
With data signals, well, it just depends.....

It may be useful to build a little jig to test the filter in, using
fixed resistors for source and load, and parallel tanks on both
sides, just to see if the filter does what you think it does. There is

a lot of loss here, but you would only be looking for the response.
If you don't have a sweeper, maybe you can just rock the
generator back and forth with one hand while diddling the
tanks with the other......

Good luck..

Andy W4OAH

5079. Re: More on matching -- Xtal filters this time

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-28 12:36:38 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <p9l0h.1038601$084.340580@attbi_s22>
Source record: 9930

"AndyS" <andysharpe@juno.com> wrote in message
news:1162029602.978485.26040@h48g2000cwc.googlegroups.com...
>
> Joel Kolstad wrote:
>> For an IF filter, I'm planning on using a an off-the-DigiKey-shelf
>> crystal
>> filter. I need (well, want) to match the filter to 50 ohms.
>>
>> Could someone verify I'm interpreting the data sheets & terminology
>> correctly?
>>
>
> The same can be done with the source impedance. However,
> the source may not like the Xtal filter as a load, since, even tho you
> may have the transformation exactly right, the load presented to
> the source is very complex, and may be very high (or low) as soon
> as you leave the xtal filter bandpass frequency..... Consequently ,
> I have always used a load resistor in the output of the source
> amplifier, either as part of the coil Q, or as a fixed value resistor
> ..... just to
> keep the load from going very very high outside of the bandpass
> and making the source amplifier go unstable.....Sure, I lose a bit
> of gain, but a stable amp is more important than an extra few db
> of gain....
>

A large increase in a receiver amplifier load impedance just outside the passband of a crystal filter (or other types of filter) can cause adjacent channel susceptibility. The network between the amplifier and the filter should be designed to prevent this occurrence. There are networks that can reverse this effect, so the impedance drops instead of increasing. Simulations and impedance measurements can verify.

Bill W0IYH

5080. Re: More on matching -- Xtal filters this time

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-28 13:46:51 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1162043211.584437.199470@b28g2000cwb.googlegroups.com>
Source record: 9931

William E. Sabin wrote:
> "AndyS" <andysharpe@>
> A large increase in a receiver amplifier load impedance just outside the
> passband of a crystal filter (or other types of filter) can cause adjacent
> channel susceptibility. The network between the amplifier and the filter
> should be designed to prevent this occurrence. There are networks that can
> reverse this effect, so the impedance drops instead of increasing.
> Simulations and impedance measurements can verify.
>
> Bill W0IYH

Andy comments:

A good point. But I am not aware of any passive networks than
can roll the impedance off (or bring it up) fast enough to handle
the adjacent channel problem. Adjacent channels are usually
(in my experience) only a few Khz away while the xtal filter is
usually many Mhz, and a passive network just doesn't change
the impedance that quickly. For those problems, I have always
had to go to a passive resistor source, such as a collector resistor,
or use a coil with a Q low enough to provide the same effect.

If I am incorrect in this, could you please elaborate on what
passive matching circuit you are reccommending. ?

Andy W4OAH

5081. Response to SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-28 15:21:16 UTC
From: Roadrunner NNTP <noone@nowhere.com>
Message-ID: <MzK0h.33021$ta3.31232@tornado.texas.rr.com>
Source record: 9932
Cross-posted to: rec.radio.amateur.equipment,rec.radio.shortwave,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

I've had enough of SC in newsgroups!

Please don't answer his flaming posts. I would like for my 14 amateur radio operator girl child (who is working on her code) to be able to use newsgroups without this abuse. We should not have to put up with it either.

Copy and forward the following to abuse@earthlink.net. They should be able to identify him from the headers and their logs.

Dear Earthlink Abuse . . .

Please get this clown off of usenet. There are several hobby groups where he posts regularly his inflammatory material, often with profanities. Our kids who are in the hobby certainly don't need to be exposed to this stuff.

Thanks.

Long time internet user and parent.

Path: be1.texas.rr.com!cyclone.austin.rr.com!news.rr.com!border2.nntp.dca.giganews.com!border1.nntp.dca.giganews.com!nntp.giganews.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread2.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail

Newsgroups: rec.radio.amateur.antenna,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

Subject: Stamp collecting doesn't require taking a code test.

From: Slow Code <my.mail@no.spam>

Organization: None

User-Agent: Xnews/5.04.25

Lines: 3

Message-ID: <Xwx0h.349$LI4.140@newsread2.news.pas.earthlink.net>

Date: Sat, 28 Oct 2006 00:30:47 GMT

NNTP-Posting-Host: 4.227.154.108

X-Complaints-To: abuse@earthlink.net

X-Trace: newsread2.news.pas.earthlink.net 1161995447 4.227.154.108 (Fri, 27 Oct 2006 17:30:47 PDT)

NNTP-Posting-Date: Fri, 27 Oct 2006 17:30:47 PDT

Xref: be1.texas.rr.com rec.radio.amateur.antenna:257939
rec.radio.amateur.policy:343886 rec.radio.scanner:266398
rec.radio.swap:457098

Maybe you people could try stamp collecting.

SC

Path:
be1.texas.rr.com!cyclone.austin.rr.com!news.rr.com!border2.nntp.dca.giganews.com!nntp.giga
news.com!nntp1.phx1.gblx.net!nntp.gblx.net!nntp.gblx.net!newsfeed.news2me.com!newshub.sdsu
.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread2.news.pas
.earthlink.net.POSTED!3dd4ce4a!not-for-mail

Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.policy,rec.radio.swap

Subject: VE's should be allowed to use a cattle prod to make people take a
code test.

From: Slow Code <my.mail@no.spam>

Organization: None

User-Agent: Xnews/5.04.25

Lines: 5

Message-ID: <D6c0h.19671$UG4.17151@newsread2.news.pas.earthlink.net>

Date: Fri, 27 Oct 2006 00:09:07 GMT

NNTP-Posting-Host: 4.254.227.60

X-Complaints-To: abuse@earthlink.net

X-Trace: newsread2.news.pas.earthlink.net 1161907747 4.254.227.60 (Thu, 26
Oct 2006 17:09:07 PDT)

NNTP-Posting-Date: Thu, 26 Oct 2006 17:09:07 PDT

Xref: be1.texas.rr.com rec.radio.amateur.antenna:257845
rec.radio.amateur.policy:343742 rec.radio.swap:457040

And if they fail the code test they get zapped again.

Bringing back 'spark' will be good for ham radio.

Path:
be1.texas.rr.com!news-wrt-01.tampabay.rr.com!news-wrt-01.southeast.rr.com!news-feed-01.sou
theast.rr.com!news.rr.com!cycny01.gnilink.net!peer01.west.cox.net!cox.net!newscon02.news.p
rodigy.net!prodigy.net!border1.nntp.dca.giganews.com!nntp.giganews.com!postnews.google.com
!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.ea
rthlink.net!newsread2.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail

Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.swap

Subject: Re: I don't remember horse and buggy, outhouses, or churning butter

From: Slow Code <my.mail@no.spam>

References: <gUx%g.12447$Lv3.2784@newsread1.news.pas.earthlink.net>
<1161746253.858141.126300@m73g2000cwd.googlegroups.com>
<5e980$453f9e94$45011502$31488@KNOLOGY.NET>

Organization: None

User-Agent: Xnews/5.04.25

Lines: 23

Message-ID: <OLS%g.19218$UG4.1065@newsread2.news.pas.earthlink.net>

Date: Wed, 25 Oct 2006 23:51:10 GMT

NNTP-Posting-Host: 4.227.154.38

X-Complaints-To: abuse@earthlink.net

X-Trace: newsread2.news.pas.earthlink.net 1161820270 4.227.154.38 (Wed, 25
Oct 2006 16:51:10 PDT)

NNTP-Posting-Date: Wed, 25 Oct 2006 16:51:10 PDT

Xref: be1.texas.rr.com rec.radio.amateur.policy:343846
rec.radio.amateur.antenna:257917 rec.radio.swap:457083

lazy ass Mike "amdx" <amdx@knology.net> wrote in

news:5e980$453f9e94$45011502$31488@KNOLOGY.NET:

>

>> Slow Code wrote:

>

>>> New hams just don't appreciate things anymore.

>

> I don't remember,

> cutting wood for winter, foraging the woods for berries,

> turning the crank on a model T, building a spear to kill a deer,

> washing my clothes in the river, making candles to light the night.

> And I do appreciate that I don't have to do these things anymore.

> Mike

Right, and why homebrew anymore when you can call HRO or AES and buy your

appliance off the shelf.

73,

Back to my CW and projects.

SC

SC

Path:
be1.texas.rr.com!news-wrt-01.tampabay.rr.com!news-wrt-01.southeast.rr.com!news-feed-01.sou
theast.rr.com!news.rr.com!cycny01.gnilink.net!peer01.west.cox.net!cox.net!newscon02.news.p
rodigy.net!prodigy.net!border1.nntp.dca.giganews.com!nntp.giganews.com!postnews.google.com
!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.ea
rthlink.net!newsread2.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail

Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.swap

Subject: Re: I don't remember horse and buggy, outhouses, or churning butter

From: Slow Code <my.mail@no.spam>

References: <gUx%g.12447$Lv3.2784@newsread1.news.pas.earthlink.net>
<1161746253.858141.126300@m73g2000cwd.googlegroups.com>
<5e980$453f9e94$45011502$31488@KNOLOGY.NET>

Organization: None

User-Agent: Xnews/5.04.25

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rec.radio.amateur.antenna:257917 rec.radio.swap:457083

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news:5e980$453f9e94$45011502$31488@KNOLOGY.NET:

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>

>>> New hams just don't appreciate things anymore.

>

> I don't remember,

> cutting wood for winter, foraging the woods for berries,

> turning the crank on a model T, building a spear to kill a deer,

> washing my clothes in the river, making candles to light the night.

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> Mike

Right, and why homebrew anymore when you can call HRO or AES and buy your

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73,

Back to my CW and projects.

SC

Path:
be1.texas.rr.com!cyclone.austin.rr.com!news.rr.com!border2.nntp.dca.giganews.com!nntp.giga
news.com!news.maxwell.syr.edu!elnk-pas-nf1!newsfeed.earthlink.net!stamper.news.pas.earthli
nk.net!newsread2.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail

Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.policy,rec.radio.swap,rec.radio.shortwave

Subject: Re: Is the code requirement really keeping good people out of ham
radio?

From: Slow Code <my.mail@no.spam>

References: <1158527339.352992.28170@i42g2000cwa.googlegroups.com>
<bhGPg.9337$v%4.106@newsread1.news.pas.earthlink.net>
<c3iug29tid5kod1f1olqktlvn5kkicgg7j@4ax.com> <450FE04F.7060501@fuse.net>
<ia79h21f1uhjc1pd68ud3j86nbmlnemdvi@4ax.com>
<b3_Rg.1384$Y24.335@newsread4.news.pas.earthlink.net>
<ltvgh21b35rlg7smc8o5n2509m34afg1pk@4ax.com>
<HJednVoOhasYvYTYnZ2dnUVZ_uudnZ2d@comcast.com>
<1161835676.853678.129230@i3g2000cwc.googlegroups.com>
<n1g0k2h8kugbpj65vjk8fc96uk5hsl70k8@4ax.com>

Organization: None

User-Agent: Xnews/5.04.25

Lines: 14

Message-ID: <76c0h.19656$UG4.15739@newsread2.news.pas.earthlink.net>

Date: Fri, 27 Oct 2006 00:08:35 GMT

NNTP-Posting-Host: 4.254.227.60

X-Complaints-To: abuse@earthlink.net

X-Trace: newsread2.news.pas.earthlink.net 1161907715 4.254.227.60 (Thu, 26 Oct 2006 17:08:35 PDT)

NNTP-Posting-Date: Thu, 26 Oct 2006 17:08:35 PDT

Xref: be1.texas.rr.com rec.radio.amateur.antenna:257842 rec.radio.amateur.policy:343730 rec.radio.swap:457038 rec.radio.shortwave:537344

Opus- <jbuchy@shaw.ca> wrote in

news:n1g0k2h8kugbpj65vjk8fc96uk5hsl70k8@4ax.com:

> Don't you have some offs to fuck?

>

Why do no-coders always break down in the middle of an argument and start

spewing profanities? I just don't understand it. It must be do to their

limited mental abilities.

Opus being a Cannuk probably doesn't help either.

SC

Path: be1.texas.rr.com!cyclone.austin.rr.com!news.rr.com!border2.nntp.dca.giganews.com!border1.nntp.dca.giganews.com!nntp.giganews.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread2.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail

Newsgroups: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Subject: If you had to learn morse code for a ham license would you stay on CB?

From: Slow Code <my.mail@no.spam>

Organization: None

User-Agent: Xnews/5.04.25

Lines: 8

Message-ID: <Lwx0h.339$LI4.180@newsread2.news.pas.earthlink.net>

Date: Sat, 28 Oct 2006 00:30:35 GMT

NNTP-Posting-Host: 4.227.154.108

X-Complaints-To: abuse@earthlink.net

X-Trace: newsread2.news.pas.earthlink.net 1161995435 4.227.154.108 (Fri, 27 Oct 2006 17:30:35 PDT)

NNTP-Posting-Date: Fri, 27 Oct 2006 17:30:35 PDT

Xref: be1.texas.rr.com rec.radio.amateur.equipment:209077 rec.radio.amateur.misc:299083 rec.radio.amateur.policy:343877

5wpm ain't really learning it. I can fart 5 wpm.

Lets kick the requirement up there to between 13 and 20 wpm for all

classes. And no-codes that haven't passed it after a year get booted which

will help clean up the repeaters.

SC

m.News. EarthLink Members should use their best judgment when posting to any newsgroup. Many groups have charters, published guidelines, FAQs, or "community standards" describing what is and is not considered appropriate. Usenet can be a valuable resource if used properly. The continued posting of off-topic articles is prohibited. Commercial advertisements are off-topic in most newsgroups, especially regional groups not specifically named for such. The presence of such articles in a group is not indicative of the group's "intended" use. Please familiarize yourself with basic Usenet netiquette before posting to a newsgroup.

EarthLink considers "multiposting" to 10 or more groups within a two week sliding window to be excessive. EarthLink servers currently limit the number of allowable "cross-posts" to 9.

EarthLink Members may not cancel messages other than their own messages. A Member may cancel posts forged in that Member's name. We may cancel any postings which violate this AUP.

5082. Re: Response to SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-28 15:56:56 UTC
From: Old Time Ham <old_fart@curmudgeons.com>
Message-ID: <WKGdnWtkRP5V4N7YnZ2dnUVZ_r6dnZ2d@comcast.com>
Source record: 9933
Cross-posted to: rec.radio.amateur.equipment,rec.radio.shortwave,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Roadrunner NNTP wrote:
> I've had enough of SC in newsgroups!
>
> Please don't answer his flaming posts. I would like for my 14 amateur radio
> operator girl child (who is working on her code) to be able to use
> newsgroups without this abuse. We should not have to put up with it either.
>
> Copy and forward the following to abuse@earthlink.net. They should be able
> to identify him from the headers and their logs.
>
>
> Dear Earthlink Abuse . . .
>
>
>
> Please get this clown off of usenet. There are several hobby groups where
> he posts regularly his inflammatory material, often with profanities. Our
> kids who are in the hobby certainly don't need to be exposed to this stuff.
>
>
>
> Thanks.
>
>

It appears to me the only profanity was directed AT Slow Code. I am sure
Earthlink will give your (anonymous) complaint the attention it
deserves. You have elevated childish whining to a new level!

5083. Re: Response to SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-28 16:01:17 UTC
From: pltrgyst <pltrgyst@spamlessxhost.org>
Message-ID: <ljv6k21j2og31vecirirk6hfbojq5o7jke@4ax.com>
Source record: 9934
Cross-posted to: rec.radio.amateur.equipment,rec.radio.shortwave,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Sat, 28 Oct 2006 15:21:16 GMT, "Roadrunner NNTP" <noone@nowhere.com> wrote:

>I've had enough of SC in newsgroups!
>
>Please don't answer his flaming posts. I would like for my 14 amateur radio
>operator girl child (who is working on her code) to be able to use
>newsgroups without this abuse. We should not have to put up with it either.

You don't. Use a kill file. If you don't, you have only yourself to blame.

It;s much less expensive in the long run than screwing around with everyone's
first amendment rights.

-- Larry

5084. Re: Response to SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-28 16:59:37 UTC
From: Mark@kb9rqz.aprs
Message-ID: <1p27k2l3881ruhd6pa6dqciqi24e7l48fm@4ax.com>
Source record: 9935
Cross-posted to: rec.radio.amateur.equipment,rec.radio.shortwave,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Sat, 28 Oct 2006 15:21:16 GMT, "Roadrunner NNTP"
<noone@nowhere.com> wrote:

>I've had enough of SC in newsgroups!
>
>Please don't answer his flaming posts. I would like for my 14 amateur radio
>operator girl child (who is working on her code) to be able to use
>newsgroups without this abuse. We should not have to put up with it either.
>
as a steady High value target of SC I can tell you he can not realy be
stoped I for one have choosen to accept his abuse in Silence having
come to agree with other in abotht the BLGT and Jewish world that
agree "silence equals death" yes you see more of this clown (and his
allies and sockpuppets since I began a campaign of resisting such
harrassment ghhe has choosen to step up the level with some goal only
he knows (if even he knows what ihis gaol is) I regret that excerising
my duty to myself myself and others like myself from this sort attack
has caused you any inconvence.

OTOH your 14 yo needs tomlearns that the world issoemtimes a hostile
place. I uncourage you to see this as a learning experence and theach
your daughter that there are those that get very upset over
encountering anything or anybody different
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5085. FA: Rare Nat. 6/2 Meter VFO + MO

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-28 17:24:12 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <0nM0h.371613$QM6.86179@bgtnsc05-news.ops.worldnet.att.net>
Source record: 9936

A vintage, somewhat rare National 6/2 Meter VFO in very good, operating condition; see it and some more stuff at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx heytubeguy

5086. Re: More on matching -- Xtal filters this time

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-28 19:24:06 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <q7O0h.121010$aJ.44385@attbi_s21>
Source record: 9937

"AndyS" <andysharpe@juno.com> wrote in message
news:1162043211.584437.199470@b28g2000cwb.googlegroups.com...
>
> William E. Sabin wrote:
>> "AndyS" <andysharpe@>
>> A large increase in a receiver amplifier load impedance just outside the
>> passband of a crystal filter (or other types of filter) can cause
>> adjacent
>> channel susceptibility. The network between the amplifier and the filter
>> should be designed to prevent this occurrence. There are networks that
>> can
>> reverse this effect, so the impedance drops instead of increasing.
>> Simulations and impedance measurements can verify.
>>
>> Bill W0IYH
>
> Andy comments:
>
> A good point. But I am not aware of any passive networks than
> can roll the impedance off (or bring it up) fast enough to handle
> the adjacent channel problem. Adjacent channels are usually
> (in my experience) only a few Khz away while the xtal filter is
> usually many Mhz, and a passive network just doesn't change
> the impedance that quickly. For those problems, I have always
> had to go to a passive resistor source, such as a collector resistor,
> or use a coil with a Q low enough to provide the same effect.
>
> If I am incorrect in this, could you please elaborate on what
> passive matching circuit you are reccommending. ?
>
> Andy W4OAH

If you have the July 1970 QST there is an article starting on page 35 that discusses this situation. The load impedance at the drain of the JFET amplifier increased very rapidly just outside the passband of the xtal filter as shown in Fig 8. The network in Fig 9A inverts the impedance change as shown in Fig 9B. This approach was tested for this article. Pages 39 and 40 show the text that applies to this situation. I have confirmed this approach a few times since then. However, if a fixed resistor is used to load the drain of the JFET this effect is pretty well mitigated. A large increase in the load impedance that the amplifier transistor sees can cause the JFET drain to become overloaded just outside the passband, and I confirmed this in a homebrew receiver that used a particular xtal filter. Different filter design approaches (xtal filter black magic) might produce

results somewhat different than mine, so the problem and the solution always need to be verified experimentally. In general the gain of the JFET etc. must be restricted so that drain overload is avoided at all frequencies, as the article explains. Also, if you have the 2004 ARRL Handbook, page 17.5 column one mentions a similar problem that can occur.

Bill W0IYH

5087. Re: Double AD99XX to make IQ local oscillator. Help needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-28 19:30:40 UTC
From: sdeyoreo@hotmail.com
Message-ID: <njb7k2l5vl22samqsknrcn677e9dl32j75@4ax.com>
Source record: 9938

On 27 Oct 2006 03:33:23 -0700, "OH1GTF" <spam99@suomi24.fi> wrote:

>Hi fellows!
>
> I'm building a software defined radio that is mostly based on the
>"Software Defined Radios For The Masses" -articles and are at the point
>of designing the DDS board. I have two units of AD9954 DDS chips and
>my idea was to use them parallel, other one with 90 degree phase shift
>to generate the quadrature signal. This is my first time with DDS, so
>understanding the control seem to be a little bit difficult for a first
>timer.
>
> Two questions to start with:
>
>1. I suppose for proper control I need four pins connected from the DDS
>to the computer (through buffers) I/O update, SDIO, SCLK and Reset, am
>I correct?
>
>2. Do I have to drive two SDIO serial signals separately for each DDS
>chip from computer so, that I can define the phase shift for the other
>DDS (while other one has no phase shift, obivously) ? This came to my
>mind since the chips don't have any addresses to indentify them.
>
>Thanks a lot!!!
>
>73 de Janne, OH1GTF

I dying to know how you make out. Here's why:
I have some DDSs, AD9911, I can't get to do anything. They have the
same I/O lines: I/O update, Reset, SDIOs and SCLK. I used a BasicStamp
to control it: Reset high, SCLK it, send in data on SDIO line, then
pulse IO_Update, nothing. Used a 10 Mhz system clock from an HP
generator. Though my one problem is the AD9911 I/Os are 3.3 volts, so
I used resistor divider on the uController outputs to the AD9911 to
drop the level, maybe that has something to do with it, I'm waiting
for 3.3 - 5 v level shiftrs from Maxim to come, MAX3371.

5088. Re: Response to SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-28 20:00:43 UTC
From: charlie <wehatespam@wymsey.co.uk>
Message-ID: <i8ydnSzdsYCYKt7YnZ2dnUVZ8sidnZ2d@pipex.net>
Source record: 9939

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Mark@kb9rqz.aprs wrote:
> On Sat, 28 Oct 2006 15:21:16 GMT, "Roadrunner NNTP"
> <noone@nowhere.com> wrote:
<SNIP>
>
> OTOH your 14 yo needs tomlearns that the world issoemtimes a hostile
> place. I uncourage you to see this as a learning experence and theach
> your daughter that there are those that get very upset over
> encountering anything or anybody different
> http://kb9rqz.blogspot.com/
>
OTOH I strongly suggest that your 14 year old is kept in ignorance
of Usenet until she chooses, as an adult, to venture into it. My 14
year old boy has access to web based groups and I know what they
are. One of the advantages of running a home network is having some
control!

As to the world being hostile at times, I'm sure that your 14 year
old has already worked that out and doesn't need to be exposed to
the abusive behaviour and language that is so common on Usenet!

Thank the lord for kill files :)

Charlie.

- --
www.wymsey.co.uk
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.4.2 (GNU/Linux)
Comment: Using GnuPG with SUSE - http://enigmail.mozdev.org

iD8DBQFFQ7brfhKqaKFAJ/YRAqvnAJ41eK1ucN42BaVvubx+RYRf/OGf9wCfajSm
adREnMfBBRRZjph8LFXQRzQ=
=haBO
-----END PGP SIGNATURE-----
```

5089. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-29 00:07:06 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <KgS0h.729$LI4.449@newsread2.news.pas.earthlink.net>
Source record: 9940
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
news:18SdncXAx4hSK9_YnZ2dnUVZ_tydnZ2d@rcn.net:

> Slow Code wrote:
>> Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
>
>>> I would bet that the person flashing SOS knows little, or no morse
>>> code other than SOS.
>>>
>>> This, as an argument for hams using CW, is kind of like "mayday" being
>>> an argument for hams being conversant in French.
>>>
>>> -Chuck
>>
>>
>> Spoken like a true "I-Hate-CW" Whiner. Why you even worried about it
>> anyway, you don't even have a welfare license.
>
> Actually, I have held an advanced class ticket for more than 30 years.
>
> I took my test at 1919 M Street, NW? Washington, DC. Under the watchful
> eye of an FCC examiner. My code test came off of an old signal corps
> paper tape driven code practice machine. The key they gave me to use
> was from the same set.
>
> My receiving speed was somewhere around 40wpm, and my sending sucks
> rope. I never could master an Iambic keyer.
>
> -Chuck

Once you master the electronic key you'll wonder how you ever got by
without one. I used a straight key for years and then got an electronic
one. It made code more fun. I tried a bug once, but after using the
electronic key I lost my timing on the side to side stuff.

One thing for sure in the maritime story above, someone did know morse,
and the rescuers probably weren't going to wait for a full message after
the sos. they would start the rescue right away, they didn't need to see a
message.

SC

5090. Re: Response to SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-29 00:07:14 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <SgS0h.730$LI4.24@newsread2.news.pas.earthlink.net>
Source record: 9941
Cross-posted to: rec.radio.amateur.equipment,rec.radio.shortwave,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Roadrunner NNTP" <noone@nowhere.com> wrote in
news:MzK0h.33021$ta3.31232@tornado.texas.rr.com:

> I've had enough of SC in newsgroups!
>
> Please don't answer his flaming posts. I would like for my 14 amateur
> radio operator girl child (who is working on her code) to be able to use
> newsgroups without this abuse. We should not have to put up with it
> either.
>
> Copy and forward the following to abuse@earthlink.net. They should be
> able to identify him from the headers and their logs.
>
>
> Dear Earthlink Abuse . . .
>
>
>
> Please get this clown off of usenet. There are several hobby groups
> where he posts regularly his inflammatory material, often with
> profanities. Our kids who are in the hobby certainly don't need to be
> exposed to this stuff.
>
>
>
> Thanks.
>
>
>
> Long time internet user and parent.
>
>
>
>
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>
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>
>

>
>
> Path:
> be1.texas.rr.com!cyclone.austin.rr.com!news.rr.com!border2.nntp.dca.gigan
> ews.com!border1.nntp.dca.giganews.com!nntp.giganews.com!newshub.sdsu.edu!
> elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsre
> ad2.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
>
> Newsgroups:
> rec.radio.amateur.antenna,rec.radio.amateur.policy,rec.radio.scanner,rec.
> radio.swap
>
> Subject: Stamp collecting doesn't require taking a code test.
>
> From: Slow Code <my.mail@no.spam>
>
> Organization: None
>
> User-Agent: Xnews/5.04.25
>
> Lines: 3
>
> Message-ID: <Xwx0h.349$LI4.140@newsread2.news.pas.earthlink.net>
>
> Date: Sat, 28 Oct 2006 00:30:47 GMT
>
> NNTP-Posting-Host: 4.227.154.108
>
> X-Complaints-To: abuse@earthlink.net
>
> X-Trace: newsread2.news.pas.earthlink.net 1161995447 4.227.154.108 (Fri,
> 27 Oct 2006 17:30:47 PDT)
>
> NNTP-Posting-Date: Fri, 27 Oct 2006 17:30:47 PDT
>
> Xref: be1.texas.rr.com rec.radio.amateur.antenna:257939
> rec.radio.amateur.policy:343886 rec.radio.scanner:266398
> rec.radio.swap:457098
>
>
>
> Maybe you people could try stamp collecting.
>
>
>
> SC
>
>
>
>

> Path:
> be1.texas.rr.com!cyclone.austin.rr.com!news.rr.com!border2.nntp.dca.gigan
> ews.com!nntp.giganews.com!nntp1.phx1.gblx.net!nntp.gblx.net!nntp.gblx.net
> !newsfeed.news2me.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.ne
> t!stamper.news.pas.earthlink.net!newsread2.news.pas.earthlink.net.POSTED!
> 3dd4ce4a!not-for-mail
>
> Newsgroups:
> rec.radio.amateur.antenna,rec.radio.amateur.policy,rec.radio.swap
>
> Subject: VE's should be allowed to use a cattle prod to make people take
> a code test.
>
> From: Slow Code <my.mail@no.spam>
>
> Organization: None
>
> User-Agent: Xnews/5.04.25
>
> Lines: 5
>
> Message-ID: <D6c0h.19671$UG4.17151@newsread2.news.pas.earthlink.net>
>
> Date: Fri, 27 Oct 2006 00:09:07 GMT
>
> NNTP-Posting-Host: 4.254.227.60
>
> X-Complaints-To: abuse@earthlink.net
>
> X-Trace: newsread2.news.pas.earthlink.net 1161907747 4.254.227.60 (Thu,
> 26 Oct 2006 17:09:07 PDT)
>
> NNTP-Posting-Date: Thu, 26 Oct 2006 17:09:07 PDT
>
> Xref: be1.texas.rr.com rec.radio.amateur.antenna:257845
> rec.radio.amateur.policy:343742 rec.radio.swap:457040
>
>
>
> And if they fail the code test they get zapped again.
>
>
>
> Bringing back 'spark' will be good for ham radio.
>
>
>
>
>

> Path:
> be1.texas.rr.com!news-wrt-01.tampabay.rr.com!news-wrt-01.southeast.rr.com
> !news-feed-01.southeast.rr.com!news.rr.com!cycny01.gnilink.net!peer01.wes
> t.cox.net!cox.net!newscon02.news.prodigy.net!prodigy.net!border1.nntp.dca
> .giganews.com!nntp.giganews.com!postnews.google.com!news4.google.com!news
> hub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthli
> nk.net!newsread2.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
>
> Newsgroups:
> rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.swap
>
> Subject: Re: I don't remember horse and buggy, outhouses, or churning
> butter
>
> From: Slow Code <my.mail@no.spam>
>
> References: <gUx%g.12447$Lv3.2784@newsread1.news.pas.earthlink.net>
> <1161746253.858141.126300@m73g2000cwd.googlegroups.com>
> <5e980$453f9e94$45011502$31488@KNOLOGY.NET>
>
> Organization: None
>
> User-Agent: Xnews/5.04.25
>
> Lines: 23
>
> Message-ID: <OLS%g.19218$UG4.1065@newsread2.news.pas.earthlink.net>
>
> Date: Wed, 25 Oct 2006 23:51:10 GMT
>
> NNTP-Posting-Host: 4.227.154.38
>
> X-Complaints-To: abuse@earthlink.net
>
> X-Trace: newsread2.news.pas.earthlink.net 1161820270 4.227.154.38 (Wed,
> 25 Oct 2006 16:51:10 PDT)
>
> NNTP-Posting-Date: Wed, 25 Oct 2006 16:51:10 PDT
>
> Xref: be1.texas.rr.com rec.radio.amateur.policy:343846
> rec.radio.amateur.antenna:257917 rec.radio.swap:457083
>
>
>
> lazy ass Mike "amdx" <amdx@knology.net> wrote in
>
> news:5e980$453f9e94$45011502$31488@KNOLOGY.NET:
>
>>
>

>>> Slow Code wrote:
>
>>
>
>>>> New hams just don't appreciate things anymore.
>
>>
>
>> I don't remember,
>
>> cutting wood for winter, foraging the woods for berries,
>
>> turning the crank on a model T, building a spear to kill a deer,
>
>> washing my clothes in the river, making candles to light the night.
>
>> And I do appreciate that I don't have to do these things anymore.
>
>> Mike
>
>
>
>
>
> Right, and why homebrew anymore when you can call HRO or AES and buy
> your
>
> appliance off the shelf.
>
>
>
>
>
> 73,
>
> Back to my CW and projects.
>
>
>
> SC
>
>
>
> SC
>
>
>
>
>
> Path:

> be1.texas.rr.com!news-wrt-01.tampabay.rr.com!news-wrt-01.southeast.rr.com
> !news-feed-01.southeast.rr.com!news.rr.com!cycny01.gnilink.net!peer01.wes
> t.cox.net!cox.net!newscon02.news.prodigy.net!prodigy.net!border1.nntp.dca
> .giganews.com!nntp.giganews.com!postnews.google.com!news4.google.com!news
> hub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthli
> nk.net!newsread2.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
>
> Newsgroups:
> rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.swap
>
> Subject: Re: I don't remember horse and buggy, outhouses, or churning
> butter
>
> From: Slow Code <my.mail@no.spam>
>
> References: <gUx%g.12447$Lv3.2784@newsread1.news.pas.earthlink.net>
> <1161746253.858141.126300@m73g2000cwd.googlegroups.com>
> <5e980$453f9e94$45011502$31488@KNOLOGY.NET>
>
> Organization: None
>
> User-Agent: Xnews/5.04.25
>
> Lines: 23
>
> Message-ID: <OLS%g.19218$UG4.1065@newsread2.news.pas.earthlink.net>
>
> Date: Wed, 25 Oct 2006 23:51:10 GMT
>
> NNTP-Posting-Host: 4.227.154.38
>
> X-Complaints-To: abuse@earthlink.net
>
> X-Trace: newsread2.news.pas.earthlink.net 1161820270 4.227.154.38 (Wed,
> 25 Oct 2006 16:51:10 PDT)
>
> NNTP-Posting-Date: Wed, 25 Oct 2006 16:51:10 PDT
>
> Xref: be1.texas.rr.com rec.radio.amateur.policy:343846
> rec.radio.amateur.antenna:257917 rec.radio.swap:457083
>
>
>
> lazy ass Mike "amdx" <amdx@knology.net> wrote in
>
> news:5e980$453f9e94$45011502$31488@KNOLOGY.NET:
>
>>
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>>> Slow Code wrote:

>
>>
>
>>>> New hams just don't appreciate things anymore.
>
>>
>
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>
>> cutting wood for winter, foraging the woods for berries,
>
>> turning the crank on a model T, building a spear to kill a deer,
>
>> washing my clothes in the river, making candles to light the night.
>
>> And I do appreciate that I don't have to do these things anymore.
>
>> Mike
>
>
>
>
>
> Right, and why homebrew anymore when you can call HRO or AES and buy
> your
>
> appliance off the shelf.
>
>
>
>
>
> 73,
>
> Back to my CW and projects.
>
>
>
> SC
>
>
>
>
>
> Path:
> be1.texas.rr.com!cyclone.austin.rr.com!news.rr.com!border2.nntp.dca.gigan
> ews.com!nntp.giganews.com!news.maxwell.syr.edu!elnk-pas-nf1!newsfeed.eart
> hlink.net!stamper.news.pas.earthlink.net!newsread2.news.pas.earthlink.net
> .POSTED!3dd4ce4a!not-for-mail
>

> Newsgroups:
> rec.radio.amateur.antenna,rec.radio.amateur.policy,rec.radio.swap,rec.rad
> io.shortwave
>
> Subject: Re: Is the code requirement really keeping good people out of
> ham radio?
>
> From: Slow Code <my.mail@no.spam>
>
> References: <1158527339.352992.28170@i42g2000cwa.googlegroups.com>
> <bhGPg.9337$v%4.106@newsread1.news.pas.earthlink.net>
> <c3iug29tid5kod1f1olqktlvn5kkicgg7j@4ax.com> <450FE04F.7060501@fuse.net>
> <ia79h21f1uhjc1pd68ud3j86nbmlnemdvi@4ax.com>
> <b3_Rg.1384$Y24.335@newsread4.news.pas.earthlink.net>
> <ltvgh21b35rlg7smc8o5n2509m34afg1pk@4ax.com>
> <HJednVoOhasYvYTYnZ2dnUVZ_uudnZ2d@comcast.com>
> <1161835676.853678.129230@i3g2000cwc.googlegroups.com>
> <n1g0k2h8kugbpj65vjk8fc96uk5hsl70k8@4ax.com>
>
> Organization: None
>
> User-Agent: Xnews/5.04.25
>
> Lines: 14
>
> Message-ID: <76c0h.19656$UG4.15739@newsread2.news.pas.earthlink.net>
>
> Date: Fri, 27 Oct 2006 00:08:35 GMT
>
> NNTP-Posting-Host: 4.254.227.60
>
> X-Complaints-To: abuse@earthlink.net
>
> X-Trace: newsread2.news.pas.earthlink.net 1161907715 4.254.227.60 (Thu,
> 26 Oct 2006 17:08:35 PDT)
>
> NNTP-Posting-Date: Thu, 26 Oct 2006 17:08:35 PDT
>
> Xref: be1.texas.rr.com rec.radio.amateur.antenna:257842
> rec.radio.amateur.policy:343730 rec.radio.swap:457038
> rec.radio.shortwave:537344
>
>
>
> Opus- <jbuchy@shaw.ca> wrote in
>
> news:n1g0k2h8kugbpj65vjk8fc96uk5hsl70k8@4ax.com:
>
>
>

>> Don't you have some offs to fuck?
>
>>
>
>
>
>
>
> Why do no-coders always break down in the middle of an argument and
> start
>
> spewing profanities? I just don't understand it. It must be do to
> their
>
> limited mental abilities.
>
>
>
> Opus being a Cannuk probably doesn't help either.
>
>
>
> SC
>
>
>
>
>
> Path:
> be1.texas.rr.com!cyclone.austin.rr.com!news.rr.com!border2.nntp.dca.gigan
> ews.com!border1.nntp.dca.giganews.com!nntp.giganews.com!newshub.sdsu.edu!
> elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsre
> ad2.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
>
> Newsgroups:
> rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.poli
> cy
>
> Subject: If you had to learn morse code for a ham license would you stay
> on CB?
>
> From: Slow Code <my.mail@no.spam>
>
> Organization: None
>
> User-Agent: Xnews/5.04.25
>
> Lines: 8
>
> Message-ID: <Lwx0h.339$LI4.180@newsread2.news.pas.earthlink.net>

>
> Date: Sat, 28 Oct 2006 00:30:35 GMT
>
> NNTP-Posting-Host: 4.227.154.108
>
> X-Complaints-To: abuse@earthlink.net
>
> X-Trace: newsread2.news.pas.earthlink.net 1161995435 4.227.154.108 (Fri,
> 27 Oct 2006 17:30:35 PDT)
>
> NNTP-Posting-Date: Fri, 27 Oct 2006 17:30:35 PDT
>
> Xref: be1.texas.rr.com rec.radio.amateur.equipment:209077
> rec.radio.amateur.misc:299083 rec.radio.amateur.policy:343877
>
>
>
>
>
> 5wpm ain't really learning it. I can fart 5 wpm.
>
>
>
> Lets kick the requirement up there to between 13 and 20 wpm for all
>
> classes. And no-codes that haven't passed it after a year get booted
> which
>
> will help clean up the repeaters.
>
>
>
> SC
>
>
>
>
>
>
> m.News. EarthLink Members should use their best judgment when posting to
> any newsgroup. Many groups have charters, published guidelines, FAQs, or
> "community standards" describing what is and is not considered
> appropriate. Usenet can be a valuable resource if used properly. The
> continued posting of off-topic articles is prohibited. Commercial
> advertisements are off-topic in most newsgroups, especially regional
> groups not specifically named for such. The presence of such articles in
> a group is not indicative of the group's "intended" use. Please
> familiarize yourself with basic Usenet netiquette before posting to a
> newsgroup.
>
> EarthLink considers "multiposting" to 10 or more groups within a two

> week sliding window to be excessive. EarthLink servers currently limit
> the number of allowable "cross-posts" to 9.
>
> EarthLink Members may not cancel messages other than their own messages.
> A Member may cancel posts forged in that Member's name. We may cancel
> any postings which violate this AUP.

Whaaaaaaaaaaa!!

Have you ever sat on the toilet and tried to fart your callsign in
morse code?

You're so wound up, I bet you could fart your call at a nearly
perfect 1000Hz square wave.

SC

5091. Re: Response to SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-29 00:21:49 UTC
From: Mark@kb9rqz.aprs
Message-ID: <nus7k29pdmqeg8vroukcjmba8ifemqcsi5@4ax.com>
Source record: 9942
Cross-posted to: rec.radio.amateur.equipment,rec.radio.shortwave,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Sun, 29 Oct 2006 00:07:14 GMT, Slow Code <my.mail@no.spam> wrote:

>"Roadrunner NNTP" <noone@nowhere.com> wrote in
>news:MzK0h.33021$ta3.31232@tornado.texas.rr.com:
>
>> I've had enough of SC in newsgroups!
>>
>> Please don't answer his flaming posts. I would like for my 14 amateur
>> radio operator girl child (who is working on her code) to be able to use
>> newsgroups without this abuse. We should not have to put up with it

>> EarthLink Members may not cancel messages other than their own messages.
>> A Member may cancel posts forged in that Member's name. We may cancel
>> any postings which violate this AUP.
>
>
>Whaaaaaaaaaaaa!!
that is right sociopath rules don't apply to you
>
>
>Have you ever sat on the toilet and tried to fart your callsign in
>morse code?
get some thrapy
>
>You're so wound up, I bet you could fart your call at a nearly
>perfect 1000Hz square wave.
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5092. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-29 00:30:36 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1162081836.634673.117810@f16g2000cwb.googlegroups.com>
Source record: 9943
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:
> Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
> news:18SdncXAx4hSK9_YnZ2dnUVZ_tydnZ2d@rcn.net:
>

>
> Once you master the electronic key you'll wonder how you ever got by
> without one. I used a straight key for years and then got an electronic
> one. It made code more fun. I tried a bug once, but after using the
> electronic key I lost my timing on the side to side stuff.

meaning you can't use CW MANUALY and you demand of me

5093. Re: Anderson Powerpoles on Front Panel

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-29 00:47:21 UTC
From: Fred McKenzie <fmmck@aol.com>
Message-ID: <fmmck-3A086C.20472128102006@nntp.aioe.org>
Source record: 9944

In article <1161903099.814059@newsreg.cos.agilent.com>,
"Al Lorona" <al_lorona@agilent.com> wrote:

> I am interested to hear how you have solved the problem of panel-mounting
> Anderson Powerpole connectors.

Al-

I don't recall where I saw it, but there was an article about using the connectors that West Mountain Radio uses in their RigRunners. As I recall, the pair were soldered to a small circuit board and mounted behind a cut-out in the panel. If you can look at one of the RigRunners, it should be possible to figure out how to do it. The only problem is finding that version of the connectors. I'd try West Mountain Radio first.

I understand at least one Ham transceiver has been produced, possibly a Yaesu, with the pair mounted on the rear panel.

73,
Fred
K4DII

5094. Crimp Tool Suggestions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-29 03:33:45 UTC
From: Danny Richardson <n_group@k6mhe.com>
Message-ID: <r688k29k59mf5vg7uj5a9s73v29uakr9l8@4ax.com>
Source record: 9945

Looking for suggestions for a good crimp tool for installing coax connectors. It will primarily for BNC connectors on RG-174, 58 and 59 cables. Although the RG-8 cable family capability would be nice too.

I do wish to avoid being a captive customer in that brand X crimp tool only works well with brand X connectors.

And, of course, looking for the best bang for the buck.

Thanks,

Danny

5095. Re: Crimp Tool Suggestions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-29 06:24:30 UTC
From: "Dr. Anton T. Squeegee" <SpammersBlow@dev.null>
Message-ID: <MPG.1fade8f7dd6eb6fa989721@news.drizzle.com>
Source record: 9946

In article <r688k29k59mf5vg7uj5a9s73v29uakr9l8@4ax.com>,
n_group@k6mhe.com (known to some as Danny Richardson) scribed...

> Looking for suggestions for a good crimp tool for installing coax
> connectors. It will primarily for BNC connectors on RG-174, 58 and 59
> cables. Although the RG-8 cable family capability would be nice too.
>
> I do wish to avoid being a captive customer in that brand X crimp tool
> only works well with brand X connectors.
>
> And, of course, looking for the best bang for the buck.

My take is that the best possible bang for the buck, as it were,
may be had by searching Greed-bay for a surplus mil-spec hex crimper,
such as the Daniels Manufacturing HX-4. This particular tool has
interchangeable dies to accommodate a wide variety of coaxial
connectors, as well as insulated terminal lugs.

They will tend to be more expensive, even at the surplus level,
than your typical made-in-taiwan Paladin (or whoever) crimper, but the
Daniels tools will also be of a much higher quality. Properly cared for,
they may outlast their owner.

As some examples: Item #120044919904 is for a new HX-4 frame, in
its original box, with a Y193 die set, opening bid of $79. Considering
that the frame alone new, from Daniels, is nearly $280, that's quite a
bargain.

Granted, the Y193 die set won't be useful to you unless you're
crimping contact assemblies for the D-sub coax/regular combo connectors,
but it should not be hard to find appropriate die sets for whatever
connectors you want to work with.

A full description of the HX-4, and a listing of common dies for
it, may be found at this link:

http://tinyurl.com/yy263j

Happy hunting.

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute
(Known to some as Bruce Lane, KC7GR)
http://www.bluefeathertech.com -- kyrrin a/t bluefeathertech d-o=t calm
"Salvadore Dali's computer has surreal ports..."

5096. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-29 12:42:20 UTC
From: Dave <W1MCE@comcast.net>
Message-ID: <q8qdnenKcds3PNnYnZ2dnUVZ_sadnZ2d@comcast.com>
Source record: 9947
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

an_old_friend

I'm very tired of your whining. No-one is demanding anything of you except to
stop whining. If you can't copy CW then give it up!

an_old_friend wrote:

> Slow Code wrote:
>
>>Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
>>news:18SdncXAx4hSK9_YnZ2dnUVZ_tydnZ2d@rcn.net:
>>
>
>
>>Once you master the electronic key you'll wonder how you ever got by
>>without one. I used a straight key for years and then got an electronic
>>one. It made code more fun. I tried a bug once, but after using the
>>electronic key I lost my timing on the side to side stuff.
>
>
> meaning you can't use CW MANUALY and you demand of me
>

5097. Re: Crimp Tool Suggestions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-29 14:56:05 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <9YKdnUqKn_-LUtnYRVnyvQ@pipex.net>
Source record: 9749

Dr. Anton T. Squeegee wrote:
> In article <r688k29k59mf5vg7uj5a9s73v29uakr9l8@4ax.com>,
> n_group@k6mhe.com (known to some as Danny Richardson) scribed...
>
>> Looking for suggestions for a good crimp tool for installing coax
>> connectors. It will primarily for BNC connectors on RG-174, 58 and 59
>> cables. Although the RG-8 cable family capability would be nice too.
>>
>> I do wish to avoid being a captive customer in that brand X crimp tool
>> only works well with brand X connectors.
>>
>> And, of course, looking for the best bang for the buck.
>
> My take is that the best possible bang for the buck, as it were,
> may be had by searching Greed-bay for a surplus mil-spec hex crimper,
> such as the Daniels Manufacturing HX-4. This particular tool has
> interchangeable dies to accommodate a wide variety of coaxial
> connectors, as well as insulated terminal lugs.
>
> They will tend to be more expensive, even at the surplus level,
> than your typical made-in-taiwan Paladin (or whoever) crimper, but the
> Daniels tools will also be of a much higher quality. Properly cared for,
> they may outlast their owner.
>
> As some examples: Item #120044919904 is for a new HX-4 frame, in
> its original box, with a Y193 die set, opening bid of $79. Considering
> that the frame alone new, from Daniels, is nearly $280, that's quite a
> bargain.
>
> Granted, the Y193 die set won't be useful to you unless you're
> crimping contact assemblies for the D-sub coax/regular combo connectors,
> but it should not be hard to find appropriate die sets for whatever
> connectors you want to work with.
>
> A full description of the HX-4, and a listing of common dies for
> it, may be found at this link:
==========
Crimping might be appropriate for a large volume of coax connectors.
However for a limited number of connectors as applicable to domestic
amateur radio a gland type of cable entry seems more to the point.
BNC- , PL259- and N-connectors are all available with braid sleeve
inserts which highly likely give a better (long term) braid/connector
connection than a crimped arrangement at least for RF ,especially when
used in an outdoor environment.

I do have a short lead with 2 PL259 connectors with both centre pin and body crimped to RG58 coax which probably originates from the 'CB trade' .The braid crimp is not a hexagon but cylindrical with side ridges, like -O- . I would never want to make up leads this way myself.

Frank GM0CSZ / KN6WH

5098. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-29 15:38:30 UTC
From: Mark@kb9rqz.aprs
Message-ID: <omi9k2td5rip97jldt4qnefr2l9t2u1rh4@4ax.com>
Source record: 9748
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Sun, 29 Oct 2006 07:42:20 -0500, Dave <W1MCE@comcast.net> wrote:

>an_old_friend
>
>I'm very tired of your whining. No-one is demanding anything of you except to
>stop whining. If you can't copy CW then give it up!
why should I care what you are tired of?
>
>an_old_friend wrote:
>
>> Slow Code wrote:
>>
>>>Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
>>>news:18SdncXAx4hSK9_YnZ2dnUVZ_tydnZ2d@rcn.net:
>>>
>>
>>
>>>Once you master the electronic key you'll wonder how you ever got by
>>>without one. I used a straight key for years and then got an electronic
>>>one. It made code more fun. I tried a bug once, but after using the
>>>electronic key I lost my timing on the side to side stuff.
>>
>>
>> meaning you can't use CW MANUALY and you demand of me
>>
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5099. Re: Crimp Tool Suggestions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-29 16:48:15 UTC
From: joe <crimp_tool_dude@criptool.net>
Message-ID: <4544DB4D.50C8AA81@criptool.net>
Source record: 9750

Hi,

Ideal makes good quality crip tools and accessory dies
for just about anything hams will need.

http://www.idealindustries.com/index.htm

regards,

crimp tool dude

5100. Re: Anderson Powerpoles on Front Panel

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-29 18:16:24 UTC
From: jawod <jawod@fuse.net>
Message-ID: <bb2eb$4544f09b$4831cf4b$32578@FUSE.NET>
Source record: 9751

>
> I understand at least one Ham transceiver has been produced, possibly a
> Yaesu, with the pair mounted on the rear panel.
>
> 73,
> Fred
> K4DII

Elecraft K2/100 has power pole connectors on the rear panel. There are probably pix on their website...just google elecraft.

John
AB8O

5101. Re: New to Ham

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-29 21:06:58 UTC
From: Ron Giuntini <giu@sbcglobal.net>
Message-ID: <pan.2006.10.29.21.07.00.774348@sbcglobal.net>
Source record: 9752

On Thu, 05 Oct 2006 18:39:12 -0700, Ed Byars wrote:

> I am going to buy a radio that I hope will last me many years. I want
> to start with a mobile that will also serve as a base station.I am
> looking at a YAESU FT-857D.
>
> Any comments on the pros or cons of this as a beginner radio that can
> stay with me as I develop my skills?

It is hard to go wrong with any Yaesu or Icom radio. If you find you prefer something else, there will be no problem trading or selling it, assuming you will lose a bit of money after it has been used. Chances are very good you will not want to part with it...I wish I still had my first radio...

5102. Re: Response to SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-29 21:52:53 UTC
From: Merlin-7 KI4ILB <merlin-7@sc.rr.com>
Message-ID: <Vo91h.1331$nG1.778@tornado.southeast.rr.com>
Source record: 9753
Cross-posted to: rec.radio.amateur.equipment,rec.radio.shortwave,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

If Slow Code left, I would miss him.

I do not agree with him most of the time. As a matter of fact, he is dead wrong a lot of the time.

At least he stands up for what he believes in.

I myself, do not think that every ham should have to be able to send/copy code at 20wpm no more that I think they should be tested on psk,rtty, slow scan tv. etc.

Some people have a passion for code and some have a passion for other modes. I use them all from time to time, and to be honest, after I move next year, I am going to work on my code a bit more when I have the time to do so.

However, I will still give him a hard time about his ranting. After all I have not heard anyone tell him that he is not a real ham because he does not have psk nailed down..HI HI
Joe
KI4ILB

5103. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-30 00:55:39 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <f4c1h.1641$zf.780@newsread3.news.pas.earthlink.net>
Source record: 9754
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"Markie in the Darkie" <konstans@hotmail.com> wrote in
news:1162081836.634673.117810@f16g2000cwb.googlegroups.com:

>
> Slow Code wrote:
>> Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
>> news:18SdncXAx4hSK9_YnZ2dnUVZ_tydnZ2d@rcn.net:
>>
>
>>
>> Once you master the electronic key you'll wonder how you ever got by
>> without one. I used a straight key for years and then got an
>> electronic one. It made code more fun. I tried a bug once, but after
>> using the electronic key I lost my timing on the side to side stuff.
>
> meaning you can't use CW MANUALY and you demand of me

Markie you blithering idiot. You're against being a knowledgable ham so
bad you have no clue what I was even talking about.

SC

5104. Re: Response to SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-30 00:55:48 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <o4c1h.1643$zf.236@newsread3.news.pas.earthlink.net>
Source record: 9755
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.policy

"Merlin-7 KI4ILB" <merlin-7@sc.rr.com> wrote in
news:Vo91h.1331$nG1.778@tornado.southeast.rr.com:

> If Slow Code left, I would miss him.
>
> I do not agree with him most of the time. As a matter of fact, he is
> dead
> wrong a lot of the time.
>
> At least he stands up for what he believes in.
>
> I myself, do not think that every ham should have to be able to
> send/copy
> code at 20wpm no more that I think they should be tested on psk,rtty,
> slow scan tv. etc.
>
> Some people have a passion for code and some have a passion for other
> modes. I use them all from time to time, and to be honest, after I move
> next year, I am going to work on my code a bit more when I have the time
> to do so.
>
> However, I will still give him a hard time about his ranting. After all
> I
> have not heard anyone tell him that he is not a real ham because he does
> not have psk nailed down..HI HI
> Joe
> KI4ILB

I was part of the big RRAP CW and anti-ARRL fights of the late 90's up
until restructuring went into effect, then my posting tapered off. I'll
disappear again once the FCC totally kills off ham radio by eliminating
the code requirement. When that happens, I'll wear a strip of black
electricians tape around my arm in memorial and observe twenty-four hours
of radio silence in memory of a once proud service.

Rest in Peace, Ham Radio. You were a good and faithful friend.

SC

5105. Re: Response to SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-30 01:00:13 UTC
From: Dave <W1MCE@comcast.net>
Message-ID: <0_ednf6_o_oG09jYnZ2dnUVZ_tednZ2d@comcast.com>
Source record: 9756
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.policy

Top posted ... opps!

Please, why don't you try 24 years of r.r.a.X silence instead of 24 hours of fictitious promises.

Slow Code wrote:

> "Merlin-7 KI4ILB" <merlin-7@sc.rr.com> wrote in
> news:Vo91h.1331$nG1.778@tornado.southeast.rr.com:
>
>
>> If Slow Code left, I would miss him.
>>
>> I do not agree with him most of the time. As a matter of fact, he is
>> dead
>>wrong a lot of the time.
>>
>> At least he stands up for what he believes in.
>>
>> I myself, do not think that every ham should have to be able to
>> send/copy
>>code at 20wpm no more that I think they should be tested on psk,rtty,
>>slow scan tv. etc.
>>
>> Some people have a passion for code and some have a passion for other
>>modes. I use them all from time to time, and to be honest, after I move
>>next year, I am going to work on my code a bit more when I have the time
>>to do so.
>>
>> However, I will still give him a hard time about his ranting. After all
>> I
>>have not heard anyone tell him that he is not a real ham because he does
>>not have psk nailed down..HI HI
>> Joe
>> KI4ILB
>
>
>
> I was part of the big RRAP CW and anti-ARRL fights of the late 90's up
> until restructuring went into effect, then my posting tapered off. I'll
> disappear again once the FCC totally kills off ham radio by eliminating
> the code requirement. When that happens, I'll wear a strip of black
> electricians tape around my arm in memorial and observe twenty-four hours
> of radio silence in memory of a once proud service.

>
> Rest in Peace, Ham Radio. You were a good and faithful friend.
>
> SC

5106. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-30 01:22:34 UTC
From: Mark@kb9rqz.aprs
Message-ID: <5tkak2hbji9hm9qiru1aae07m0vh7q1dd4@4ax.com>
Source record: 9757
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Mon, 30 Oct 2006 00:55:39 GMT, Slow Code <my.mail@no.spam> wrote:

>"Markie in the Darkie" <konstans@hotmail.com> wrote in
>news:1162081836.634673.117810@f16g2000cwb.googlegroups.com:
>
>>
>> Slow Code wrote:
>>> Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
>>> news:18SdncXAx4hSK9_YnZ2dnUVZ_tydnZ2d@rcn.net:
>>>
>>
>>>
>>> Once you master the electronic key you'll wonder how you ever got by
>>> without one. I used a straight key for years and then got an
>>> electronic one. It made code more fun. I tried a bug once, but after
>>> using the electronic key I lost my timing on the side to side stuff.
>>
>> meaning you can't use CW MANUALY and you demand of me
>
>
>Markie you blithering idiot.
I can sign my name and I can clla other by there name you can do
neither
> You're against being a knowledgable ham so
>bad you have no clue what I was even talking about.

I know exactly what you are talking about you have stated you don't
use manaul Morse Code at all
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5107. Re: Response to SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-30 01:44:48 UTC
From: Mark@kb9rqz.aprs
Message-ID: <j7mak2lfmppit9lh9uqago00sgk7i60juo@4ax.com>
Source record: 9758
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Mon, 30 Oct 2006 00:55:48 GMT, Slow Code <my.mail@no.spam> wrote:

>"Merlin-7 KI4ILB" <merlin-7@sc.rr.com> wrote in
>news:Vo91h.1331$nG1.778@tornado.southeast.rr.com:
>
>> If Slow Code left, I would miss him.
>>
>> I do not agree with him most of the time. As a matter of fact, he is
>> dead
>> wrong a lot of the time.
>>
>> At least he stands up for what he believes in.
>>
>> I myself, do not think that every ham should have to be able to
>> send/copy
>> code at 20wpm no more that I think they should be tested on psk,rtty,
>> slow scan tv. etc.
>>
>> Some people have a passion for code and some have a passion for other
>> modes. I use them all from time to time, and to be honest, after I move
>> next year, I am going to work on my code a bit more when I have the time
>> to do so.
>>
>> However, I will still give him a hard time about his ranting. After all
>> I
>> have not heard anyone tell him that he is not a real ham because he does
>> not have psk nailed down..HI HI
>> Joe
>> KI4ILB
>
>
>I was part of the big RRAP CW and anti-ARRL fights of the late 90's up
>until restructuring went into effect, then my posting tapered off. I'll
>disappear again once the FCC totally kills off ham radio by eliminating
>the code requirement.
you planing to turn in your licens ein protest
> When that happens, I'll wear a strip of black
>electricians tape around my arm in memorial and observe twenty-four hours
>of radio silence in memory of a once proud service.
>
>Rest in Peace, Ham Radio. You were a good and faithful friend.
>
>SC

http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5108. Re: Response Marqueer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-30 03:43:10 UTC
From: MarQueerMyDear <dear_marqueer_marky@mail2princess.com>
Message-ID: <1162179790.316284.25260@f16g2000cwb.googlegroups.com>
Source record: 9759
Cross-posted to:
rec.radio.cb,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.policy

Mark@kb9rqz.aprs wrote:
> On Mon, 30 Oct 2006 00:55:48 GMT, Slow Code <my.mail@no.spam> wrote:
>
> >"Merlin-7 KI4ILB" <merlin-7@sc.rr.com> wrote in
> >news:Vo91h.1331$nG1.778@tornado.southeast.rr.com:
> >
> >> If Slow Code left, I would miss him.
> >>
> >> I do not agree with him most of the time. As a matter of fact, he is
> >> dead
> >> wrong a lot of the time.
> >>
> >> At least he stands up for what he believes in.
> >>
> >> I myself, do not think that every ham should have to be able to
> >> send/copy
> >> code at 20wpm no more that I think they should be tested on psk,rtty,
> >> slow scan tv. etc.
> >>
> >> Some people have a passion for code and some have a passion for other
> >> modes. I use them all from time to time, and to be honest, after I move
> >> next year, I am going to work on my code a bit more when I have the time
> >> to do so.
> >>
> >> However, I will still give him a hard time about his ranting. After all
> >> I
> >> have not heard anyone tell him that he is not a real ham because he does
> >> not have psk nailed down..HI HI
> >> Joe
> >> KI4ILB
> >>
> >>
> >I was part of the big RRAP CW and anti-ARRL fights of the late 90's up
> >until restructuring went into effect, then my posting tapered off. I'll
> >disappear again once the FCC totally kills off ham radio by eliminating
> >the code requirement.
> you planing to turn in your licens ein protest
> > When that happens, I'll wear a strip of black
> >electricians tape around my arm in memorial and observe twenty-four hours
> >of radio silence in memory of a once proud service.
> >
> >Rest in Peace, Ham Radio. You were a good and faithful friend.

> >
> >SC
> http://kb9rqz.blogspot.com/
>
> --
> Posted via a free Usenet account from http://www.teranews.com

STFU faggot

5109. Re: Crimp Tool Suggestions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-30 04:50:17 UTC
From: "Dr. Anton T. Squeegee" <SpammersBlow@dev.null>
Message-ID: <MPG.1faf245f66f57738989724@news.drizzle.com>
Source record: 9760

In article <9YKdnUqKn_-LUtnYRVnyvQ@pipex.net>,
abcgm0csz.kn6whxyz@dsl.pipex.com (known to some as Highland Ham)
scribed...

<snippety>

> > Granted, the Y193 die set won't be useful to you unless you're
> > crimping contact assemblies for the D-sub coax/regular combo connectors,
> > but it should not be hard to find appropriate die sets for whatever
> > connectors you want to work with.
> >
> > A full description of the HX-4, and a listing of common dies for
> > it, may be found at this link:
> ==========
> Crimping might be appropriate for a large volume of coax connectors.
> However for a limited number of connectors as applicable to domestic
> amateur radio a gland type of cable entry seems more to the point.
> BNC- , PL259- and N-connectors are all available with braid sleeve
> inserts which highly likely give a better (long term) braid/connector
> connection than a crimped arrangement at least for RF ,especially when
> used in an outdoor environment.

I would be prepared to debate this. A properly-done crimp
connection, made with high-quality connectors (I'm talking Amphenol RF
or King) and done with a high-grade crimper will be gas-tight. If you
enclose the whole thing in the sealant-lined heat-shrink tubing after
you've made up and tested the cable, there's no reason it won't do just
as well as a gland type.

And, with crimping, you stand a much lower chance of heat damage to
the insulation. ;-)

> I do have a short lead with 2 PL259 connectors with both centre pin
> and body crimped to RG58 coax which probably originates from the 'CB
> trade' .The braid crimp is not a hexagon but cylindrical with side
> ridges, like -O- . I would never want to make up leads this way myself.

I absolutely agree. That's why I suggested the Daniels crimper. Its
dies are all hexagon style, per mil specs.

Keep the peace(es).

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute
(Known to some as Bruce Lane, KC7GR)
http://www.bluefeathertech.com -- kyrrin a/t bluefeathertech d-o=t calm
"Salvadore Dali's computer has surreal ports..."

5110. id theft is a crime

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-30 04:55:49 UTC
From: Mark@kb9rqz.aprs
Message-ID: <sb1bk2p8t70i61a8qb2n8k2fer7s9g09q6@4ax.com>
Source record: 9761
Cross-posted to:
rec.radio.cb,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.policy

On 29 Oct 2006 19:43:10 -0800, "MarQueerMyDear"
<dear_marqueer_marky@mail2princess.com> wrote:

>

>> Posted via a free Usenet account from http://www.teranews.com
>
>
>STFU faggot
no I do not take orders from criminals beside you don't even WANT to
shut up you want me to post so you can continue to spew your hate

Id theft is a crime and you remain a criminal a coward and a poor ham
if you are a ahm at all
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5111. Help required with design

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-30 08:08:44 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <gqi1h.55702$rP1.41396@news-server.bigpond.net.au>
Source record: 9762

I am looking to hire someone for a few hours to give me advice on a design for VHF ASK radio transmitter and receiver that I have designed.

The design is running but I need to improve sensitivity a bit and TX output power.

If you are interested please contact me by email.

Regards

David

5112. Beautiful women, aged clones, and Ultimate Fighting Championship

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-30 12:20:13 UTC
From: skiswim@mail.com
Message-ID: <1162210812.993801.272450@e3g2000cwe.googlegroups.com>
Source record: 9763

Friend,

I'm always looking for good and intelligent individuals like you to visit my website, www.ChezBrandon.com , and it has pictures of beautiful women, information about aged clones, and a link to Ultimate Fighting Championship, a very good show.

My name is Brandon, and I'm in my 20s, am a college student, and as lie detectors, both conventional and unconventional would show, I've never been sexually penetrated. Moreover, I could be shown pictures of X, Y, and Z, and it would show that I'm only sexually attracted to women.

The Murders of Our Leaders in Government were Stopped.

I, Brandon, can take lie detector and psychological tests, and I can go before a panel of truth detecting experts. I tell the truth. A mini-psychological test: 8 times 2 = 16, the world is round, not flat, and the year is 2006. Feel free to call me, my cellphone number is 503.740.0272 (United States based) and feel free to utilize a GK-1 voice truth detecting device too:

>From Congressmen Bill Frist to John Kerry to Dennis Hastert to Hillary Clinton to John Warner to Ron Wyden to Gordon Smith to John McCain to Joseph Lieberman to Nancy Pelosi to Diane Feinstein to Ted Kennedy to anyone else who happened to be in the Congressional chambers during either a joint session of Congress or a State of the Union address from Masons to Skull and Bones members to Secret Service agents to pages to visitors to other good individuals, they all would have been murdered, all of their accomplishments stripped away, their earned wealth stripped away, their homes stripped away, their family and friends stripped away. Moreover, someone else would have been sleeping with their spouses.

Elements of the Mossad, who wanted to bathe in the blood of our Congressmen as well as bathe in the blood of leaders around the world, and when they seized power they would, as confirmed by psychic vision and confirmed auditorially, "he's right; he's psychic," would outlaw most if not all organizations, including the Masons, and these elements as Victor Ostrovsky writes about in his #1 New York Times bestseller By Way of Deception are out of control, notoriously lie, and have a disregard for life -- I was able, thank God, to thwart the conquest of the USA and the world, and was able to thwart the murder of United States and world leaders, via a psychic vision of Senator John Warner and other Congressmen being choked to death by gas, which was confirmed auditorially from both ears, such as "He saved Congress," who they were going to kill "all of them,""how did he know that?" and "he's psychic"

-- murdered my biological Aunt Gloria Atkinson, whom I loved very much, as she did of me, and there is a tribute to her on my website. Please, friend, be sure to barricade your bedroom door at night. I'm not afraid of aged clones or the attempted chopping off of my appendages (elements of the Mossad talked about chopping off my right middle finger and right ear, and 10 out of 10 of my toes, like my right middle finger have unique steeple designs).

I'm not afraid of anything. I'll defend myself to the best of my ability, and I commit my life to saving the lives of men, women, and children and strengthening good organizations. I will always remember my biological Aunt Gloria Atkinson. Sincerely, Brandon

5113. Re: Crimp Tool Suggestions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-30 20:14:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12kcn9k25vrlub2@corp.supernews.com>
Source record: 9764

Dr. Anton T. Squeegee wrote:
>
> I would be prepared to debate this. A properly-done crimp
> connection, made with high-quality connectors (I'm talking Amphenol RF
> or King) and done with a high-grade crimper will be gas-tight. If you
> enclose the whole thing in the sealant-lined heat-shrink tubing after
> you've made up and tested the cable, there's no reason it won't do just
> as well as a gland type.

I keep reading that crimp connections are more reliable than clamp type, but my experience sure runs contrary to that conclusion. I have a sizable quantity of patch and longer RG-58 cables with crimped BNC connectors. Most are from the Tektronix surplus outlet, but some from other industrial sources. All were presumably made by skilled people with the proper equipment, and they were manufactured over a long period of time. Yet on many cables, the outer insulation has pulled out from under the crimp, leaving bare shield. Besides an obvious entry point for water if used outside, the shield wires begin breaking from flexing against the hard crimp connector end. In contrast, I've never had a failure of cables I've made myself with crimp type connectors, although some have gotten very severe and prolonged use.

I imagine that adding sealant-type heat shrink tubing would delay the onset of the insulation migration problem and reduce shield breakage after it occurs. But that's an extra step not required for clamp-type connectors.

In addition, some "precision" cables made with double-shielded cable were very RF-leaky at the connectors, a problem I solved by replacing the crimp connectors with clamp type.

So I have what I've read on the one hand, and what I've experienced on the other. The only conclusion I can reach is that it must be a lot more difficult to "properly" assemble a crimp connector than most people realize. I figure that if the pros have so much trouble doing it right, I don't have a chance. I'll stick with clamp type. My feeling is that the reason that crimp connectors have become so popular doesn't have anything to do with reliability but simply that they're faster to assemble and therefore cheaper.

> And, with crimping, you stand a much lower chance of heat damage to
> the insulation. ;-)

The only heat involved with clamp type connectors is in soldering the center pin. Hopefully most people can manage that -- I've never had a problem, anyway.

Roy Lewallen, W7EL

5114. Re: Coax Crimp Tool Recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-31 00:32:32 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <AQw1h.8$L6.5@newsread3.news.pas.earthlink.net>
Source record: 9765
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.policy

Dave <W1MCE@comcast.net> wrote in
news:Ro-dnR7I2LS-Lt7YnZ2dnUVZ_o-dnZ2d@comcast.com:

> Solder??

I know how you feel. I felt the same way after hearing there would be
5wpm Extras.

> Danny Richardson wrote:
>
>> Looking for suggestions for a good crimp tool for installing coax
>> connectors. It will primarily for BNC connectors on RG-174, 58 and 59
>> cables. Although the RG-8 cable family capability would be nice too.
>>
>> I do wish to avoid being a captive customer in that brand X crimp tool
>> only works well with brand X connectors.
>>
>> And, of course, looking for the best bank for the buck.
>>
>> Thanks,
>>
>> Danny
>
>

5115. Re: Crimp Tool Suggestions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-31 02:11:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12kdc7ankh3m346@corp.supernews.com>
Source record: 9766

Correction:

Roy Lewallen wrote:

> . .
> against the hard crimp connector end. In contrast, I've never had a
> failure of cables I've made myself with crimp type connectors, although
> some have gotten very severe and prolonged use.
> . .

That last sentence should read ". . .with *clamp* type connectors. . ."
I've never made a crimp type myself.

Roy Lewallen, W7EL

5116. Re: Beautiful women, aged clones, and Ultimate Fighting Championship marqueer sucking cock

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-31 03:23:11 UTC
From: MarQueerMyDear <dear_marqueer_marky@mail2princess.com>
Message-ID: <1162264991.536297.203390@f16g2000cwb.googlegroups.com>
Source record: 9767
Cross-posted to: rec.radio.cb,rec.radio.amateur.homebrew,alt.usenet.kooks,alt.radio,rec.radio.amateur.policy

skiswim@mail.com wrote:
> Friend,
>
> I'm always looking for good and intelligent individuals like you to
> visit my website, www.ChezBrandon.com , and it has pictures of
> beautiful women, information about aged clones, and a link to Ultimate
> Fighting Championship, a very good show.
>
> My name is Brandon, and I'm in my 20s, am a college student, and as lie
> detectors, both conventional and unconventional would show, I've never
> been sexually penetrated. Moreover, I could be shown pictures of X, Y,
> and Z, and it would show that I'm only sexually attracted to women.
>
> The Murders of Our Leaders in Government were Stopped.
>
> I, Brandon, can take lie detector and psychological tests, and I can go
> before a panel of truth detecting experts. I tell the truth. A
> mini-psychological test: 8 times 2 = 16, the world is round, not flat,
> and the year is 2006. Feel free to call me, my cellphone number is
> 503.740.0272 (United States based) and feel free to utilize a GK-1
> voice truth detecting device too:
>
> >From Congressmen Bill Frist to John Kerry to Dennis Hastert to Hillary
> Clinton to John Warner to Ron Wyden to Gordon Smith to John McCain to
> Joseph Lieberman to Nancy Pelosi to Diane Feinstein to Ted Kennedy to
> anyone else who happened to be in the Congressional chambers during
> either a joint session of Congress or a State of the Union address from
> Masons to Skull and Bones members to Secret Service agents to pages to
> visitors to other good individuals, they all would have been murdered,
> all of their accomplishments stripped away, their earned wealth
> stripped away, their homes stripped away, their family and friends
> stripped away. Moreover, someone else would have been sleeping with
> their spouses.
>
> Elements of the Mossad, who wanted to bathe in the blood of our
> Congressmen as well as bathe in the blood of leaders around the world,
> and when they seized power they would, as confirmed by psychic vision
> and confirmed auditorially, "he's right; he's psychic," would outlaw
> most if not all organizations, including the Masons, and these elements
> as Victor Ostrovsky writes about in his #1 New York Times bestseller By
> Way of Deception are out of control, notoriously lie, and have a
> disregard for life -- I was able, thank God, to thwart the conquest of

> the USA and the world, and was able to thwart the murder of United
> States and world leaders, via a psychic vision of Senator John Warner
> and other Congressmen being choked to death by gas, which was confirmed
> auditorially from both ears, such as "He saved Congress," who they were
> going to kill "all of them,""how did he know that?" and "he's psychic"
> -- murdered my biological Aunt Gloria Atkinson, whom I loved very much,
> as she did of me, and there is a tribute to her on my website. Please,
> friend, be sure to barricade your bedroom door at night. I'm not afraid
> of aged clones or the attempted chopping off of my appendages (elements
> of the Mossad talked about chopping off my right middle finger and
> right ear, and 10 out of 10 of my toes, like my right middle finger
> have unique steeple designs).
>
> I'm not afraid of anything. I'll defend myself to the best of my
> ability, and I commit my life to saving the lives of men, women, and
> children and strengthening good organizations. I will always remember
> my biological Aunt Gloria Atkinson. Sincerely, Brandon

5117. id theft remans a crime

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-31 03:28:39 UTC
From: "kb9rqz-3@hotmail.com" <kb9rqz-3@hotmail.com>
Message-ID: <1162265319.071100.161730@b28g2000cwb.googlegroups.com>
Source record: 9768
Cross-posted to: rec.radio.cb,rec.radio.amateur.homebrew,alt.radio,rec.radio.amateur.policy

MarQueerMyDear wrote:
>
and always will be one get help woger

5118. Re: APOLOGIES AND CORRECTION - FS - stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-31 12:49:19 UTC
From: Telstar Electronics <briangriffey@sbcglobal.net>
Message-ID: <1162298959.865118.192730@h48g2000cwc.googlegroups.com>
Source record: 9769

Sounds like a job for Ebay...

http://www.telstar-electronics.com/default_files/CompetingModels.htm

5119. 144 MHz Amplifer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-10-31 20:21:40 UTC
From: mtech <marin.zorica/REMOVE/@zd.t-com.hr>
Message-ID: <ei8b87$74t$1@news1.carnet.hr>
Source record: 9770

Hi;

I need a schematic of a 50W or less 144MHz PA, with about 5W input......

The PA isn't big problem I'm worried, but real problem is switching
RX/TX.....

5120. Re: Coax Crimp Tool Recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-01 00:31:41 UTC
From: I PUNCE <markpunce@yahoo.com>
Message-ID: <1162341101.724699.283610@m7g2000cwm.googlegroups.com>
Source record: 9771
Cross-posted to: rec.radio.cb,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.policy,alt.usenet.kooks

Slow Code wrote:
> Dave <W1MCE@comcast.net> wrote in
> news:Ro-dnR7I2LS-Lt7YnZ2dnUVZ_o-dnZ2d@comcast.com:
>
> > Solder??
>
>
> I know how you feel. I felt the same way after hearing there would be
> 5wpm Extras.
>
>
>
> > Danny Richardson wrote:
> >
> >> Looking for suggestions for a good crimp tool for installing coax
> >> connectors. It will primarily for BNC connectors on RG-174, 58 and 59
> >> cables. Although the RG-8 cable family capability would be nice too.
> >>
> >> I do wish to avoid being a captive customer in that brand X crimp tool
> >> only works well with brand X connectors.
> >>
> >> And, of course, looking for the best bank for the buck.
> >>
> >> Thanks,
> >>
> >> Danny
> >
> >

wait till hf is filled with marqueer extras

5121. Re: Coax Crimp Tool Recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-01 00:43:40 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <05S1h.577$l25.354@newsread4.news.pas.earthlink.net>
Source record: 9772
Cross-posted to: rec.radio.cb,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.policy,alt.usenet.kooks

"I PUNCE" <markpunce@yahoo.com> wrote in
news:1162341101.724699.283610@m7g2000cwm.googlegroups.com:

>
> Slow Code wrote:
>> Dave <W1MCE@comcast.net> wrote in
>> news:Ro-dnR7I2LS-Lt7YnZ2dnUVZ_o-dnZ2d@comcast.com:
>>
>> > Solder??
>>
>>
>> I know how you feel. I felt the same way after hearing there would be
>> 5wpm Extras.
>>
>>
>>
>> > Danny Richardson wrote:
>> >
>> >> Looking for suggestions for a good crimp tool for installing coax
>> >> connectors. It will primarily for BNC connectors on RG-174, 58 and
>> >> 59 cables. Although the RG-8 cable family capability would be nice
>> >> too.
>> >>
>> >> I do wish to avoid being a captive customer in that brand X crimp
>> >> tool only works well with brand X connectors.
>> >>
>> >> And, of course, looking for the best bank for the buck.
>> >>
>> >> Thanks,
>> >>
>> >> Danny
>> >
>> >
>
> wait till hf is filled with marqueer extras

Shit. You just made halloween scary.

SC

5122. id theft is acrime

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-01 01:14:43 UTC
From: Mark@kb9rqz.aprs
Message-ID: <f7tfk2h5ugaacamnielrs8ddvbk7pj5are@4ax.com>
Source record: 9773
Cross-posted to: rec.radio.cb,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.policy

On 31 Oct 2006 16:31:41 -0800, "I PUNCE" <markpunce@yahoo.com> wrote:

>
and you knwo that
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5123. Re: Response to SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-01 02:49:01 UTC
From: RadioGuy <RadioGuy@radioguy.com>
Message-ID: <MPG.1fb1d529a82a361c989a8e@news-server.carolina.rr.com>
Source record: 9774
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.policy

In article <o4c1h.1643$zf.236@newsread3.news.pas.earthlink.net>,
my.mail@no.spam says...
> "Merlin-7 KI4ILB" <merlin-7@sc.rr.com> wrote in
> news:Vo91h.1331$nG1.778@tornado.southeast.rr.com:
>
> > If Slow Code left, I would miss him.
> >
> > I do not agree with him most of the time. As a matter of fact, he is
> > dead
> > wrong a lot of the time.
> >
> > At least he stands up for what he believes in.
> >
> > I myself, do not think that every ham should have to be able to
> > send/copy
> > code at 20wpm no more that I think they should be tested on psk,rtty,
> > slow scan tv. etc.
> >
> > Some people have a passion for code and some have a passion for other
> > modes. I use them all from time to time, and to be honest, after I move
> > next year, I am going to work on my code a bit more when I have the time
> > to do so.
> >
> > However, I will still give him a hard time about his ranting. After all
> > I
> > have not heard anyone tell him that he is not a real ham because he does
> > not have psk nailed down..HI HI
> > Joe
> > KI4ILB
>
>
> I was part of the big RRAP CW and anti-ARRL fights of the late 90's up
> until restructuring went into effect, then my posting tapered off. I'll
> disappear again once the FCC totally kills off ham radio by eliminating
> the code requirement. When that happens, I'll wear a strip of black
> electricians tape around my arm in memorial and observe twenty-four hours
> of radio silence in memory of a once proud service.
>
> Rest in Peace, Ham Radio. You were a good and faithful friend.
>
> SC
>
We could only hope you observe 24 years of newsgroup silence. By then

you'd be in the grave.

5124. Re: More on matching -- Xtal filters this time

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-01 22:22:06 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12ki7ggkmpri856@corp.supernews.com>
Source record: 9775

Thanks for the help, Andy... I muddled through it (it's a little odd the first time you've normalized your Smith chart to 1800 ohms and the termination is 50 ohms!) and the filters do work as their data sheets say.

I did find that xtal filters can easily drive a network analyzer nuts... even for looking at a single frequency, I had to significantly increase the sampling time well above the default to get a stable display. I'm thinking this is due to the absurdly high Q of the crystals causing a very long transient response, thereby necessitating a long sampling time to finally measure the steady state response.

---Joel

5125. FA: NOS NATIONAL RF CHOKES + STUFF

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-01 23:15:35 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <rU92h.166140$QZ1.4442@bgtnsc04-news.ops.worldnet.att.net>
Source record: 9776

Have listed several small NOS National RF chokes; see at :

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

+ other stuff, tnx heytubeguy

5126. Ten Tec Band Modules Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-02 03:35:22 UTC
From: Brian <kb9bvn@earthlink.net>
Message-ID: <_Hd2h.1263$l25.127@newsread4.news.pas.earthlink.net>
Source record: 9777
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I have a friend that just bought a used Ten Tec Scout, it came with a 40m and a 80m band module. He is looking for 30m and maybe 15/17m as well.

If you have any of these you'd like to sell, please send me an email.

73 de KB9BVN

5127. Re: More on matching -- Xtal filters this time

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-02 03:51:19 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1162439479.063813.50030@b28g2000cwb.googlegroups.com>
Source record: 9778

Joel Kolstad wrote:
> Thanks for the help, Andy... I muddled through it (it's a little odd the first
> time you've normalized your Smith chart to 1800 ohms and the termination is 50
> ohms!) and the filters do work as their data sheets say.
>
> I did find that xtal filters can easily drive a network analyzer nuts... even
> for looking at a single frequency, I had to significantly increase the
> sampling time well above the default to get a stable display. I'm thinking
> this is due to the absurdly high Q of the crystals causing a very long
> transient response, thereby necessitating a long sampling time to finally
> measure the steady state response.
>
> ---Joel

Andy writes:

I liked using the old Telonic sweep generators, with the two big
dials, and a diode detector/scope to scan the filter bandpass.
I don't have one, or access to one anymore, and have to do
it by hand.....
But, what the hell. Retirement gives me a lot of time to
twiddle knobs...

Andy W4OAH

5128. Re: Question for the group. Mainly new hams.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-02 04:28:24 UTC
From: RadioGuy <RadioGuy@radioguy.com>
Message-ID: <MPG.1fb33df13282b61a989aa7@news-server.carolina.rr.com>
Source record: 9779
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

In article <VLS%g.19224$UG4.10081@newsread2.news.pas.earthlink.net>,
my.mail@no.spam says...
> Chuck Harris <cf-NO-SPAM-harris@erols.com> wrote in
> news:MNGdnVFG3tY7ArDYnZ2dnUVZ_qudnZ2d@rcn.net:
>
> > Slow Code wrote:
> >
> >>>> Big Ten-Four on that Good Buddy.
> >>> It sounds like you run a lot of 11m, not surprising considering how
> >>> much you whine, and it's not alternator whine.
> >>
> >>
> >> I only typed like because I knew you would understand that style of
> >> communicating. So, after your license came in the mail what I
> >> appliance did you decide to buy? MFJ? Alinco? Cobra?
> >>
> >
> > While you are being all holier than thou, what did you design and build
> > for your main rig? I'm hoping to be impressed, but expecting to be
> > disappointed.
> >
> > Did the code help you with the design?
> >
> > I took my Advanced class test down at 1919 M street 36 years ago. I had
> > to sit at the desk and copy one solid minute out of five error free at
> > 13WPM. I passed it on the first try. I almost failed the sending test,
> > as I had never spent much time doing that. I had never made a code
> > contact before my test, and I have only made a couple since.
> >
> > The thing about code contacts is they never seem to want to say anything
> > beyond:
> >
> > WA3XXX DE W6XX RST 5NN WX FB 73 W6XX SK
>
>
> Contacts like that still help maintain receiving skill. That's important
> if you ever have to use CW to save a life.
>
> SC
>
How are you going to save a life with CW? If someone is having a heart
attack he's not going to be steady enough to type out an SOS to you.

No planes use morse code. No ships do either. Just who do you think is going to send you an SOS?

5129. Re: Coax Crimp Tool Recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-02 06:23:05 UTC
From: "Text Medium No. 5" <mhm29x21@meow.flonk>
Message-ID:
<pan.2006.11.02.06.23.02.250372@hail.eris.flonk.meow.all.hail.discordia.meow.flonk.mockery.demon.not.really.leola>
Source record: 9780
Cross-posted to: rec.radio.cb,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.policy,alt.usenet.kooks

Hail Eris! On Tue, 31 Oct 2006 16:31:41 -0800, I PUNCE jabbered inanely:
> Slow Code wrote:
>> Dave wrote:
>>
>> > Solder??
>>
>> I know how you feel. I felt the same way after hearing there would be
>> 5wpm Extras.
>>
>> > Danny Richardson wrote:
>> >
>> >> Looking for suggestions for a good crimp tool for installing coax
>> >> connectors. It will primarily for BNC connectors on RG-174, 58 and 59
>> >> cables. Although the RG-8 cable family capability would be nice too.
>> >>
>> >> I do wish to avoid being a captive customer in that brand X crimp
>> >> tool only works well with brand X connectors.
>> >>
>> >> And, of course, looking for the best bank for the buck.
>> >>
>> >> Thanks,
>> >>
>> >> Danny
>
> wait till hf is filled with marqueer extras

That sounds exciting! Your foam should rise high, then.

--
Shon'ai COOSN-029-06-71069
"I was told there would be cookies."
Cross-Poasters For Goddess!
Remember: Straight people can't help it!
A petition to make the Five-Fingered Hand of Eris
the official symbol for the planet Eris:
http://www.petitiononline.com/ffhoeris/

"If you don't have pedicures AT LEAST every two weeks, don't talk to me.
If you don't floss every night and morning and brush at least twice a
day, don't talk to me. If you don't spend money on you hair and get
great cuts and color, don't talk to me. If you are heavy, don't talk to
me. If you don't shower every morning and take a nice bubble bath every
night, don't talk to me. If you don't have a loved one in your arms,

don't talk to me. If you don't keep an immaculate house, don't talk to me. If you don't work, don't talk to me." -- Clearly, Martha Vandella never wants to talk to me, which is for the best, really.
MID: <1161934857.062934.91900@i42g2000cwa.googlegroups.com>

5130. Re: Crimp Tool Suggestions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-02 12:16:05 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1162469765.118284.282450@e3g2000cwe.googlegroups.com>
Source record: 9781

I just purchased a crimp tool and dies for RG8/213 from Davis RF... It was eighty some dollars for the tool, two sets of dies, and a carry case.. I have a bunch of cabling to make for the station revisions in progress... This was a whim decision and I will post my thoughts after I use it a bit...

denny / k8do

5131. Using alliance rotor with channel master box

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-02 13:48:21 UTC
From: n4aeq <tucker@conninc.com>
Message-ID: <1162475301.873627.50980@i42g2000cwa.googlegroups.com>
Source record: 9782

Many years ago in the TV bussiness we would use a alliance tenna
rotor 4 - wire on a 3 - wire
channel master control box. Now i have the same combination i need to
install on my 6 meter beam
however i fot got the wiring setup?
Does any remember the proper wiring, i think it was combine 1&2 or 3&4
but i cant remember the
setup.

5132. Re: More on matching -- Xtal filters this time

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-02 14:31:06 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1162477866.843613.116770@e3g2000cwe.googlegroups.com>
Source record: 9783

Joel Kolstad wrote:
> Thanks for the help, Andy... I muddled through it (it's a little odd the first
> time you've normalized your Smith chart to 1800 ohms and the termination is 50
> ohms!) and the filters do work as their data sheets say.
>
> I did find that xtal filters can easily drive a network analyzer nuts... even
> for looking at a single frequency, I had to significantly increase the
> sampling time well above the default to get a stable display. I'm thinking
> this is due to the absurdly high Q of the crystals causing a very long
> transient response, thereby necessitating a long sampling time to finally
> measure the steady state response.
>
> ---Joel

Andy writes:

Joel, one more thing comes to mind.

I like to match impedances using a "double Smith chart". On this
chart,
a normal smith chart is in one color while the mirror image is in
another
color.....
It is called an "impedance-admittance" chart.

One can follow the series reactances along one color, and then
the parallel reactances along the other, to get from the starting
point to the ending part....

Once a person is comfortable using this method, it gives a LOT
of gut feel insight to the various combinations of matching networks
you can use.....

I had to design an automated antenna tuner for Texas Instruments
once, for the HF SSB marine system, and I used the double Smith
Chart to figure out what the combinations needed to be, and then
wrote a computer program that would step reactive elements in series
or parallel . The automated system therefore just stepped along the
curves exactly as I had done by hand..... That was about 30 years
ago.

Anyway, the Smith Chart, and various derivative versions, is great
because you can see a much larger 'big picture" rather than just
discrete values at discrete frequencies..... It's a good and very
useful skill to have... among others..

Andy in Eureka, Texas W4OAH

5133. DIY Transmitter for 3 m

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-02 19:29:39 UTC
From: Martin <senderbau@egyptportal.ch>
Message-ID: <1162495779.517408.264110@m7g2000cwm.googlegroups.com>
Source record: 9784

Hi,
I would like to tell you about my new site for DIY transmitter for 3
meters. There is a lot of transmitters, amplifiers, antennas. The site
is in german language, but pictures are international.. :)

Visit it one time
www.senderbau.egyptportal.ch

best regards

5134. Re: Double AD99XX to make IQ local oscillator. Help needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-03 01:49:21 UTC
From: novatech@eskimo.com
Message-ID: <eie771$j63$1@eskinews.eskimo.com>
Source record: 9785

"john jardine" <john@jjdesigns.fsnet.co.uk> writes:

>"OH1GTF" <spam99@suomi24.fi> wrote in message
>news:1161945203.565532.248130@i42g2000cwa.googlegroups.com...
>> Hi fellows!
>>
>> I'm building a software defined radio that is mostly based on the
>> "Software Defined Radios For The Masses" -articles and are at the point
>> of designing the DDS board. I have two units of AD9954 DDS chips and
>> my idea was to use them parallel, other one with 90 degree phase shift
>> to generate the quadrature signal. This is my first time with DDS, so
>> understanding the control seem to be a little bit difficult for a first
>> timer.
>>
>> Two questions to start with:
>>
>> 1. I suppose for proper control I need four pins connected from the DDS
>> to the computer (through buffers) I/O update, SDIO, SCLK and Reset, am
>> I correct?
>>
>> 2. Do I have to drive two SDIO serial signals separately for each DDS
>> chip from computer so, that I can define the phase shift for the other
>> DDS (while other one has no phase shift, obivously) ? This came to my
>> mind since the chips don't have any addresses to indentify them.
>>
>> Thanks a lot!!!
>>
>> 73 de Janne, OH1GTF
>>
>Don't know that particular DDS but did it with two AD9832 used in a vector
>impedance arrangement. The master clock and serial clock/data lines were
>wired to both chips. Common serial data was sent to both chips but made
>'valid' only for the wanted DDS by use of individual "Fsync"(?) lines.
>Worked no problem. Chips never got out of step. Phase could be varied at
>will.
>john

Yep, that will always work. If you aren't tied to the AD9954, I would suggest
the AD9959 or AD9958. You get 4 or 2 channels in one chip with lots of
control. Cost more, but pretty nice part.

Steve.
--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997

206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

5135. CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-03 03:58:26 UTC
From: ka9s3@comcast.net
Message-ID: <1162526305.552507.202020@e3g2000cwe.googlegroups.com>
Source record: 9786

I have been looking into gizmos that improve CW copy. Most are audio tone detectors that ignore short impulse noise bursts and then regenerate the CW with a keyed tone oscillator. There are several of these designs around and they are all well and good, but I stumbled across something different and was wondering if any of you have had personal experience with it?

An October 1971 article in Ham Radio magazine (pg 17) titled "high-performance CW processor for communications receivers", "Frequency modulating the telegraphy signals in your receiver provides an interesting and profitable addition to conventional receiver design".

The idea is to sample the last IF of a receiver after as much IF filtering as you can muster, and then using this as the RF input to a FM modulator. The RF/IF is modulated at the audio frequency you like to hear while copying CW. The next step is to frequency multiply the FM modulated signal to increase the bandwidth and up the modulation index. The following step is to treat it like any normal FM receiver IF and run it through a limiter stripping off any amplitude information. The last step is to put the signal into a normal FM discriminator to recover the modulating tone you used.

What this is supposed to do is reduce or eliminate QRN (not QRM) from the CW signal making a "quiet" background to copy the CW.

Have any of you ever done this and how did it work out for you?

- Jeff

5136. Re: More on matching -- Xtal filters this time

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-03 06:07:00 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12kln45m8ihade@corp.supernews.com>
Source record: 9787

"AndyS" <andysharpe@juno.com> wrote in message
news:1162439479.063813.50030@b28g2000cwb.googlegroups.com...
> I liked using the old Telonic sweep generators, with the two big
> dials, and a diode detector/scope to scan the filter bandpass.
> I don't have one, or access to one anymore, and have to do
> it by hand.....

Perhaps I'm spoiled by having access to VNAs and spectrum analyzers with tracking generators. :-)

It's sad that *good* spectrum analyzers are still quite spendy, even on the used market. There are several "homebew" spec. ans. out there that are quite impressive, but none that come close to even something like a 15 year old HP 8594.

---Joel

5137. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-03 12:27:39 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1162556859.782446.301680@h48g2000cwc.googlegroups.com>
Source record: 9788

ka9s3@comcast.net wrote:>
> Have any of you ever done this and how did it work out for you?
>
> - Jeff

Andy writes:
Jeff, I haven't tried this method, but one rule of thumb I have
always
believed in is:

"No matter how much you shift, limit, amplify or divide noise, it still
ends up as noise"

The only effective way I have ever found is to narrow the bandwidth
around the signal until the signal starts to get degraded. If done
digitally, it can be done by digital processing, but that changes only
the technique, not the principle...

So, while I would really like to try out some of these "improved
methods",
I am not confident enough in them to spend a weekend wiring together
some hardware.... In my younger years, I probly would've, tho....

Personally, as a CW operator of some 45 years, I have found that my
ears/brain does a lot better job of filtering than one would suppose,
especially
if I am copying some standard message where I sort of know the words
the other fellow will send. I only need 2 or 3 letters per word to
fill in
the pieces with devastating accuracy (grin).....

But, good luck on your efforts. If you do build up something, please

come back and post it here. I am sure that there are many
experimenters who try something like that if someone thinks it shows
promise..... But, please, take some actual measurements. And with
S/N ratios of around the 0 db level. My ear copy can still pick those

out, and many of the "processors" can't deal with noisy sigs in that
region....they tend to fall apart when anything below tangential
sensitivity is received....

Andy W4OAH in Eureka, Texas

5138. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-03 16:00:47 UTC
From: ka9s3@comcast.net
Message-ID: <1162569647.116221.22280@b28g2000cwb.googlegroups.com>
Source record: 9789

Andy,

Thanks for your response. I guess I'm looking for a magic pill (though
I know better). I agree that the human brain/ear combination is
unsurpassed in digging out the really weak ones or the weak signal our
of the pile up. My unfortunate situation is my degenerating hearing. I
now wear hearing aids in both ears and have difficulty understanding
spoken conversation no matter what the volume level. I have always been
a CW only operator so the loss of SSB use doesn't seem so bad. I can
copy CW much better than listen to voices, but I can never be sure that
I can still dig the weak signals out of the mud and I'm pretty sure I
have lost some ability to deal with pile-up QRM. So I'm grabbing at
straws for gizmos to help me out as my hearing digresses.

73 - Jeff - KA9S

On Nov 3, 6:27 am, "AndyS" <andysha...@juno.com> wrote:
> k...@comcast.net wrote:>
> > Have any of you ever done this and how did it work out for you?
>
> > - Jeff
> Andy writes: Jeff, I haven't tried this method, but one rule of thumb I have
> always
> believed in is:
>
> "No matter how much you shift, limit, amplify or divide noise, it still
> ends up as noise"
>
> The only effective way I have ever found is to narrow the bandwidth
> around the signal until the signal starts to get degraded. If done
> digitally, it can be done by digital processing, but that changes only
> the technique, not the principle...
>
> So, while I would really like to try out some of these "improved
> methods",
> I am not confident enough in them to spend a weekend wiring together
> some hardware.... In my younger years, I probly would've, tho....
>
> Personally, as a CW operator of some 45 years, I have found that my
> ears/brain does a lot better job of filtering than one would suppose,
> especially
> if I am copying some standard message where I sort of know the words
> the other fellow will send. I only need 2 or 3 letters per word to
> fill in
> the pieces with devastating accuracy (grin).....

>
> But, good luck on your efforts. If you do build up something, please
>
> come back and post it here. I am sure that there are many
> experimenters who try something like that if someone thinks it shows
> promise..... But, please, take some actual measurements. And with
> S/N ratios of around the 0 db level. My ear copy can still pick those
>
> out, and many of the "processors" can't deal with noisy sigs in that
> region....they tend to fall apart when anything below tangential
> sensitivity is received....
>
> Andy W4OAH in Eureka, Texas

5139. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-03 16:30:13 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <H_OdnZ9smLIQ89bYnZ2dnUVZ_sadnZ2d@web-ster.com>
Source record: 9790

ka9s3@comcast.net wrote:
(top posting fixed)
> On Nov 3, 6:27 am, "AndyS" <andysha...@juno.com> wrote:
>
>>k...@comcast.net wrote:>
>>
>>>Have any of you ever done this and how did it work out for you?
>>
>>>- Jeff
>>
>>Andy writes: Jeff, I haven't tried this method, but one rule of thumb I have
>>always
>>believed in is:
>>
>>"No matter how much you shift, limit, amplify or divide noise, it still
>>ends up as noise"
>>

(snip)

>>My ear copy can still pick those
>>out, and many of the "processors" can't deal with noisy sigs in that
>>region....they tend to fall apart when anything below tangential
>>sensitivity is received....
>>
>> Andy W4OAH in Eureka, Texas
>
> Andy,
>
> Thanks for your response. I guess I'm looking for a magic pill (though
> I know better). I agree that the human brain/ear combination is
> unsurpassed in digging out the really weak ones or the weak signal our
> of the pile up. My unfortunate situation is my degenerating hearing. I
> now wear hearing aids in both ears and have difficulty understanding
> spoken conversation no matter what the volume level. I have always been
> a CW only operator so the loss of SSB use doesn't seem so bad. I can
> copy CW much better than listen to voices, but I can never be sure that
> I can still dig the weak signals out of the mud and I'm pretty sure I
> have lost some ability to deal with pile-up QRM. So I'm grabbing at
> straws for gizmos to help me out as my hearing digresses.
>
> 73 - Jeff - KA9S
>
They're doing amazing things with PCs and soundcards, doing waterfall
plots to pick out weak signals. Perhaps this would work for CW as well

-- and if it does you can take a break from the hearing aids entirely,
and just do it all visually.

Alas, I don't know what the right software to use would be.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

5140. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-03 17:58:25 UTC
From: mcalhoun@ksu.edu
Message-ID: <eig001$t2t@unix1.cc.ksu.edu>
Source record: 9791

>Thanks for your response. I guess I'm looking for a magic pill (though
>I know better). I agree that the human brain/ear combination is
>unsurpassed in digging out the really weak ones or the weak signal our
>of the pile up.....

Interesting. I recall reading (in QST, no less) of PSK QSO's where
the human ear could NOT even tell a signal was being received, yet
the screen copy was "5x9" (if such a phrase even has meaning in
this context!-)

--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
NRA Life Member and Rifle, Pistol, & Home Firearm Safety Certified Instructor
Certified Instructor for the Kansas Concealed-Carry Handgun license

5141. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-03 19:30:47 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <3r2nk2lpmk8knidb7uhlpsmajupdukkkou@4ax.com>
Source record: 9792

On 3 Nov 2006 08:00:47 -0800, ka9s3@comcast.net wrote:

>My unfortunate situation is my degenerating hearing. I
>now wear hearing aids in both ears and have difficulty understanding
>spoken conversation no matter what the volume level.

Sorry to hear about your hearing problem, apparently you have
problems of hearing some specific frequencies.

I don't know if this might help you, but one interesting observation
about a A1A beacon and FM receivers may be of interest.

We have a nearby microwave beacon sending out call sign and locator
using ordinary on-off keying. When receiving the signal on an FM
receiver with the squelch fully open, full quieting is achieved when
the carrier is on, but strong "FM-hiss" is audible, when there is no
signal.

After a while, it was not too hard to copy the beacon message in this
"negative-CW" format.

Since the FM-noise contains white noise, it should be detectable even
if some spot frequencies are undetectable due to selective hearing
loss.

One approach would be to run the CW signal through some kind of FM
receive, limiting the carrier, but producing white noise when no
signal is available (and you would have to learn to copy negative-CW)
or alternatively use some amplitude detector to control a noise gate,
i.e. when there is a carrier present, the white noise would get
through, with no signal, the headphones would be silent.

Just an idea.

Paul OH3LWR

5142. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-03 21:58:05 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1162591085.500898.182100@h54g2000cwb.googlegroups.com>
Source record: 9793

Paul Keinanen wrote:
spot frequencies are undetectable due to selective hearing
> loss.
>
> One approach would be to run the CW signal through some kind of FM
> receive, limiting the carrier, but producing white noise when no
> signal is available (and you would have to learn to copy negative-CW)
> or alternatively use some amplitude detector to control a noise gate,
> i.e. when there is a carrier present, the white noise would get
> through, with no signal, the headphones would be silent.
>
> Just an idea.
>
> Paul OH3LWR

Andy writes:

A hard limiter decreases the signal to noise by about 5.6 db, and
that's
a mathematical fact...

If we know the characteristics of the noise, and the
characteristics of
when it occurs and the distribution of the energy, then we have
"a priori" experience , and it really isn't "noise" anymore, and it can
be
dealt with --- in some cases rejected - and it's effects on the
intelligibiliy
of a desired signal made less...

There are two characteristics familiar to a radar engineer, which
deals with detection of a signal in the presence of noise::

Probability of detection -- Which is the probablility that a
signal
will be detected in the presence of noise without
an error.

Probability of false alarm -- This is the probability that
detection of
a vailid signal will occur when there is, in
fact, no signal
present.

Entire volumes have been written on Pd versus Pfa, since this
means

life or death to an aircraft (for instance) when a missle lock may happen.....

If the other guy detects you and sends his missle before you do, you will probly be dead.
If you fire your missles off at a ghost and have none left, you will probly
be dead..

In the final analysis, CW is just On-Off signals, much like pulses.

The bottom line in all this is that if you KNOW what the signal is going to
do you can increase the chances of detecting it properly.

For instance, if the signal is repetitive, it can be stored, integrated,
differentiated, or accumulated with weighing functions to recover the intelligence ---- "a priori" knowledge is necessary..

If you know what the noise is going to do -- impulse, popcorn, static, broadband, random, etc --- you can use techniques to reduce it hopefully without reducing the signal..

So fancy noise limiters, signal enhancers, and innovative detectors will
work on some types of interference, and not on others. To be a universal
S/N improvement, it has to work on "unknown" interference...

That's what the ham bands are like. It could be AM splatter, white noise, a welder machine, the "woodpecker", car ignition..... whatever....

That's what restricting the bandpass does, usually. Sometimes it makes the S/N worse, but only with "special" types of interference.

There ain't no "magic bullet".....

The subject is a LOT more complicated than just any single simple technique for recovering a signal...

However ,our ear/brain, with PRACTICE is an adaptive filter. It's amazing
how well it works, after someone has been copying CW for a while. Perhaps a microprocessor controlled adaptive filter can be made to approach it, but ADAPTIVE filtering is the only hope that I can see, given the different types of QRM and QRN that I have encountered. My best bet is that someday an adaptive CW filter would be to do as good as my own ear could do today.....

It's like looking at a noisy signal on a scope. Someone with a lot of practice can see a valid signal several db lower in S/N than a novice can do.... Sonar operators can do the same.....

"Waterfall" displays simply integrate the signal and noise over time,
which is similar mathematically to restricting the bandwidth as far as
the
S/N "enhancement" properties.... The characteristics of the signal
and the characteristics of the noise are known beforehand, and
that is used, via the display, to increase the Pd and decrease the
Pfa....

End of rant..... I need a beer.

Andy W4OAH

(retired communications and RADAR systems engineer and
ham for about 45 years, or so.... hell, I don't remember any more)

5143. Anyone written the FCC and told them to keep the code requirement?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-04 00:16:13 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <hZQ2h.1647$L6.319@newsread3.news.pas.earthlink.net>
Source record: 9794
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

If you have, Thanks.

73
de Slow Code

5144. Re: Anyone written the FCC and told them to keep the code requirement?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-04 00:55:21 UTC
From: U-Know-Who <no-one@nowhere.com>
Message-ID: <ZxR2h.5257$lx6.424@tornado.texas.rr.com>
Source record: 9795
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Slow Code" <my.mail@no.spam> wrote in message
news:hZQ2h.1647$L6.319@newsread3.news.pas.earthlink.net...
>
>
> If you have, Thanks.
>
> 73
> de Slow Code

Nah, all HF bands are for sale. Lord help the rest of the world after the
FCC finishes their work. People like SC are the reason for this.

5145. Selecting toroids for HF use...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-04 17:54:15 UTC
From: tictac1 <bggungor@gmail.com>
Message-ID: <1162662855.345115.209880@h48g2000cwc.googlegroups.com>
Source record: 9796

Hi,

I need some toroidal cores(powdered iron or ferrite) for general HF use. So i guess i will be looking for cores in 3-30~ MHz range. I have access to Philips toroidal cores in where i live and i need your advice to find the suitable one. Waiting for your answers...

Thanks...

5146. Class C amps and saturation (again)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-04 18:34:14 UTC
From: bill.meara@gmail.com
Message-ID: <1162665254.828375.182050@k70g2000cwa.googlegroups.com>
Source record: 9797

Back in July I wrote:

I'm reading David Rutledge's excellent "The Electronics of Radio."
In Chapter 10 -- Power Amplifiers, he discusses Class C amps and says,
"In addition, if we drive the transistor clear to saturation, using the

transistor as a switch, the dissipated power can be greatly reduced,
because the saturation voltage is low. This is Class C
amplification..."
I'd always throught that in Class C, while you'd operate the device so
that it was cutoff during most of the cycle, but not saturated.
Is this just a different definition of Class C?
I checked back with SSDRA and EMRFD, and didn't see anything about
driving Class C amps into saturation?
What says the group? Do we saturate in Class C or not?

I've been thinking about this some more. The 1980 ARRL handbook points
out that "Solid State power amplifiers should be operated just below
their saturation points for best efficiency and stability." Also, the
formula that we use to determine load resistance (Rl=Vcc^2/2Po) implies
that we are looking for a combination of Vcc, Load resistance and power
out that will prevent saturation.
And wouldn't we end up with far lower harmonic content if we only clip
one side of the wave form (at cutoff) instead of both sides (cutoff and
saturation)?

I know there are more exotic modes beyond C, but for plain old ordinary
ham radio applications, don't we normally avoid saturation in Class C
amps?

Also, what about this business of having the efficiency improve through
saturation "because the saturation voltage is low" Could that be
right? If you put a voltage across a conductor and generate a large
current, you can't sit back and say "Great! Power consumption across
the conductor is low because the voltage drop across it is now
minimal!"

73 from London
Bill M0HBR N2CQR CU2JL
http://www.gadgeteer.us

5147. Re: Class C amps and saturation (again)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-04 18:50:14 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1162666214.306314.66710@h48g2000cwc.googlegroups.com>
Source record: 9848

bill.meara@gmail.com wrote:
> Back in July I wrote:
>
> I'm reading David Rutledge's excellent "The Electronics of Radio."
> In Chapter 10 -- Power Amplifiers, he discusses Class C amps and says,
> "In addition, if we drive the transistor clear to saturation, using the
>
> transistor as a switch, the dissipated power can be greatly reduced,
> because the saturation voltage is low. This is Class C
> amplification..."
> I'd always throught that in Class C, while you'd operate the device so
> that it was cutoff during most of the cycle, but not saturated.
> Is this just a different definition of Class C?
> I checked back with SSDRA and EMRFD, and didn't see anything about
> driving Class C amps into saturation?
> What says the group? Do we saturate in Class C or not?
> ---
> I've been thinking about this some more. The 1980 ARRL handbook points
> out that "Solid State power amplifiers should be operated just below
> their saturation points for best efficiency and stability." Also, the
> formula that we use to determine load resistance (Rl=Vcc^2/2Po) implies
> that we are looking for a combination of Vcc, Load resistance and power
> out that will prevent saturation.
> And wouldn't we end up with far lower harmonic content if we only clip
> one side of the wave form (at cutoff) instead of both sides (cutoff and
> saturation)?
>
> I know there are more exotic modes beyond C, but for plain old ordinary
> ham radio applications, don't we normally avoid saturation in Class C
> amps?
>
> Also, what about this business of having the efficiency improve through
> saturation "because the saturation voltage is low" Could that be
> right? If you put a voltage across a conductor and generate a large
> current, you can't sit back and say "Great! Power consumption across
> the conductor is low because the voltage drop across it is now
> minimal!"
>
> 73 from London
> Bill M0HBR N2CQR CU2JL
> http://www.gadgeteer.us

The definition I've always heard for class C is that conduction of the
active device is for less than half of each cycle. Nothing is said

about saturation.

Of course, if the active device conducts when there is appreciable voltage across it, it will dissipate more power than if it were conducting the same current at lower voltage.

Cheers,
Tom

5148. Re: Selecting toroids for HF use...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-04 18:53:13 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1162666393.251369.270220@b28g2000cwb.googlegroups.com>
Source record: 9849

tictac1 wrote:
> Hi,
>
> I need some toroidal cores(powdered iron or ferrite) for general HF
> use. So i guess i will be looking for cores in 3-30~ MHz range. I have
> access to Philips toroidal cores in where i live and i need your advice
> to find the suitable one. Waiting for your answers...
>
> Thanks...

Suitable for WHAT? You say you "need" them, but what exactly causes
that need? What are you trying to accomplish?

Cheers,
Tom

5149. Re: Anyone written the FCC and told them to keep the code requirement?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-04 19:05:46 UTC
From: Mark@kb9rqz.aprs
Message-ID: <34ppk2hk8sudht712ap04fitgaa70gd8m1@4ax.com>
Source record: 9850
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sat, 04 Nov 2006 00:16:13 GMT, Slow Code <my.mail@no.spam> wrote:

>
>
>If you have, Thanks.
>
>73
>de Slow Code
nope not here
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5150. Re: Selecting toroids for HF use...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-04 19:19:16 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12kpptmsmqm9k15@corp.supernews.com>
Source record: 9851

There is no such thing as a single core type suitable for "general" HF use, because the required core material depends strongly on just what the use is.

You can, however, satisfy a large number of requirements with a few core types. Micrometals type 2 or 6 powdered iron cores are suitable for most high-Q inductors. I consistently measure higher Q with type 6 cores, at least when sparsely wound, but type 2 is convenient for higher inductances due to its higher permeability. I didn't know Philips made powdered iron cores -- if they do, you should check their web site and Micrometals' to find an approximate equivalent. The choice of core material for RF chokes and broadband transformers depends on how much power and how much DC current is involved. For low power applications where there isn't a substantial amount of DC current, Fair-rite type 43 ferrite material is a good choice for those applications. If you need more impedance, for example at lower frequency or in higher impedance circuits, one of the 70 series materials would be better. Again, look at the respective web sites to find an approximate equivalent material from another manufacturer.

The sizes of cores you'll need depends on the inductance (for high-Q inductors) or impedance (for RF chokes or broadband transformers) range, power handling capability, and DC flux level you need to deal with. For low power, low flux applications, (F)T-37 and -50 are popular sizes. These are 0.37 and 0.50 inch OD respectively.

Roy Lewallen, W7EL

tictac1 wrote:
> Hi,
>
> I need some toroidal cores(powdered iron or ferrite) for general HF
> use. So i guess i will be looking for cores in 3-30~ MHz range. I have
> access to Philips toroidal cores in where i live and i need your advice
> to find the suitable one. Waiting for your answers...
>
> Thanks...
>

5151. Re: Class C amps and saturation (again)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-04 19:29:49 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <Z9qdnZ1JW9m-d9HYnZ2dnUVZ_s2dnZ2d@web-ster.com>
Source record: 9852

bill.meara@gmail.com wrote:
> Back in July I wrote:
>
> I'm reading David Rutledge's excellent "The Electronics of Radio."
> In Chapter 10 -- Power Amplifiers, he discusses Class C amps and says,
> "In addition, if we drive the transistor clear to saturation, using the
>
> transistor as a switch, the dissipated power can be greatly reduced,
> because the saturation voltage is low. This is Class C
> amplification..."
> I'd always throught that in Class C, while you'd operate the device so
> that it was cutoff during most of the cycle, but not saturated.
> Is this just a different definition of Class C?

Look at it this way: If you had to drive the device into saturation
before it was class C, then there could have been no class C tube
amplifiers -- yet I see schematics for them all over my older amateur
radio literature.

The definition that _I_ was taught was all about conduction angle.

> I checked back with SSDRA and EMRFD, and didn't see anything about
> driving Class C amps into saturation?
> What says the group? Do we saturate in Class C or not?
> ---
> I've been thinking about this some more. The 1980 ARRL handbook points
> out that "Solid State power amplifiers should be operated just below
> their saturation points for best efficiency and stability." Also, the
> formula that we use to determine load resistance (Rl=Vcc^2/2Po) implies
> that we are looking for a combination of Vcc, Load resistance and power
> out that will prevent saturation.
> And wouldn't we end up with far lower harmonic content if we only clip
> one side of the wave form (at cutoff) instead of both sides (cutoff and
> saturation)?
>
> I know there are more exotic modes beyond C, but for plain old ordinary
> ham radio applications, don't we normally avoid saturation in Class C
> amps?

The "saturation" in bipolar transistor terminology means "current
saturation", but it could just as well mean "carrier saturation". When
the transistor is saturated the base region is stuffed full of carriers
(holes, for an NPN transistor). It takes a while for those carriers to
go away, during which the transistor stays on. This is a very nonlinear
effect, and can be very slow. The old 74Sxx series logic put a

schottkey diode from collector to base on the transistors to keep them
out of saturation, and sped them up considerably.

So yes, with an otherwise ordinary bipolar transistor you probably want
to avoid saturation.
>
> Also, what about this business of having the efficiency improve through
> saturation "because the saturation voltage is low" Could that be
> right? If you put a voltage across a conductor and generate a large
> current, you can't sit back and say "Great! Power consumption across
> the conductor is low because the voltage drop across it is now
> minimal!"

That's the whole point of the class D amplifier (AKA switching amp, or
switching supply) at baseband, and the class E amplifier at RF -- you
arrange the circuit so the transistor is either on with low voltage
across it, or off with no current, with as little time in between as you
can manage.

But it's not class C, or at least it isn't _just_ class C.

I don't think you could manage a class E amplifier with bipolar
transistors at RF frequencies, although I'm willing to be surprised.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

5152. Re: Anyone written the FCC and told them to keep the code requirement?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-04 19:31:10 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <Z9qdnZxJW9nud9HYnZ2dnUVZ_s2dnZ2d@web-ster.com>
Source record: 9853
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Slow Code wrote:

> If you have, Thanks.
>
> 73
> de Slow Code

Don't forget the requirement to understand the construction, theory and
maintenance of spark transmitters.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

5153. Re: Selecting toroids for HF use...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-04 19:39:40 UTC
From: tictac1 <bggungor@gmail.com>
Message-ID: <1162669180.368863.228540@h48g2000cwc.googlegroups.com>
Source record: 9854

Thanks for the answers.. I already didn't say that i needed one exact type. They will be used in HF transceiver projects(ie. VFO's, mixers, BPF's and everything). I think that a toroid like T-50-2 would be useful for many applications like those. As i said above i only have access to Philips cores and i can't find a catalog to choose from. I did a search on the net but didn't come accross anything handy. So if any of you have used Philips cores in your applications i would like to know what types do you use and what equivalents are out there for known brands such as Amidon, CWS etc.

Thanks...

5154. Re: Anyone written the FCC and told them to keep the code requirement?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-04 21:38:40 UTC
From: James Philopena <jphilopena@verizon.net>
Message-ID: <AL73h.1005$sw6.573@trndny08>
Source record: 9855
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Slow Code" <my.mail@no.spam> wrote in message
news:hZQ2h.1647$L6.319@newsread3.news.pas.earthlink.net...
>
>
> If you have, Thanks.
>
> 73
> de Slow Code

No, but I asked them to start testing on PSK, RTTY, APRS, Computer Interface
Logic and Theory and a half dozen other digital points. Does that help?

KB1NXE

5155. Re: Anderson Powerpoles on Front Panel

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-04 21:43:39 UTC
From: James Philopena <jphilopena@verizon.net>
Message-ID: <fQ73h.2019$qG.1869@trndny02>
Source record: 9856

Cut the hole in the panel. In the hole where the roll pin goes to join them
together, punch out the roll pin and using a right angle (small aluminum
angle stock works good) bracket on the panel rear and screw through the
rollpin hole. Another screw through the panel. Viola...

KB1NXE

"Al Lorona" <al_lorona@agilent.com> wrote in message
news:1161903099.814059@newsreg.cos.agilent.com...
> Hi, Everybody,
>
> I am interested to hear how you have solved the problem of panel-mounting
> Anderson Powerpole connectors.
>
> I have already ruled out the Anderson 4-pole "Powerpole Pak" connectors.
> Too
> bulky. Don't need four. Just need two. I know about these. I am interested
> in other solutions.
>
> Thanks very much.
>
> Regards,
>
> Al W6LX
>
>
>
>
>

5156. Re: Selecting toroids for HF use...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-04 21:59:37 UTC
From: sailtamarack@yahoo.ca
Message-ID: <1162677576.987403.24830@e3g2000cwe.googlegroups.com>
Source record: 9857

The Philips cores that you are referring to were probably manufactured
by Ferroxcube (Philips has sold the company to Yaego). You can find
data and a handbook at http://www.ferroxcube.com/

If you want a useful ham program (free) for designing with Ferroxcube,
Amidon, Epcos and air cores download "mini-RC Calculator" from
http://www.dl5swb.de/html/software_for_amateur_radio.htm

Fair-rite (ferrite manufacturer) has a distributor in your country -
Turkey and they can be contacted at http://www.aktif-neser.com/

Roger

tictac1 wrote:
> Thanks for the answers.. I already didn't say that i needed one exact
> type. They will be used in HF transceiver projects(ie. VFO's, mixers,
> BPF's and everything). I think that a toroid like T-50-2 would be
> useful for many applications like those. As i said above i only have
> access to Philips cores and i can't find a catalog to choose from. I
> did a search on the net but didn't come accross anything handy. So if
> any of you have used Philips cores in your applications i would like to
> know what types do you use and what equivalents are out there for known
> brands such as Amidon, CWS etc.
>
> Thanks...

5157. Re: Class C amps and saturation (again)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-04 22:05:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12kq3llsge9akfb@corp.supernews.com>
Source record: 9858

Tim Wescott wrote:
> . . .
> The "saturation" in bipolar transistor terminology means "current
> saturation", but it could just as well mean "carrier saturation". When
> the transistor is saturated the base region is stuffed full of carriers
> (holes, for an NPN transistor). It takes a while for those carriers to
> go away, during which the transistor stays on. This is a very nonlinear
> effect, and can be very slow. The old 74Sxx series logic put a
> schottkey diode from collector to base on the transistors to keep them
> out of saturation, and sped them up considerably.

The very slow saturation recovery you see in saturated switch applications (unless using a gold-doped transistor) is largely absent in typical RF power applications. The reason is the bipolar drive usually employed -- there's typically a large amount of negative base current available to suck the stored charge out of the base region in a hurry.

> . . .

Roy Lewallen, W7EL

5158. FS: Variable Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-04 23:17:26 UTC
From: Eugene Rippen <soundval@foothill.net>
Message-ID: <1162682330_16203@sp6iad.superfeed.net>
Source record: 9859

2 each Cardwell 50 x 300 mmfd 3/16" between opposing plates.
14.5" from front end of shaft to rearmost.
The other dimensions are 6" x 4"
Neither looks used.
Shipping weight is m10 pounds.
One has had the insulating strip on one lower side repaired.
(This strip is not load bearing - has terminals on it)
Price for the repaired one $25 plus shipping from near
Sacramento, CA
Price for the other is $30 plus shipping from near
Sacramento,CA
http://www.muchstuff.com/pics/VARCAP/VARCAP-1.JPG
http://www.muchstuff.com/pics/VARCAP/VARCAP-2.JPG
****

One National Dual variable capacitor. 10 to 50 mmfd each section.
Common rotor. 3/8 inch between opposing plates.
With ceramic flex coupler on end of shaft.
13" from end of shaft to rearmost. Other dimensions 5" x 8"
Looks unused.
I don't know what happened to the pictures. I will try to take
pictures again tomorrow, but please don't wait on that.
$40 plus shipping from near Sacramento, CA.

PayPal, or,
Credit cards through PayPal,
or, Checks to me

Eugene Rippen
105 Donnington Ave.
Auburn, CA 95603

-----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

5159. FS: QSTs

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-04 23:34:43 UTC
From: Eugene Rippen <soundval@foothill.net>
Message-ID: <1162683363_16209@sp6iad.superfeed.net>
Source record: 9860

These will be shipped by USPS at the Bound Printed Matter rate, paid by
buyer.
These are in good to very good condition, unless stated otherwise.
The units listed are the groupings by which they will be sold.
I may not reply to requests for parts of the groups.
When you first order please tell me your address with zip, so I can tell you
what the shipping will cost.
I'm done for the night. I will pick up responses tomorrow

YEAR ISSUES EXCEPTIONS PRICE Shipping weight
33 all $15 6 lbs
34 all 15 7
35 all 15 7
36 all 15 7
38 all 16 7
40 all 16 9
41 all 16 7
41 all 16 7
42 only Jan, Feb, Mar, Apr, July 6 3
45 all except Aug. Sept. 14 6
46 all except Aug, Sep, Oct, Nov. 8 6
47 all complete, spines very poor 5 9
47 all 13 9
51 all 13 9
53 all 13 8
57 all 16 10
58 all except Mar. 14 10
59 all 16 11

-----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

5160. Re: Anyone written the FCC and told them to keep the code requirement?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-04 23:58:07 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <jO93h.2460$0r.1804@newsread1.news.pas.earthlink.net>
Source record: 9861
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"James Philopena" <jphilopena@verizon.net> wrote in
news:AL73h.1005$sw6.573@trndny08:

>
> "Slow Code" <my.mail@no.spam> wrote in message
> news:hZQ2h.1647$L6.319@newsread3.news.pas.earthlink.net...
>>
>>
>> If you have, Thanks.
>>
>> 73
>> de Slow Code
>
> No, but I asked them to start testing on PSK, RTTY, APRS, Computer
> Interface Logic and Theory and a half dozen other digital points. Does
> that help?
>
> KB1NXE

I like it.

SC

5161. Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-04 23:58:09 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <lO93h.2461$0r.1796@newsread1.news.pas.earthlink.net>
Source record: 9862
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

If all the seats are taken at a club meeting and a 20wpm code tested Extra is standing, a no-code ham should give their seat to the Extra and sit on the floor. After saluting of course.

SC

5162. TS: Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 00:42:00 UTC
From: Eugene Rippen <soundval@foothill.net>
Message-ID: <1162687400_16426@sp6iad.superfeed.net>
Source record: 9863

This batch of tubes consists of mostly old home radio type, with a few audio
and transmitting types.

PRICES ARE MOSTLY BETWEEN 65% and 75% OFF OF INTERNET TUBE DEALERS

Shipping in USA is a flat $4.00 for whatever amount shipped at one time.
Payment by PayPal, or Credit cards through PayPal, or checks to me.
Any shipments outside of USA will be paid through PayPal only.
I will only ship big orders outside of USA. That's big in money.

See them at:
http://www.muchstuff.com/1024tfs.html

The fractions indicate how they tested on the tube checker. The numerator
is the scale reading, the denominator is the amount on the chart. The
checkers were either my Hickok 6000A or my TV7/U. The tubes may or may not
have boxes. If they are new, then they are in boxes.
N = new. U = used. Tip = glass comes with a tip on top.
BB = brass base. A round glass is like a tennis ball is called ball.
A glass that is larger at the top (like a 280) than at the base is called
ballon.

Please email your orders including the full description, that is tube type
followed
by the TCxxx number which tells me where to find it.
Please, I am not going to pull these tubes to look for more descriptions;
like getter shapes and plate colors.

Eugene Rippen
105 Donnington Ave.
Auburn, CA 95603

-----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

5163. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 01:19:07 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrnekqf0b.1ato.ben@saturn.home.ben.com>
Source record: 9864
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

```
On 2006-11-04, Slow Code <my.mail@no.spam> wrote:
> If all the seats are taken at a club meeting and a 20wpm code tested Extra
> is standing, a no-code ham should give their seat to the Extra and sit
> on the floor. After saluting of course.

Thanks to guys like you, there are always plenty of free seats at
club meetings.

--
Ben Jackson AD7GD
<ben@ben.com>
http://www.ben.com/
```

5164. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 01:38:02 UTC
From: bill_newport.4land@yahoo.com
Message-ID: <1162690682.573639.184290@k70g2000cwa.googlegroups.com>
Source record: 9865
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

Ben Jackson wrote:
> On 2006-11-04, Slow Code <my.mail@no.spam> wrote:
> > If all the seats are taken at a club meeting and a 20wpm code tested Extra
> > is standing, a no-code ham should give their seat to the Extra and sit
> > on the floor. After saluting of course.
>
> Thanks to guys like you, there are always plenty of free seats at
> club meetings.
>
and thanks to guys like you there are always plenty of free blow jobs
at club meetings
> --
> Ben Jackson AD7GD
> <ben@ben.com>
> http://www.ben.com/

5165. Re: Common courtesy is somthing our unknown idoit needs to learn

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 01:58:09 UTC
From: Mark@kb9rqz.aprs
Message-ID: <n8hqk2p9h9k0lu9nr4kfjligs76mkhgcp9@4ax.com>
Source record: 9866
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

On Sat, 04 Nov 2006 23:58:09 GMT, Slow Code <my.mail@no.spam> wrote:

>If all the seats are taken at a club meeting and a 20wpm code tested Extra
>is standing, a no-code ham should give their seat to the Extra and sit
>on the floor. After saluting of course.
bullshit sc
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5166. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 02:59:22 UTC
From: Titties n Beer <anon@anon>
Message-ID: <eg9kb.ojl.17.1@news.alt.net>
Source record: 9867
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

"Slow Code" <my.mail@no.spam> wrote in message
news:lO93h.2461$0r.1796@newsread1.news.pas.earthlink.net...
If all the seats are taken at a club meeting and a 20wpm code tested Extra
is standing, a no-code ham should give their seat to the Extra and sit
on the floor. After saluting of course.

SC

Not only should the No-Coder give up his seat to a superior, he should also
wipe it clean with disinfectant.

5167. Re: Common courtesyis l;acking from the many of the extras

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 03:50:37 UTC
From: Mark@kb9rqz.aprs
Message-ID: <krnqk25a68nbv211dog21g09cajjbd9dd1@4ax.com>
Source record: 9868
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

On Sat, 4 Nov 2006 21:59:22 -0500, "Titties n Beer" <anon@anon> wrote:

>
>"Slow Code" <my.mail@no.spam> wrote in message
>news:lO93h.2461$0r.1796@newsread1.news.pas.earthlink.net...
>If all the seats are taken at a club meeting and a 20wpm code tested Extra
>is standing, a no-code ham should give their seat to the Extra and sit
>on the floor. After saluting of course.
>
>SC
>
>
>Not only should the No-Coder give up his seat to a superior, he should also
>wipe it clean with disinfectant.
as this statement clearly proves
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5168. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 11:13:24 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <oHj3h.1040$C57.131@trndny05>
Source record: 9869

A hard limiter decreases the signal to noise by about 5.6 db, and
that's a mathematical fact...

Andy,

Can you point us to a reference document that explains this "mathematical
fact"?.

Joe
W3JDR

5169. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 15:20:17 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1162740017.628783.176870@f16g2000cwb.googlegroups.com>
Source record: 9870

W3JDR wrote:

>
> Can you point us to a reference document that explains this "mathematical
> fact"?.
>
> Joe
> W3JDR

Andy writes:

No. It was about 25 years ago when I was designing the TI2100 FM
Marine
Transceiver for Texas Intruments, which was my last commercial Fm
unit. (Some two meter stuff since then as home projects, tho)

It was info gleaned from several technical papers and I don't for
the
life of me remember which ones. I got a limiter and noise source
and checked it in the lab, at the time, and it seemed consistent.
I don't remember exactly, but I think I combined noise with a
signal and amplified the hell out of it, and then put in an
attenuator to get it back down and measured the S/n in a receiver.
Then I put a limiter in between the amp and the attenuator, and
decreased the atten to get the same level into the receiver, and
measured the S/N again. While I didn't get exactly 5.6 db, I
remember it was close enough to believe that the mathematical
derivation was confirmed (in my mind) and that my measurement
error was probly due to my own imprecision in the experiment..
Anyway, I moved on..... and it settled the question on whether
hard limiting "improves" things.....

Sorry, but that's just one of the numbers that stay with a guy, like
-174 dbm (God's noise) , and 8.5 db (tangential sensitivity), and
10Log(bw), and 3.14..... Heck, I forget my phone number from time
to time, but numbers that I have used for most of my life stay with
me.....

And, being in the profession, I have, at some time or another,
verified
them myself in the lab when the opportunity permitted.. I take that
back.... I have never verified PI..... I hope I haven't been too
gullible..... :>)))

So, I regret not having the mental acuity any more to jot down some
derivations for you. But , if they are not correct, there's a lot of

products
on the market which I built whose development was a wild fluke....

If you want to pursue it yourself, I would suggest a few texts that
have guided me... Skolnik's Radar Handbook (the smal one, not
the BIG one --- I call it " small Skolnik") has a LOT of tech info
that
is presented in a level only slightly greater than the ARRL handbook.
Also "Principles of FM" -- damn, I don't remember the author.....but
how many could there be ? :>)))) I might have it in my workshop.
If I run across it I'll post it here.

Well, good luck. Some knowledge can be passed on as a proven
fact and one needs look no farther..... like PI, for instance... Other
is in conflict with what someone thinks to be "how things work", and
doubt
is in the air.... No matter -- I was the same way, when I had the
energy to pursue it.....

Good on ya' , mate,

Andy W4OAH in Eureka, Texas

5170. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 15:22:36 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1162740155.991184.191890@m73g2000cwd.googlegroups.com>
Source record: 9871
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

Slow Code wrote:
> If all the seats are taken at a club meeting and a 20wpm code tested Extra
> is standing, a no-code ham should give their seat to the Extra and sit
> on the floor. After saluting of course.
>
> SC

Andy writes;

Yeah.... I got yer salute right here !!!!

Andy W4OAH

5171. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 15:53:13 UTC
From: wîthhËld fØr rËåsØñs Øf ñå tîØñål SËÇürîty <root@127.0.0.1>
Message-ID: <1162741998.230855@www.vif.com>
Source record: 9872
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

OFF TOPIC YOU FUCKEN MORON!

AndyS wrote:

> Slow Code wrote:
>
>>If all the seats are taken at a club meeting and a 20wpm code tested Extra
>>is standing, a no-code ham should give their seat to the Extra and sit
>>on the floor. After saluting of course.
>>
>>SC
>
>
> Andy writes;
>
> Yeah.... I got yer salute right here !!!!
>
> Andy W4OAH
>
>
>
> ---
> avast! Antivirus: Inbound message clean.
> Virus Database (VPS): 0645-4, 11/03/2006
> Tested on: 11/5/2006 10:52:02 AM
> avast! - copyright (c) 1988-2006 ALWIL Software.
> http://www.avast.com
>
>
>

---
avast! Antivirus: Outbound message clean.
Virus Database (VPS): 0645-4, 11/03/2006
Tested on: 11/5/2006 10:53:14 AM
avast! - copyright (c) 1988-2006 ALWIL Software.
http://www.avast.com

5172. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 15:58:55 UTC
From: wîthhËld fØr rËåsØñs Øf ñå tîØñål SËÇürîty <root@127.0.0.1>
Message-ID: <1162742339.308132@www.vif.com>
Source record: 9873
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

YOU FUCKEN MORONS! STOP CROSS POSTING YOUR HAMSTER CRAP IN SCANNER
NEWSGROUPS

Ben Jackson wrote:

> On 2006-11-04, Slow Code <my.mail@no.spam> wrote:
>
>>If all the seats are taken at a club meeting and a 20wpm code tested Extra
>>is standing, a no-code ham should give their seat to the Extra and sit
>>on the floor. After saluting of course.
>
>
> Thanks to guys like you, there are always plenty of free seats at
> club meetings.
>

---
avast! Antivirus: Outbound message clean.
Virus Database (VPS): 0645-4, 11/03/2006
Tested on: 11/5/2006 10:58:55 AM
avast! - copyright (c) 1988-2006 ALWIL Software.
http://www.avast.com

5173. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 17:09:08 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <UUo3h.2525$qJ6.2375@trndny07>
Source record: 9874

So it's not a "mathematical fact" in the sense that any of us can look it up
and see how it was derived, it's your recollection of something you heard
and vaguely remember convincing yourself it could be true, right?

While we're at it, what's the significance of your reference to "8.5 db (
tangential sensitivity)"?

Joe
W3JDR

"AndyS" <andysharpe@juno.com> wrote in message
news:1162740017.628783.176870@f16g2000cwb.googlegroups.com...
>
> W3JDR wrote:
>
>>
>> Can you point us to a reference document that explains this "mathematical
>> fact"?.
>>
>> Joe
>> W3JDR
>
> Andy writes:
>
> No. It was about 25 years ago when I was designing the TI2100 FM
> Marine
> Transceiver for Texas Intruments, which was my last commercial Fm
> unit. (Some two meter stuff since then as home projects, tho)
>
> It was info gleaned from several technical papers and I don't for
> the
> life of me remember which ones. I got a limiter and noise source
> and checked it in the lab, at the time, and it seemed consistent.
> I don't remember exactly, but I think I combined noise with a
> signal and amplified the hell out of it, and then put in an
> attenuator to get it back down and measured the S/n in a receiver.
> Then I put a limiter in between the amp and the attenuator, and
> decreased the atten to get the same level into the receiver, and
> measured the S/N again. While I didn't get exactly 5.6 db, I
> remember it was close enough to believe that the mathematical
> derivation was confirmed (in my mind) and that my measurement
> error was probly due to my own imprecision in the experiment..
> Anyway, I moved on..... and it settled the question on whether
> hard limiting "improves" things.....
>

>
>
> Sorry, but that's just one of the numbers that stay with a guy, like
> -174 dbm (God's noise) , and 8.5 db (tangential sensitivity), and
> 10Log(bw), and 3.14..... Heck, I forget my phone number from time
> to time, but numbers that I have used for most of my life stay with
> me.....
>
> And, being in the profession, I have, at some time or another,
> verified
> them myself in the lab when the opportunity permitted.. I take that
> back.... I have never verified PI..... I hope I haven't been too
> gullible..... :>)))
>
> So, I regret not having the mental acuity any more to jot down some
> derivations for you. But , if they are not correct, there's a lot of
> products
> on the market which I built whose development was a wild fluke....
>
> If you want to pursue it yourself, I would suggest a few texts that
> have guided me... Skolnik's Radar Handbook (the smal one, not
> the BIG one --- I call it " small Skolnik") has a LOT of tech info
> that
> is presented in a level only slightly greater than the ARRL handbook.
> Also "Principles of FM" -- damn, I don't remember the author.....but
> how many could there be ? :>)))) I might have it in my workshop.
> If I run across it I'll post it here.
>
> Well, good luck. Some knowledge can be passed on as a proven
> fact and one needs look no farther..... like PI, for instance... Other
> is in conflict with what someone thinks to be "how things work", and
> doubt
> is in the air.... No matter -- I was the same way, when I had the
> energy to pursue it.....
>
> Good on ya' , mate,
>
> Andy W4OAH in Eureka, Texas
>

5174. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 18:06:29 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <FKp3h.1051803$084.991392@attbi_s22>
Source record: 9875

Agilent App Note says:

Tangential sensitivity is the lowest input signal power level for which the detector will have an 8 dB signal-to-noise ratio at the output of a test video amplifier.

http://www.home.agilent.com/upload/cmc_upload/All/DetectorOverview.pdf

Bill W0IYH

"W3JDR" <joe@roccis.com> wrote in message
news:UUo3h.2525$qJ6.2375@trndny07...
> So it's not a "mathematical fact" in the sense that any of us can look it
> up and see how it was derived, it's your recollection of something you
> heard and vaguely remember convincing yourself it could be true, right?
>
> While we're at it, what's the significance of your reference to "8.5 db
> (tangential sensitivity)"?
>
> Joe
> W3JDR
>
>
>
>
>
> "AndyS" <andysharpe@juno.com> wrote in message
> news:1162740017.628783.176870@f16g2000cwb.googlegroups.com...
>>
>> W3JDR wrote:
>>
>>>
>>> Can you point us to a reference document that explains this
>>> "mathematical
>>> fact"?.
>>>
>>> Joe
>>> W3JDR
>>
>> Andy writes:
>>
>> No. It was about 25 years ago when I was designing the TI2100 FM
>> Marine
>> Transceiver for Texas Intruments, which was my last commercial Fm
>> unit. (Some two meter stuff since then as home projects, tho)

>>
>> It was info gleaned from several technical papers and I don't for
>> the
>> life of me remember which ones. I got a limiter and noise source
>> and checked it in the lab, at the time, and it seemed consistent.
>> I don't remember exactly, but I think I combined noise with a
>> signal and amplified the hell out of it, and then put in an
>> attenuator to get it back down and measured the S/n in a receiver.
>> Then I put a limiter in between the amp and the attenuator, and
>> decreased the atten to get the same level into the receiver, and
>> measured the S/N again. While I didn't get exactly 5.6 db, I
>> remember it was close enough to believe that the mathematical
>> derivation was confirmed (in my mind) and that my measurement
>> error was probly due to my own imprecision in the experiment..
>> Anyway, I moved on..... and it settled the question on whether
>> hard limiting "improves" things.....
>>
>>
>>
>> Sorry, but that's just one of the numbers that stay with a guy, like
>> -174 dbm (God's noise) , and 8.5 db (tangential sensitivity), and
>> 10Log(bw), and 3.14..... Heck, I forget my phone number from time
>> to time, but numbers that I have used for most of my life stay with
>> me.....
>>
>> And, being in the profession, I have, at some time or another,
>> verified
>> them myself in the lab when the opportunity permitted.. I take that
>> back.... I have never verified PI..... I hope I haven't been too
>> gullible..... :>)))
>>
>> So, I regret not having the mental acuity any more to jot down some
>> derivations for you. But , if they are not correct, there's a lot of
>> products
>> on the market which I built whose development was a wild fluke....
>>
>> If you want to pursue it yourself, I would suggest a few texts that
>> have guided me... Skolnik's Radar Handbook (the smal one, not
>> the BIG one --- I call it " small Skolnik") has a LOT of tech info
>> that
>> is presented in a level only slightly greater than the ARRL handbook.
>> Also "Principles of FM" -- damn, I don't remember the author.....but
>> how many could there be ? :>)))) I might have it in my workshop.
>> If I run across it I'll post it here.
>>
>> Well, good luck. Some knowledge can be passed on as a proven
>> fact and one needs look no farther..... like PI, for instance... Other
>> is in conflict with what someone thinks to be "how things work", and
>> doubt
>> is in the air.... No matter -- I was the same way, when I had the

>> energy to pursue it.....
>>
>> Good on ya' , mate,
>>
>> Andy W4OAH in Eureka, Texas
>>
>
>

5175. Re: Class C amps and saturation (again)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 18:26:11 UTC
From: Telstar Electronics <briangriffey@sbcglobal.net>
Message-ID: <1162751171.421981.27940@e3g2000cwe.googlegroups.com>
Source record: 9876
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb

bill.meara@gmail.com wrote:
> Back in July I wrote:
>
> I'm reading David Rutledge's excellent "The Electronics of Radio."
> In Chapter 10 -- Power Amplifiers, he discusses Class C amps and says,
> "In addition, if we drive the transistor clear to saturation, using the
>
> transistor as a switch, the dissipated power can be greatly reduced,
> because the saturation voltage is low. This is Class C
> amplification..."
> I'd always throught that in Class C, while you'd operate the device so
> that it was cutoff during most of the cycle, but not saturated.
> Is this just a different definition of Class C?
> I checked back with SSDRA and EMRFD, and didn't see anything about
> driving Class C amps into saturation?
> What says the group? Do we saturate in Class C or not?
> ---
> I've been thinking about this some more. The 1980 ARRL handbook points
> out that "Solid State power amplifiers should be operated just below
> their saturation points for best efficiency and stability." Also, the
> formula that we use to determine load resistance (Rl=Vcc^2/2Po) implies
> that we are looking for a combination of Vcc, Load resistance and power
> out that will prevent saturation.
> And wouldn't we end up with far lower harmonic content if we only clip
> one side of the wave form (at cutoff) instead of both sides (cutoff and
> saturation)?
>
> I know there are more exotic modes beyond C, but for plain old ordinary
> ham radio applications, don't we normally avoid saturation in Class C
> amps?
>
> Also, what about this business of having the efficiency improve through
> saturation "because the saturation voltage is low" Could that be
> right? If you put a voltage across a conductor and generate a large
> current, you can't sit back and say "Great! Power consumption across
> the conductor is low because the voltage drop across it is now
> minimal!"
>
> 73 from London
> Bill M0HBR N2CQR CU2JL
> http://www.gadgeteer.us

As far as I'm concerned... saturation has nothing to do with the class the amplifier is running. I can saturate an amplifier in any class. Saturation is most ofen an undesireable effect... that causes distortion in amplifiers.

www.telstar-electronics.com

5176. Re: Selecting toroids for HF use...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 18:32:10 UTC
From: tictac1 <bggungor@gmail.com>
Message-ID: <1162751530.503894.305400@h54g2000cwb.googlegroups.com>
Source record: 9877

I checked Fair-rite's site but couldn't find anything about frequency characteristics of toroidal cores. Also, you know, as a homebrewer i can't buy parcels of material like toroids, and I don't think that distributor can sell small number of items, can they? Anyway, doesn't anyone use Philips toroids, or is there no such thing as Philips cores?

Thanks...

5177. Re: Class C amps and saturation (again)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 18:39:43 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <opbsk2hqc2dl5jnatg1m2l3dnu67gh9s5c@4ax.com>
Source record: 9878
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb

ORIGINAL MESSAGE:

On 5 Nov 2006 10:26:11 -0800, "Telstar Electronics"
<briangriffey@sbcglobal.net> wrote:

>Saturation is most ofen an undesireable effect... that causes
>distortion in amplifiers.

------------ REPLY FOLLOWS ------------

Saturation is only undesirable in LINEAR amplifiers. In non-linear
amps which are often used for CW, RTTY or FM, saturation is good
because it improves efficiency. Distortion in those applications is
unimportant.

Bill, W6WRT

5178. Re: Selecting toroids for HF use...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 19:35:31 UTC
From: sailtamarack@yahoo.ca
Message-ID: <1162755331.654722.22130@b28g2000cwb.googlegroups.com>
Source record: 9879

Philips is no longer in the ferrite business!! They sold the company to Yaego and it now operates as Ferroxcube. The Philips cores in your area must be available as surplus parts. Use google "Philips Components Magnetics" and you will find old spec sheets.

You can find current toroid data and a handbook at http://www.ferroxcube.com/ They have kept some of the Philips part numbers.

More toroid info at http://www.electronics-tutorials.com/basics/toroids.htm and http://users.catchnet.com.au/~rjandusimports/

Did you download "mini-RC Calculator" ??? www.dl5swb.de/html/software_for_amateur_radio.htm

This program will answer many of your questions.

Roger

tictac1 wrote:
> I checked Fair-rite's site but couldn't find anything about frequency
> characteristics of toroidal cores. Also, you know, as a homebrewer i
> can't buy parcels of material like toroids, and I don't think that
> distributor can sell small number of items, can they? Anyway, doesn't
> anyone use Philips toroids, or is there no such thing as Philips cores?
>
>
> Thanks...

5179. Magnavox transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 19:53:17 UTC
From: Andy Bullington <a7bull@hotmail.com>
Message-ID: <IcydnRt-9aK-3NPYnZ2dnUVZ_rOdnZ2d@comcast.com>
Source record: 9880

A friend who was in the TV repair business for many years has given me a large bag of transistors in little plastic squares marked Magnavox factory replacement part and then a serial number. They are all different and I would love to know what their equivalents are. Is there a site or any way of getting this information? Thanks.
Andy W1AWB

5180. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 20:46:03 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1162759563.714741.278140@f16g2000cwb.googlegroups.com>
Source record: 9881

William E. Sabin wrote:
> Agilent App Note says:
>
> Tangential sensitivity is the lowest input signal power level for which the
> detector will have an 8 dB signal-to-noise ratio at the output of a test
> video amplifier.
>
> http://www.home.agilent.com/upload/cmc_upload/All/DetectorOverview.pdf
>
> Bill W0IYH
>

Andy writes:

I used 8.5 db, tho , as you know, it has a LOT to do with who is
making the measurement and positioning the pulse on the scope....
I'm not sure that I am proficient enough to position an 8db pedestal
to within a half db accuracy..... Agilent probly used a math
derivation.
I have seen it called out at several numbers, tho 8.5 is the one I
always used....

I will probly start using 8 db if the Agilent App note says so since
there is always somebody wanting to get a "reference", and it's
much easier to just give them the App Note source than try to
explain....
Once they actually see the scope presentation, they will understand
the problem...
Andy in Eureka

5181. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 20:56:33 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1162760193.213243.4520@m73g2000cwd.googlegroups.com>
Source record: 9882

W3JDR wrote:
> So it's not a "mathematical fact" in the sense that any of us can look it up
> and see how it was derived, it's your recollection of something you heard
> and vaguely remember convincing yourself it could be true, right?
>

Andy replies:
That's right. But just because I don't remember how to derive it,
or can
give you the name of the paper that I read 25-30 years ago, it doesn't
mean it's wrong. So I would suggest you do your own research....

Whether it is true, or not true, IS a mathematical fact, and if you
are
capable of understanding the math proof, you are probably also
capable of proving or disproving it yourself on paper. Me, hell , I
always
had a good lab where I could try things out if I had doubt.....

It is probly easier, if you have access to a good lab, to rig up an
experiment to find out..... That way you wouldn't have to bother with
newsgroups to learn about this stuff.....

I would encourage you to try. If you come up with a good answer you
can be proud of, post it back here for us all to see. I am sure many
people here would be interested , since lots of time is often wasted
coming up with circuits whose purpose is doomed from the start....
such as using "hard limiters" to improve the SNR........

As far as the "tangential sensitivity", you can probly do a google
search and learn all about it.... If you haven't run into it yet, you
probably don't deal with OOK pulses like radar and stuff. There's no
shame in that.....

:>)))) Andy in Eureka, Texas W4OAH

5182. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 21:16:20 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1162761380.900039.268890@e3g2000cwe.googlegroups.com>
Source record: 9883

Andy writes

Well, I saved you some time by googling it myself. It took about 10 seconds
to be able to cut and paste the definition I have been talking about....

Note that in this paper it says TSS is eight db +/- one db .... and depends on several system factors, including the
actual detector used... From experience, the detector type, and the absolute signal level it is detecting, is a BIG DEAL.
It needs to operate in the "perfect diode" region . Doing the detection in the square law region buggers up the measurement.

That +/- one db is due to the accuracy that one operator can set up the
scope versus the next operator that comes along. I use 8.5 db, and I DARE anyone to set the same measurement up 10 times in a row and get the same answer to less than +/- one db.

Agilent probly uses a math derivation to get 8 db to accomplish some specific criteria, and did not specify a detector type, hence it is a "mathematically perfect " answer. Furthermore, they use a different
definition, but ORIGINALLY it was bases on the FIRST SENTENCE in the cut and paste below...

The Agilent App Note that Bill Sabin refers to also came up on the first page of hits, and you can go read it for yourself.

I hope this satisfies your curiousity. I had nothing better to do today..... Now, I'm outta beer, and Jeff Foxworthy is on TV, so 73s

Andy W40AH

**********CUT AND PASTE FROM GOOGLE HIT **********

TANGENTIAL SENSITIVITY
Tangential sensitivity (TSS) is the point where thetop of the noise level with no signal applied is level with thebottom of the noise level on a pulse as shown in Figure 6.

Itcan be determined in the laboratory by varying the amplitudeof the input pulse until the stated criterion is reached, or byvarious approximation formulas.The signal power is nominally 8±1 dB above thenoise level at the TSS point. TSS depends on the RFbandwidth, the

video bandwidth, the noise figure, and the detector characteristic.

TSS is generally a characteristic associated with receivers (or RWRs), however the TSS does not necessarilyprovide a criterion for properly setting the detection threshold. If the threshold is set to TSS, then the false alarm rate israther high.

Radars do not operate at TSS. Most require a more positive S/N for track (> 10 dB) to reduce false detectionon noise spikes.
SENSITIVITY CONCLUSION
When all factors effecting system sensitivity are considered, the designer has little flexibility in the choice ofreceiver parameters. Rather, the performance requirements dictate the limit of sensitivity which can be implemented by theEW receiver.1. Minimum Signal-to-Noise Ratio (S/N) - Set by the accuracy which you want to measure signal parameters and by thefalse alarm requirements.2. Total Receiver Noise Figure (NF) - Set by available technology and system constraints for RF front end performance.3. Equivalent Noise Bandwidth (B) - Set by minimum pulse width or maximum modulation bandwidth needed toNaccomplish the system requirements. A choice which is available to the designer is the relationship of pre- (B) and post-IFdetection (B) bandwidth. The most affordable approach is to set the post-detection filter equal to the reciprocal of theVminimum pulse width, then choose the pre-detection passband to be as wide as the background interference environmentwill allow. Recent studies suggest that pre-detection bandwidths in excess of 100 MHz will allow significant loss of signalsdue to "pulse-on-pulse" conditions. 4. Antenna Gain (G) - Set by the needed instantaneous FOV needed to support the system time to intercept requirements.

**********END OF CUT AND PASTE
****

5183. Re: Class C amps and saturation (again)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 22:13:30 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <OKidnRm0grxg_NPYnZ2dnUVZ_tOdnZ2d@web-ster.com>
Source record: 9884

Roy Lewallen wrote:
> Tim Wescott wrote:
>
>> . . .
>> The "saturation" in bipolar transistor terminology means "current
>> saturation", but it could just as well mean "carrier saturation".
>> When the transistor is saturated the base region is stuffed full of
>> carriers (holes, for an NPN transistor). It takes a while for those
>> carriers to go away, during which the transistor stays on. This is a
>> very nonlinear effect, and can be very slow. The old 74Sxx series
>> logic put a schottkey diode from collector to base on the transistors
>> to keep them out of saturation, and sped them up considerably.
>
>
> The very slow saturation recovery you see in saturated switch
> applications (unless using a gold-doped transistor) is largely absent in
> typical RF power applications. The reason is the bipolar drive usually
> employed -- there's typically a large amount of negative base current
> available to suck the stored charge out of the base region in a hurry.
>
>> . . .
I didn't think of that -- in spite of having applied it in a small
switching regulator application, per an ap note by Zetex.

D'oh.

Thanks for pointing it out -- perhaps I'll remember this second
application. Perhaps when the third one comes around I'll put one and
one together...

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

5184. Re: Selecting toroids for HF use...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 22:13:38 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12ksogm2l8lgcd2@corp.supernews.com>
Source record: 9885

tictac1 wrote:
> I checked Fair-rite's site but couldn't find anything about frequency
> characteristics of toroidal cores.

???

On the main page, under "Technical Articles", "Use of Ferrites in Broadband Transformers" has a large amount of information about frequency characteristics. So does "How to Choose Ferrite Components for EMI Suppression".

> Also, you know, as a homebrewer i
> can't buy parcels of material like toroids, and I don't think that
> distributor can sell small number of items, can they? Anyway, doesn't
> anyone use Philips toroids, or is there no such thing as Philips cores?

I'm puzzled. . . does Philips sell small numbers of cores directly either? I'm sure some of the folks here can recommend retailers who sell a small number of cores from various manufacturers. The last time I checked -- some time ago -- Amidon was still selling Micrometals powdered iron cores and ferrites from Fair-rite and Magnetics.

Roy Lewallen, W7EL

5185. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 22:28:24 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <cAt3h.225668$FQ1.198085@attbi_s71>
Source record: 9886

There are so many variables and approximations involved that it would seem difficult to be very precise about 8.0 or 8.5 dB S/N ratio or some other number. The decision probably involves the type of signal involved. 8.0 dB in one application gives the minimum acceptible performance for one kind of signal. A more critical system might want more than 8.0 dB to achieve a better bit error rate, for example.

Bill W0IYH

"AndyS" <andysharpe@juno.com> wrote in message
news:1162759563.714741.278140@f16g2000cwb.googlegroups.com...
>
> William E. Sabin wrote:
>> Agilent App Note says:
>>
>> Tangential sensitivity is the lowest input signal power level for which
>> the
>> detector will have an 8 dB signal-to-noise ratio at the output of a test
>> video amplifier.
>>
>> http://www.home.agilent.com/upload/cmc_upload/All/DetectorOverview.pdf
>>
>> Bill W0IYH
>>
>
> Andy writes:
>
> I used 8.5 db, tho , as you know, it has a LOT to do with who is
> making the measurement and positioning the pulse on the scope....
> I'm not sure that I am proficient enough to position an 8db pedestal
> to within a half db accuracy..... Agilent probly used a math
> derivation.
> I have seen it called out at several numbers, tho 8.5 is the one I
> always used....
>
> I will probly start using 8 db if the Agilent App note says so since
> there is always somebody wanting to get a "reference", and it's
> much easier to just give them the App Note source than try to
> explain....
> Once they actually see the scope presentation, they will understand
> the problem...
> Andy in Eureka
>

5186. Re: 144 MHz Amplifer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 22:51:14 UTC
From: jimbo <jimbo@jimbo.net>
Message-ID: <454E6AE0.2380BCBA@jimbo.net>
Source record: 9887

hi,

I've got schematics for the rf concepts 2-23 brick

will scan them in monday eve in pdf for you.

73 james

5187. Re: Magnavox transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 22:54:15 UTC
From: jimbo <jimbo@jimbo.net>
Message-ID: <454E6B96.91863463@jimbo.net>
Source record: 9888

hi andy,

if parts have numbers on them (not plastic bag)
try the substitution tool

http://nte01.nteinc.com/nte/NTExRefSemiProd.nsf/$$Search?OpenForm

Andy Bullington wrote:

> A friend who was in the TV repair business for many years has given me a
> large bag of transistors in little plastic squares marked
> Magnavox factory replacement part and then a serial number. They are all
> different and I would love to know what their equivalents are. Is there a
> site or any way of getting this information? Thanks.
> Andy W1AWB

5188. Re: Selecting toroids for HF use...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 22:56:46 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <TMWdnQc70_q-8dPYRVnysg@pipex.net>
Source record: 9889

> I'm puzzled. . . does Philips sell small numbers of cores directly
> either? I'm sure some of the folks here can recommend retailers who sell
> a small number of cores from various manufacturers. The last time I
> checked -- some time ago -- Amidon was still selling Micrometals
> powdered iron cores and ferrites from Fair-rite and Magnetics.
==========
In the UK there are quite a number of small retailers which can supply
ferrite as well as powder iron cores.
www.sycom.co.uk
www.jabdog.com
www.modecomponents.co.uk

Also the G-QRP club sells both types of cores to members.

Frank GM0CSZ / KN6WH

5189. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-05 23:49:43 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1162770583.044809.292510@m7g2000cwm.googlegroups.com>
Source record: 9890

William E. Sabin wrote:
> There are so many variables and approximations involved that it would seem
> difficult to be very precise about 8.0 or 8.5 dB S/N ratio or some other
> number. The decision probably involves the type of signal involved. 8.0 dB
> in one application gives the minimum acceptible performance for one kind of
> signal. A more critical system might want more than 8.0 dB to achieve a
> better bit error rate, for example.
>
> Bill W0IYH

Andy comments:

Yeah, ... the way I used it was to adjust the level to tangential,
then increase
the signal level with an attenuator to get the S/n I wanted,,,,,

You know how hard it is to put together the stuff to measure the
S/N of a pulsed signal ? Well, by setting it up to get 'tangential"
then
messing with the attenuators to get what I wanted, I could, with
reasonable
accuracy, set up a measurement for 13 o 14 db S/n , or whatever, to
take
the Pfa measurement....

(Those are the S/N levels that reasonable Pfa and Pd numbers occur)

Remember, Tangential Sensitivity was defined 50 years before
Agilent
was in existence... Maybe more..... It allowed a person with a scope
to
make reasonably accurate measurements, and refine their systems to take
advantage of it, 50 years before the simulators, and math, dealt
conclusively
with the issue. Hewlitt was using light bulbs to make audio
oscillators when
RADAR engineers were finding German airplanes....

If my use of the HISTORICAL term has confused these kids that just
got
their BSEE,..... I don't really care....

Why do we respond to these kids ? Probably because we both are
retired and bored.....If they want to prove we are stupid, ...
hell,.... it's
OK with me..... I admit readily to having only a fraction of the math

ability
that I would need to understand all of the things I know to be true...
.... Including Pi.............

Andy in Eureka, W4OAH, over-the-hill on Lake Richland-Chambers

5190. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-06 00:44:03 UTC
From: X-rated Vermonter <k1xvnospam@arrl.net>
Message-ID: <991tk25h97tilno2df445pvh2ouvbf6oog@4ax.com>
Source record: 9891
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

On Sat, 04 Nov 2006 23:58:09 GMT, Slow Code <my.mail@no.spam> wrote:

>If all the seats are taken at a club meeting and a 20wpm code tested Extra
>is standing, a no-code ham should give their seat to the Extra and sit
>on the floor. After saluting of course.
>
>SC
++++++++
You have been drinking too much sloe gin.

5191. Re: Class C amps and saturation (again)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-06 01:16:06 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <q1w3h.2748$l25.2190@newsread4.news.pas.earthlink.net>
Source record: 9892
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.amateur.policy

"Telstar Electronics" <briangriffey@sbcglobal.net> wrote in
news:1162751171.421981.27940@e3g2000cwe.googlegroups.com:

> bill.meara@gmail.com wrote:
>> Back in July I wrote:
>>
>> I'm reading David Rutledge's excellent "The Electronics of Radio."
>> In Chapter 10 -- Power Amplifiers, he discusses Class C amps and says,
>> "In addition, if we drive the transistor clear to saturation, using the
>>
>> transistor as a switch, the dissipated power can be greatly reduced,
>> because the saturation voltage is low. This is Class C
>> amplification..."
>> I'd always throught that in Class C, while you'd operate the device so
>> that it was cutoff during most of the cycle, but not saturated.
>> Is this just a different definition of Class C?
>> I checked back with SSDRA and EMRFD, and didn't see anything about
>> driving Class C amps into saturation?
>> What says the group? Do we saturate in Class C or not?
>> ----------
>> I've been thinking about this some more. The 1980 ARRL handbook points
>> out that "Solid State power amplifiers should be operated just below
>> their saturation points for best efficiency and stability." Also, the
>> formula that we use to determine load resistance (Rl=Vcc^2/2Po) implies
>> that we are looking for a combination of Vcc, Load resistance and power
>> out that will prevent saturation.
>> And wouldn't we end up with far lower harmonic content if we only clip
>> one side of the wave form (at cutoff) instead of both sides (cutoff and
>> saturation)?
>>
>> I know there are more exotic modes beyond C, but for plain old ordinary
>> ham radio applications, don't we normally avoid saturation in Class C
>> amps?
>>
>> Also, what about this business of having the efficiency improve through
>> saturation "because the saturation voltage is low" Could that be
>> right? If you put a voltage across a conductor and generate a large
>> current, you can't sit back and say "Great! Power consumption across
>> the conductor is low because the voltage drop across it is now
>> minimal!"
>>
>> 73 from London
>> Bill M0HBR N2CQR CU2JL

>> http://www.gadgeteer.us
>
>
> As far as I'm concerned... saturation has nothing to do with the class
> the amplifier is running. I can saturate an amplifier in any class.
> Saturation is most ofen an undesireable effect... that causes
> distortion in amplifiers.
>
> www.telstar-electronics.com

Don't worry about saturation. CB'ers think over saturation produces
a better sounding signal. Of course, on ham radio we would call
them Lids.

SC

5192. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-06 01:16:08 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <s1w3h.2749$l25.830@newsread4.news.pas.earthlink.net>
Source record: 9893
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

X-rated Vermonter <k1xvnospam@arrl.net> wrote in
news:991tk25h97tilno2df445pvh2ouvbf6oog@4ax.com:

> On Sat, 04 Nov 2006 23:58:09 GMT, Slow Code <my.mail@no.spam> wrote:
>
>>If all the seats are taken at a club meeting and a 20wpm code tested
>>Extra is standing, a no-code ham should give their seat to the Extra and
>>sit on the floor. After saluting of course.
>>
>>SC
> ++++++++
> You have been drinking too much sloe gin.

Please wipe the seat after you get off to sit on the floor.

Thanks.

SC

5193. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-06 01:39:33 UTC
From: X-rated Vermonter <k1xvnospam@arrl.net>
Message-ID: <lh4tk2h7f0elg6ilpcjdh7ma48crfk7cr0@4ax.com>
Source record: 9894
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

On Mon, 06 Nov 2006 01:16:08 GMT, Slow Code <my.mail@no.spam> wrote:

>X-rated Vermonter <k1xvnospam@arrl.net> wrote in
>news:991tk25h97tilno2df445pvh2ouvbf6oog@4ax.com:
>
>> On Sat, 04 Nov 2006 23:58:09 GMT, Slow Code <my.mail@no.spam> wrote:
>>
>>>If all the seats are taken at a club meeting and a 20wpm code tested
>>>Extra is standing, a no-code ham should give their seat to the Extra and
>>>sit on the floor. After saluting of course.
>>>
>>>SC
>> ++++++++
>> You have been drinking too much sloe gin.
>
>
>
>Please wipe the seat after you get off to sit on the floor.
>
>Thanks.
>
>SC
+++++++++
It just so happens that I passed a 20 wpm code test and I think you
are a bozo.

5194. Re: Class C amps and saturation (again)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-06 03:08:29 UTC
From: Jim Hampton <aa2qa@frontiernet.net>
Message-ID: <NGx3h.4791$Ka1.2350@news01.roc.ny>
Source record: 9895
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb

"Telstar Electronics" <briangriffey@sbcglobal.net> wrote in message
news:1162751171.421981.27940@e3g2000cwe.googlegroups.com...
> bill.meara@gmail.com wrote:
> > Back in July I wrote:
> >
> > I'm reading David Rutledge's excellent "The Electronics of Radio."
> > In Chapter 10 -- Power Amplifiers, he discusses Class C amps and says,
> > "In addition, if we drive the transistor clear to saturation, using the
> >
> > transistor as a switch, the dissipated power can be greatly reduced,
> > because the saturation voltage is low. This is Class C
> > amplification..."
> > I'd always throught that in Class C, while you'd operate the device so
> > that it was cutoff during most of the cycle, but not saturated.
> > Is this just a different definition of Class C?
> > I checked back with SSDRA and EMRFD, and didn't see anything about
> > driving Class C amps into saturation?
> > What says the group? Do we saturate in Class C or not?
> > ---
> > I've been thinking about this some more. The 1980 ARRL handbook points
> > out that "Solid State power amplifiers should be operated just below
> > their saturation points for best efficiency and stability." Also, the
> > formula that we use to determine load resistance (Rl=Vcc^2/2Po) implies
> > that we are looking for a combination of Vcc, Load resistance and power
> > out that will prevent saturation.
> > And wouldn't we end up with far lower harmonic content if we only clip
> > one side of the wave form (at cutoff) instead of both sides (cutoff and
> > saturation)?
> >
> > I know there are more exotic modes beyond C, but for plain old ordinary
> > ham radio applications, don't we normally avoid saturation in Class C
> > amps?
> >
> > Also, what about this business of having the efficiency improve through
> > saturation "because the saturation voltage is low" Could that be
> > right? If you put a voltage across a conductor and generate a large
> > current, you can't sit back and say "Great! Power consumption across
> > the conductor is low because the voltage drop across it is now
> > minimal!"
> >
> > 73 from London
> > Bill M0HBR N2CQR CU2JL
> > http://www.gadgeteer.us

>
>
> As far as I'm concerned... saturation has nothing to do with the class
> the amplifier is running. I can saturate an amplifier in any class.
> Saturation is most ofen an undesireable effect... that causes
> distortion in amplifiers.
>
> www.telstar-electronics.com
>

It can be messy. The class of amplifier is determined by the cut-off (or lack thereof). A class A amplifier neither hits saturation nor hits cut-off. Maximum theoretical efficiency (of a sinusodal waveform) of a class A amp is 50%, but 25% is typical. Very low distortion, of course.

Class B amplifiers are biased at cutoff and only conduct for 50% of the cycle. They shouldn't saturate, however. Efficiencies are around 60%.

Class C amps are typically biased well into cut-off and only conduct for perhaps 90 degrees (25%) of the cycle and can run 70% efficient.

However, there are class D and E amplifiers and they are switchmode amplifiers. They run on or off (cut off or in full saturation). They are normally used for CW or FM and there was a circuit (and components) available from a university to build a cw transmitter using switchmode. The thing ran about 93% efficient!

To add to the confusion, with solid state it *is* possible to use the darn things as a *linear* amplifier! Yep, commercial radio stations now use these things. The problem is that the control circuitry (which, I believe, controls the voltage fed to the final) is very complex and expensive and will be found neither in amateur nor cb equipment for a long time.

73 from Rochester, NY
Jim

5195. sc contiues crapathon

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-06 03:28:16 UTC
From: Mark@kb9rqz.aprs
Message-ID: <ltatk25oqgjbqm1pvq66cpdps4914kc420@4ax.com>
Source record: 9896
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.amateur.policy

On Mon, 06 Nov 2006 01:16:06 GMT, Slow Code <my.mail@no.spam> wrote:

>"Telstar Electronics" <briangriffey@sbcglobal.net> wrote in

why do you behave so badly sc
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5196. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-06 06:58:48 UTC
From: K4YZ <k4yz@aol.com>
Message-ID: <1162796328.142616.84010@e3g2000cwe.googlegroups.com>
Source record: 9897
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

X-rated Vermonter wrote:

> It just so happens that I passed a 20 wpm code test and I think you
> are a bozo.

Where's the evidence?

Steve, K4YZ

5197. Tektronix 2215A

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-06 12:03:16 UTC
From: Joe <.>
Message-ID: <454f2486$0$3073$afc38c87@news.optusnet.com.au>
Source record: 9698

Hello all
I am looking for a schematic on the above oscilloscope. The thing blows the fuse at switch on. Any advice would also be appreciated. I know there are many of these old units out there
Thanks in advance
Joe
vk3bki

5198. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-06 12:26:11 UTC
From: X-rated Vermonter <k1xvnospam@arrl.net>
Message-ID: <r7auk2pnd9f3curn9d4kcgs9d9l79hn878@4ax.com>
Source record: 9699
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

On 5 Nov 2006 22:58:48 -0800, "K4YZ" <k4yz@aol.com> wrote:

>X-rated Vermonter wrote:
>
>> It just so happens that I passed a 20 wpm code test and I think you
>> are a bozo.
>
> Where's the evidence?
>
>Steve, K4YZ
++++++++++

http://wireless2.fcc.gov/UlsApp/UlsSearch/license.jsp?licKey=236071

In May 1997 20 wpm was still in effect.

K1XV the X-rated Vermonter

5199. CW copying Improvement

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-06 12:45:08 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1162817107.995131.309630@f16g2000cwb.googlegroups.com>
Source record: 9700

Andy writes:

A recent thread from a ham with a hearing disability who was looking for a way to make CW easier to copy caused me to think about something I had seen that might help. I will try to describe it...

The audio output was applied to an amplifier that had an artificial "threshold", like putting diodes in SERIES with the input so that no signal would reach the amplifier until the total level was high enough to break down the diodes ..... only the threshold was more precise and not "soft"..... easy to do with op amps.....

The audio was adjusted to the point where NO signal would not produce and output and YES signal would simply amplify and cause an output...

..... much like adjusting a relay to click in at a given threshold....

Note that this does NOT increase the SNR because that has to be measure with a signal, and when the signal is present the noise is riding on top of it......

However it would produce more "abrupt" contrast between YES signal and NO signal..... much like the FM quieting phenomena that one of the posters in CW Remodulator referred to.....

It might improve the ability to copy for someone with a hearing disability..

I haven't tried it, but I can't see why it wouldn't help.

If a reader has built it up, or something similar, I would appreciate hearing about it..... or possibly where the original article describing it appeared.... I'm sure it was either the ARRL handbook or an old issues of QST....

Just wanted to throw this in the mix. Good luck.

Andy W4OAH

5200. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-06 12:47:07 UTC
From: k4yz_03@yahoo.com
Message-ID: <1162817227.178370.22540@b28g2000cwb.googlegroups.com>
Source record: 9701
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

X-rated Vermonter wrote:
> On 5 Nov 2006 22:58:48 -0800, "K4YZ" <k4yz@aol.com> wrote:
>
> >X-rated Vermonter wrote:
> >
> >> It just so happens that I passed a 20 wpm code test and I think you
> >> are a bozo.
> >
> > Where's the evidence?
> >
> >Steve, K4YZ
> ++++++++++
>
> http://wireless2.fcc.gov/UlsApp/UlsSearch/license.jsp?licKey=236071
>
> In May 1997 20 wpm was still in effect.
>
> K1XV the X-rated Vermonter

No...Where's the evidence of Slow Code being a bozo...?!?!

(And I passed the 20WPM when I still had to send, too...)

Steve, K4YZ

5201. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-06 12:51:46 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1162817506.291816.175840@h48g2000cwc.googlegroups.com>
Source record: 9702
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

Slow Code wrote:
> If all the seats are taken at a club meeting and a 20wpm code tested Extra
> is standing, a no-code ham should give their seat to the Extra and sit
> on the floor. After saluting of course.
>
> SC

Andy writes:

A FINE idea. And if the Extra needs to go to the restroom for some
reason, the no-code should accompany him with a roll of tissue and
assist in His endeavors.......

It's innovative ideas like yours that bring inspiration and, dare I
say it, PRIDE to those who have joined the ranks of Amateur Radio.
And I am shocked, I tell you, shocked, at the attempts of our
members to discredit what is obviously a very inventive
personality.....

There's no doubt in my mind that you could be another
"Larry the Cable Guy" if you set your mind to it. The world has
far too many Einsteins and not nearly enough Howard Deans, and
you might have a ready made niche.....

No one here thinks more highly of you than I ,

Andy

5202. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-06 13:42:10 UTC
From: X-rated Vermonter <k1xvnospam@arrl.net>
Message-ID: <pleuk2dkp1h6fbqnbe3kv6f3n5vt2qm9b4@4ax.com>
Source record: 9703
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

On 6 Nov 2006 04:47:07 -0800, k4yz_03@yahoo.com wrote:

>
>X-rated Vermonter wrote:
>> On 5 Nov 2006 22:58:48 -0800, "K4YZ" <k4yz@aol.com> wrote:
>>
>> >X-rated Vermonter wrote:
>> >
>> >> It just so happens that I passed a 20 wpm code test and I think you
>> >> are a bozo.
>> >
>> > Where's the evidence?
>> >
>> >Steve, K4YZ
>> ++++++++++
>>
>> http://wireless2.fcc.gov/UlsApp/UlsSearch/license.jsp?licKey=236071
>>
>> In May 1997 20 wpm was still in effect.
>>
>> K1XV the X-rated Vermonter
>
> No...Where's the evidence of Slow Code being a bozo...?!?!
>
> (And I passed the 20WPM when I still had to send, too...)
>
>Steve, K4YZ

++++++++++++
I think a review of Slow Code's many posts on this and related issues
make it self evident.

5203. sc conitues crapathon

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-06 17:09:48 UTC
From: Mark@kb9rqz.aprs
Message-ID: <f1ruk2touge81hsnqjrrahlslaigvqnsg0@4ax.com>
Source record: 9704
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

On 5 Nov 2006 22:58:48 -0800, "K4YZ" <k4yz@aol.com> wrote:

>X-rated Vermonter wrote:
>
>> It just so happens that I passed a 20 wpm code test and I think you
>> are a bozo.
>
> Where's the evidence?
where the eveidence you passed one

indeed based on the standard reasoning of the PrOcders one must
conclude that you are the result of a code waiver or some other form
of cheating
>
>Steve, K4YZ
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5204. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-06 17:10:35 UTC
From: Mark@kb9rqz.aprs
Message-ID: <f3ruk2134dup0jhl4eiau0v3bik812lsif@4ax.com>
Source record: 9705
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

On Mon, 06 Nov 2006 08:42:10 -0500, X-rated Vermonter
<k1xvnospam@arrl.net> wrote:

>On 6 Nov 2006 04:47:07 -0800, k4yz_03@yahoo.com wrote:
>
>>
>>X-rated Vermonter wrote:
>>> On 5 Nov 2006 22:58:48 -0800, "K4YZ" <k4yz@aol.com> wrote:
>>>
>>> >X-rated Vermonter wrote:
>>> >
>>> >> It just so happens that I passed a 20 wpm code test and I think you
>>> >> are a bozo.
>>> >
>>> > Where's the evidence?
>>> >
>>> >Steve, K4YZ
>>> ++++++++++
>>>
>>> http://wireless2.fcc.gov/UlsApp/UlsSearch/license.jsp?licKey=236071
>>>
>>> In May 1997 20 wpm was still in effect.
>>>
>>> K1XV the X-rated Vermonter
>>
>> No...Where's the evidence of Slow Code being a bozo...?!?!
>>
>> (And I passed the 20WPM when I still had to send, too...)
>>
>>Steve, K4YZ
>
>++++++++++++
>I think a review of Slow Code's many posts on this and related issues
>make it self evident.
exchanges like this make the notion SC is K4YZ look awfully likely
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5205. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-06 17:16:24 UTC
From: kd5sak <kd5sak@sbcglobal.net>
Message-ID: <I5K3h.5831$9v5.448@newssvr29.news.prodigy.net>
Source record: 9706
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

<Mark@kb9rqz.aprs> wrote in message
news:f3ruk2134dup0jhl4eiau0v3bik812lsif@4ax.com...
> On Mon, 06 Nov 2006 08:42:10 -0500, X-rated Vermonter
> <k1xvnospam@arrl.net> wrote:
>
>>
>>> No...Where's the evidence of Slow Code being a bozo...?!?!
>>>
>>> (And I passed the 20WPM when I still had to send, too...)
>>>
>>>Steve, K4YZ
>>
>>++++++++++++
>>I think a review of Slow Code's many posts on this and related issues
>>make it self evident.
> exchanges like this make the notion SC is K4YZ look awfully likely

Prototypical example of the old saying, "A Legend In His Own Mind".

Harold
KD5SAK

5206. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-06 17:33:35 UTC
From: Mark@kb9rqz.aprs
Message-ID: <3esuk2dcb1sl3koct13tdh5olo79t546nl@4ax.com>
Source record: 9707
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

On Mon, 06 Nov 2006 17:16:24 GMT, "kd5sak" <kd5sak@sbcglobal.net>
wrote:

>
><Mark@kb9rqz.aprs> wrote in message
>news:f3ruk2134dup0jhl4eiau0v3bik812lsif@4ax.com...
>> On Mon, 06 Nov 2006 08:42:10 -0500, X-rated Vermonter
>> <k1xvnospam@arrl.net> wrote:
>>
>>>
>>>> No...Where's the evidence of Slow Code being a bozo...?!?!
>>>>
>>>> (And I passed the 20WPM when I still had to send, too...)
>>>>
>>>>Steve, K4YZ
>>>
>>>++++++++++++
>>>I think a review of Slow Code's many posts on this and related issues
>>>make it self evident.
>> exchanges like this make the notion SC is K4YZ look awfully likely
>
>Prototypical example of the old saying, "A Legend In His Own Mind".
>
>Harold
>KD5SAK
>
indeed and with the annymouse he is not vulerable to attacks himself
but if you poke at his sockpuppets long enough he come and explodes
all over the NG
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5207. Re: Tektronix 2215A

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-06 19:35:26 UTC
From: mtech <marin.zorica/REMOVE/@zd.t-com.hr>
Message-ID: <eio2p8$960$1@news1.carnet.hr>
Source record: 9708

Try to look at greatz rectifier and smoothing capacitors first, because if one of this is short-cicuted thay fuse gonna blow!

"Joe" <.> wrote in message news:454f2486$0$3073$afc38c87@news.optusnet.com.au...
> Hello all
> I am looking for a schematic on the above oscilloscope. The thing blows
> the
> fuse at switch on. Any advice would also be appreciated. I know there are
> many of these old units out there
> Thanks in advance
> Joe
> vk3bki
>
>

5208. Re: CW copying Improvement

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-06 20:16:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12kv61n5m1lv647@corp.supernews.com>
Source record: 9709

Over 30 years ago I designed and built something similar to what you're describing. I ran the CW signal through a sharp audio filter, detected it with a diode, and used that to key an audio oscillator (rather than amplifying the original signal as you describe). It was interesting, but worked only for a rock-solid signal which was simple to copy anyway. It didn't take much QRN or QRM to cut holes in the output signal which made copy impossible.

The brain is an amazing signal processing mechanism. It's really hard to beat. If I had a hearing disability, I'd look into various amplifying and frequency shaping devices and perhaps some types of audio signal processing. But in my opinion it's best to send more-or-less the original signal to the brain and let it do what it's good at. If that's not feasible, then use a digital mode that's specifically designed for easy detection with electronic circuits and let them do all the work.

Roy Lewallen, W7EL

AndyS wrote:
> Andy writes:
>
> A recent thread from a ham with a hearing disability who was
> looking for a way to make CW easier to copy caused me to
> think about something I had seen that might help. I will try
> to describe it...
>
> The audio output was applied to an amplifier that had
> an artificial "threshold", like putting diodes in SERIES with
> the input so that no signal would reach the amplifier until
> the total level was high enough to break down the diodes
> .... only the threshold was more precise and not
> "soft"............... easy to do with op amps.....
>
> The audio was adjusted to the point where NO signal
> would not produce and output and YES signal would
> simply amplify and cause an output...
>
> ..... much like adjusting a relay to click in at a given
> threshold....
>
> Note that this does NOT increase the SNR because that
> has to be measure with a signal, and when the signal is
> present the noise is riding on top of it......
>
> However it would produce more "abrupt" contrast between

> YES signal and NO signal..... much like the FM quieting
> phenomena that one of the posters in CW Remodulator
> referred to.......
>
> It might improve the ability to copy for someone with a
> hearing disability..
>
> I haven't tried it, but I can't see why it wouldn't help.
>
> If a reader has built it up, or something similar, I would
> appreciate hearing about it..... or possibly where the
> original article describing it appeared.... I'm sure it was
> either the ARRL handbook or an old issues of QST....
>
> Just wanted to throw this in the mix. Good luck.
>
> Andy W4OAH
>

5209. Re: CW copying Improvement

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-07 00:51:47 UTC
From: Mike Coslo <mremovethiscoslo@adelphia.net>
Message-ID: <8u6dnV4LBY8-RdLYnZ2dnUVZ_r6dnZ2d@comcast.com>
Source record: 9710

Roy Lewallen wrote:
> Over 30 years ago I designed and built something similar to what you're
> describing. I ran the CW signal through a sharp audio filter, detected
> it with a diode, and used that to key an audio oscillator (rather than
> amplifying the original signal as you describe). It was interesting, but
> worked only for a rock-solid signal which was simple to copy anyway. It
> didn't take much QRN or QRM to cut holes in the output signal which made
> copy impossible.
>
> The brain is an amazing signal processing mechanism. It's really hard to
> beat. If I had a hearing disability, I'd look into various amplifying
> and frequency shaping devices and perhaps some types of audio signal
> processing. But in my opinion it's best to send more-or-less the
> original signal to the brain and let it do what it's good at.

Hi Roy,

So much depends on the nature of the hearing problem. I have a lot of holes in my hearing, as well as a different tone of tinnitus in both ears. It took me over 6 months/3 hours per day to learn CW to 5 wpm. And it still had to be crystal clear signal.

I learned a lot of things during this time. The main thing is that my brain gives equal weight to all sounds, whether the CW I am trying to copy, or whatever happens to be around it. Turns out that the same is true for multiple people speaking, or one person speaking with an air conditioner on in the room. This is probably related to the length of time that I have been hard of hearing (started at 7 with a bad case of the mumps, then the tinnitus started at 18)

> If that's
>> not feasible, then use a digital mode that's specifically designed for
>> easy detection with electronic circuits and let them do all the work.

Yup, I'm a big fan of PSK31.

- 73 de Mike KB3EIA -

5210. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-07 00:58:31 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <XSQ3h.3079$l25.2652@newsread4.news.pas.earthlink.net>
Source record: 9712
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

X-rated Vermonter <k1xvnospam@arrl.net> wrote in
news:lh4tk2h7f0elg6ilpcjdh7ma48crfk7cr0@4ax.com:

> On Mon, 06 Nov 2006 01:16:08 GMT, Slow Code <my.mail@no.spam> wrote:
>
>>X-rated Vermonter <k1xvnospam@arrl.net> wrote in
>>news:991tk25h97tilno2df445pvh2ouvbf6oog@4ax.com:
>>
>>> On Sat, 04 Nov 2006 23:58:09 GMT, Slow Code <my.mail@no.spam> wrote:
>>>
>>>>If all the seats are taken at a club meeting and a 20wpm code tested
>>>>Extra is standing, a no-code ham should give their seat to the Extra
>>>>and sit on the floor. After saluting of course.
>>>>
>>>>SC
>>> ++++++++
>>> You have been drinking too much sloe gin.
>>
>>
>>
>>Please wipe the seat after you get off to sit on the floor.
>>
>>Thanks.
>>
>>SC
> +++++++++
> It just so happens that I passed a 20 wpm code test and I think you
> are a bozo.

If you're really a code tested Extra, why do you want to dumb down ham
radio? You should help me push for better radio exams by supporting an
increase in speed of the code requirement. If we can get rid of the
no-codes and nickle hams, test everyone up to 13 and 20wpm, no one will
have to sit on the floor at club meetings anymore.

SC

5211. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-07 00:58:33 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <ZSQ3h.3080$I25.2060@newsread4.news.pas.earthlink.net>
Source record: 9711
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

"AndyS" <andysharpe@juno.com> wrote in
news:1162817506.291816.175840@h48g2000cwc.googlegroups.com:

>
> Slow Code wrote:
>> If all the seats are taken at a club meeting and a 20wpm code tested
>> Extra is standing, a no-code ham should give their seat to the Extra
>> and sit on the floor. After saluting of course.
>>
>> SC
>
> Andy writes:
>
> A FINE idea. And if the Extra needs to go to the restroom for some
> reason, the no-code should accompany him with a roll of tissue and
> assist in His endeavors.......

I like it, but there's only one problem. No-codes don't use toilet paper.

Somebody is going to have to Elmer them on how to wipe a butt and since
it's your idea....

SC

5212. slow code continues crapathon

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-07 01:39:51 UTC
From: Mark@kb9rqz.aprs
Message-ID: <1uovk2p54tm7dus04kpfdj10nanjg5ssj7@4ax.com>
Source record: 9713
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

On Tue, 07 Nov 2006 00:58:31 GMT, Slow Code <my.mail@no.spam> wrote:

>X-rated Vermonter <k1xvnospam@arrl.net> wrote in
>news:lh4tk2h7f0elg6ilpcjdh7ma48crfk7cr0@4ax.com:
>
>> On Mon, 06 Nov 2006 01:16:08 GMT, Slow Code <my.mail@no.spam> wrote:
>>
>>>X-rated Vermonter <k1xvnospam@arrl.net> wrote in
>>>news:991tk25h97tilno2df445pvh2ouvbf6oog@4ax.com:
>>>
>>>> On Sat, 04 Nov 2006 23:58:09 GMT, Slow Code <my.mail@no.spam> wrote:
>>>>
>>>>>If all the seats are taken at a club meeting and a 20wpm code tested
>>>>>Extra is standing, a no-code ham should give their seat to the Extra
>>>>>and sit on the floor. After saluting of course.
>>>>>
>>>>>SC
>>>> ++++++++
>>>> You have been drinking too much sloe gin.
>>>
>>>
>>>
>>>Please wipe the seat after you get off to sit on the floor.
>>>
>>>Thanks.
>>>
>>>SC
>> +++++++++
>> It just so happens that I passed a 20 wpm code test and I think you
>> are a bozo.
>
>
>If you're really a code tested Extra, why do you want to dumb down ham
>radio? You should help me push for better radio exams by supporting an
>increase in speed of the code requirement. If we can get rid of the
>no-codes and nickle hams, test everyone up to 13 and 20wpm, no one will
>have to sit on the floor at club meetings anymore.
>
nobody wants to dumb down ham radio we want to end the dumbing down
that exists today

code testing
>SC

http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5213. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-07 02:22:44 UTC
From: "X-rated Vermonter"
Message-ID: <9nqvk290folpkapot0pqm4ks68dummbn27@4ax.com>
Source record: 9714
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

```
On Tue, 07 Nov 2006 00:58:31 GMT, Slow Code <my.mail@no.spam> wrote:

>X-rated Vermonter <k1xvnospam@arrl.net> wrote in
>news:lh4tk2h7f0elg6ilpcjdh7ma48crfk7cr0@4ax.com:
>
>> On Mon, 06 Nov 2006 01:16:08 GMT, Slow Code <my.mail@no.spam> wrote:
>>
>>>X-rated Vermonter <k1xvnospam@arrl.net> wrote in
>>>news:991tk25h97tilno2df445pvh2ouvbf6oog@4ax.com:
>>>
>>>> On Sat, 04 Nov 2006 23:58:09 GMT, Slow Code <my.mail@no.spam> wrote:
>>>>
>>>>>If all the seats are taken at a club meeting and a 20wpm code tested
>>>>>Extra is standing, a no-code ham should give their seat to the Extra
>>>>>and sit on the floor. After saluting of course.
>>>>>
>>>>>SC
>>>> ++++++++
>>>> You have been drinking too much sloe gin.
>>>
>>>
>>>
>>>Please wipe the seat after you get off to sit on the floor.
>>>
>>>Thanks.
>>>
>>>SC
>> +++++++++
>> It just so happens that I passed a 20 wpm code test and I think you
>> are a bozo.
>
>
>If you're really a code tested Extra, why do you want to dumb down ham
>radio? You should help me push for better radio exams by supporting an
>increase in speed of the code requirement. If we can get rid of the
>no-codes and nickle hams, test everyone up to 13 and 20wpm, no one will
>have to sit on the floor at club meetings anymore.
>
>SC

++++++++++++
I don't want to dumb down amateur radio, but you very much want to.
You see, amateur radio is supposed to be about advancement of the art,
```

and preparing and maintaining a civilian population with contemporary communications skills Mandating a mode that has fallen completely out of military and commercial use as obsolete is contrary to the concept of advancement of the art. It is as if blood letting was a required course for a medical degree.

Code is fine for those who like that mode. I use it at least once a month. However, it is no longer the mode that is best in weak signal conditions, or that uses the narrowest band width for effective communication. PSK31 runs circles around code. And guess what....many of the most fervent code guys I know cheat and use computers to print the received code on a screen, and a keyboard to allow the computer to generate their sending.

An amateur extra exam these days covers information a lot more current than that on the exam just a few decades ago. Perhaps instead of harping on code as some indicator of intelligence, you should direct your efforts to having all hams retested on license renewal, to make sure they continue to be current with the state of the art in amateur radio. Or do you believe that de Forest era vacuum tubes are more relevant to amateur radio in the 21st century than integrated circuits?

5214. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-07 02:35:51 UTC
From: U-Know-Who <no-one@nowhere.com>
Message-ID: <biS3h.91$mR4.12@tornado.texas.rr.com>
Source record: 9715
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

<X-rated Vermonter> wrote in message
news:9nqvk290folpkapot0pqm4ks68dummbn27@4ax.com...
> On Tue, 07 Nov 2006 00:58:31 GMT, Slow Code <my.mail@no.spam> wrote:
>
>>X-rated Vermonter <k1xvnospam@arrl.net> wrote in
>>news:lh4tk2h7f0elg6ilpcjdh7ma48crfk7cr0@4ax.com:
>>
>>> On Mon, 06 Nov 2006 01:16:08 GMT, Slow Code <my.mail@no.spam> wrote:
>>>
>>>>X-rated Vermonter <k1xvnospam@arrl.net> wrote in
>>>>news:991tk25h97tilno2df445pvh2ouvbf6oog@4ax.com:
>>>>
>>>>> On Sat, 04 Nov 2006 23:58:09 GMT, Slow Code <my.mail@no.spam> wrote:
>>>>>
>>>>>>If all the seats are taken at a club meeting and a 20wpm code tested
>>>>>>Extra is standing, a no-code ham should give their seat to the Extra
>>>>>>and sit on the floor. After saluting of course.
>>>>>>
>>>>>>SC
>>>>> ++++++++
>>>>> You have been drinking too much sloe gin.
>>>>
>>>>
>>>>
>>>>Please wipe the seat after you get off to sit on the floor.
>>>>
>>>>Thanks.
>>>>
>>>>SC
>>> +++++++++
>>> It just so happens that I passed a 20 wpm code test and I think you
>>> are a bozo.
>>
>>
>>If you're really a code tested Extra, why do you want to dumb down ham
>>radio? You should help me push for better radio exams by supporting an
>>increase in speed of the code requirement. If we can get rid of the
>>no-codes and nickle hams, test everyone up to 13 and 20wpm, no one will
>>have to sit on the floor at club meetings anymore.
>>
>>SC
>

> ++++++++++++
> I don't want to dumb down amateur radio, but you very much want to.
> You see, amateur radio is supposed to be about advancement of the art,
> and preparing and maintaining a civilian population with contemporary
> communications skills Mandating a mode that has fallen completely out
> of military and commercial use as obsolete is contrary to the concept
> of advancement of the art. It is as if blood letting was a required
> course for a medical degree.
>
> Code is fine for those who like that mode. I use it at least once a
> month. However, it is no longer the mode that is best in weak signal
> conditions, or that uses the narrowest band width for effective
> communication. PSK31 runs circles around code. And guess
> what....many of the most fervent code guys I know cheat and use
> computers to print the received code on a screen, and a keyboard to
> allow the computer to generate their sending.
>
> An amateur extra exam these days covers information a lot more current
> than that on the exam just a few decades ago. Perhaps instead of
> harping on code as some indicator of intelligence, you should direct
> your efforts to having all hams retested on license renewal, to make
> sure they continue to be current with the state of the art in amateur
> radio. Or do you believe that de Forest era vacuum tubes are more
> relevant to amateur radio in the 21st century than integrated
> circuits?

He's still trying to homebrew his first spark-gap transmitter.

5215. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-07 03:31:24 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1162870284.031154.51070@f16g2000cwb.googlegroups.com>
Source record: 9716
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

K4YZ wrote:
> X-rated Vermonter wrote:
>
> > It just so happens that I passed a 20 wpm code test and I think you
> > are a bozo.
>
> Where's the evidence?
>
> Steve, K4YZ

Silly Bozo Wabbit, opinions need no evidence.

5216. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-07 04:42:45 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1162874565.387051.20660@b28g2000cwb.googlegroups.com>
Source record: 9717
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

hot-ham-and-cheese@hotmail.com wrote:
> K4YZ wrote:
> > X-rated Vermonter wrote:
> >
> > > It just so happens that I passed a 20 wpm code test and I think you
> > > are a bozo.
> >
> > Where's the evidence?
> >
> > Steve, K4YZ
>
> Silly Bozo Wabbit, opinions need no evidence.

not when they oppose the Might Steve then they must be proven true or
he will meat justice or some such crap

5217. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-07 05:14:23 UTC
From: Colonel Mark <anon@anon>
Message-ID: <elq9f.dgu.17.1@news.alt.net>
Source record: 9718
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

> >
> > Steve, K4YZ
>
> Silly Bozo Wabbit, opinions need no evidence.

not when they oppose the Might Steve then they must be proven true or
he will meat justice or some such crap
...
Mork punces again....

he will meat justice
he will meat justice
he will meat justice

You are your own worst enemy, Mork.

5218. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-07 05:25:05 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1162877105.763517.83010@e3g2000cwe.googlegroups.com>
Source record: 9719
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

Colonel Mark wrote:
more fraud
> > >
> > > Steve, K4YZ
> >
> > Silly Bozo Wabbit, opinions need no evidence.
>
> not when they oppose the Might Steve then they must be proven true or
> he will meat justice or some such crap
> ...
> Mork punces again....
>
> he will meat justice
> he will meat justice
> he will meat justice
>
> You are your own worst enemy, Mork.

hardly steve

most people are not so teribly concerned with spelling

indeed most people reconize that when all you have to offer is speling
mistakes you have NO real armguement to make

you are your own worst enemy. i could not make such a fool of you
without YOUR help and consent

5219. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-07 05:33:14 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <eip5qq$hm1$1@theodyn.ncf.ca>
Source record: 9720

(ka9s3@comcast.net) writes:
> I have been looking into gizmos that improve CW copy. Most are audio
> tone detectors that ignore short impulse noise bursts and then
> regenerate the CW with a keyed tone oscillator. There are several of
> these designs around and they are all well and good, but I stumbled
> across something different and was wondering if any of you have had
> personal experience with it?
>
> An October 1971 article in Ham Radio magazine (pg 17) titled
> "high-performance CW processor for communications receivers",
> "Frequency modulating the telegraphy signals in your receiver provides
> an interesting and profitable addition to conventional receiver
> design".
>
I finally dug out the article. I haven't a clue to its worth, but
I don't recall that sort of scenario coming up in other places (while
the one about good filtering and using a detected voltage to key an
audio oscillator came up a number of times), which may mean nobody
found it useful, or nobody else could be bothered replicating the circuitry.
What you want to do is check a few issues later, to see if there were
any letters related to it in the "Comments" section.

It's interesting that the November 1971 issue of Ham Radio had an article
entitled "Weak Signal Reception in CW Receivers", which used nothing
cutting edge but was a summation of various things one could do to improve
reception.

Go back a few years, and you'd see an article or two about "under the noise"
CW reception, which of course amounted to PLLs driving some indicator, but
at the time were pretty out of the ordinary since IC phase locked loops
hadn't arrived.

I suspect to evaluate this, one really needs to dig through the magazines
and look at all the schemes. Ham Radio seemed to have a fair number in
the first decade or so. Something about that article you reference reminds
me of something in an article about a Hallicrafter's diversity receiver,
I forget the issue but it likely was in one of the annual October (or was
it November?) receiver issues. About '74 or '75, someone named Hilbert
had some scheme that involved active audio filters, but there was more
to it than I can think of at the moment. (I seem to recall there was
some "stereo" effect, in that different signals were fed to each ear,
which in itself may be worth pursuing. Use one of those schemes with
the detectors to key the audio oscillator, but also include some of
the signal from the receiver output, so you get the noise and the actual
signal in it.) Wait, I think it must have been "Hildreth", who also

wrote this article you reference. In which case, you can look up what he did later; did he see some fault in this system, or did he just realize it was easier to implement something at audio?

Someone mentioned in this thread something that hinted at Coherent CW, which sync'd up the time and frequency at both ends to allow for good filters and fairly deep in the noise CW reception. If you know when and where to look, then it's easier to gather whether there's a signal there or not.

By looking at the various schemes people have come up with, one can get a better idea of each one's worth better than looking at each one by itself.

Some of the schemes likely panned out to be duds. Others required too much circuitry, at least at the time of the articles, so nobody wanted to replicate them. And then likely they've been forgotten, because otherwise more recent technology advances make the past easier (look at how phasing SSB returned to some level of popularity when ICs and digital audio came along). Others, like Coherent CW had the disadvantage that they were a whole system, rather than a processor, so you needed matching stations at both ends in order for it all to work.

You can at least look over the cumulative index of Ham Radio magazine, since someone has put it (or at least some version of it) online at http://webhome.idirect.com/~griffith/hrindex.htm

Ham Radio seemed to be the place to look for that sort of out of the ordinary schemes.

> The idea is to sample the last IF of a receiver after as much IF
> filtering as you can muster, and then using this as the RF input to a
> FM modulator. The RF/IF is modulated at the audio frequency you like to
> hear while copying CW. The next step is to frequency multiply the FM
> modulated signal to increase the bandwidth and up the modulation index.
> The following step is to treat it like any normal FM receiver IF and
> run it through a limiter stripping off any amplitude information. The
> last step is to put the signal into a normal FM discriminator to
> recover the modulating tone you used.
>
> What this is supposed to do is reduce or eliminate QRN (not QRM) from
> the CW signal making a "quiet" background to copy the CW.
>
It gets the on/off of the keying, but yes it limits the signals. So widely varying signals will be at about the same level (though that may not always be a feature), and any QRN will be limited too.

In thinking about it, I'm not so sure it's all that distant from the schemes that detect the CW and use that to key an audio oscillator. The bulk of the circuitry is not there to improve the CW reception, but to get that needed FM signal, with the incoming CW signal as

the "carrier".

Again, the more I think about it the more I think his later audio based schemes may implement a similar concept.

Michael VE2BVW

5220. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-07 07:31:25 UTC
From: Mike Monett <No@email.adr>
Message-ID: <Xns98741B7E1D4AENoemailadr@208.49.80.251>
Source record: 9721

"AndyS" <andysharpe@juno.com> wrote:

> My ear copy can still pick those out, and many of the "processors"
> can't deal with noisy sigs in that region. They tend to fall apart
> when anything below tangential sensitivity is received.

> Andy W4OAH in Eureka, Texas

Leif Asbrink, SM5BSZ, has some remarkable plots of moonbounce using
25W emitted from single 10 element yagi:

http://www.nitehawk.com/sm5bsz/kk7ka/kk7ka.htm

He gives his personal experience listening to weak Morse code here:

http://www.nitehawk.com/sm5bsz/weakcom.htm

His entire site is packed with very useful information on receiving
weak signals, including his Linrad setup:

http://www.nitehawk.com/sm5bsz/weakcom.htm

Well worth exploring if you haven't had the chance.

Regards,

Mike Monett

Antiviral, Antibacterial Silver Solution:
http://silversol.freewebpage.org/index.htm
SPICE Analysis of Crystal Oscillators:
http://silversol.freewebpage.org/spice/xtal/clapp.htm
Noise-Rejecting Wideband Sampler:
http://www3.sympatico.ca/add.automation/sampler/intro.htm

5221. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-07 12:07:10 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <45507abf$0$5726$9b4e6d93@newsspool3.arcor-online.net>
Source record: 9722

About tone detection in noise with biaural hearing:
In an ancient magazine article (If I recall correctly it was "dubus") there was a scientific reference mentioned. The signal must be delayed AND a difference in power level feeding it to the ears. They mentioned it is possible to get 3dB improvement with this methode.

Of course, detecting "submarine" is a good search for Google I think. They do worn stereo head phones.

Signal detection in general is how the processing is done:
- online or offline. Offline gives the added benefit of knowing all the signal in advance.
- bit-speed needed (Here the brain is bounded to limits)
- power level achievable (over background)
You can't beat the modern detection systems doing DSP algorithms.

- Henry

5222. Re: Tektronix 2215A

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-07 13:23:00 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <_cGdnYQcWo24Fc3YnZ2dnUVZ_vmdnZ2d@comcast.com>
Source record: 9723

this is one TEK product which deserves the "heave - ho" (well, there are others like the audio sweep generator which they had outsourced) -- the CRT mesh is flimsy and deforms easily -- and the only correction is a new CRT.

5223. Re: Tektronix 2215A

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-07 13:52:42 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <Kc04h.136385$aJ.97896@attbi_s21>
Source record: 9724

I have a 2235A that I bought new in 1991 that is quite good. No problems.
Dual beam, analog, 100 MHz.

Bill W0IYH

"jack" <jdwalton@comcast.net> wrote in message
news:_cGdnYQcWo24Fc3YnZ2dnUVZ_vmdnZ2d@comcast.com...
> this is one TEK product which deserves the "heave - ho" (well, there are
> others like the audio sweep generator which they had outsourced) -- the
> CRT
> mesh is flimsy and deforms easily -- and the only correction is a new CRT.
>
>

5224. Re: Tektronix 2215A

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-07 14:54:59 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <7714h.227564$FQ1.161610@attbi_s71>
Source record: 9725

>I have a 2235A that I bought new in 1991 that is quite good. No problems.
> Dual beam, analog, 100 MHz.
>
> Bill W0IYH

My shop scope is a Tek 2236, and I have the service manual for it that I could scan portions of if helpful. I suspect there are close similarities. However, for a few bucks, you can obtain the exact manual on a CD at:

http://www.pdf-manuals.com/

W4ZCB

5225. How connect two EPP ports to "talk" between them?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 00:11:38 UTC
From: mcalhoun@ksu.edu
Message-ID: <eir7bq$7ja@unix1.cc.ksu.edu>
Source record: 9726

Hope this isn't too far off-topic, but maybe somebody who has actually
done something homebrew like this can give me some pointers.

I'd like to connect two PC's with EPP ports so they could "talk" to each
other (mono-directional at any instant but reversible -- probably by
passing a "token" back and forth -- and preferably NOT using interrupts
because I'll be doing most of the programming in a high-level language).

This is a one-off job and I'm not looking for elegance or portability;
I just want something to work reliably.

Maximum cable length will be be less than 10 meters, so propagation
time should be minimal.

The programming, itself, doesn't bother me, but it's how to CONNECT
the two parallel ports and how to implement half of the handshake.

Each port has the following pins/functions available:
DIRECTION: DESCRIPTION(#)
Out: Write
InOut: Data (8)
In: Interrupt
In: Wait
Out: DataStrobe
Out: Reset
Out: AdrsStrobe
In: Spare (3)
Ground: (8)

Some connections are fairly obvious:
* 8 data lines to corresponding 8 data lines
* 1 (or a few) ground line(s) to ground line(s)
* DataStrobe outputs to the other's Interrupt inputs
(but I'll DISable the Interrupts).

Possible algorithm:
Assume one PC is started as SeNDeR and the other as ReCeiVeR:
Not sure how RCVR lets SNDR know it is ready to receive,
but RCVR furiously polls the Interrupt input.
SNDR writes the data to its port.
which causes Write to go low
which causes data to be dumped on the output data lines
Not sure what signal from RCVR should be the SNDR's Wait signal.
but when SNDR's Wait is low SNDR's DataStrobe is set high

Something tells me this just isn't going to work!

HELP! Please!
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
NRA Life Member and Rifle, Pistol, & Home Firearm Safety Certified Instructor
Certified Instructor for the Kansas Concealed-Carry Handgun license

5226. Super Glue doesn't work any more

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 00:31:36 UTC
From: Al Lorona <al_lorona@agilent.com>
Message-ID: <1162945128.879720@newsreg.cos.agilent.com>
Source record: 9727

Has anybody noticed that Super Glue (cyanoacrylate clear liquid glue) just doesn't seem to work any more? I remember when it first came out that it used to bond anything and everything. Lately, seems that I can't even fix my son's toys with it any more.

Latest failure: Just tried to glue a small 12V DC fan for a PA with it and the bond came apart the next day pretty much by itself.

Al W6LX

5227. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 00:34:05 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <1C94h.3634$L6.3344@newsread3.news.pas.earthlink.net>
Source record: 9728
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

X-rated Vermonter wrote in
news:9nqvk290folpkapot0pqm4ks68dummbn27@4ax.com:

> On Tue, 07 Nov 2006 00:58:31 GMT, Slow Code <my.mail@no.spam> wrote:
>
>>X-rated Vermonter <k1xvnospam@arrl.net> wrote in
>>news:lh4tk2h7f0elg6ilpcjdh7ma48crfk7cr0@4ax.com:
>>
>>> On Mon, 06 Nov 2006 01:16:08 GMT, Slow Code <my.mail@no.spam> wrote:
>>>
>>>>X-rated Vermonter <k1xvnospam@arrl.net> wrote in
>>>>news:991tk25h97tilno2df445pvh2ouvbf6oog@4ax.com:
>>>>
>>>> On Sat, 04 Nov 2006 23:58:09 GMT, Slow Code <my.mail@no.spam> wrote:
>>>>
>>>>>If all the seats are taken at a club meeting and a 20wpm code tested
>>>>>Extra is standing, a no-code ham should give their seat to the Extra
>>>>>and sit on the floor. After saluting of course.
>>>>>
>>>>>SC
>>>> ++++++++
>>>> You have been drinking too much sloe gin.
>>>>
>>>>
>>>>
>>>>Please wipe the seat after you get off to sit on the floor.
>>>>
>>>>Thanks.
>>>>
>>>>SC
>>> +++++++++
>>> It just so happens that I passed a 20 wpm code test and I think you
>>> are a bozo.
>>
>>
>>If you're really a code tested Extra, why do you want to dumb down ham
>>radio? You should help me push for better radio exams by supporting an
>>increase in speed of the code requirement. If we can get rid of the
>>no-codes and nickle hams, test everyone up to 13 and 20wpm, no one will
>>have to sit on the floor at club meetings anymore.
>>
>>SC
>

> ++++++++++++
> I don't want to dumb down amateur radio, but you very much want to.
> You see, amateur radio is supposed to be about advancement of the art,
> and preparing and maintaining a civilian population with contemporary
> communications skills Mandating a mode that has fallen completely out
> of military and commercial use as obsolete is contrary to the concept
> of advancement of the art. It is as if blood letting was a required
> course for a medical degree.
>
> Code is fine for those who like that mode. I use it at least once a
> month. However, it is no longer the mode that is best in weak signal
> conditions, or that uses the narrowest band width for effective
> communication. PSK31 runs circles around code. And guess
> what....many of the most fervent code guys I know cheat and use
> computers to print the received code on a screen, and a keyboard to
> allow the computer to generate their sending.
>
> An amateur extra exam these days covers information a lot more current
> than that on the exam just a few decades ago. Perhaps instead of
> harping on code as some indicator of intelligence, you should direct
> your efforts to having all hams retested on license renewal, to make
> sure they continue to be current with the state of the art in amateur
> radio. Or do you believe that de Forest era vacuum tubes are more
> relevant to amateur radio in the 21st century than integrated
> circuits?

Code is just one part of it. Here's my four step plan that will keep
ham radio from becoming like CB:

Step 1: No more automatic renewals. Individuals must retest and
pass all elements required for their license class.

Step 2: The passing score for written exams needs to be raised to 85%.

Step 3: Code elements should be 13 wpm for General, and 20 wpm for Extra.

Step 4: Make the no-code license one year non-renewable.

5228. FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 00:34:08 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <4C94h.3637$L6.184@newsread3.news.pas.earthlink.net>
Source record: 9729
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

When CW is gone, CB'ers will get the other bands too.

SC

5229. Re: Super Glue doesn't work any more

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 00:44:37 UTC
From: "John, N9JG" <john@Xremove.MeYgotwals.com>
Message-ID: <VL94h.98$eb5.1@newsreading01.news.tds.net>
Source record: 9730

Switch to two-part epoxy. You will, however, have to wait for it to set.

"Al Lorona" <al_lorona@agilent.com> wrote in message
news:1162945128.879720@newsreg.cos.agilent.com...
> Has anybody noticed that Super Glue (cyanoacrylate clear liquid glue) just
> doesn't seem to work any more? I remember when it first came out that it
> used to bond anything and everything. Lately, seems that I can't even fix
> my
> son's toys with it any more.
>
> Latest failure: Just tried to glue a small 12V DC fan for a PA with it and
> the bond came apart the next day pretty much by itself.
>
> Al W6LX
>
>
>
>

5230. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 00:46:09 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <12l2a6geou7ftc7@corp.supernews.com>
Source record: 9731
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Slow Code wrote:
> When CW is gone, CB'ers will get the other bands too.
>
>
> SC

Actually what the FCC did was to take the 11 meter band and create the
General Radio Service Class C and Class D.
Class C was limited to only a few channels (6) limited to control and
paging. Class D was farmed out as 23 channels with only AM modulation
and a max. of 5 watts power input to the finals. This was later
modified to 40 channels and 4 watts input.
The classic CB'er came just prior to the increase to 40 channels.

Dave N
KBH1602 (very expired)

5231. Re: How connect two EPP ports to "talk" between them?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 01:17:36 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12l2c1ipno3436d@corp.supernews.com>
Source record: 9732

Just out of curiosity, is there any reason you can't either buy what you're asking for off-the-shelf in the form of, e.g., LapLink or else use an interface that's better suited to the problem to begin with (such as Ethernet or even those USB "networking" cables)?

The last time I did what you're after here was in the late '80s!

5232. Re: Super Glue doesn't work any more

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 01:21:51 UTC
From: dplatt@radagast.org
Message-ID: <12l2c9fenbr7vc7@corp.supernews.com>
Source record: 9733

In article <1162945128.879720@newsreg.cos.agilent.com>,
Al Lorona <al_lorona@agilent.com> wrote:

>Has anybody noticed that Super Glue (cyanoacrylate clear liquid glue) just
>doesn't seem to work any more? I remember when it first came out that it
>used to bond anything and everything. Lately, seems that I can't even fix my
>son's toys with it any more.
>
>Latest failure: Just tried to glue a small 12V DC fan for a PA with it and
>the bond came apart the next day pretty much by itself.

There are certain specific plastics (polyethylene, polypropylene, and
Teflon) which most cyanoacrylates will not bond to properly (either at
all, or without some specialized surface preparation). I believe that
these plastics are characterized by low surface energy.

If what I read in some of the trade journals is any indication,
manufacturers have been selecting newer and more specialized blends of
thermoplastics and thermoset plastics over the past few years, in
order to optimize the cost, strength, impact resistance, etc. of their
products. It would not surprise me if you're more likely now, than a
few years ago, to run into plastic-resin blends which cyanoacrylates
have difficulty "getting a grip on".

A web page at Saf-t-lok indicates that "Surface ionization
pretreatment is necessary to affect best results with instant bonders
on non-polar plastic surfaces such as polyethylene or polypropylene.
SAF-T-LOK® Surface Conditioner does the job."

Cyanoacrylates also vary significantly in their "grabbing"
aggressiveness, viscosity, gap-filling strength, and their tendency to
bloom (emit the classic eye-searing white fumes which then "frost" the
surface around the application point). My impression is that the
newer non-blooming formulations may not grab as aggressively, or hold
as strongly as the classic variety. None of them seem to be
particularly good in gap-filling strength, unless you add an
additional particulate filler (baking soda is sometime suggested).

Abrading the surface with fine-grit sandpaper, and then degreasing
with isopropyl alcohol, can improve the grip significantly.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5233. Re: Super Glue doesn't work any more

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 02:14:06 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <77f2l29dns9nim7vt6bca4dkbfvca4fmjd@4ax.com>
Source record: 9734

ORIGINAL MESSAGE:

On Tue, 7 Nov 2006 16:31:36 -0800, "Al Lorona" <al_lorona@agilent.com>
wrote:

>Has anybody noticed that Super Glue (cyanoacrylate clear liquid glue) just
>doesn't seem to work any more? I remember when it first came out that it
>used to bond anything and everything. Lately, seems that I can't even fix my
>son's toys with it any more.
>
>Latest failure: Just tried to glue a small 12V DC fan for a PA with it and
>the bond came apart the next day pretty much by itself.
>
>Al W6LX
>
>
>

---------- REPLY FOLLOWS ----------

FWIW: Super glue should only be used for temporary fixes. Even though
it may be strong enough when first applied, it gets brittle after
about a year and loses much of its strength.

Bill, W6WRT

5234. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 02:50:31 UTC
From: "X-rated Vermonter"
Message-ID: <6bh2l2lfjr65mf9qevdr1o4nbcqouqtfnd@4ax.com>
Source record: 9735
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Wed, 08 Nov 2006 00:34:08 GMT, Slow Code <my.mail@no.spam> wrote:

>
>When CW is gone, CB'ers will get the other bands too.
>
>
>SC
++++++++
I fail to see the connection between Country and Western music bands
and amateur radio. And what makes you think that Country and Western
is endangered in the first place?

5235. Slow code crapathon contines

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 02:58:20 UTC
From: Mark@kb9rqz.aprs
Message-ID: <4qh2l2li3730mmdll25a8hlal60gb8dj0o@4ax.com>
Source record: 9736
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Wed, 08 Nov 2006 00:34:08 GMT, Slow Code <my.mail@no.spam> wrote:

>
>When CW is gone, CB'ers will get the other bands too.
grow up
>
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5236. Re: How connect two EPP ports to "talk" between them?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 03:50:39 UTC
From: Mike Young <boat042-spam@yahoo.com>
Message-ID: <juc4h.3026$vP1.193@newssvr13.news.prodigy.com>
Source record: 9737

<mcalhoun@ksu.edu> wrote in message news:eir7bq$7ja@unix1.cc.ksu.edu...
> Hope this isn't too far off-topic, but maybe somebody who has actually
> done something homebrew like this can give me some pointers.
>
> I'd like to connect two PC's with EPP ports so they could "talk" to each
> other (mono-directional at any instant but reversible -- probably by
> passing a "token" back and forth -- and preferably NOT using interrupts
> because I'll be doing most of the programming in a high-level language).
>
> This is a one-off job and I'm not looking for elegance or portability;
> I just want something to work reliably.
>
> Maximum cable length will be be less than 10 meters, so propagation
> time should be minimal.
>
> The programming, itself, doesn't bother me, but it's how to CONNECT
> the two parallel ports and how to implement half of the handshake.
>
> Each port has the following pins/functions available:
> DIRECTION: DESCRIPTION(#)
> Out: Write
> InOut: Data (8)
> In: Interrupt
> In: Wait
> Out: DataStrobe
> Out: Reset
> Out: AdrsStrobe
> In: Spare (3)
> Ground: (8)
>
> Some connections are fairly obvious:
> * 8 data lines to corresponding 8 data lines
> * 1 (or a few) ground line(s) to ground line(s)
> * DataStrobe outputs to the other's Interrupt inputs
> (but I'll DISable the Interrupts).
>
> Possible algorithm:
> Assume one PC is started as SeNDeR and the other as ReCeiVeR:
> Not sure how RCVR lets SNDR know it is ready to receive,
> but RCVR furiously polls the Interrupt input.
> SNDR writes the data to its port.
> which causes Write to go low
> which causes data to be dumped on the output data lines
> Not sure what signal from RCVR should be the SNDR's Wait signal.

> but when SNDR's Wait is low SNDR's DataStrobe is set high
>
> Something tells me this just isn't going to work!

I don't suppose you have TCP stacks for the two machines?

5237. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 06:56:05 UTC
From: kcdillon@rochester.rr.com
Message-ID: <1162968965.650283.77590@f16g2000cwb.googlegroups.com>
Source record: 9738
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

X-rated wrote:
> On Wed, 08 Nov 2006 00:34:08 GMT, Slow Code <my.mail@no.spam> wrote:
>
> >
> >When CW is gone, CB'ers will get the other bands too.
> >
> >
> >SC
> ++++++++
> I fail to see the connection between Country and Western music bands
> and amateur radio. And what makes you think that Country and Western
> is endangered in the first place?

5238. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 06:57:11 UTC
From: kcdillon@rochester.rr.com
Message-ID: <1162969031.058681.231590@e3g2000cwe.googlegroups.com>
Source record: 9739
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

X-rated wrote:
> On Wed, 08 Nov 2006 00:34:08 GMT, Slow Code <my.mail@no.spam> wrote:
>
> >
> >When CW is gone, CB'ers will get the other bands too.
> >
> >
> >SC
> ++++++++
> I fail to see the connection between Country and Western music bands
> and amateur radio. And what makes you think that Country and Western
> Wikipedia

Directory > Reference > Wikipedia continuous wave
A continuous wave or continuous waveform (CW) is an electromagnetic
wave of constant amplitude and frequency; and in mathematical analysis,
of infinite duration. Continuous wave is also the name given to an
early method of radio transmission, in which a carrier wave is switched
on and off. Information is carried in the rhythm and spacing with which
the signal is sent. CW is thus is a form of on-off keying (OOK). In
radio transmission, CW waves are also known as "undamped waves", to
distinguish this method from damped wave transmission
is endangered in the first place?

5239. automatic (direct reading) SWR Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 11:56:42 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <eisglq$c9m$1@news.onet.pl>
Source record: 9740

Hi
I'm looking for Direct reading SWR meter (schematics, pcb, solution,
ideas - anything)

Help please
MAc

PS - got QST 97/2

5240. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 13:07:31 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <nEk4h.4969$Ka1.989@news01.roc.ny>
Source record: 9741
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

X-rated Vermonter wrote:
> On Wed, 08 Nov 2006 00:34:08 GMT, Slow Code <my.mail@no.spam> wrote:
>
>
>>When CW is gone, CB'ers will get the other bands too.
>>
>>
>>SC
>
> ++++++++
> I fail to see the connection between Country and Western music bands
> and amateur radio. And what makes you think that Country and Western
> is endangered in the first place?

Country seems to be doing fine, Western might be sparse on the ground
but that's the nature of that beast.

5241. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 13:20:47 UTC
From: Cecil Moore <mycall@hotmail.com>
Message-ID: <PQk4h.23824$TV3.12566@newssvr21.news.prodigy.com>
Source record: 9742
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

kcdillon@rochester.rr.com wrote:
> Directory > Reference > Wikipedia continuous wave
> A continuous wave or continuous waveform (CW) is an electromagnetic
> wave of constant amplitude and frequency; and in mathematical analysis,
> of infinite duration.

Thus, a continuous wave is incapable of conveying
any information.
--
73, Cecil http://www.w5dxp.com

5242. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 13:28:21 UTC
From: Harry Gross <harry144@optonline.net>
Message-ID: <4551DB75.1080801@optonline.net>
Source record: 9743
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Cecil Moore wrote:
> kcdillon@rochester.rr.com wrote:
>> Directory > Reference > Wikipedia continuous wave
>> A continuous wave or continuous waveform (CW) is an electromagnetic
>> wave of constant amplitude and frequency; and in mathematical analysis,
>> of infinite duration.
>
> Thus, a continuous wave is incapable of conveying
> any information.

Um, not quite:-) The very presence of the CW signal conveys SOME
information (e.q. the fact that something is out there generating it:-)

It's the turning on and off of the wave that conveys most of the USEFUL
information:-) Which makes CW communication a DIGITAL mode, by the way.

Harry

5243. Re: Super Glue doesn't work any more

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 13:30:00 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1162992599.838749.153980@m7g2000cwm.googlegroups.com>
Source record: 9744

Al Lorona wrote:
> Has anybody noticed that Super Glue (cyanoacrylate clear liquid glue) just
> doesn't seem to work any more? I remember when it first came out that it
> used to bond anything and everything. Lately, seems that I can't even fix my
> son's toys with it any more.
>
> Latest failure: Just tried to glue a small 12V DC fan for a PA with it and
> the bond came apart the next day pretty much by itself.

Many modern plastics are not effectively glued with plain old super glue (Well, for me modern is anything newer than Bakelite). There are some CA glues that include special activators to help stick to these plastics but they aren't magic bullets, they turn a failed joint into a marginal joint.

If you can rough up the surfaces involved (using more area than just the broken joint) and use a glue that will give a good fillet around the joint, that'll help. There are thick super glues and epoxies that help there.

It's very odd that a fan blade would have broken off all by itself. Usually indicates some sort of mechanical interference (guard loose, maybe bearings so worn that it's rubbing against something else.)

Tim.

5244. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 16:04:07 UTC
From: Cecil Moore <mycall@hotmail.com>
Message-ID: <Xdn4h.7005$9v5.5642@newssvr29.news.prodigy.net>
Source record: 9745
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Harry Gross wrote:
>
> Cecil Moore wrote:
>> Thus, a continuous wave is incapable of conveying
>> any information.
>
> Um, not quite:-) The very presence of the CW signal conveys SOME
> information (e.q. the fact that something is out there generating it:-)

"Information - an indication of the number of possible
choices of messages, expressible as the value of some
monotonic function of the number of choices."
--
73, Cecil http://www.w5dxp.com

5245. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 16:31:19 UTC
From: JD <andersonj@acu.edu>
Message-ID: <rDn4h.1397$6t.321@newssvr11.news.prodigy.com>
Source record: 9746
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Is this a Chat Room?
"Slow Code" <my.mail@no.spam> wrote in message
news:4C94h.3637$L6.184@newsread3.news.pas.earthlink.net...
>
> When CW is gone, CB'ers will get the other bands too.
>
>
> SC

5246. Re: Super Glue doesn't work any more

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 19:59:13 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1163015953.635162.115650@i42g2000cwa.googlegroups.com>
Source record: 9747

Al Lorona wrote:
> Has anybody noticed that Super Glue (cyanoacrylate clear liquid glue) just
> doesn't seem to work any more? I remember when it first came out that it
> used to bond anything and everything. Lately, seems that I can't even fix my
> son's toys with it any more.
>
> Latest failure: Just tried to glue a small 12V DC fan for a PA with it and
> the bond came apart the next day pretty much by itself.
>
> Al W6LX

FWIW, I've found a product called "Plas-T-Pair" to work in a lot of cases where "super glue" won't. Also, I've been using LocTite 444 "Tak Pak" alpha cyanoacrylate for other things, as it seems to work better than the thin mass-marketed superglues. LocTite 712 accelerator makes it set up quickly. In addition, any joint with stress (esp. tension) on it I'll augment with reinforcement of some sort. Lots of things work: embed a little scrap of cloth in the joint, drill mating holes and put in a peg made from wood dowel stock, or threaded rod (a cut-off machine screw, for example), or roughed-up steel wire, or even copper wire. Even wrapping sewing thread (or small steel wire) around the joint (if the geometry lets that work, so the thread crosses the joint multiple times) works wonders. Apply the idea of reinforcement creatively and you'll pretty much always get a much stronger repair. Even embedding chopped-up fiberglass in the glue will help. Hint: superglue alone is probably going to be fine in compression, so long as it's not subject to shock or excessive mositure, but in tension, it can benefit a lot from some help, especially if it adds reinforcement where the glue joint to the original pieces becomes shear instead of simple tension--i.e., adding pegs in holes.

>From your post, I'm not sure just what part of the fan you were gluing. If it was a broken blade, I'd expect to need to be very careful with the repair because there's a lot of stress on the blade when the fan is running, and adding mass will imbalance the blade if you're not careful.

Cheers,
Tom

5247. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 20:31:51 UTC
From: larya <larya@rogers.com>
Message-ID: <1163017911.266486.104440@m7g2000cwm.googlegroups.com>
Source record: 9648
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

I think you will find that cw is making a comeback. Now that the cw
requirement has been serverly reduced, more hams are getting into cw
and it should be starting to make a comback....

Second... I also think you will find that the fcc, and in my country
the IC, are deeply regretting the conversion of 11 meters to 'cb'.
Virtually all of our bad radio operating procedures, of all radio
services, can all be traced back to the bad operating technique found
in the 11 meter cb band....

Larry ve3fxq

Slow Code wrote:
> When CW is gone, CB'ers will get the other bands too.
>
>
> SC

5248. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 20:51:18 UTC
From: Mark@kb9rqz.aprs
Message-ID: <qng4l25fdjfooduifg7sktfgclf10uoofp@4ax.com>
Source record: 9649
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On 8 Nov 2006 12:31:51 -0800, "larya" <larya@rogers.com> wrote:

>I think you will find that cw is making a comeback. Now that the cw
>requirement has been serverly reduced, more hams are getting into cw
>and it should be starting to make a comback....
>
>Second... I also think you will find that the fcc, and in my country
>the IC, are deeply regretting the conversion of 11 meters to 'cb'.
>Virtually all of our bad radio operating procedures, of all radio
>services, can all be traced back to the bad operating technique found
>in the 11 meter cb band....

CW could make a something of a comeback Like AM if it advocates can
learn better manners bothon here and on the air dealing with newer CW
Ops

as it I I suspect MORSE USE is doomed by the attittude of it's
advocates
>
>Larry ve3fxq
>
>
>Slow Code wrote:
>> When CW is gone, CB'ers will get the other bands too.
>>
>>
>> SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5249. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 20:55:03 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <9os924-mvo.ln1@mail.specsol.com>
Source record: 9650
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

In rec.radio.amateur.antenna Cecil Moore <mycall@hotmail.com> wrote:
> Harry Gross wrote:
> >
> > Cecil Moore wrote:
> >> Thus, a continuous wave is incapable of conveying
> >> any information.
> >
> > Um, not quite:-) The very presence of the CW signal conveys SOME
> > information (e.q. the fact that something is out there generating it:-)

> "Information - an indication of the number of possible
> choices of messages, expressible as the value of some
> monotonic function of the number of choices."
> --
> 73, Cecil http://www.w5dxp.com

How about a DF to give the bearing to the transmitter?

See straws, grasping.

--
Jim Pennino

Remove .spam.sux to reply.

5250. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 21:37:20 UTC
From: David Thompson <thompson@mindspring.com>
Message-ID: <k6s4h.4055$0r.3409@newsread1.news.pas.earthlink.net>
Source record: 9651
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

That was 50 years ago! If you listened to the ARRL SS last weekend you
know CW is not dead. Look at Dx Summit spots...CW is by far the majority!
And I am mostly SSB!

Dave K4JRB

5251. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 21:39:45 UTC
From: David Thompson <thompson@mindspring.com>
Message-ID: <B8s4h.4056$0r.2900@newsread1.news.pas.earthlink.net>
Source record: 9652
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Stop posting on multiple newsgroups. Don't you have anything else to do
Dave K4JRB

"Slow Code" <my.mail@no.spam> wrote in message
news:4C94h.3637$L6.184@newsread3.news.pas.earthlink.net...
>
> When CW is gone, CB'ers will get the other bands too.
>
>
> SC

5252. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 21:48:19 UTC
From: Mark@kb9rqz.aprs
Message-ID: <v2k4l2hkl1j8hlfm94m70qulmadgeamlq5@4ax.com>
Source record: 9653
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Wed, 08 Nov 2006 21:39:45 GMT, "David Thompson"
<thompson@mindspring.com> wrote:

>Stop posting on multiple newsgroups. Don't you have anything else to do
>Dave K4JRB
he has to do that he is trying to try up RRAP and can't find any
support for his desires to destory the ARS by taking the liecsening
back to the 1950's
>
>"Slow Code" <my.mail@no.spam> wrote in message
>news:4C94h.3637$L6.184@newsread3.news.pas.earthlink.net...
>>
>> When CW is gone, CB'ers will get the other bands too.
>>
>>
>> SC
>
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5253. Re: Super Glue doesn't work any more

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 22:17:45 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <3Kqdnaq9LMAVys_YnZ2dnUVZ8sqdnZ2d@pipex.net>
Source record: 9654

Al Lorona wrote:
> Has anybody noticed that Super Glue (cyanoacrylate clear liquid glue) just
> doesn't seem to work any more? I remember when it first came out that it
> used to bond anything and everything. Lately, seems that I can't even fix my
> son's toys with it any more.
>
> Latest failure: Just tried to glue a small 12V DC fan for a PA with it and
> the bond came apart the next day pretty much by itself.
==========
Super glue (cyano-acrylate) works on the basis of 'exclusion of oxygen'
at the joint ,hence it can often be used effectively for rejoining
broken crockery.

With plastic the break surface is often less 'crisp' especially when
interfered with by tools /sandpaper. Hence an expoxy type of glue is
then more appropriate .

Some plastics can be jointed by hot glue dispensed by a hot melt gun
provided it is done carefully and there is a reasonably large jointing
surface.

Polystyrene can be best (re)jointed with polystyrene glue as used for
model making , or acetone (nail polish remover) when the material at
the joint is dissolved locally by the acetone (a solvent).

Frank GM0CSZ / KN6WH

5254. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 22:30:49 UTC
From: Dave <W1MCE@comcast.net>
Message-ID: <l4GdnZhp6e4Kx8_YnZ2dnUVZ_vCdnZ2d@comcast.com>
Source record: 9655
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

jimp@specsol.spam.sux.com wrote:

> In rec.radio.amateur.antenna Cecil Moore <mycall@hotmail.com> wrote:
>
>>Harry Gross wrote:
>>
>>>Cecil Moore wrote:
>>>
>>>>Thus, a continuous wave is incapable of conveying
>>>>any information.
>>>
>>>Um, not quite:-) The very presence of the CW signal conveys SOME
>>>information (e.q. the fact that something is out there generating it:-)
>
>
>>"Information - an indication of the number of possible
>>choices of messages, expressible as the value of some
>>monotonic function of the number of choices."
>>--
>>73, Cecil http://www.w5dxp.com
>
>
> How about a DF to give the bearing to the transmitter?
>
> See straws, grasping.
>

How about a carrier that confirms ALL OK.

Absence of carrier = Problem exists.

5255. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 23:01:36 UTC
From: JD <andersonj@acu.edu>
Message-ID: <klt4h.1512$6t.22@newssvr11.news.prodigy.com>
Source record: 9656
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

This is worse that a chat room, lotsalaughs
"JD" <andersonj@acu.edu> wrote in message
news:rDn4h.1397$6t.321@newssvr11.news.prodigy.com...
> Is this a Chat Room?
> "Slow Code" <my.mail@no.spam> wrote in message
> news:4C94h.3637$L6.184@newsread3.news.pas.earthlink.net...
>>
>> When CW is gone, CB'ers will get the other bands too.
>>
>>
>> SC
>

5256. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-08 23:43:07 UTC
From: N2EY@AOL.COM
Message-ID: <1163029387.830593.79290@m7g2000cwm.googlegroups.com>
Source record: 9657
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

David G. Nagel wrote:
> Slow Code wrote:
> > When CW is gone, CB'ers will get the other bands too.

> > SC

> Actually what the FCC did was to take the 11 meter band and create the
> General Radio Service Class C and Class D.
> Class C was limited to only a few channels (6) limited to control and
> paging. Class D was farmed out as 23 channels with only AM modulation
> and a max. of 5 watts power input to the finals. This was later
> modified to 40 channels and 4 watts input.

Wasn't it 4 watts output?

> The classic CB'er came just prior to the increase to 40 channels.
>
> Dave N
> KBH1602 (very expired)

Some more facts:

11 meters was never a ham band by international treaty. FCC allowed hams to use it on a shared basis with Industrial, Scientific and Medical users after WW2. This was done in part as a sort of compensation for hams' loss of 160 meters to LORAN after WW2.

The Citizens' Radio Service was created by FCC in the late 1940s. The original Class A and Class B services were on UHF - right where FRS and GMRS are now.

The problem was that, in those days, the UHF radios that performed well were big, heavy, expensive, power hungry and complex. Simple UHF sets that were small, light, inexpensive and simple didn't perform too well.

The Citizen's Radio service had so few takers at the end of 10 years that FCC created Class C and Class D, at 27 MHz. Low power channelized sets for 27 MHz could be made small and inexpensive even with the technology of the late 1950s.

FCC could take the band away from hams because it wasn't a ham band by treaty anyway. They also argued that the creation of the 15 meter ham band in 1954, and the gradual return of 160 to hams, meant that 11 meters wasn't critical to ham radio.

Add to that the fact that 11 meters wasn't the most-popular ham band anyway. Many popular rigs of the time didn't even cover the band. It

wasn't harmonically related to the other HF/MF ham bands of the era, and in many areas it was full of noise from ISM users like diathermy machines, vacuum formers, etc. Since many other countries didn't allocate 11 meters to hams, there wasn't as much DX to work on 11. And the 1.7 MHz wide 10 meter band was right next door.

Of course hams didn't like losing the band, fearing that it was a harbinger of things to come, but it wasn't. Over the intervening years, we hams got all of 160 back, and three new HF bands at 30, 17 and 12 meters. The cb boom of the '70s came and went, and hams are still here.

73 de Jim, N2EY

5257. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 00:23:41 UTC
From: Cecil Moore <mycall@hotmail.com>
Message-ID: <hyu4h.9002$B31.8504@newssvr27.news.prodigy.net>
Source record: 9658
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Dave wrote:
> How about a carrier that confirms ALL OK.
> Absence of carrier = Problem exists.

Absence of carrier is the opposite of
continuous wave. :-)
--
73, Cecil http://www.w5dxp.com

5258. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 00:45:30 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <KSu4h.4104$0r.533@newsread1.news.pas.earthlink.net>
Source record: 9660
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

John Smith <assemblywizard@gmail.com> wrote in
news:eir9jg$b9u$1@aioe.server.aioe.org:

> Tell us man, we are here to help you! Don't be afraid to admit it and
> come clean. You already have our pity, although you found the end to
> our patience a while back.
>
> JS

John,

If it's not too difficult for your tiny CW hating brain to handle, try to
figured out how to use your killfile. Everyone is tired of seeing your
retard follow-ups to my protect ham radio posts. Tnx.

Try not to get your pants dirty when you sit on the floor at the next
club meeting.

SC

5259. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 00:45:33 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <NSu4h.4106$0r.399@newsread1.news.pas.earthlink.net>
Source record: 9659
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Cecil Moore <mycall@hotmail.com> wrote in
news:hyu4h.9002$B31.8504@newssvr27.news.prodigy.net:

> Dave wrote:
>> How about a carrier that confirms ALL OK.
>> Absence of carrier = Problem exists.
>
> Absence of carrier is the opposite of
> continuous wave. :-)

And switching between the two with various patterns can convey a message.

Those with a brain and who aren't lazy can receive it, those that can't
should stay on CB.

SC

5260. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 02:33:18 UTC
From: Mark@kb9rqz.aprs
Message-ID: <eq45l2lb64kmg2dghqu40o0pp3i6bkqbqf@4ax.com>
Source record: 9661
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

On Thu, 09 Nov 2006 00:45:30 GMT, Slow Code <my.mail@no.spam> wrote:

>John Smith <assemblywizard@gmail.com> wrote in
>news:eir9jg$b9u$1@aioe.server.aioe.org:
>
>> Tell us man, we are here to help you! Don't be afraid to admit it and
>> come clean. You already have our pity, although you found the end to
>> our patience a while back.
>>
>> JS
>
>
>John,
>
>If it's not too difficult for your tiny CW hating brain to handle, try to
>figured out how to use your killfile. Everyone is tired of seeing your
>retard follow-ups to my protect ham radio posts. Tnx.

lying again SC not everybody
>
>Try not to get your pants dirty when you sit on the floor at the next
>club meeting.

why would he sit on the floor?
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5261. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 06:04:17 UTC
From: cmdr buzz corey <cmdr-buzz-corey@mailcity.com>
Message-ID: <1163052257.698157.165480@m73g2000cwd.googlegroups.com>
Source record: 9662
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

X-rated wrote:
> On Wed, 08 Nov 2006 00:34:08 GMT, Slow Code <my.mail@no.spam> wrote:
>
> >
> >When CW is gone, CB'ers will get the other bands too.
> >
> >
> >SC
> ++++++++
> I fail to see the connection between Country and Western music bands
> and amateur radio. And what makes you think that Country and Western
> is endangered in the first place?

Actually today it is Country and Restroom.

5262. Re: automatic (direct reading) SWR Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 06:10:44 UTC
From: sailtamarack@yahoo.ca
Message-ID: <1163052644.546483.182800@m73g2000cwd.googlegroups.com>
Source record: 9663

Mac,

You will probably get more responses if you describe what you want in more detail: frequency of operation, inline or test instrument, self contained or PC based, remote head, analog or digital display, cost, commercial or homebrew etc.

I suggest that you take a look at current and back issues of the ARRL handbook and read the articles @ http://www.arrl.org/tis/tismenu.html

Regards - Roger

MAc wrote:
> Hi
> I'm looking for Direct reading SWR meter (schematics, pcb, solution,
> ideas - anything)
>
> Help please
> MAc
>
> PS - got QST 97/2

5263. Re: automatic (direct reading) SWR Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 08:52:57 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <eiuq99$k7k$1@news.onet.pl>
Source record: 9664

sailtamarack@yahoo.ca napisał(a):

> You will probably get more responses if you describe what you want in
> more detail: frequency of operation, inline or test instrument, self
> contained or PC based, remote head, analog or digital display, cost,
> commercial or homebrew etc.

;-) ANY ideas. ANY schematics, Any The topic is "direct reading" :-)

mac

the best would be:
analogue,
single meter,
1,8-30
of course homebrew - it's r.r.a.h group

5264. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 12:58:38 UTC
From: Dave <W1MCE@comcast.net>
Message-ID: <g_ednVZgXbthuM7YnZ2dnUVZ_uqdnZ2d@comcast.com>
Source record: 9665
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

N2EY@AOL.COM wrote:

SNIPPED

> Some more facts:
>
> 11 meters was never a ham band by international treaty. FCC allowed
> hams to use it on a shared basis with Industrial, Scientific and
> Medical users after WW2. This was done in part as a sort of
> compensation for hams' loss of 160 meters to LORAN after WW2.
>
> The Citizens' Radio Service was created by FCC in the late 1940s. The
> original Class A and Class B services were on UHF - right where FRS
> and GMRS are now.
>
> The problem was that, in those days, the UHF radios that performed well
> were big, heavy, expensive, power hungry and complex. Simple UHF sets
> that were small, light, inexpensive and simple didn't perform too well.
>
>
> The Citizen's Radio service had so few takers at the end of 10 years
> that FCC created Class C and Class D, at 27 MHz. Low power channelized
> sets for 27 MHz could be made small and inexpensive even with the
> technology of the late 1950s.
>
> FCC could take the band away from hams because it wasn't a ham band by
> treaty anyway. They also argued that the creation of the 15 meter ham
> band in 1954, and the gradual return of 160 to hams, meant that 11
> meters wasn't critical to ham radio.
>
> Add to that the fact that 11 meters wasn't the most-popular ham band
> anyway. Many popular rigs of the time didn't even cover the band. It
> wasn't harmonically related to the other HF/MF ham bands of the era,
> and in many areas it was full of noise from ISM users like diathermy
> machines, vacuum formers, etc. Since many other countries didn't
> allocate 11 meters to hams, there wasn't as much DX to work on 11. And
> the 1.7 MHz wide 10 meter band was right next door.
>
> Of course hams didn't like losing the band, fearing that it was a
> harbinger of things to come, but it wasn't. Over the intervening years,
> we hams got all of 160 back, and three new HF bands at 30, 17 and 12
> meters. The cb boom of the '70s came and went, and hams are still here.
>
> 73 de Jim, N2EY

>

As a former user of 11 meters, the Ham Band, this summary pretty much reflects my memory of events. BTW, my old Multi-Elmac AH-54 [if I recall] had 11 meters factory installed. It drifted "slighlty" during each transmission. Slightly meaning 50 +/- KHz. I had to use crystal control to stay reasonably close to any frequency!

5265. CW copying Improvement

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 13:08:36 UTC
From: David George Johnson <ercoupe@direcway.com>
Message-ID: <vr86l2t562mur65uvi4gq2blf0ea77cl33@4ax.com>
Source record: 9666

On Mon, 06 Nov 2006 19:51:47 -0500, Mike Coslo
<mremovethiscoslo@adelphia.net> wrote:

>Roy Lewallen wrote:
>> Over 30 years ago I designed and built something similar to what you're
>> describing. I ran the CW signal through a sharp audio filter, detected
>> it with a diode, and used that to key an audio oscillator (rather than
>> amplifying the original signal as you describe). It was interesting, but
>> worked only for a rock-solid signal which was simple to copy anyway. It
>> didn't take much QRN or QRM to cut holes in the output signal which made
>> copy impossible.
>>
>> The brain is an amazing signal processing mechanism. It's really hard to
>> beat. If I had a hearing disability, I'd look into various amplifying
>> and frequency shaping devices and perhaps some types of audio signal
>> processing. But in my opinion it's best to send more-or-less the
>> original signal to the brain and let it do what it's good at.
>
> Hi Roy,
>
> So much depends on the nature of the hearing problem. I have a lot of
>holes in my hearing, as well as a different tone of tinnitus in both
>ears. It took me over 6 months/3 hours per day to learn CW to 5 wpm. And
>it still had to be crystal clear signal.
>
> I learned a lot of things during this time. The main thing is that my
>brain gives equal weight to all sounds, whether the CW I am trying to
>copy, or whatever happens to be around it. Turns out that the same is
>true for multiple people speaking, or one person speaking with an air
>conditioner on in the room. This is probably related to the length of
>time that I have been hard of hearing (started at 7 with a bad case of
>the mumps, then the tinnitus started at 18)
>
>> If that's
>>> not feasible, then use a digital mode that's specifically designed for
>>> easy detection with electronic circuits and let them do all the work.
>
> Yup, I'm a big fan of PSK31.
>
> - 73 de Mike KB3EIA -

Hi Roy and Mike,

Ten Tec made a device similar to the one Roy is describing back in
the 1970's. It was called the S-20 Signalizer and I don't think that

Ten Tec sold very many. I still have mine and use it quite frequently. As Roy said, it was not for weak signal work and most everyone who bought one seemed to think it was just another filter or Q-multiplier that would help dig out weak signals.

On the contrary, the Signalizer works best when you have a strong signal and you just want to get rid of some annoying background sound, like a heterodyne or static crashes. I use mine primarily on 80 meters when there is QRN and I feed its audio to one side of my stereo headphones. The other side of the headphones goes directly to the audio from the receiver so I can hear the raw signal without any AGC action. The advantage of this arrangement is that I can turn the receiver audio down a bit lower than I usually would and still pick up those characters that I would miss completely with the signalizer. It is definitely more comfortable than listening to the raw receiver audio for a long period of time when QRN is present.

Of course, the above arrangement only works because the brain is in fact "an amazing signal processing system", and can selectively insert the weaker signal from the raw receiver audio into the stream of perfect audio coming from the Signalizer.

Mike, I might add that the product review of the Signalizer in QST said that the effect of turning it on was "like closing the door" to shut out the noise from an adjacent room. When I try to describe the effect of the Signalizer to others ("Its a re-keyer, not a filter"), I often use the very analogy that you mentioned, namely that its like being able to lower your voice when someone turns the air conditioner off or other people stop speaking in a crowded room.

You occasionally see a signalizer on e-bay, often misdescribed as a CW filter or amplified speaker. A couple of months ago one went for about fifty dollars as I recall.

-- Dave WB4JTT

5266. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 16:55:06 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12l6nbch852b545@corp.supernews.com>
Source record: 9667
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"larya" <larya@rogers.com> wrote in message
news:1163017911.266486.104440@m7g2000cwm.googlegroups.com...
> Second... I also think you will find that the fcc, and in my country
> the IC, are deeply regretting the conversion of 11 meters to 'cb'.

I hope not. The FCC providing unlicensed spectrum for the masses was one of the smartest thing they ever did! Yes, it leads to all sorts of horrible operating practices, but CB and -- more contemporarily -- FRS/GMRS and WiFi had provided *huge* benefits for people (and many millions of dollars in equipment sales) nationwide. I'd hate to live in a country where there's no such thing as a license-free $20 pair of FRS-type walkie talkies or $20 WiFi cards for high-speed Internet access.

> Virtually all of our bad radio operating procedures, of all radio
> services, can all be traced back to the bad operating technique found
> in the 11 meter cb band....

I'd say they can be traced back to human nature. People were rowdy and "uncouth" in, say, taverns for thousands of years before CB came along.

---Joel

5267. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 17:01:53 UTC
From: Mark@kb9rqz.aprs
Message-ID: <gln6l2ttl3a7h04cf9jctdvup4tm5t1s09@4ax.com>
Source record: 9668
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Thu, 9 Nov 2006 08:55:06 -0800, "Joel Kolstad"
<JKolstad71HatesSpam@yahoo.com> wrote:

>"larya" <larya@rogers.com> wrote in message
>news:1163017911.266486.104440@m7g2000cwm.googlegroups.com...
>> Second... I also think you will find that the fcc, and in my country
>> the IC, are deeply regretting the conversion of 11 meters to 'cb'.
>
>I hope not. The FCC providing unlicensed spectrum for the masses was one of
>the smartest thing they ever did! Yes, it leads to all sorts of horrible
>operating practices, but CB and -- more contemporarily -- FRS/GMRS and WiFi
>had provided *huge* benefits for people (and many millions of dollars in
>equipment sales) nationwide. I'd hate to live in a country where there's no
>such thing as a license-free $20 pair of FRS-type walkie talkies or $20 WiFi
>cards for high-speed Internet access.

the bad part about what they did with CB was providing that band for
and limiting it to local comms when everyone knew it was usable for
longer range stuff this insurred folks would not have much respect for
the rules (wether they obeyed em or not
>
>> Virtually all of our bad radio operating procedures, of all radio
>> services, can all be traced back to the bad operating technique found
>> in the 11 meter cb band....
>
>I'd say they can be traced back to human nature. People were rowdy and
>"uncouth" in, say, taverns for thousands of years before CB came along.
>
>---Joel
>
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5268. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 17:29:27 UTC
From: Dave <W1MCE@comcast.net>
Message-ID: <MNKdnZu_i8vp-M7YnZ2dnUVZ_qudnZ2d@comcast.com>
Source record: 9669
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Joel Kolstad wrote:

SNIPPED
> I'd say they can be traced back to human nature. People were rowdy and
> "uncouth" in, say, taverns for thousands of years before CB came along.
> ---Joel

I'll agree with the uncouth in the taverns part, but, disagree with the context.

CB brought the uncouth out of the tavern and onto the air.

:-)

5269. Re: automatic (direct reading) SWR Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 17:56:42 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <yZJ4h.1737$TP6.1221@newsfe05.lga>
Source record: 9670

I haven't seen a lot of examples out there, but the project seems very simple; perhaps trivially simple.

First, you build a directional coupler -- there are a number of designs out there, but none are especially difficult. Then you rectify the voltage and perhaps amplify it. Feed the two voltages into a microcontroller that does the math and operates the display (digital of course). Analog isn't going to be so popular because you not only need a meter (generally harder to get and expensive these days), but you will need some custom meter face, and what it needs to look like won't be all that obvious.

You can get 10 bits on a microcontroller A/D pretty easily and cheaply, more bits will generally cost more, sometimes a lot more. While you don't need terrific resolution for SWR, you will if you want to measure SWR over a wide range of power levels. A lot of micros have 5 or 10 A/D's, though, so perhaps you could get cute and avoid the need for something expensive.

Not many micros have D/As, but many have PWM outputs that can be filtered and would be plenty enough resolution for an analog meter. The cool part of that is that you could have your retro instrument, and you could adjust the output to match the meter face you have.

Of course, if you aren't afraid of a little work, a graphical LCD could be made to display a meter face .. after all, it's only ones and zeroes <g> Some of these color LCDs from cell phones (pricey) are all the rage among some PIC hobbyists these days.

..

"MAc" <mac_dx@tosiewytnie.poczta.onet.pl> wrote in message news:eiuq99$k7k$1@news.onet.pl...
> sailtamarack@yahoo.ca napisal(a):
>
>> You will probably get more responses if you describe what you want in
>> more detail: frequency of operation, inline or test instrument, self
>> contained or PC based, remote head, analog or digital display, cost,
>> commercial or homebrew etc.
>
>
> ;-) ANY ideas. ANY schematics, Any The topic is "direct reading" :-)
>
> mac
>
> the best would be:
> analogue,
> single meter,

> 1,8-30
> of course homebrew - it's r.r.a.h group

5270. Re: automatic (direct reading) SWR Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 20:24:07 UTC
From: dplatt@radagast.org
Message-ID: <12l73j7akilsh18@corp.supernews.com>
Source record: 9671

>>> You will probably get more responses if you describe what you want in
>>> more detail: frequency of operation, inline or test instrument, self
>>> contained or PC based, remote head, analog or digital display, cost,
>>> commercial or homebrew etc.
>> ;-) ANY ideas. ANY schematics, Any The topic is "direct reading" :-)

>I haven't seen a lot of examples out there, but the project seems very
>simple; perhaps trivially simple.
>
>First, you build a directional coupler -- there are a number of designs out
>there, but none are especially difficult. Then you rectify the voltage and
>perhaps amplify it. Feed the two voltages into a microcontroller that does
>the math and operates the display (digital of course). Analog isn't going
>to be so popular because you not only need a meter (generally harder to get
>and expensive these days), but you will need some custom meter face, and
>what it needs to look like won't be all that obvious.

Another possibility along these lines would be a little more analog-ish.

Analog Devices makes a line of neat little "log amp" ICs. Feed them a
sample of RF on one pin, and you get out a DC voltage which is
proportional to the log of the RF voltage. They have a wide frequency
range and if I recall correctly the Vout=log(Vin) relationship holds
up pretty well over several decades of power level.

Build two direction couplers, as suggested above, but without the
rectifier diodes. The ARRL handbook has instructions for building
directional couplers for HF out of copper pipe. For a physically
smaller design (for lower power) google around for "stripline
directional coupler", "monimatch", and similar terms, or go to the
Boat Anchors Archive and hunt around for the manual for an old
Heathkit SWR meter.

Take the directionally-coupler-sampled RF signals (forward and
reverse) and run them into a pair of the ADC log-amps.

The two DC voltages which come out will be proportional to the
logarithms of the forward and reverse voltages. If I remember my math
correctly, this means that the difference of the two is proportional
to the logarithm of the ratio of the forward and reverse voltages,
and would thus be a pretty nice indication of the return loss in dB.
Zero voltage difference would mean zero return loss (infinitely high
SWR), and the voltage difference would increase with the return loss
(lower SWR). The upper limit on the voltage difference will probably
be set by the directionality limit of the directional couplers.

Take this voltage difference, run it through a voltage-to-current converter (a.k.a. a series resistor) and into an analog meter, and *bingo* you've got a direct-reading SWR meter. It'll read at the high end of the scale for a 1:1 SWR and will not deflect if the SWR is infinitely high.

It might need to be recalibrated for a proper full-scale deflection at 1:1 on any given frequency, to adjust for the directionality limits of the couplers.

Take a look at the "DEM ABPM" (Down East Microwave All Band Power Meter) at www.downeastmicrowave.com - it's a professionally kitted version of a homebrew product, which uses one of the AD logamps for frequencies from ultrasonic up through UHF, and a less-sensitive-but-higher-frequency Linear Technologies part for frequencies from VHF through microwave. Readout is through a common DC-to-LED-bargraph IC.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

5271. Re: automatic (direct reading) SWR Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 20:54:15 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <ej04hn$7mh$1@news.onet.pl>
Source record: 9672

Dave Platt napisaďż˝(a):

> Build two direction couplers, as suggested above, but without the
> rectifier diodes. [cut...]

Many many thanks. I'll go this way.

Best
73
MAc
sp9mrn

5272. Re: automatic (direct reading) SWR Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 20:55:50 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <ej04km$7mh$2@news.onet.pl>
Source record: 9673

xpyttl napisaďż˝(a):
Feed the two voltages into a microcontroller that does
> the math and operates the display (digital of course). Analog isn't going
> to be so popular because you not only need a meter (generally harder to get
> and expensive these days), but you will need some custom meter face, and
> what it needs to look like won't be all that obvious.

I was thinkink about it, but i want to do it "as much analogue as
possible" ;-)

Thank you for response

MAc
sp9mrn

5273. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 22:02:17 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12l79baai66qgbf@corp.supernews.com>
Source record: 9674
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"Dave" <W1MCE@comcast.net> wrote in message
news:MNKdnZu_i8vp-M7YnZ2dnUVZ_qudnZ2d@comcast.com...
> CB brought the uncouth out of the tavern and onto the air.

Drive by the tavern... tune past the CBers? ;-)

I suppose amateur radio is supposed to be more a high-class dining
establishment than a dinner -- suit, tie, and official FCC-approved membership
required --, although these days you wouldn't necessarily know it from
listening to the airwaves.

5274. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 22:10:48 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ej0939$1roe$1@news.ndhu.edu.tw>
Source record: 9675
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Joel Kolstad wrote:
> "Dave" <W1MCE@comcast.net> wrote in message
> news:MNKdnZu_i8vp-M7YnZ2dnUVZ_qudnZ2d@comcast.com...
>> CB brought the uncouth out of the tavern and onto the air.
>
> Drive by the tavern... tune past the CBers? ;-)
>
> I suppose amateur radio is supposed to be more a high-class dining
> establishment than a dinner -- suit, tie, and official FCC-approved membership
> required --, although these days you wouldn't necessarily know it from
> listening to the airwaves.
>
>
>
>

Hmmm:

You mean you can quickly tell the difference from some self-important, self-worshiping, self-impressed, carried-away-with-oneself personality as opposed to one considering himself/herself to being a student-of-the-world? And, your final implication being, "This group of amateurs is full of the former?"

You present a most interesting observation! <in-a-contemplative-state>

JS

5275. Re: automatic (direct reading) SWR Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 23:00:25 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12l7cobp0r1ra3d@corp.supernews.com>
Source record: 9676

MAc wrote:
>
> I was thinkink about it, but i want to do it "as much analogue as
> possible" ;-)

You'll get some good ideas from "The Tandem Match - An Accurate Directional Wattmeter" by John Grebenkemper, KA3BLO, in Jan. 1987 QST. See also corrections to the article in Jan. 1988 Technical Correspondence.

Roy Lewallen, W7EL

5276. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 23:14:51 UTC
From: N2EY@AOL.COM
Message-ID: <1163114091.811538.251680@b28g2000cwb.googlegroups.com>
Source record: 9677
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Joel Kolstad wrote:
> "Dave" <W1MCE@comcast.net> wrote in message
> news:MNKdnZu_i8vp-M7YnZ2dnUVZ_qudnZ2d@comcast.com...
> > CB brought the uncouth out of the tavern and onto the air.
>
> Drive by the tavern... tune past the CBers? ;-)
>
> I suppose amateur radio is supposed to be more a high-class dining
> establishment than a dinner -- suit, tie, and official FCC-approved membership
> required --, although these days you wouldn't necessarily know it from
> listening to the airwaves.

I think it depends where you listen...

This past weekend, I was active in the November CW Sweepstakes. Made
over 400 QSOs in 74 sections (all states except Hawaii). Lots of
activity but nothing objectionable at all.

73 de Jim, N2EY

5277. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 23:18:49 UTC
From: N2EY@AOL.COM
Message-ID: <1163114329.736030.120270@m7g2000cwm.googlegroups.com>
Source record: 9678
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Dave wrote:
> N2EY@AOL.COM wrote:
>
> SNIPPED
>
> > Some more facts:
> >
> > 11 meters was never a ham band by international treaty. FCC allowed
> > hams to use it on a shared basis with Industrial, Scientific and
> > Medical users after WW2. This was done in part as a sort of
> > compensation for hams' loss of 160 meters to LORAN after WW2.
> >
> > The Citizens' Radio Service was created by FCC in the late 1940s. The
> > original Class A and Class B services were on UHF - right where FRS
> > and GMRS are now.
> >
> > The problem was that, in those days, the UHF radios that performed well
> > were big, heavy, expensive, power hungry and complex. Simple UHF sets
> > that were small, light, inexpensive and simple didn't perform too well.
> >
> >
> > The Citizen's Radio service had so few takers at the end of 10 years
> > that FCC created Class C and Class D, at 27 MHz. Low power channelized
> > sets for 27 MHz could be made small and inexpensive even with the
> > technology of the late 1950s.
> >
> > FCC could take the band away from hams because it wasn't a ham band by
> > treaty anyway. They also argued that the creation of the 15 meter ham
> > band in 1954, and the gradual return of 160 to hams, meant that 11
> > meters wasn't critical to ham radio.
> >
> > Add to that the fact that 11 meters wasn't the most-popular ham band
> > anyway. Many popular rigs of the time didn't even cover the band. It
> > wasn't harmonically related to the other HF/MF ham bands of the era,
> > and in many areas it was full of noise from ISM users like diathermy
> > machines, vacuum formers, etc. Since many other countries didn't
> > allocate 11 meters to hams, there wasn't as much DX to work on 11. And
> > the 1.7 MHz wide 10 meter band was right next door.
> >
> > Of course hams didn't like losing the band, fearing that it was a
> > harbinger of things to come, but it wasn't. Over the intervening years,
> > we hams got all of 160 back, and three new HF bands at 30, 17 and 12
> > meters. The cb boom of the '70s came and went, and hams are still here.

> >
> > 73 de Jim, N2EY

> As a former user of 11 meters, the Ham Band, this summary pretty much reflects
> my memory of events.

Thanks!

> BTW, my old Multi-Elmac AH-54 [if I recall] had 11 meters
> factory installed. It drifted "slighlty" during each transmission. Slightly
> meaning 50 +/- KHz. I had to use crystal control to stay reasonably close to any
> frequency!

I think one reason for the relative unpopularity of 11 meters with hams
was that the band was not harmonically related to other bands, meaning
crystals bought for 11 were probably not useful on any other ham band.

73 de Jim, N2EY

5278. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 23:23:16 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <ELO4h.4556$l25.2380@newsread4.news.pas.earthlink.net>
Source record: 9679
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

N2EY@AOL.COM wrote in
news:1163029387.830593.79290@m7g2000cwm.googlegroups.com:

> The cb boom of the '70s came and went, and hams are still here.
>
> 73 de Jim, N2EY

Hams are still here right up until code is eliminated.

SC

5279. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 23:23:18 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <GLO4h.4557$l25.2126@newsread4.news.pas.earthlink.net>
Source record: 9680
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> wrote in
news:12l79baai66qgbf@corp.supernews.com:

> "Dave" <W1MCE@comcast.net> wrote in message
> news:MNKdnZu_i8vp-M7YnZ2dnUVZ_qudnZ2d@comcast.com...
>> CB brought the uncouth out of the tavern and onto the air.
>
> Drive by the tavern... tune past the CBers? ;-)
>
> I suppose amateur radio is supposed to be more a high-class dining
> establishment than a dinner -- suit, tie, and official FCC-approved
> membership required --,

Too many amateurs now don't care if ham radio turns into the local
scarf & barf.

5280. Re: automatic (direct reading) SWR Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-09 23:53:53 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <ej0f2h$67l$1@news.onet.pl>
Source record: 9681

Roy Lewallen napisał(a):

> You'll get some good ideas from "The Tandem Match - An Accurate
> Directional Wattmeter" by John Grebenkemper, KA3BLO, in Jan. 1987 QST.
> See also corrections to the article in Jan. 1988 Technical Correspondence.
>

Thank You, Roy - I did't know that article. Im just reading it and
trying to understand :-)

73
MAc
sp9mrn

5281. Re: Super Glue doesn't work any more

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-10 00:45:30 UTC
From: Al Lorona <al_lorona@agilent.com>
Message-ID: <1163118766.320439@newsreg.cos.agilent.com>
Source record: 9682

Thank you all for your replies. Tom's treatise on reinforcement was well-taken on this end and is something I am going to try in the future.

The opinion seems to be that Super Glue has not really changed but that plastics have changed into a form not as easily repaired by Super Glue. However, judging from the way Super Glue used to bond my skin vs. how much less so now, I still suspect that a weakening of the formula may have taken place, perhaps in response to a lawsuit by someone who accidentally glued the palm of their hand to the sole of their shoe or something ridiculous like that. Lawyers are continually ruining products and processes for the rest of us as they search for the next target from which to extract punitive damages.

By the way, I never said what kind of failure it was; someone else assumed a fan blade had cracked. Actually, it was one of the supporting struts that had cracked. I am fairly confident that with some reinforcement a crack like this one has a very good chance of being repaired. However, I believe epoxy is better indicated in this particular case as one of the posters pointed out. Epoxy is one tough glue.

Thanks again.

Al

5282. Re: automatic (direct reading) SWR Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-10 00:55:14 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <86Q4h.3606$TP6.2358@newsfe05.lga>
Source record: 9683

If you're going to be doing the math anyway, analog or digital, and providing some sort of calibration mechanism, you don't need to get too weird about the directional coupler. For HF anyway, almost any old thing will work. It sort of seems a little like black magic. Just stick a couple chunks of wire next to a section of coax with the braid removed and all of a sudden a directional coupler. I think the toriod based couplers are a little more reproduceable, though.

Somebody, maybe even AD, has an RF power chip, too. Not sure of the specifics of it. Might not be too useful for an analog circuit. A lot of the cool chips these days are little bitty thing with lots of legs that you can't hardly see.

..

"MAc" <mac_dx@tosiewytnie.poczta.onet.pl> wrote in message news:ej04hn$7mh$1@news.onet.pl...
> Dave Platt napisa(a):
>
>> Build two direction couplers, as suggested above, but without the
>> rectifier diodes. [cut...]
>
> Many many thanks. I'll go this way.
>
> Best
> 73
> MAc
> sp9mrn

5283. Re: automatic (direct reading) SWR Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-10 01:23:33 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <64l7l25d48623gfr8bsa2pomvn2tumeh6m@4ax.com>
Source record: 9684

On Thu, 09 Nov 2006 15:00:25 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>MAc wrote:
>>
>> I was thinkink about it, but i want to do it "as much analogue as
>> possible" ;-)
>
>You'll get some good ideas from "The Tandem Match - An Accurate
>Directional Wattmeter" by John Grebenkemper, KA3BLO, in Jan. 1987 QST.
>See also corrections to the article in Jan. 1988 Technical Correspondence.

Also here:

http://n2pk.com/RLPmtr/RLPv1c.pdf

5284. crapthon continues

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-10 02:36:38 UTC
From: Mark@kb9rqz.aprs
Message-ID: <ocp7l2poq1dfasg6tdfjpf6aa5qblf8adt@4ax.com>
Source record: 9685
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Thu, 09 Nov 2006 23:23:18 GMT, Slow Code <my.mail@no.spam> wrote:

>"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> wrote in
>news:12l79baai66qgbf@corp.supernews.com:
>
>> "Dave" <W1MCE@comcast.net> wrote in message
>> news:MNKdnZu_i8vp-M7YnZ2dnUVZ_qudnZ2d@comcast.com...
>>> CB brought the uncouth out of the tavern and onto the air.
>>
>> Drive by the tavern... tune past the CBers? ;-)
>>
>> I suppose amateur radio is supposed to be more a high-class dining
>> establishment than a dinner -- suit, tie, and official FCC-approved
>> membership required --,
>
>
>Too many amateurs now don't care if ham radio turns into the local
>scarf & barf.

becuase many of the HF bands already sound that way and have for years
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5285. Re: automatic (direct reading) SWR Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-10 08:01:33 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <ej1bkuigb1@news.onet.pl>
Source record: 9686

xpyttl napisaďż˝(a):
> If you're going to be doing the math anyway, analog or digital, and
> providing some sort of calibration mechanism, you don't need to get too
> weird about the directional coupler.

DC (coupler) isn't a problem for me. I've made few reflectometers (both HF and VHF) based on homebrew couplers. I've tested toroids, pcb's and copper tubes.

I am rather afraid (terribly afraid) about mistakes in my op-amp mathematics ;-)

Now I'm thinking about ad 8302, 8307 and also (used in my FSM - ad8313)

MAc
sp9mrn

5286. Re: automatic (direct reading) SWR Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-10 08:57:14 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <ej1etashq1@news.onet.pl>
Source record: 9687

Wes Stewart napisał(a):

>
> http://n2pk.com/RLPmtr/RLPv1c.pdf
>

N2PK wrote ~~"...measure return loss instead of swr..."
I think, its the best way.
I suppose (only for "comparisom" purposes) I can make a second scale on
meter face which will show swr (N2pk article figure2)

MAc

5287. Re: Class C amps and saturation (again)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-10 10:24:21 UTC
From: bill.meara@gmail.com
Message-ID: <1163154261.259437.38890@e3g2000cwe.googlegroups.com>
Source record: 9688

Thanks to all who responded. I think I'm starting to understand this. LTSpice helps a lot. I set up a class C amp and looked out power dissipated in the transistor vs. power dissipated in the load. The big efficiency gains that come with saturation were very apparent.

To better understand WHY this happens, I set up a spreadsheet that looked at power dissipated in a variable resistor as it swept from .1 ohms to 10 ohms. It had a fixed 10 ohm resistor in series and 10 volts DC across both of them. Yes indeed, the power disspated in the variable resistor drops off dramatically when the resistance (and hence the voltage across it) gets very low. I guess is why this happens in the saturating Class C amp, Right?

But I still have some questions. When we design a Class A amp, the familiar formula Rload = (Vcc-Ve)^2/2Pout allows us to come up with a load value that will prevent the amplifier from saturating. A load of this value will cause the voltage across the transistor (collector to emitter) to vary from zero to twice Vcc. But it won't go into saturation.

Why then do so many of the books (EMRFD, SSDRA, the W1FB books) call for the use of essentially the same formula for the load when selecting a load for Class C amps? We're no longer worried about staying out of saturation, correct? In fact, we want to saturate. So why the same formula? In fact, it seems to me that if you have a Class C amplifier that is designed with this formula and is operating just below saturation, you can get it to saturate just by increasing the value of the load presented to the collector. Power out and efficiency immediately improves. Linearity, of course, does not.

Thanks, 73 Bill M0HBR
http://www.gadgeteer.us

On Nov 4, 6:34 pm, bill.me...@gmail.com wrote:
> Back in July I wrote:
>
> I'm reading David Rutledge's excellent "The Electronics of Radio."
> In Chapter 10 -- Power Amplifiers, he discusses Class C amps and says,
> "In addition, if we drive the transistor clear to saturation, using the
>
> transistor as a switch, the dissipated power can be greatly reduced,
> because the saturation voltage is low. This is Class C
> amplification..."
> I'd always throught that in Class C, while you'd operate the device so
> that it was cutoff during most of the cycle, but not saturated.
> Is this just a different definition of Class C?

> I checked back with SSDRA and EMRFD, and didn't see anything about
> driving Class C amps into saturation?
> What says the group? Do we saturate in Class C or not?
> ----------
> I've been thinking about this some more. The 1980 ARRL handbook points
> out that "Solid State power amplifiers should be operated just below
> their saturation points for best efficiency and stability." Also, the
> formula that we use to determine load resistance (Rl=Vcc^2/2Po) implies
> that we are looking for a combination of Vcc, Load resistance and power
> out that will prevent saturation.
> And wouldn't we end up with far lower harmonic content if we only clip
> one side of the wave form (at cutoff) instead of both sides (cutoff and
> saturation)?
>
> I know there are more exotic modes beyond C, but for plain old ordinary
> ham radio applications, don't we normally avoid saturation in Class C
> amps?
>
> Also, what about this business of having the efficiency improve through
> saturation "because the saturation voltage is low" Could that be
> right? If you put a voltage across a conductor and generate a large
> current, you can't sit back and say "Great! Power consumption across
> the conductor is low because the voltage drop across it is now
> minimal!"
>
> 73 from London
> Bill M0HBR N2CQR CU2JLhttp://www.gadgeteer.us

5288. Re: automatic (direct reading) SWR Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-10 14:02:40 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <8E%4h.1210$h56.1115@newsfe07.lga>
Source record: 9689

"MAc" <mac_dx@tosiewytnie.poczta.onet.pl> wrote in message
news:ej1bkuigb1@news.onet.pl...

> I am rather afraid (terribly afraid) about mistakes in my op-amp
> mathematics ;-)

Don't be afraid ... just fudge it!

..

5289. Re: Class C amps and saturation (again)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-10 17:40:00 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1163180400.420402.25060@h54g2000cwb.googlegroups.com>
Source record: 9690

bill.meara@gmail.com wrote:
> Thanks to all who responded. I think I'm starting to understand this.
> LTSpice helps a lot. I set up a class C amp and looked out power
> dissipated in the transistor vs. power dissipated in the load. The big
> efficiency gains that come with saturation were very apparent.
>
> To better understand WHY this happens, I set up a spreadsheet that
> looked at power dissipated in a variable resistor as it swept from .1
> ohms to 10 ohms. It had a fixed 10 ohm resistor in series and 10 volts
> DC across both of them. Yes indeed, the power disspated in the
> variable resistor drops off dramatically when the resistance (and hence
> the voltage across it) gets very low. I guess is why this happens in
> the saturating Class C amp, Right?
>
> But I still have some questions. When we design a Class A amp, the
> familiar formula Rload = (Vcc-Ve)^2/2Pout allows us to come up with a
> load value that will prevent the amplifier from saturating. A load of
> this value will cause the voltage across the transistor (collector to
> emitter) to vary from zero to twice Vcc. But it won't go into
> saturation.
>
> Why then do so many of the books (EMRFD, SSDRA, the W1FB books) call
> for the use of essentially the same formula for the load when selecting
> a load for Class C amps? We're no longer worried about staying out of
> saturation, correct? In fact, we want to saturate. So why the same
> formula? In fact, it seems to me that if you have a Class C amplifier
> that is designed with this formula and is operating just below
> saturation, you can get it to saturate just by increasing the value of
> the load presented to the collector. Power out and efficiency
> immediately improves. Linearity, of course, does not.

...
In Class A, the active device is conducting the entire cycle, and
conducting in proportion to where you are in the cycle. Because of
that, you can drive a purely resistive load--that is, a non-resonant
load. Class A is used in single-ended broadband linear amplifiers,
such as receiver stages, audio amplifiers, scope vertical amplifiers,
...

In Class B, each active device is conducting for half the cycle. If
you use a single active device, you need a resonant tank to complete
the cycle. You can also have push-pull class B where one device
handles output voltages of one polarity, and the other handles output
voltages of the other polarity. It is usual to bias the active devices
in such a case slightly into class A, so that the nonlinearities right

at the half-cycle point can be smoothed over. But class B in a single ended RF amplifier, with a resonant tank at the output, is still capable of linear performance, because you can reduce the conduction during the active half-cycle and reduce the output amplitude in proportion.

In both Class A and Class B, it's possible for the output to peak with the active device having a very low voltage across it, so that the the output peak-to-peak amplitude at that point is still two times the supply voltage, or nearly so, assuming it's a good approximation of a sine wave there. For class A and B amplifiers, though, the output amplitude may be less than that. The efficiency obviously goes toward zero as the output amplitude goes toward zero, since some conduction in the active devices is required to drive any output, and the dissipation in the active device is proportional essentially just to the current at low output swings since the voltage on the device is nearly constant; but the power to the load is proportional to the square of the current.

In Class C, the active device is hard-on for a relatively small fraction of the cycle. It always drives the output to about two times the supply voltage, peak to peak, if it's properly designed for low dissipation in the active device. But a key difference between it and class A is that the active device is conducting essentially no current except when there is only a very low voltage across it. In class A, there's current through the device at all output voltages.

So at full output in all those cases, the peak-to-peak voltage is the same, and for a given output POWER, that tells you what the effective resistive load should be at that point.

(In Class D, the voltage at the output of the active devices swings very quickly between power rails, spending most of the time at one rail or the other, and the output is varied according to the duty cycle of the rectangular waveform there. That waveform is filtered to remove the switching frequency and its harmonics. The result can be a very efficient amplifier. They are becoming common in audio applications these days.)

Clearly there's a bit more to it than that simple explanation, but it's a first approximation that may get you going...

Cheers,
Tom

5290. Re: Class C amps and saturation (again)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-10 18:41:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12l9hvf1jp3d36b@corp.supernews.com>
Source record: 9691

K7ITM wrote:
> . . .
> In Class C, the active device is hard-on for a relatively small
> fraction of the cycle. It always drives the output to about two times
> the supply voltage, peak to peak, if it's properly designed for low
> dissipation in the active device. . .

I've designed saturating RF amplifiers of a few watts output in which the device is on for well over half the cycle, and which have an efficiency of around 90%. The peak-peak collector voltage is nearly 40 volts when run from a 12 volt supply. The high efficiency implies relatively low dissipation in the active device. But perhaps this falls outside some definitions of class C.

Roy Lewallen, W7EL

5291. how much can dummy load carbon resistors stand

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-10 18:50:48 UTC
From: n4aeq <tucker@conninc.com>
Message-ID: <1163184647.845070.101830@h48g2000cwc.googlegroups.com>
Source record: 9692

I need to build a portable load to carry on the roof or tower to check
transmission lines, I know for
intermitten use a resistor will stand alot more then its rated for so
does anyone know the factor
for intermitten use?

5292. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-10 19:15:04 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1163186104.101525.243960@i42g2000cwa.googlegroups.com>
Source record: 9693

Mike Monett wrote:
> "AndyS" <andysharpe@juno.com> wrote:
>
> > My ear copy can still pick those out, and many of the "processors"
> > can't deal with noisy sigs in that region. They tend to fall apart
> > when anything below tangential sensitivity is received.
>
> > Andy W4OAH in Eureka, Texas
>
> Leif Asbrink, SM5BSZ, has some remarkable plots of moonbounce using
> 25W emitted from single 10 element yagi:
>
> http://www.nitehawk.com/sm5bsz/kk7ka/kk7ka.htm
>
> He gives his personal experience listening to weak Morse code here:
>
> http://www.nitehawk.com/sm5bsz/weakcom.htm
>
> His entire site is packed with very useful information on receiving
> weak signals, including his Linrad setup:
>
> http://www.nitehawk.com/sm5bsz/weakcom.htm
>
> Well worth exploring if you haven't had the chance.
>
> Regards,
>
> Mike Monett
>
> Antiviral, Antibacterial Silver Solution:
> http://silversol.freewebpage.org/index.htm
> SPICE Analysis of Crystal Oscillators:
> http://silversol.freewebpage.org/spice/xtal/clapp.htm
> Noise-Rejecting Wideband Sampler:
> http://www3.sympatico.ca/add.automation/sampler/intro.htm

Andy comments:\

Mike,
The comments you have attributed to me in the above post
are in error. You mistakenly copied another's comments and
put my name in front of it..... Not a problem for me,but
I get into enough trouble on my own without having to catch
any hell for other people... (grin)

Andy W4OAH

5293. Re: how much can dummy load carbon resistors stand

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-10 22:04:09 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <ej2t0p$nt7$1@theodyn.ncf.ca>
Source record: 9694

"n4aeq" (tucker@conninc.com) writes:
> I need to build a portable load to carry on the roof or tower to check
> transmission lines, I know for
> intermitten use a resistor will stand alot more then its rated for so
> does anyone know the factor
> for intermitten use?
>
But if you're just checking transmission lines, wouldn't it make sense
to get by with a small dummy load, and just reduce power into the
transmission lines?

Michael VE2BVW

5294. Re: how much can dummy load carbon resistors stand

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-11 00:10:41 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <i35al2tehqonuticp96hr8a59or0ghhd8t@4ax.com>
Source record: 9695

Solder a three watt 50 ohm non-inductive resistor directly into a
PL-259 and there you are. Use a double-female barrel adaptor as a
gender changer when needed. That will stand five watts momentarily, or
better yet, get an SWR analyzer such as the MFJ units. They are much
handier than an SWR bridge anyway. I wouldn't be without one.

73, Bill W6WRT

------------ ORIGINAL MESSAGE ------------

On 10 Nov 2006 10:50:48 -0800, "n4aeq" <tucker@conninc.com> wrote:

> I need to build a portable load to carry on the roof or tower to check
>transmission lines, I know for
>intermitten use a resistor will stand alot more then its rated for so
>does anyone know the factor
>for intermitten use?

5295. Re: Radio Shack store robbed

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-11 00:51:04 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <Y795h.5473$ig4.4880@newsread2.news.pas.earthlink.net>
Source record: 9696
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap

cuhulin@webtv.net wrote in
news:18671-4554BFEE-81@storefull-3253.bay.webtv.net:

> It happened this morning at the Radio Shack store at Highway 18 and
> Greenway Drive here in Jackson,Mississippi,according to WLBT mid day tv
> news.That store is in the strip mall next to the Wal Mart store where I
> do my food shopping,a mile and a half South of my doggy's couch.Two guys
> walked into the store and one of them had a pistol.They demanded money
> and then they got away.They will be caught sooner or later.
> cuhulin

It's good the robbers didn't go in and ask for technical assistance, they
would have come out empty handed.

SC

5296. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-11 01:56:05 UTC
From: john graesser <graesser@tca.net>
Message-ID: <12laaq5h6u2hr98@corp.supernews.com>
Source record: 9697

"Slow Code" <my.mail@no.spam> wrote in message
news:lO93h.2461$0r.1796@newsread1.news.pas.earthlink.net...
> If all the seats are taken at a club meeting and a 20wpm code tested Extra
> is standing, a no-code ham should give their seat to the Extra and sit
> on the floor. After saluting of course.
>
> SC

Removed all the crossposting, since only retards crosspost.

I am a slow code extra, and proud of it. However, if every ham that passed the tests 40-50 years ago was retested now, how many would still pass? I know one local ham that has been active since the 1950's and still is an advanced, he can repair or build all his own gear, but still isn't able to pass the extra exam. Put a current extra exam in front of most extras, I don't think they would pass. I would be in favor of periodic retesting, just like driver license vision testing, every 10-20 years you have to repass the level of test for the license you currently hold.

And I am not afraid to use my real name and callsign or to build my own equipment since that is what this group is really about inspite of the misguided attempts of trolls to disrupt it.
thanks, John.
KC5DWD

5297. Re: How connect two EPP ports to "talk" between them?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-11 05:20:29 UTC
From: mcalhoun@ksu.edu
Message-ID: <ej3mit$b83@unix1.cc.ksu.edu>
Source record: 9598

>Just out of curiosity, is there any reason you can't either buy what you're
>asking for off-the-shelf in the form of, e.g., LapLink or else use an
>interface that's better suited to the problem to begin with (such as Ethernet
>or even those USB "networking" cables)?

An even better solution would be to cobble the destination drive
into the source-drive's PC, do a big XCOPY, and uncobble it.
Unfortunately, in my situation the drives are NOT compatible, either.

Neither do the computers I'm working with have Ethernet or USB.

And there's almost a times-100 ratio in speed; to copy a 1 gig
disk via laplink will take about 24 HOURS vs about 17 MINUTES via
the parallel port.

Besides, there's always the fun of doing it, and that much time
difference should even "pay" for the programming effort.

--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
NRA Life Member and Rifle, Pistol, & Home Firearm Safety Certified Instructor
Certified Instructor for the Kansas Concealed-Carry Handgun license

5298. Re: How connect two EPP ports to "talk" between them?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-11 05:52:31 UTC
From: john graesser <graesser@tca.net>
Message-ID: <12laolj1g7kb9f7@corp.supernews.com>
Source record: 9599

<mcalhoun@ksu.edu> wrote in message news:ej3mit$b83@unix1.cc.ksu.edu...
> >Just out of curiosity, is there any reason you can't either buy what
you're
> >asking for off-the-shelf in the form of, e.g., LapLink or else use an
> >interface that's better suited to the problem to begin with (such as
Ethernet
> >or even those USB "networking" cables)?
>
> An even better solution would be to cobble the destination drive
> into the source-drive's PC, do a big XCOPY, and uncobble it.
> Unfortunately, in my situation the drives are NOT compatible, either.
>
> Neither do the computers I'm working with have Ethernet or USB.
>
> And there's almost a times-100 ratio in speed; to copy a 1 gig
> disk via laplink will take about 24 HOURS vs about 17 MINUTES via
> the parallel port.
>
> Besides, there's always the fun of doing it, and that much time
> difference should even "pay" for the programming effort.

At least one version of laplink that I remember used the printer port for connecting.

Along a similar vein, there was talk in comp.os.cpm a couple of weeks ago about a utility that allowed a dos machine to function as a disk drive for a cp/m computer via the printer port, perhaps if you look that one up, you can write a util that allows your machine to do the same. At least it should help get you started.

In my opinion writing the utils to do it will take more than 24 hours, if you start the copy now it might just be done before you finish writing the utils.

Cross opsys transfers are done here the slow way with some form of xmodem or zmodem at 19.2k, it may take a while but it works just fine while I am asleep.

5299. Re: Class C amps and saturation (again)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-11 08:36:27 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1163234186.961467.270640@h48g2000cwc.googlegroups.com>
Source record: 9600

Roy Lewallen wrote:
> K7ITM wrote:
> > . . .
> > In Class C, the active device is hard-on for a relatively small
> > fraction of the cycle. It always drives the output to about two times
> > the supply voltage, peak to peak, if it's properly designed for low
> > dissipation in the active device. . .
>
> I've designed saturating RF amplifiers of a few watts output in which
> the device is on for well over half the cycle, and which have an
> efficiency of around 90%. The peak-peak collector voltage is nearly 40
> volts when run from a 12 volt supply. The high efficiency implies
> relatively low dissipation in the active device. But perhaps this falls
> outside some definitions of class C.
>
> Roy Lewallen, W7EL

A flyback switching RF amplifier, Roy? ;-) One can also use active devices that pull hard to ground and to a rail, delivering a square wave output at high efficiency. That square wave can then be filtered with a network that presents a high impedance for harmonics and passes the fundamental, and achieve very high efficiency. A square wave is nice because the even harmonics are theoretically zero, and in practice can be much lower than the odd, so the filter doesn't have to have super-steep cutoff. I guess that would be some variation on class D. It's actually the way the HP8640B generates its signal: divide-by-2 stages from the master oscillator, followed by filters. I suppose it's really best to describe the operation of any amplifier in some detail, and not just rely on "Class A" or the like.

Cheers,
Tom

Cheers,
Tom

5300. Re: Radio Shack store robbed

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-11 11:01:59 UTC
From: sidwellfriends@aol.com
Message-ID: <1163242919.789203.58630@b28g2000cwb.googlegroups.com>
Source record: 9601
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap

Slow Code wrote:
> cuhulin@webtv.net wrote in
> news:18671-4554BFEE-81@storefull-3253.bay.webtv.net:
>
> > It happened this morning at the Radio Shack store at Highway 18 and
> > Greenway Drive here in Jackson,Mississippi,according to WLBT mid day tv
> > news.That store is in the strip mall next to the Wal Mart store where I
> > do my food shopping,a mile and a half South of my doggy's couch.Two guys
> > walked into the store and one of them had a pistol.They demanded money
> > and then they got away.They will be caught sooner or later.
> > cuhulin
>
>
> It's good the robbers didn't go in and ask for technical assistance, they
> would have come out empty handed.
>
> SC

Radio Shack - "You've got questions , we've got blank stares". It
seems, as if there is always one idiot clerk and one pushy asshole -
our store, we have this red-headed asshole, who likes to talk-down,
and sell the most expensive of what you want. I am so glad, that the HD
Radio Cartel chose this loser retail chain, as its Big HD Radio Rollout
!

5301. Re: how much can dummy load carbon resistors stand

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-11 14:46:53 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <xnl5h.15905$j7.333534@news.indigo.ie>
Source record: 9602

On Fri, 10 Nov 2006 10:50:48 -0800, n4aeq wrote:

> I need to build a portable load to carry on the roof or tower to check
> transmission lines, I know for
> intermitten use a resistor will stand alot more then its rated for so
> does anyone know the factor
> for intermitten use?

There is no formula for calculating how much you
can exceed the maximum ratings of a component.

I have found that most resistors can withstand several
times their maximum rating for brief periods. A lot
more if you submerge them in oil.

You don't want to do any high power tests while you
are up the tower or on the roof. High power = high
voltage = a long fall if you get a shock!

73, Ed. EI9GQ.

--
Remove 'X' to reply by e-mail
Linux 2.6.17

5302. Re: How connect two EPP ports to "talk" between them?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-11 14:54:23 UTC
From: Norm Mann <folder0735@hotmail.com>
Message-ID: <zul5h.134$Jd3.95@trnddc07>
Source record: 9603

"john graesser" <graesser@tca.net> wrote in message
news:12laolj1g7kb9f7@corp.supernews.com...
>
> <mcalhoun@ksu.edu> wrote in message news:ej3mit$b83@unix1.cc.ksu.edu...
>> >Just out of curiosity, is there any reason you can't either buy what
> you're
>> >asking for off-the-shelf in the form of, e.g., LapLink or else use an
>> >interface that's better suited to the problem to begin with (such as
> Ethernet
>> >or even those USB "networking" cables)?
>>
>> An even better solution would be to cobble the destination drive
>> into the source-drive's PC, do a big XCOPY, and uncobble it.
>> Unfortunately, in my situation the drives are NOT compatible, either.
>>
>> Neither do the computers I'm working with have Ethernet or USB.
>>
>> And there's almost a times-100 ratio in speed; to copy a 1 gig
>> disk via laplink will take about 24 HOURS vs about 17 MINUTES via
>> the parallel port.
>>
>> Besides, there's always the fun of doing it, and that much time
>> difference should even "pay" for the programming effort.
>
> At least one version of laplink that I remember used the printer port for
> connecting.

I got into this a little late, but I'm also assuming in this case that there are no standard, common media (CD, DVD, etc.) either. Somewhere around here I still have a file transfer program which came with a null modem cable, but also gave instructions on how to build a parallel port cable. IIRC, the data lines were 1-to-1, but some control lines were switched. Would this data be helpful or do you already have this information?

-NM

5303. Re: Radio Shack store robbed

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-11 15:51:55 UTC
From: Howard Kowall <hkowall@shaw.ca>
Message-ID: <vkm5h.291241$5R2.259049@pd7urf3no>
Source record: 9604
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap

you got questions we got stupid answers
that is there saying

"Slow Code" <my.mail@no.spam> wrote in message
news:Y795h.5473$ig4.4880@newsread2.news.pas.earthlink.net...
> cuhulin@webtv.net wrote in
> news:18671-4554BFEE-81@storefull-3253.bay.webtv.net:
>
>> It happened this morning at the Radio Shack store at Highway 18 and
>> Greenway Drive here in Jackson,Mississippi,according to WLBT mid day tv
>> news.That store is in the strip mall next to the Wal Mart store where I
>> do my food shopping,a mile and a half South of my doggy's couch.Two guys
>> walked into the store and one of them had a pistol.They demanded money
>> and then they got away.They will be caught sooner or later.
>> cuhulin
>
>
> It's good the robbers didn't go in and ask for technical assistance, they
> would have come out empty handed.
>
> SC

5304. Labeling mobile antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-11 15:52:47 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <4555F1CD.5030809@invalid.invalid>
Source record: 9605

I operate mobile with a number of Hamstick antennas - fiberglass rods ~1/2" (1.3cm) diameter with stainless steel whips at the end. A separate antenna is necessary for each band.

The antennas come with paper tags at the bottom indicating which band they're for. These are surprisingly durable, but they aren't perfect. The 20 meter antenna has lost its tag - luckily right now I know that the untagged antenna is 20 but if another one loses its tag I'll be down to comparing lengths of loading coils...

What methods can folks suggest for labeling these antennas? Remember that, while in use, it'll be exposed to the elements on the rear bumper of a car.

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

5305. Re: how much can dummy load carbon resistors stand

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-11 16:08:42 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <9Am5h.20507$IY5.1692@bignews6.bellsouth.net>
Source record: 9606

n4aeq wrote:
> I need to build a portable load to carry on the roof or tower to check
> transmission lines, I know for
> intermitten use a resistor will stand alot more then its rated for so
> does anyone know the factor
> for intermitten use?
>
You can connect several resistors in a series-parallel combo to get higher wattage while keeping the 50 ohm resistance. There is a limit as a non-resistive complex impedance will grow larger as you add more resistors due to stray inductance and capacitance. House the resistors in a small can and fill the can with mineral oil. This will increase the wattage rating. In fact resistors submerged in oil will handle 10-20 times their wattage rating for short periods. Paint the outside of the can black to increase radiative cooling.
(Ever see a Heath Cantenna?)

Hint: get 10 120 ohm 2 watt resistors, and connect them in series-parallel. (IE: 5 sets of 2 series connected resistors in parallel). This will give you a 48 ohm 20 watt resistor. With the resistors heat sinked in oil they will handle 200-400 watts for short periods.

5306. Re: Radio Shack store robbed

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-11 16:11:15 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <yCm5h.20509$IY5.1053@bignews6.bellsouth.net>
Source record: 9607
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap

Howard Kowall wrote:
> you got questions we got stupid answers
> that is there saying
>
More like we got Bull Shit.

5307. Re: Radio Shack store robbed

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-11 16:53:25 UTC
From: an old freind <Mark@kb9rqz.aprs>
Message-ID: <4555f32a$0$21167$88260bb3@free.teranews.com>
Source record: 9608
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap

"ken scharf" <wa2mzeNOSPAMBOTS@bellsouth.net> wrote in message
news:yCm5h.20509$lY5.1053@bignews6.bellsouth.net...
> Howard Kowall wrote:
>> you got questions we got stupid answers
>> that is there saying
>>
> More like we got Bull Shit.
with teh punce gotcha do u hav anyting cognet two say?

--
Posted via a free Usenet account from http://www.teranews.com

5308. Re: Radio Shack store robbed

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-11 20:36:31 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <dvq5h.18294$GE1.16382@bignews7.bellsouth.net>
Source record: 9609
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap

an old freind wrote:
> "ken scharf" <wa2mzeNOSPAMBOTS@bellsouth.net> wrote in message
> news:yCm5h.20509$lY5.1053@bignews6.bellsouth.net...
>> Howard Kowall wrote:
>>> you got questions we got stupid answers
>>> that is there saying
>>>
>> More like we got Bull Shit.
> with teh punce gotcha do u hav anyting cognet two say?
>
>
>
Take the marbles out of your mouth troll.

5309. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-11 20:44:22 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <BCq5h.18297$GE1.1902@bignews7.bellsouth.net>
Source record: 9610
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Joel Kolstad wrote:
> "larya" <larya@rogers.com> wrote in message
> news:1163017911.266486.104440@m7g2000cwm.googlegroups.com...
>> Second... I also think you will find that the fcc, and in my country
>> the IC, are deeply regretting the conversion of 11 meters to 'cb'.
>
> I hope not. The FCC providing unlicensed spectrum for the masses was one of
> the smartest thing they ever did! Yes, it leads to all sorts of horrible
> operating practices, but CB and -- more contemporarily -- FRS/GMRS and WiFi
> had provided *huge* benefits for people (and many millions of dollars in
> equipment sales) nationwide. I'd hate to live in a country where there's no
> such thing as a license-free $20 pair of FRS-type walkie talkies or $20 WiFi
> cards for high-speed Internet access.
>
>> Virtually all of our bad radio operating procedures, of all radio
>> services, can all be traced back to the bad operating technique found
>> in the 11 meter cb band....
>
> I'd say they can be traced back to human nature. People were rowdy and
> "uncouth" in, say, taverns for thousands of years before CB came along.
>
> ---Joel
>
>
At the time "CB" in the 27mhz region made sense because UHF equipment
was too expensive to build for the masses. That's no longer true. The
FCC should eliminate the 27 mhz CB service before the start of the next
sunspot cycle and force everyone there to move to UHF. One of CB's
biggest problems was interference from 'skip' (DX), and it is illegal to
work DX stations anyway.

5310. Re: Radio Shack store robbed

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-11 20:46:25 UTC
From: an old freind <Mark@kb9rqz.aprs>
Message-ID: <455629c6$0$21108$88260bb3@free.teranews.com>
Source record: 9611
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap

"ken scharf" <wa2mzeNOSPAMBOTS@bellsouth.net> wrote in message
news:dvq5h.18294$GE1.16382@bignews7.bellsouth.net...
> an old freind wrote:
>> "ken scharf" <wa2mzeNOSPAMBOTS@bellsouth.net> wrote in message
>> news:yCm5h.20509$lY5.1053@bignews6.bellsouth.net...
>>> Howard Kowall wrote:
>>>> you got questions we got stupid answers
>>>> that is there saying
>>>>
>>> More like we got Bull Shit.
>> with teh punce gotcha do u hav anyting cognet two say?
>>
>>
>>
> Take the marbles out of your mouth troll.
stfu child raping forger
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5311. stop crapin in in SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-11 21:01:19 UTC
From: Mark@kb9rqz.aprs
Message-ID: <kgecl2pl6mgqpd6qp7os7qeotag8h5k27e@4ax.com>
Source record: 9612
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap

On Sat, 11 Nov 2006 00:51:04 GMT, Slow Code <my.mail@no.spam> wrote:

>
stop crapin in in SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5312. id theft remains a crime

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-11 21:12:09 UTC
From: Mark@kb9rqz.aprs
Message-ID: <t4fcl21mfrsfm3422fhp9cd33m5j0o3ino@4ax.com>
Source record: 9613
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap

On Sat, 11 Nov 2006 15:46:25 -0500, "an old freind" <Mark@kb9rqz.aprs>
wrote:

>
>
id theft remains a crime
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5313. Re: Labeling mobile antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-11 22:50:20 UTC
From: Larry Gagnon <lggagnon@fakeuniserve.com>
Message-ID: <pan.2006.11.11.22.50.20.989311@fakeuniserve.com>
Source record: 9614

Use a minidrill with an engraving bit on it and engrave "20M" into the side of the stainless base??

Larry VE7EA

5314. Re: Labeling mobile antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-12 00:25:12 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <PYt5h.582$_f3.243@newsfe03.lga>
Source record: 9615

I have to break down the antenna to fit in my trunk. I mark the whip with colored vinyl tape at the point it adjusts into the mast, and put a piece of the same colored tape on the mast. Red=40, Blue=30, Yellow=20. I use Hustlers for 75/80 since the Hamstick doesn't cover 80, and the 75 meter resonator carries red tape so I can quickly tell it from 80.

..

"Doug Smith W9WI" <w9wi@invalid.invalid> wrote in message news:4555F1CD.5030809@invalid.invalid...
>I operate mobile with a number of Hamstick antennas - fiberglass rods ~1/2"
>(1.3cm) diameter with stainless steel whips at the end. A separate antenna
>is necessary for each band.
>
> The antennas come with paper tags at the bottom indicating which band
> they're for. These are surprisingly durable, but they aren't perfect. The
> 20 meter antenna has lost its tag - luckily right now I know that the
> untagged antenna is 20 but if another one loses its tag I'll be down to
> comparing lengths of loading coils...
>
> What methods can folks suggest for labeling these antennas? Remember
> that, while in use, it'll be exposed to the elements on the rear bumper of
> a car.
> --
> Doug Smith W9WI
> Pleasant View (Nashville), TN EM66
> http://www.w9wi.com
>

5315. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-12 01:38:46 UTC
From: X-rated Vermonter <k1xvnospam@arrl.net>
Message-ID: <2jucl2ph03e2elmaag3huj4t2nlusl7t5p@4ax.com>
Source record: 9616
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

On Wed, 08 Nov 2006 00:34:05 GMT, Slow Code <my.mail@no.spam> wrote:

>
>Code is just one part of it. Here's my four step plan that will keep
>ham radio from becoming like CB:
>
>
>Step 1: No more automatic renewals. Individuals must retest and
> pass all elements required for their license class.
>
>Step 2: The passing score for written exams needs to be raised to 85%.
>
>Step 3: Code elements should be 13 wpm for General, and 20 wpm for Extra.
>
>Step 4: Make the no-code license one year non-renewable.
+++++++++
Your plan will eliminate QRM. There will be nobody left with a
license.

Are you an undercover agent for some commercial group that is looking
to take over ham band spectrum for commercial uses?

You are a caricature of a crusty old fool.

5316. Racal-Dana F64 Schematic?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-12 02:20:16 UTC
From: wackyvorlon <wackyvorlon@gmail.com>
Message-ID: <1163298016.140982.315560@i42g2000cwa.googlegroups.com>
Source record: 9617

I have a Racal-Dana F64 function generator that I'm trying to repair
for a friend. It has the ability to function as a frequency counter
for an external input, this appears to work without difficulty. I have
not, however, been able to make it generate a signal. When switched to
input, the frequency display reads zero. Does anyone know where I can
a schematic for this machine? Any help is greatly appreciated.

5317. Re: Labeling mobile antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-12 02:48:35 UTC
From: budgie <me@privacy.net>
Message-ID: <hq2dl2psd2nnri1d4arnibi5tqpmv4alh0@4ax.com>
Source record: 9618

On Sat, 11 Nov 2006 15:52:47 GMT, Doug Smith W9WI <w9wi@invalid.invalid> wrote:

>I operate mobile with a number of Hamstick antennas - fiberglass rods
>~1/2" (1.3cm) diameter with stainless steel whips at the end. A
>separate antenna is necessary for each band.
>
>The antennas come with paper tags at the bottom indicating which band
>they're for. These are surprisingly durable, but they aren't perfect.
>The 20 meter antenna has lost its tag - luckily right now I know that
>the untagged antenna is 20 but if another one loses its tag I'll be down
>to comparing lengths of loading coils...
>
>What methods can folks suggest for labeling these antennas? Remember
>that, while in use, it'll be exposed to the elements on the rear bumper
>of a car.

Heatshrink tubing. Either colour coded, or clear with a printed/coded label
inside.

5318. Re: Labeling mobile antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-12 03:09:38 UTC
From: dplatt@radagast.org
Message-ID: <12ld43i9hefm9c5@corp.supernews.com>
Source record: 9619

In article <4555F1CD.5030809@invalid.invalid>,
Doug Smith W9WI <w9wi@invalid.invalid> wrote:

>What methods can folks suggest for labeling these antennas? Remember
>that, while in use, it'll be exposed to the elements on the rear bumper
>of a car.

How about labelling the antenna or base with a self-adhesive label
(e.g Brother P-Touch), and then covering it with some clear
heat-shrink tubing?

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5319. Re: Radio Shack store robbed

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-12 03:16:07 UTC
From: amdx <amdx@knology.net>
Message-ID: <a6c6e$455691f6$45011502$25364@KNOLOGY.NET>
Source record: 9620
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap

"ken scharf" <wa2mzeNOSPAMBOTS@bellsouth.net> wrote in message
news:yCm5h.20509$lY5.1053@bignews6.bellsouth.net...
> Howard Kowall wrote:
>> you got questions we got stupid answers
>> that is there saying
>>
> More like we got Bull Shit.

Here's my latest story;

I sent the following letter to;
customerservice@radioshack.com

Hi,
Do you have a service manual (schematic) for Model # 15-1937
Accurian HomePlug Digital Audio Receiver/Amplifier?

Thank you,
Mike

And I received;

Dear Valued Customer, Thank you for contacting RadioShack.com Order Center.
Your questions and concerns are important to us and we are dedicated to
assisting you in anyway possible. In order to assist you in the most
efficient and timely manner, all email correspondence must be submitted
through our online email form. To locate our online email form, we ask that
you visit our Help Desk at RadioShack.com Order Center/helpdesk and choose
Contact Us under Online Store Information. Then, choose the subject that
will address your question and send us an email through our online email
form. We apologize for any inconvenience this may cause you. Sincerely,
RadioShack.com Order Center

Original Message Follows: ------------------------

Hi,
Do you have a service manual (schematic) for Model # 15-1937
Accurian HomePlug Digital Audio Receiver/Amplifier?

Thank you,
Mike

So I located the online email form and I sent,

Hi,
Do you have a service manual (schematic) for Model # 15-1937
Accurian HomePlug Digital Audio Receiver/Amplifier?

Thank you,
Mike
and I received;

Dear Valued Customer,

Thank you for contacting RadioShack.com Order Center.

Your questions and concerns are important to us and we are dedicated to
assisting you in anyway possible. In order to assist you in the most
efficient and timely manner, all email correspondence must be submitted
through our online email form. To locate our online email form, we ask
that you visit our Help Desk at RadioShack.com Order Center/helpdesk and
choose Contact Us under Online Store Information. Then, choose
the subject that will address your question and send us an email through
our online email form.

We apologize for any inconvenience this may cause you.

Sincerely,

RadioShack.com Order Center

Original Message Follows:

To: Customerservice@radioshack.com

From: @knology.net

Subject: I need help finding a product

Order Number:

Name: Mike

Phone Number:
Wrote: Hi,
Do you have a service manual (schematic) for Model # 15-1937
Accurian HomePlug Digital Audio Receiver/Amplifier?

Thank you,
Mike Knowlton

So I think I did something wrong, I check your email and copy
RadioShack.com Order Center/helpdesk
from your email, add www. and of course, there is no such page.
Ok, so I try just www.radioshack.com and look for Order Center/helpdesk
I don't find Order Center/helpdesk anywhere on the page.
After much searching I gave up.
I located an 800 # and called it, After pushing all the right buttons, hey

guess what? I get a busy signal!
The next call, I'm very quiet, I don't say anything to all the prompts,
finally a live person answered and I get switched to someone that
helps me. You don't carry the repair part I needed, but I did get an answer,
it did take two emails and about 45 minutes, but I got an answer.

Your Valued Customer,
Mike Knowlton

5320. Re: how much can dummy load carbon resistors stand

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-12 03:35:22 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <di5dl2tkmtnb8cmcaf5ir79nrmo9g87lqd@4ax.com>
Source record: 9621

No one has ever gotten a shock from high power RF. Burns, yes.

Bill, W6WRT

------------ ORIGINAL MESSAGE ------------

On Sat, 11 Nov 2006 14:46:53 GMT, "Eamon Skelton"
<Xnospam@oceanfree.net> wrote:

>You don't want to do any high power tests while you
>are up the tower or on the roof. High power = high
>voltage = a long fall if you get a shock!

5321. Re: Radio Shack store robbed

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-12 03:39:17 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <8n5dl25odcm961ns0gctuo91of7ugl05q5@4ax.com>
Source record: 9622
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap

Pot calls kettle black!

Try "their".

Bill, W6WRT

------------ ORIGINAL MESSAGE ------------

On Sat, 11 Nov 2006 15:51:55 GMT, "Howard Kowall" <hkowall@shaw.ca>
wrote:

>you got questions we got stupid answers
>that is there saying

5322. Re: Labeling mobile antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-12 03:50:13 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <455699F3.3000302@invalid.invalid>
Source record: 9623

Dave Platt wrote:
> How about labelling the antenna or base with a self-adhesive label
> (e.g Brother P-Touch), and then covering it with some clear
> heat-shrink tubing?

I've learned the hard way that P-Touch labels can't tolerate exposure to sunlight.

I like the colored tape idea.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

5323. Re: Labeling mobile antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-12 04:04:31 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <bo6dl2trmjeer4ftsv7qntqao3f6deagfo@4ax.com>
Source record: 9624

Paint or nail polish with the resistor color code:

GRY/BLK = 80
PUR/GRN = 75
YEL/BLK = 40
ORN/BLK = 30
RED/BLK = 20
BRN/GRN = 15
BRN/BLK = 10

Since the hamsticks themselves are black, you could omit black as the second color unless you want to paint a white background first. I'd paint a circle clear around it like a resistor so you can read it without rotating the antenna.

And yes, there is green nail polish. :-)

Bill, W6WRT

------------ ORIGINAL MESSAGE ------------

On Sat, 11 Nov 2006 15:52:47 GMT, Doug Smith W9WI
<w9wi@invalid.invalid> wrote:

>What methods can folks suggest for labeling these antennas? Remember
>that, while in use, it'll be exposed to the elements on the rear bumper
>of a car.

5324. Re: Labeling mobile antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-12 12:58:37 UTC
From: Mike Leech <jr9893@sbcglobal.net>
Message-ID: <1UE5h.12681$B31.11068@newssvr27.news.prodigy.net>
Source record: 9625

I use standard return address labels under clear heat shrink (teflon) to label pressure transducers at work and it works just fine.

This has to stand up to hot ATF (Automatic Transmission Fluid) at about 100 deg.C.

P Touch labels are thermal and turn black with heat.

Mike KF8FG

5325. Re: automatic (direct reading) SWR Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-12 13:48:10 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <ej78mq$ef1$1@news.onet.pl>
Source record: 9626

So, the way is 2x AD8310 +dual opamp and analog meter.
Will report the result. Now I'm waiting for parts.

Thanks to all

73
MAc
sp9mrn

5326. FA:NOS AMPEREX TUBES+CRL SWITCHES

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-12 13:51:09 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <hFF5h.251483$QZ1.185999@bgtnsc04-news.ops.worldnet.att.net>
Source record: 9627

NOS Amperex utbes in original boxes + CRL 3&4 wafer switches (more coming): will be adding other stuff as well-check often:

see at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking, 73 heytubeguy

5327. Re: Labeling mobile antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-12 14:03:02 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <45572995.4030901@invalid.invalid>
Source record: 9628

Bill Turner wrote:
> Paint or nail polish with the resistor color code:
>
> GRY/BLK = 80
> PUR/GRN = 75
> YEL/BLK = 40
> ORN/BLK = 30
> RED/BLK = 20
> BRN/GRN = 15
> BRN/BLK = 10
>
> Since the hamsticks themselves are black, you could omit black as the
> second color unless you want to paint a white background first. I'd
> paint a circle clear around it like a resistor so you can read it
> without rotating the antenna.
>
> And yes, there is green nail polish. :-)

I'm single & live in a small town. Buying green nail polish may not be
a good idea<grin>.

Would nail polish stand exposure to the elements?

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

5328. Re: Labeling mobile antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-12 15:46:45 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <LIH5h.13$GH2.5@newsfe02.lga>
Source record: 9629

"Doug Smith W9WI" <w9wi@invalid.invalid> wrote in message
news:45572995.4030901@invalid.invalid...

> I'm single & live in a small town. Buying green nail polish may not be a
> good idea<grin>.

I've been using nail polish to mark the polarity of toriod coils. The
problem is, other than red/pink, most of the colors aren't very opaque.
Even though blue and fluorescent green look starkly diferent in the bottle,
if you paint them on something dark they are pretty hard to tell from clear.
Having the brush in the bottle is terribly convenient, though. Why don't
they make model enamel with the brush in the cap? Or nail polish that looks
like model paint?

Oh yeah, and nail polish has an amazing range of price. I have a few
bottles of the cheap stuff I got years ago. Might be more opaque if I could
get my head around ten bucks for a half-ounce of paint.

..

5329. Re: Labeling mobile antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-12 16:14:13 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <zqWdnaYWPe7L1crYnZ2dnUVZ_oadnZ2d@bright.net>
Source record: 9630

How's about getting an electric engraver. Sears has them. That would
permanently mark them and is 100% guaranteed to be weather proof and
probably good up to at least Mach 12 or so :)

Scott
N0EDV

Doug Smith W9WI wrote:
> I operate mobile with a number of Hamstick antennas - fiberglass rods
> ~1/2" (1.3cm) diameter with stainless steel whips at the end. A
> separate antenna is necessary for each band.
>
> The antennas come with paper tags at the bottom indicating which band
> they're for. These are surprisingly durable, but they aren't perfect.
> The 20 meter antenna has lost its tag - luckily right now I know that
> the untagged antenna is 20 but if another one loses its tag I'll be down
> to comparing lengths of loading coils...
>
> What methods can folks suggest for labeling these antennas? Remember
> that, while in use, it'll be exposed to the elements on the rear bumper
> of a car.

5330. Re: Radio Shack store robbed

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-12 16:20:00 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <LQH5h.16392$1v.3498@bignews3.bellsouth.net>
Source record: 9631
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap

Bill Turner wrote:
> Pot calls kettle black!
>
> Try "their".
>
> Bill, W6WRT
>
>
> ------------ ORIGINAL MESSAGE ------------
>
> On Sat, 11 Nov 2006 15:51:55 GMT, "Howard Kowall" <hkowall@shaw.ca>
> wrote:
>
>> you got questions we got stupid answers
>> that is there saying
At a former job I had a rather over weight supervisor, and there was a crazy technician from Jamaica. The tech was always making rude comments about his overweight boss, so we had "the black calling the kettle pot".

5331. Re: Labeling mobile antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-12 19:11:47 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <_IK5h.83$Vd1.32@newsfe03.lga>
Source record: 9632

"Scott" <acepilot@bloomer.net> wrote in message
news:zqWdnaYWPe7L1crYnZ2dnUVZ_oadnZ2d@bright.net...

> probably good up to at least Mach 12 or so :)

Funny, I don't recall having you as a passenger lately ...

..

5332. Re: Labeling mobile antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-12 19:53:39 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <IeSdnXJQv8Ne5srYnZ2dnUVZ_h6dnZ2d@bright.net>
Source record: 9633

Everybody these days drives Mach 12, don't they? They seem to on the
Interstate around Minneapolis! ;)

Scott
N0EDV

xpyttl wrote:

> "Scott" <acepilot@bloomer.net> wrote in message
> news:zqWdnaYWPe7L1crYnZ2dnUVZ_oadnZ2d@bright.net...
>
>
>>probably good up to at least Mach 12 or so :)
>
>
> Funny, I don't recall having you as a passenger lately ...
>
> ..
>
>

5333. Re: Labeling mobile antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-12 20:55:42 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <45578A41.2020200@invalid.invalid>
Source record: 9634

xpyttl wrote:
> Hustlers for 75/80 since the Hamstick doesn't cover 80, and the 75 meter

Yeah, this was an unpleasant surprise last night. I'd bought the 75m antenna months ago & figured it was marketed as "75" because they didn't think anybody would want to work mobile in the CW band. Finally got around to trying it in a Wendy's parking lot in Cadiz, Ky. - and found with the stinger all the way out it wouldn't resonate any lower than 3650.

Yet the cutting guide packed with the antenna provides length settings for the entire 80m band.

Yes, I *was* parked far away from any light poles/buildings/semis/other detuning objects...

(and despite the >9:1 SWR I was able to make three QSOs on 3560 as far away as Pennsylvania...)

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

5334. Re: Labeling mobile antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-12 21:06:52 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <Q1M5h.38$GH2.0@newsfe02.lga>
Source record: 9635

What is it about cities?

Here in MI, the Interstares move along quite nicely out away from the cities (well, except Friday night when everyone in the state goes "up north"), but get near Detroit or Grand Rapids or Kalamazoo and you better have your jet pack..

..

"Scott" <acepilot@bloomer.net> wrote in message news:IeSdnXJQv8Ne5srYnZ2dnUVZ_h6dnZ2d@bright.net...
> Everybody these days drives Mach 12, don't they? They seem to on the
> Interstate around Minneapolis! ;)
>
> Scott
> N0EDV
>
>
> xpyttl wrote:
>
>> "Scott" <acepilot@bloomer.net> wrote in message
>> news:zqWdnaYWPe7L1crYnZ2dnUVZ_oadnZ2d@bright.net...
>>
>>
>>>probably good up to at least Mach 12 or so :)
>>
>>
>> Funny, I don't recall having you as a passenger lately ...
>>
>> ..
>>

5335. Re: Labeling mobile antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-13 00:30:14 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <QNOdndBy5oMFIcrYnZ2dnUVZ_uydnZ2d@bright.net>
Source record: 9636

Amen brother! Not only do they have to go faster, but they HAVE to be in FRONT of you, no matter what!. I've been passed like I'm a dirty rag going in reverse and once they pass, then they get in front of me and slow down to exactly the same speed I am going when they pass me. That always makes a bunch of sense to me! Worse yet is when they pass you in town on a two lane road, get back into the lane in FRONT of you (again), go 2 blocks and then put on their LEFT blinker and now we BOTH have to wait for opposing traffic. I suspect THIS is the reason the concealed weapon laws have a hard time getting passed into law ('cause that sucker would be dead now) ;)

Scott

xpyttl wrote:
> What is it about cities?
>
> Here in MI, the Interstares move along quite nicely out away from the cities
> (well, except Friday night when everyone in the state goes "up north"), but
> get near Detroit or Grand Rapids or Kalamazoo and you better have your jet
> pack..
>
> ..
>
> "Scott" <acepilot@bloomer.net> wrote in message
> news:IeSdnXJQv8Ne5srYnZ2dnUVZ_h6dnZ2d@bright.net...
>
>>Everybody these days drives Mach 12, don't they? They seem to on the
>>Interstate around Minneapolis! ;)
>>
>>Scott
>>N0EDV
>>
>>
>>xpyttl wrote:
>>
>>
>>>"Scott" <acepilot@bloomer.net> wrote in message
>>>news:zqWdnaYWPe7L1crYnZ2dnUVZ_oadnZ2d@bright.net...
>>>
>>>
>>>
>>>>probably good up to at least Mach 12 or so :)
>>>
>>>
>>>Funny, I don't recall having you as a passenger lately ...

>>>
>>>..
>>>
>
>

5336. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-13 17:40:54 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12lhbh7etppioee@corp.supernews.com>
Source record: 9637
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"ken scharf" <wa2mzeNOSPAMBOTS@bellsouth.net> wrote in message
news:BCq5h.18297$GE1.1902@bignews7.bellsouth.net...
> At the time "CB" in the 27mhz region made sense because UHF equipment
> was too expensive to build for the masses. That's no longer true. The
> FCC should eliminate the 27 mhz CB service before the start of the next
> sunspot cycle and force everyone there to move to UHF.

I like your reasoning, although realistically they'd have to have a
well-publicized program to do so that would most likely have various
"deadlines" that would get pushed back a few times before really having any
meaning (just as the switch to broadcast HDTV has done!) I'd expect that
equpiment manufacturers would -- for a time -- be building dual-band radios.

Given how "abused" FRS and GMRS are anyway, perhaps the FCC could just drop
the GMRS licensing requirement and pretty much be done with it!

> One of CB's
> biggest problems was interference from 'skip' (DX), and it is illegal to
> work DX stations anyway.

Really -- I didn't know that (the part about it being illegal)! Seems a
little silly to me...

---Joel

5337. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-13 17:52:19 UTC
From: Mark@kb9rqz.aprs
Message-ID: <o0chl2hk6of6ib2a7cv0t9lt2hqdn5klf1@4ax.com>
Source record: 9638
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Mon, 13 Nov 2006 09:40:54 -0800, "Joel Kolstad"
<JKolstad71HatesSpam@yahoo.com> wrote:

>"ken scharf" <wa2mzeNOSPAMBOTS@bellsouth.net> wrote in message
>news:BCq5h.18297$GE1.1902@bignews7.bellsouth.net...
>> At the time "CB" in the 27mhz region made sense because UHF equipment
>> was too expensive to build for the masses. That's no longer true. The
>> FCC should eliminate the 27 mhz CB service before the start of the next
>> sunspot cycle and force everyone there to move to UHF.
>
>I like your reasoning, although realistically they'd have to have a
>well-publicized program to do so that would most likely have various
>"deadlines" that would get pushed back a few times before really having any
>meaning (just as the switch to broadcast HDTV has done!) I'd expect that
>equpiment manufacturers would -- for a time -- be building dual-band radios.

get that band back for Ham use is simply imposible too many rigs out
there
>
>Given how "abused" FRS and GMRS are anyway, perhaps the FCC could just drop
>the GMRS licensing requirement and pretty much be done with it!
>
>> One of CB's
>> biggest problems was interference from 'skip' (DX), and it is illegal to
>> work DX stations anyway.
>
>Really -- I didn't know that (the part about it being illegal)! Seems a
>little silly to me...
>
indeed it is ilegal to make a contact more than 150 miles away from
you a rule I have broeken without trying near the top of the last
cycle with a a mag mount on AM was living near springfield IL
mentioned the town springfield someone came back refered to roads that
don't exist so yes I have broken that rule and was techinal subjec to
a serve fine becuase the FCC tried to rewrie the laws of physics

it makes it difcult for me to be too critcal of breaking other of the
rules when the rules are so hard to take seriously
>---Joel
>
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5338. WTD: SuperCap Capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-13 22:31:28 UTC
From: "Richard W. Solomon, W1KSZ" <w1ksz@earthlink.net>
Message-ID: <2gshl2llpsflj641odperchb27vtn6i88p@4ax.com>
Source record: 9639

I have a Rockwell Jupiter GPS Engine and want to add the SuperCap.
Any sugeestions where I can get one (0.22F).

Thanks, Dick, W1KSZ

5339. Re: FCC took 11 meters from Hams and gave it to CB'ers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-14 00:52:15 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ejb41toer1@news.ndhu.edu.tw>
Source record: 9641
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Mark@kb9rqz.aprs wrote:
> On Mon, 13 Nov 2006 09:40:54 -0800, "Joel Kolstad"
> <JKolstad71HatesSpam@yahoo.com> wrote:
>
>> "ken scharf" <wa2mzeNOSPAMBOTS@bellsouth.net> wrote in message
>> news:BCq5h.18297$GE1.1902@bignews7.bellsouth.net...
>>> At the time "CB" in the 27mhz region made sense because UHF equipment
>>> was too expensive to build for the masses. That's no longer true. The
>>> FCC should eliminate the 27 mhz CB service before the start of the next
>>> sunspot cycle and force everyone there to move to UHF.
>> I like your reasoning, although realistically they'd have to have a
>> well-publicized program to do so that would most likely have various
>> "deadlines" that would get pushed back a few times before really having any
>> meaning (just as the switch to broadcast HDTV has done!) I'd expect that
>> equpiment manufacturers would -- for a time -- be building dual-band radios.
>
> get that band back for Ham use is simply imposible too many rigs out
> there
>> Given how "abused" FRS and GMRS are anyway, perhaps the FCC could just drop
>> the GMRS licensing requirement and pretty much be done with it!
>>
>>> One of CB's
>>> biggest problems was interference from 'skip' (DX), and it is illegal to
>>> work DX stations anyway.
>> Really -- I didn't know that (the part about it being illegal)! Seems a
>> little silly to me...
>>
> indeed it is ilegal to make a contact more than 150 miles away from
> you a rule I have broeken without trying near the top of the last
> cycle with a a mag mount on AM was living near springfield IL
> mentioned the town springfield someone came back refered to roads that
> don't exist so yes I have broken that rule and was techinal subjec to
> a serve fine becuase the FCC tried to rewrie the laws of physics
>
> it makes it difcult for me to be too critcal of breaking other of the
> rules when the rules are so hard to take seriously
>> ---Joel
>>
> http://kb9rqz.blogspot.com/
>

That arrangement of words comes nearest the most logic, reason and
formed thought I believe ever sprang forth from your keyboard.

JS

5340. Re: Common courtesy

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-14 00:54:50 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <ut86h.6395$L6.5374@newsread3.news.pas.earthlink.net>
Source record: 9640
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

X-rated Vermonter <k1xvnospam@arrl.net> wrote in
news:2jucl2ph03e2elmaag3huj4t2nlusl7t5p@4ax.com:

> On Wed, 08 Nov 2006 00:34:05 GMT, Slow Code <my.mail@no.spam> wrote:
>
>
>>
>>Code is just one part of it. Here's my four step plan that will keep
>>ham radio from becoming like CB:
>>
>>
>>Step 1: No more automatic renewals. Individuals must retest and
>> pass all elements required for their license class.
>>
>>Step 2: The passing score for written exams needs to be raised to 85%.
>>
>>Step 3: Code elements should be 13 wpm for General, and 20 wpm for
>>Extra.
>>
>>Step 4: Make the no-code license one year non-renewable.
> +++++++++
> Your plan will eliminate QRM. There will be nobody left with a
> license.

I know you're right. Requiring good operators will kill the service.

Hams just want to be appliance operators these days and they don't want
license exams that will interfere with them getting to those appliances
even though it means being less skilled. I don't see anyone modernizing
like everyone says is happening. They just get their licenses and grab a
microphone. What percentage of hams have a computer connected to a
radio? Probably less than 30%. Hams don't want to modernize. Guess we
just have live with inferior operators on the bands from here on out.
Then again, maybe hams shouldn't be required to be knowledgable or have
skills. Requiring skills and knowledge is too old skool. Everything must
be outcome based these days, even licensing. It ain't like we have to
help out in emergencies or anything. It's Quantity, not quality. We need
more hams even if they aren't skilled.

SC

5341. Re: Is the code requirement really keeping good people out of ham radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-14 00:55:11 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <Pt86h.6410$L6.4142@newsread3.news.pas.earthlink.net>
Source record: 9642
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

N2EY@AOL.COM wrote in
news:1163335905.242003.59790@b28g2000cwb.googlegroups.com:

> John Smith wrote:
>> N2EY@AOL.COM wrote:
>> > ... They are written *by* me, but they are not *about* me. ...
>>
>> I strongly disagree with the above. They are about you. They
>> describe, and I feel quite accurately, the depth, width and breadth of
>> you, your thinking and your abilities.
>
> Well, I disagree somewhat. My posts simply state my thoughts and
> observations on certain subjects. They do not "describe,....., the
> depth, width and breadth of you, your
> thinking and your abilities."
>
> There's more to me than what I post on Usenet. In fact, I try to post
> as little about myself here as possible.
>
> OTOH, they *do* say something about me, their writer. They don't say
> everything, but they do say something. So you do have a point - they
> *are* about me to some extent.
>
>> I ask you, "If not, then why would you not structure your words
>> differently?"
>
> I structure my words as best I can to convey the meanings intended.
> That does not mean my postings are flawless!
>
>> NOTE: This message makes NO statement as to your words worth. It only
>> points out the error in your statement.
>
> Good point. Thanks
>
> 73 de Jim, N2EY

Anyone that enjoys CW and supports keeping the requirement is okay in my
book.

SC

5342. ... -.-. -. . . -.. ... .-. ..-

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-14 01:00:37 UTC
From: Mark@kb9rqz.aprs
Message-ID: <375il2hh8tsv3kuvapjvtm2pqub718au0h@4ax.com>
Source record: 9643
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Tue, 14 Nov 2006 00:55:11 GMT, Slow Code <my.mail@no.spam> wrote:

>N2EY@AOL.COM wrote in
>news:1163335905.242003.59790@b28g2000cwb.googlegroups.com:
>
>> John Smith wrote:
>>> N2EY@AOL.COM wrote:
>>> > ... They are written *by* me, but they are not *about* me. ...
>>>
>>> I strongly disagree with the above. They are about you. They
>>> describe, and I feel quite accurately, the depth, width and breadth of
>>> you, your thinking and your abilities.
>>
>> Well, I disagree somewhat. My posts simply state my thoughts and
>> observations on certain subjects. They do not "describe,....., the
>> depth, width and breadth of you, your
>> thinking and your abilities."
>>
>> There's more to me than what I post on Usenet. In fact, I try to post
>> as little about myself here as possible.
>>
>> OTOH, they *do* say something about me, their writer. They don't say
>> everything, but they do say something. So you do have a point - they
>> *are* about me to some extent.
>>
>>> I ask you, "If not, then why would you not structure your words
>>> differently?"
>>
>> I structure my words as best I can to convey the meanings intended.
>> That does not mean my postings are flawless!
>>
>>> NOTE: This message makes NO statement as to your words worth. It only
>>> points out the error in your statement.
>>
>> Good point. Thanks
>>
>> 73 de Jim, N2EY
>
>
>Anyone that enjoys CW and supports keeping the requirement is okay in my
>book.
>
>SC

>
... -.-. -. . . -.. ... .-. ..-
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5343. ... -.-. -. . . -.. ... .-. ..-

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-14 01:00:58 UTC
From: Mark@kb9rqz.aprs
Message-ID: <t95il2197t071i67eat4i04qvrvdv6g05e@4ax.com>
Source record: 9644
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

On Tue, 14 Nov 2006 00:54:50 GMT, Slow Code <my.mail@no.spam> wrote:

>X-rated Vermonter <k1xvnospam@arrl.net> wrote in
>news:2jucl2ph03e2elmaag3huj4t2nlusl7t5p@4ax.com:
>
>> On Wed, 08 Nov 2006 00:34:05 GMT, Slow Code <my.mail@no.spam> wrote:
>>
>>
>>>
>>>Code is just one part of it. Here's my four step plan that will keep
>>>ham radio from becoming like CB:
>>>
>>>
>>>Step 1: No more automatic renewals. Individuals must retest and
>>> pass all elements required for their license class.
>>>
>>>Step 2: The passing score for written exams needs to be raised to 85%.
>>>
>>>Step 3: Code elements should be 13 wpm for General, and 20 wpm for
>>>Extra.
>>>
>>>Step 4: Make the no-code license one year non-renewable.
>> +++++++++
>> Your plan will eliminate QRM. There will be nobody left with a
>> license.
>
>
>
>
>I know you're right. Requiring good operators will kill the service.

... -.-. -. . . -.. ... .-. ..-
>
>Hams just want to be appliance operators these days and they don't want
>license exams that will interfere with them getting to those appliances
>even though it means being less skilled. I don't see anyone modernizing
>like everyone says is happening. They just get their licenses and grab a
>microphone. What percentage of hams have a computer connected to a
>radio? Probably less than 30%. Hams don't want to modernize. Guess we
>just have live with inferior operators on the bands from here on out.
>Then again, maybe hams shouldn't be required to be knowledgable or have
>skills. Requiring skills and knowledge is too old skool. Everything must
>be outcome based these days, even licensing. It ain't like we have to

>help out in emergencies or anything. It's Quantity, not quality. We need
>more hams even if they aren't skilled.
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5344. Tektronix 2215A

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-14 10:50:50 UTC
From: Andreas Tekman <and7@bigfoot.com>
Message-ID: <1163501450.678460.58950@e3g2000cwe.googlegroups.com>
Source record: 9645

Joe schrieb:

> Hello all
> I am looking for a schematic on the above oscilloscope. The thing blows the
> fuse at switch on. Any advice would also be appreciated. I know there are
> many of these old units out there
> Thanks in advance
> Joe
> vk3bki

Pwr supply is similar in all: Tektronix 2213/2215/2213A. bama.sbc.edu
as a starting point for free download.

check postings of Jim Yanik and others in sci.electronics.* for this
type of fault.

This type of Tektronix scope has an SMPS with a primary pre-req
circuit. Faults, repair hints and corrections are often described in
e.g. sci.electronics.repair and similar.

Most often: TL597 IC blown, FET blown, fast recorvery diode blown.

hth,
Andreas

5345. ferrrite in linear tank coil ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-14 20:50:58 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <S_p6h.5885$IR4.4647@newssvr25.news.prodigy.net>
Source record: 9646

This item on ebay:
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=200047524644
has a ferrite rods in the tank coil. I've never heard of or seen this
before.
Any expert opinions out there?
tnx

--

73
Hank WD5JFR

5346. Re: ferrrite in linear tank coil ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-14 23:18:50 UTC
From: Skipp checks in <spammenot@yahoo.com>
Message-ID: <ejdisq$d6f$1@skeeter.ucdavis.edu>
Source record: 9647

Sure, it's done quite a bit to increase the inductance. The fly in your soup is trying to keep the ferrite material from Saturation.

If you like the subject of rf (and audio) amplifiers you might consider joining the yahoo rf amplifiers group:

http://groups.yahoo.com/group/rfamplifiers/

Well over 800 members and we talk about all things rf amplifier related but not limited to.

Hope to see you there...

cheers,
skipp

: Henry Kolesnik <kolesnik@sbcglobal.net> wrote:
: This item on ebay:
: http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=200047524644
: has a ferrite rods in the tank coil. I've never heard of or seen this
: before.
: Any expert opinions out there?
: tnx
: --
: 73
: Hank WD5JFR

5347. Re: WTD: SuperCap Capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-15 00:36:07 UTC
From: "T. Commuter" <somewhere@someone.com>
Message-ID: <ekkkl2l1vah0cgc5m7jfusso1327qebloh@4ax.com>
Source record: 9498

On Mon, 13 Nov 2006 22:31:28 GMT, "Richard W. Solomon, W1KSZ"
<w1ksz@earthlink.net> wrote:

>I have a Rockwell Jupiter GPS Engine and want to add the SuperCap.
>Any sugeestions where I can get one (0.22F).
>
>Thanks, Dick, W1KSZ

www.digikey.com

also try ebay, there are always people selling small quantities.

5348. Re: ... -.-. -. . . -.. ... .-. ..-

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-15 00:41:33 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <1nt6h.7436$ig4.5131@newsread2.news.pas.earthlink.net>
Source record: 9499
Cross-posted to: alt.radio.scanner,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

Mark in the Dark, <kb9rqz-1@hotmail.com> wrote in
news:1163467726.716965.68020@m73g2000cwd.googlegroups.com:

> hopefully Sc will be able to understand the message in is favorite mode
>
> i may try some of the short titles I I have been using in morse not
> hard if I don't have to hurry at all

You should really learn CW before you try to use it Markie, now go soak
your head in Keweenaw Bay you little turd.

SC

5349. Re: ... -.-. -. . . -.. ... .-. ..-

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-15 00:47:11 UTC
From: Mark@kb9rqz.aprs
Message-ID: <trokl2hqeo8oivl2u0sd5o6bojsopbisv8@4ax.com>
Source record: 9500
Cross-posted to: alt.radio.scanner,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

On Wed, 15 Nov 2006 00:41:33 GMT, Slow Code <my.mail@no.spam> wrote:

>Mark in the Dark, <kb9rqz-1@hotmail.com> wrote in
>news:1163467726.716965.68020@m73g2000cwd.googlegroups.com:
>
>> hopefully Sc will be able to understand the message in is favorite mode
>>
>> i may try some of the short titles I I have been using in morse not
>> hard if I don't have to hurry at all
>
>
>
>You should really learn CW before you try to use it Markie, now go soak
>your head in Keweenaw Bay you little turd.

why the message is clear enough
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5350. Re: ferrrite in linear tank coil ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-15 12:39:50 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1163594390.633812.100730@f16g2000cwb.googlegroups.com>
Source record: 9501

Many amps produced today use ferrite in the tank (usually toroids) for 160/80 meters... This is done to keep the physical size of the tank compartment minimized... Skipp has pointed out the drawback... You cannot saturate an air coil...

denny

Skipp checks in wrote:
> Sure, it's done quite a bit to increase the inductance. The fly in your
> soup is trying to keep the ferrite material from Saturation.

5351. Re: ferrrite in linear tank coil ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-15 15:21:46 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <5sbml29dsjt2njd33gm4l763b1nieabvs6@4ax.com>
Source record: 9502

ORIGINAL MESSAGE:

On 15 Nov 2006 04:39:50 -0800, "Denny" <k8do@mailblocks.com> wrote:

>Many amps produced today use ferrite in the tank (usually toroids) for
>160/80 meters... This is done to keep the physical size of the tank
>compartment minimized... Skipp has pointed out the drawback... You
>cannot saturate an air coil...

---------- REPLY FOLLOWS ----------

I could be wrong, but I don't think you will find ferrite coils in the tank circuit of any commercially built amps. Powdered iron is preferred for resonant circuits because it will not saturate at any reasonable power level, unlike ferrites.

You will find ferrites in non resonant circuits such as filament or heater chokes.

73, Bill W6WRT

5352. Re: ferrrite in linear tank coil ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-15 18:29:18 UTC
From: Telstar Electronics <briangriffey@sbcglobal.net>
Message-ID: <1163615358.097947.19460@m73g2000cwd.googlegroups.com>
Source record: 9503

> Many amps produced today use ferrite in the tank (usually toroids) for
> 160/80 meters... This is done to keep the physical size of the tank
> compartment minimized... Skipp has pointed out the drawback... You
> cannot saturate an air coil...

Wouldn't that also drastically reduce the Q of the tank?

www.telstar-electronics.com

5353. Re: How connect two EPP ports to "talk" between them?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-15 20:42:34 UTC
From: Mike Young <boat042-spam@yahoo.com>
Message-ID: <_YK6h.15729$B31.4953@newssvr27.news.prodigy.net>
Source record: 9504

<mcalhoun@ksu.edu> wrote in message news:ej3mit$b83@unix1.cc.ksu.edu...
>
> Neither do the computers I'm working with have Ethernet or USB.

16-bit NICs are $10 apiece, and likely free for the asking from almost any office's dead PC junk heap.

> Besides, there's always the fun of doing it, and that much time
> difference should even "pay" for the programming effort.

Seems to me your time would be better spent on things with lasting value.

Linux is free. You can boot directly off the CD image. CD drives are less than $20 new; likely free for the asking from the dead PC junk heap. Any pre-built kernel less than 5 years old will work with most NICs, PC filesystems, and CD drives. Total time and cost can be less than the kW-hrs you already burned musing about parallel port transfers.

5354. Re: How connect two EPP ports to "talk" between them?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-15 22:57:58 UTC
From: Bob <bobZstein@sbcglobal.net>
Message-ID: <WXM6h.15740$B31.10696@newssvr27.news.prodigy.net>
Source record: 9505

Mike Young wrote:
> <mcalhoun@ksu.edu> wrote in message news:ej3mit$b83@unix1.cc.ksu.edu...
>>
>> Neither do the computers I'm working with have Ethernet or USB.
>
> 16-bit NICs are $10 apiece, and likely free for the asking from almost
> any office's dead PC junk heap.
>
>> Besides, there's always the fun of doing it, and that much time
>> difference should even "pay" for the programming effort.
>
> Seems to me your time would be better spent on things with lasting value.
>
> Linux is free. You can boot directly off the CD image. CD drives are
> less than $20 new; likely free for the asking from the dead PC junk
> heap. Any pre-built kernel less than 5 years old will work with most
> NICs, PC filesystems, and CD drives. Total time and cost can be less
> than the kW-hrs you already burned musing about parallel port transfers.
>
>
I bought two brand new Airlink NICs for $0.99 each from Fry's
Electronics a few months ago. How could I not pass up a bargain like that?

Bob

--
When replying direct, remove the Z in my email address.

5355. Re: How connect two EPP ports to "talk" between them?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-16 03:10:18 UTC
From: craigm <none@domain.invalid>
Message-ID: <MDQ6h.75$Vy4.699824@news.sisna.com>
Source record: 9506

Mike Young wrote:

> <mcalhoun@ksu.edu> wrote in message news:ej3mit$b83@unix1.cc.ksu.edu...
>>
>> Neither do the computers I'm working with have Ethernet or USB.
>
> 16-bit NICs are $10 apiece, and likely free for the asking from almost any
> office's dead PC junk heap.
>
>> Besides, there's always the fun of doing it, and that much time
>> difference should even "pay" for the programming effort.
>
> Seems to me your time would be better spent on things with lasting value.
>
> Linux is free. You can boot directly off the CD image. CD drives are less
> than $20 new; likely free for the asking from the dead PC junk heap. Any
> pre-built kernel less than 5 years old will work with most NICs, PC
> filesystems, and CD drives. Total time and cost can be less than the
> kW-hrs you already burned musing about parallel port transfers.

Simply using google to find a laplink parallel cable is quick, too.

http://www.nullmodem.com/LapLink.htm

5356. Wanted Collins 30L-1 Round

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-16 07:16:50 UTC
From: Carl Domanico <vze2686b@verizon.net>
Message-ID: <CfU6h.3829$ZN1.764@trndny03>
Source record: 9507

Hi, I'm looking for a Collins 30L-1 Round Emblem, High Frequency, Linear Amplifer. Not looking for any junk, actually I want one in excellent condition, Must be Round Emblem... Prefer one that has already been refurbished, things such as power supply, caps , etc...So as I do not have to do it...Although I've restored a few of them...I just want one in Excellent to Mint Condition...
If anyone out there has one of these amps, please feel free to e-mail me and if you like call 718-331-7427

Thanks a Lot
Carl
N2MFW

5357. Important Information

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-16 12:03:04 UTC
From: Brandon Lands <Lion623@mail.com>
Message-ID: <1163678584.144224.271690@b28g2000cwb.googlegroups.com>
Source record: 9508

```
Check out: www.Brandon-Lands.com
```

5358. Re: ferrrite in linear tank coil ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-16 14:59:53 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1163689193.760802.177380@e3g2000cwe.googlegroups.com>
Source record: 9509

Well, of course you are right that the high permeability stuff in the tank is iron not ferrite...

Cut me some slack - I'm old enough to be your grandfather, I didn't have my nap, and that cute little nurse they send out to watch me has a habit of bending waaay over, which instantly diverts blood flow from the brain...

denny / k8do

5359. Re: ferrrite in linear tank coil ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-16 15:11:34 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <Lc%6h.18$z01.14@newsfe04.lga>
Source record: 9510

If the preceding stage is clean, does it matter? The main point of the tank is impedance matching. If the stage before isn't too clean it can also double as a filter, but if the input to the tank is pretty clean, then the Q doesn't really matter all that much. Indeed, lower Q is an advantage in terms of being able to operate across the band without retuning.

..

"Telstar Electronics" <briangriffey@sbcglobal.net> wrote in message news:1163615358.097947.19460@m73g2000cwd.googlegroups.com...
>> Many amps produced today use ferrite in the tank (usually toroids) for
>> 160/80 meters... This is done to keep the physical size of the tank
>> compartment minimized... Skipp has pointed out the drawback... You
>> cannot saturate an air coil...
>
> Wouldn't that also drastically reduce the Q of the tank?
>
> www.telstar-electronics.com
>

5360. Re: ferrrite in linear tank coil ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-16 15:38:17 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <nc1pl25a65bd3sinnem2r55hdk7rdv1t2c@4ax.com>
Source record: 9511

ORIGINAL MESSAGE:

On 16 Nov 2006 06:59:53 -0800, "Denny" <k8do@mailblocks.com> wrote:

>Cut me some slack - I'm old enough to be your grandfather

---------- REPLY FOLLOWS ----------

Wow... you must be really old! Both my grandfathers died more than 30
years ago in their 80's. :-)

Bill, W6WRT

5361. Re: ferrrite in linear tank coil ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-16 15:47:00 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <oh1pl2dguunk6nvfg7d5npg272rnfbcf6p@4ax.com>
Source record: 9512

ORIGINAL MESSAGE:

On Thu, 16 Nov 2006 10:11:34 -0500, "xpyttl"
<xpyttl_NOSPAM@earthling.net> wrote:

>If the preceding stage is clean, does it matter? The main point of the tank
>is impedance matching. If the stage before isn't too clean it can also
>double as a filter, but if the input to the tank is pretty clean, then the Q
>doesn't really matter all that much. Indeed, lower Q is an advantage in
>terms of being able to operate across the band without retuning.

---------- REPLY FOLLOWS ----------

What you say is true only for class A operation. In any other class,
the plate tank acts as a "flywheel" to provide the missing portion of
the RF cycle, and in that application, Q is important. If the Q is too
low, the "flywheel" runs out of energy and severe distortion can
result. A Q of at least 10 is recommended for that reason, and Q's of
12-15 are often used for better harmonic suppression. Q's above about
20 are a bit much and can lead to excessive heating of the tank coil
and a narrow tuning bandwidth, but are otherwise pretty much harmless.

Bill, W6WRT

5362. Re: How connect two EPP ports to "talk" between them?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-16 17:40:16 UTC
From: mcalhoun@ksu.edu
Message-ID: <eji7q0$4bc@unix1.cc.ksu.edu>
Source record: 9513

>> Neither do the computers I'm working with have Ethernet or USB.

>16-bit NICs are $10 apiece, and likely free for the asking from almost any
>office's dead PC junk heap.

And I have several. Have you ever made a NIC work with DOS?
If so, I'd sure love to learn how you did it.

>> Besides, there's always the fun of doing it, and that much time
>> difference should even "pay" for the programming effort.

>Seems to me your time would be better spent on things with lasting value.
>Linux is free....

Linux may be free, but the aftermath of installing Linux would cost
YEARS of effort to "port" the:
801 FORTRAN programs I currently use
225 Pascal programs I currently use
452 DOS .BAT and Norton's DOS .BTM scripts I currently use.

No, converting to Linux is NOT free, especially at my age!

--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
NRA Life Member and Rifle, Pistol, & Home Firearm Safety Certified Instructor
Certified Instructor for the Kansas Concealed-Carry Handgun license

5363. Re: How connect two EPP ports to "talk" between them?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-16 17:46:52 UTC
From: mcalhoun@ksu.edu
Message-ID: <eji86c$4n0@unix1.cc.ksu.edu>
Source record: 9514

>Simply using google to find a laplink parallel cable is quick, too.
>http://www.nullmodem.com/LapLink.htm

Of course, even LapLink's "parallel" cable only transfers 4 bits
at a time vs. the 8-bits that are possible on an EPP port.

And LapLink does NOT run in the background (as does RIFS - Remote
Installable File Server, which, alas, uses a serial port and is
thus also much slower than a fully parallel port.)

I find it interesting: lots of people have suggested I do something
ELSE, but no one has answered the question itself. Obviously I
posted my question in the wrong newsgroups! Oh, well; nothing
ventured, nothing gained (and only a little time lost).

--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
NRA Life Member and Rifle, Pistol, & Home Firearm Safety Certified Instructor
Certified Instructor for the Kansas Concealed-Carry Handgun license

5364. Re: How connect two EPP ports to "talk" between them?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-16 21:57:05 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12lpnliconhl96d@corp.supernews.com>
Source record: 9515

<mcalhoun@ksu.edu> wrote in message news:eji7q0$4bc@unix1.cc.ksu.edu...
> And I have several. Have you ever made a NIC work with DOS?
> If so, I'd sure love to learn how you did it.

NICs work fine in DOS. At least back with Windows NT (and probably still 2000... possibly not XP anymore though) you could tell it to build you a "DOS startup disk" which configured most everything you needed to connect to a NetBEUI-based server (which is still supported in XP, etc.). Many network cards still come with DOS drivers, and of those that don't, many really cheap ones are still "NE2000 compatible" and generic drivers can be found. I'm sure you can Google for the details -- I haven't done this in a number of years, but very commonly what I used to do was make DOS network startup disks so that I could connect to a server to pull over a complete hard drive image to set up the machine using, e.g., Norton Ghost.

> Linux may be free, but the aftermath of installing Linux would cost
> YEARS of effort to "port" the:
> 801 FORTRAN programs I currently use
> 225 Pascal programs I currently use
> 452 DOS .BAT and Norton's DOS .BTM scripts I currently use.

There's a very good chance the vast majority of your programs would work under WINE in Linux. That being said, Linux -- especially with the "popular" desktops such as KDE -- has gotten to the point of requiring powerful enough hardware that, if your PCs wouldn't "comfortably" run at least Windows 2000, you probably shouldn't bother with Linux as you probably won't have a pleasant experience if you just perform a "default" install of any contemporary distributions.

---Joel

5365. Re: How connect two EPP ports to "talk" between them?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-16 21:59:37 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12lpnqa2vinps0d@corp.supernews.com>
Source record: 9516

<mcalhoun@ksu.edu> wrote in message news:eji86c$4n0@unix1.cc.ksu.edu...
> I find it interesting: lots of people have suggested I do something
> ELSE, but no one has answered the question itself.

You might be better off in one of the "historical" computer groups (maybe alt.folklore.computers); what you're wanting to do requires knowledge that's simply obsolete by current standards, so you won't find that many people who still possess it.

5366. Re: How connect two EPP ports to "talk" between them?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-16 22:07:04 UTC
From: Christen Fihl <look_at_HSPascal.fihl.net@nospam.plz>
Message-ID: <455ce108$0$3503$edfadb0f@dread11.news.tele.dk>
Source record: 9517

I did this back in 1984 when I got a Toshiba portable with the new 3"
floppies, just to get files back and forth.
Later somebody made some commercial products (pdq, lablink, ...)

In short I did:

Server end is a program that reads requeste from other pc, and reads or
writes disk sectors.

Client side has a device driver, disk type, so I now has a D: on that
computer.
I took the memdisk example from the tech books, and rewrote the read and
write sectors to go to other computer.

It works very nice. Only trashed a few disks when doing small
programming mistakes ;-)

Now the interface between the pc's, which first was tested for function
of rx/tx, like Send512Bytes(SomeData)

I had the old parallelport, so I had 5 bits and used 4 for data and 1
for strobe.
I did not use interrupts, as the server just sat there waiting for the
other end to start flipping the strobe bit.

```
Procedure SendHalfByte(Strobe,B: Byte);
begin
Port():= Strobe+ (B and $0F);
SleepShort;
Port():= (1 xor Strobe)+ (B and $0F);
SleepShort;
end;
```

```
Procedure Send1Byte(B: Byte);
begin
SendHalfByte($00,B);
SendHalfByte($80,B shr 4);
end;
```

The receiver end will do

```
Function Read1Byte: Byte;
var X: Byte;
begin
repeat until StrobeBit<>0;
X:=Port() and $0F;
repeat until StrobeBit=0;
```

```
Result:=X + (Port() shl 4);
end;
```

Use Send1Byte and Read1Byte, and you have data. Make some framing like
DataToSend:= LF + MyData + CR
and it is easy to check for correct reception.

I managed to put some 50KBytes between two PC's in 198x, at 8MHz I guess.

PS: All coding above is out of my head, and was done in assembler back then.

--
Christen Fihl
OZ1AAB
http://HSPascal.Fihl.net/

5367. Re: How connect two EPP ports to "talk" between them?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-16 22:13:31 UTC
From: kl7r <kl7r@yahoo.com>
Message-ID: <1163715211.808168.326560@f16g2000cwb.googlegroups.com>
Source record: 9518

Have you thought about using PLIP to do tcpip over your parallel ports?

mcalhoun@ksu.edu wrote:
> Hope this isn't too far off-topic, but maybe somebody who has actually
> done something homebrew like this can give me some pointers.
>
> I'd like to connect two PC's with EPP ports so they could "talk" to each
> other (mono-directional at any instant but reversible -- probably by
> passing a "token" back and forth -- and preferably NOT using interrupts

5368. Re: How connect two EPP ports to "talk" between them?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-16 22:26:35 UTC
From: kl7r <kl7r@yahoo.com>
Message-ID: <1163715995.665370.128360@m73g2000cwd.googlegroups.com>
Source record: 9519

kl7r wrote:
> Have you thought about using PLIP to do tcpip over your parallel ports?
>

Check out :

http://www.crynwr.com/ for DOS packet drivers
http://tldp.org/HOWTO/PLIP-9.html for information on DOS/LINUX PLIP
connections

5369. Re: How connect two EPP ports to "talk" between them?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-17 00:33:12 UTC
From: craigm <none@domain.invalid>
Message-ID: <Aq77h.126$FD4.827465@news.sisna.com>
Source record: 9520

mcalhoun@ksu.edu wrote:

>>Simply using google to find a laplink parallel cable is quick, too.
>>http://www.nullmodem.com/LapLink.htm
>
> Of course, even LapLink's "parallel" cable only transfers 4 bits
> at a time vs. the 8-bits that are possible on an EPP port.

You asked how to connect tow parallel ports. The link gives two examples. The examples are ones that worked with commercial software. (Hint: that means they would probably work for you. It may also meet your criteria for reliability.)

>
> And LapLink does NOT run in the background (as does RIFS - Remote
> Installable File Server, which, alas, uses a serial port and is
> thus also much slower than a fully parallel port.)

Your original post made no mention of specific software being a restriction. It did say this was a one-off job without out a speed requirement.

>
> I find it interesting: lots of people have suggested I do something
> ELSE, but no one has answered the question itself.

The link answered the question in the subject.

> Obviously I
> posted my question in the wrong newsgroups! Oh, well; nothing
> ventured, nothing gained (and only a little time lost).
>

Your fault the time was lost. Simple google searches would have given you what you wanted.

The search to find the earlier link was on "laplink parallel cable".

If you do a search on "connecting epp ports", one of the links will be this page.

http://www.lvr.com/jansfaq.htm

Scroll down to the bottom to see a problem with connecting all data bits. (You did say you wanted a reliable solution.)

Yes, this may have been the wrong newsgroup. That is not the fault of anyone who replied to you.

5370. Re: How connect two EPP ports to "talk" between them?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-17 02:15:29 UTC
From: Mike Young <boat042-spam@yahoo.com>
Message-ID: <5X87h.6933$Sw1.2931@newssvr13.news.prodigy.com>
Source record: 9521

<mcalhoun@ksu.edu> wrote in message news:eji7q0$4bc@unix1.cc.ksu.edu...
>>> Neither do the computers I'm working with have Ethernet or USB.
>
>>16-bit NICs are $10 apiece, and likely free for the asking from almost any
>>office's dead PC junk heap.
>
> And I have several. Have you ever made a NIC work with DOS?
> If so, I'd sure love to learn how you did it.

Wollongong. Beame and Whiteside. To name two.

But that's going backwards. With one foot in the grave already, you need to
keep moving forward, not back. If it runs DOS, it'll run Linux.

>
>
>>> Besides, there's always the fun of doing it, and that much time
>>> difference should even "pay" for the programming effort.
>
>>Seems to me your time would be better spent on things with lasting value.
>>Linux is free....
>
> Linux may be free, but the aftermath of installing Linux would cost
> YEARS of effort to "port" the:
> 801 FORTRAN programs I currently use
> 225 Pascal programs I currently use
> 452 DOS .BAT and Norton's DOS .BTM scripts I currently use.

It boots off the CD. I know I mentioned that. It's worth mentioning a second
time. And a third: It boots off the CD. No installing, no configuring...
Just boot it, FTP your files, and get on with whatever it is you're trying
to do.

>
> No, converting to Linux is NOT free, especially at my age!

Yeah, I know just what you mean. About the age thing, that is. Time's
wasting; best get to it.

5371. Re: How connect two EPP ports to "talk" between them?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-17 05:20:32 UTC
From: laura halliday <marsgal42@hotmail.com>
Message-ID: <1163740831.965507.86080@f16g2000cwb.googlegroups.com>
Source record: 9522

mcalhoun@ksu.edu wrote:

> I find it interesting: lots of people have suggested I do something
> ELSE, but no one has answered the question itself. Obviously I
> posted my question in the wrong newsgroups! Oh, well; nothing
> ventured, nothing gained (and only a little time lost).

Maybe it was the wrong *question*. Kindly refrain from
criticizing a forum like this for not being your personal
research staff.

As the discussion showed, what you really want to do
is transfer files. Fine. If you want to transfer files, a null
modem cable (an off the shelf item) and a couple of
copies of kermit (ditto) will transfer a lot of data. I
transferred a Windows 95 CD to a laptop once that way.

Laura Halliday VE7LDH "That's a totally illegal,
Grid: CN89mg madcap scheme. I like it!"
ICBM: 49 16.05 N 122 56.92 W - H. Pearce

5372. Re: Tektronix 2215A

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-17 12:06:42 UTC
From: Joe <.>
Message-ID: <455da5d6$0$3073$afc38c87@news.optusnet.com.au>
Source record: 9523

Thanks to all who replied to my query. I have found it is the FET which is faulty, have a number of spares available. Haven't been able to get to it yet, my young brother has been visiting, but will start on it this weekend.
Joe

"Andreas Tekman" <and7@bigfoot.com> wrote in message news:1163501450.678460.58950@e3g2000cwe.googlegroups.com...
>
> Joe schrieb:
>
> > Hello all
> > I am looking for a schematic on the above oscilloscope. The thing blows the
> > fuse at switch on. Any advice would also be appreciated. I know there are
> > many of these old units out there
> > Thanks in advance
> > Joe
> > vk3bki
>
> Pwr supply is similar in all: Tektronix 2213/2215/2213A. bama.sbc.edu
> as a starting point for free download.
>
> check postings of Jim Yanik and others in sci.electronics.* for this
> type of fault.
>
> This type of Tektronix scope has an SMPS with a primary pre-req
> circuit. Faults, repair hints and corrections are often described in
> e.g. sci.electronics.repair and similar.
>
> Most often: TL597 IC blown, FET blown, fast recorvery diode blown.
>
>
> hth,
> Andreas
>

5373. Re: how much can dummy load carbon resistors stand

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-17 12:12:59 UTC
From: Joe <.>
Message-ID: <455da74f$0$29167$afc38c87@news.optusnet.com.au>
Source record: 9524

Lemme tell you, the last (and first) time I got a burn from RF it certainly did shock me. Would not have felt comfortable getting the burn on top of a tower.
Joe vk3bki

"Bill Turner" <noway@nowhow.com> wrote in message news:di5dl2tkmtnb8cmcaf5ir79nrmo9g87lqd@4ax.com...
> No one has ever gotten a shock from high power RF. Burns, yes.
>
> Bill, W6WRT
>
>
> ------------ ORIGINAL MESSAGE ------------
>
> On Sat, 11 Nov 2006 14:46:53 GMT, "Eamon Skelton"
> <Xnospam@oceanfree.net> wrote:
>
> >You don't want to do any high power tests while you
> >are up the tower or on the roof. High power = high
> >voltage = a long fall if you get a shock!

5374. Re: How connect two EPP ports to "talk" between them?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-17 19:17:31 UTC
From: mcalhoun@ksu.edu
Message-ID: <ejl1sb$3gp@unix1.cc.ksu.edu>
Source record: 9525

>As the discussion showed, what you really want to do is transfer files.
>....[snip]....

That may be what the DISCUSSION showed, but that's NOT what my QUESTION
asked (which was how one might connect two EPP ports so they could "talk"
with each other bidirectionally).

Others "answered" the question by suggesting alternative solutions
(And there is/was nothing wrong with that!),
but only a very few actually addressed the original question,

And I hereby thank them.
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
NRA Life Member and Rifle, Pistol, & Home Firearm Safety Certified Instructor
Certified Instructor for the Kansas Concealed-Carry Handgun license

5375. Re: Wouff Hong for antenna newsgroup (filters)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-18 01:20:57 UTC
From: Lloyd Wiseman <davies@wiseman_hojnacki.org>
Message-ID: <Zdt7h.165$sf5.54@newsread4.news.pas.earthlink.net>
Source record: 9526
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

"Rick" <ricknj10@hotmail.com> wrote in
news:hxq7h.3079$AO3.1294@newsfe12.lga:

>
>> Works as good as a Wouff Hong.
>
> I should have said "Works ALMOST as well as a Wouff Hong."
> Because a real Wouff Hong, properly administered, would eliminate not
> only the QRM but the QRM'er - a beautiful thing.
>
> Rick K2XT

Get used to the QRM, because after CW is eliminated you're going to wish
your rig did come with Rettysnitch and wouff hong filters...

But I forget, due to the lack of support for good tests a lot of you
people must like hearing Lids.

SC

5376. Re: ferrrite in linear tank coil ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-18 19:09:22 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <uTI7h.813$m9.548@bignews2.bellsouth.net>
Source record: 9527

Bill Turner wrote:
> ORIGINAL MESSAGE:
>
> On 15 Nov 2006 04:39:50 -0800, "Denny" <k8do@mailblocks.com> wrote:
>
>
>> Many amps produced today use ferrite in the tank (usually toroids) for
>> 160/80 meters... This is done to keep the physical size of the tank
>> compartment minimized... Skipp has pointed out the drawback... You
>> cannot saturate an air coil...
>
> ------------ REPLY FOLLOWS ------------
>
> I could be wrong, but I don't think you will find ferrite coils in the
> tank circuit of any commercially built amps. Powdered iron is
> preferred for resonant circuits because it will not saturate at any
> reasonable power level, unlike ferrites.
>
> You will find ferrites in non resonant circuits such as filament or
> heater chokes.
>
> 73, Bill W6WRT
Bill, there is a transmitter described in the 1967 ARRL handbook
that does indeed have a small piece of 1/2 dia ferrite rod (broken off a
BCB loop stick) inside the 80meter tank coil to decrease the number of
turns needed in the coil. This was a two tube transmitter using a 12by7
and a 1625. Plug in coils are used for the oscillator and final tank
circuits.

5377. Re: ferrrite in linear tank coil ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-18 21:15:25 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <NJK7h.1745$_x3.1691@trndny02>
Source record: 9528

Sounds like there's some confusion here between "loaded O" and "unloaded Q".

Ferrite in the tank coil reduces the number of turns needed for a given coil inductance but it also reduces the "unloaded Q" of the COIL, increasing tuned circuit losses. The "loaded Q" of the CIRCUIT is primarily what determines bandwidth, and it is determined by the inductive reactance and the load impedance the coil is imbedded in. The inclusion of ferrite has little to do with "loaded Q" and thus little to do with the bandwidth of the circuit (at least for practical first-order considerations; small tuned circuit losses do have a small second-order effect on bandwidth).

Joe
W3JDR

<xpyttl_NOSPAM@earthling.net> wrote in message
news:Lc%6h.18$z01.14@newsfe04.lga...
> If the preceding stage is clean, does it matter? The main point of the
> tank is impedance matching. If the stage before isn't too clean it can
> also double as a filter, but if the input to the tank is pretty clean,
> then the Q doesn't really matter all that much. Indeed, lower Q is an
> advantage in terms of being able to operate across the band without
> retuning.
>
> ..
>
> "Telstar Electronics" <briangriffey@sbcglobal.net> wrote in message
> news:1163615358.097947.19460@m73g2000cwd.googlegroups.com...
>>> Many amps produced today use ferrite in the tank (usually toroids) for
>>> 160/80 meters... This is done to keep the physical size of the tank
>>> compartment minimized... Skipp has pointed out the drawback... You
>>> cannot saturate an air coil...
>>
>> Wouldn't that also drastically reduce the Q of the tank?
>>
>> www.telstar-electronics.com
>>
>
>

5378. FA:MORE PARTS + AMPEREX TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-18 22:12:47 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <zzL7h.302850$QZ1.132824@bgtnsc04-news.ops.worldnet.att.net>
Source record: 9529

Just listed a few more parts with more coming + a super buy on some
Amperex receiving type tubes at
1/2 the first listed price:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking, heytubeguy

5379. Re: Group poll.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-19 00:25:33 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <1wN7h.626$sf5.622@newsread4.news.pas.earthlink.net>
Source record: 9530
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote in
news:ej8knc$kn5$1@news.hawaii.edu:

> John Smith <assemblywizard@gmail.com> wrote:
>>Idiot, check your spelling, it's "group troll."
>
> Well, let's see if he ment "poll" or "troll":
>
>
> 0 2 4 6 8 10
> /
> /
> /
> /
> /
> /
> /
> /
> POLL-O-METER

So what appliances does everyone hope Santa brings them for Xmas?

HF, VHF, UHF, KENWOOD, YAESU, ICOM, Cobra?

I couldn't think of anything for myself, so I hope I just get a some
componants and a new soldering iron for projects so I can keep moving
forward in ham radio.

SC

5380. Re: Group poll.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-19 01:22:09 UTC
From: U-Know-Who <no-one@nowhere.com>
Message-ID: <5lO7h.283$_H5.256@tornado.texas.rr.com>
Source record: 9531
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"Slow Code" <my.mail@no.spam> wrote in message
news:1wN7h.626$sf5.622@newsread4.news.pas.earthlink.net...
> jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote in
> news:ej8knc$kn5$1@news.hawaii.edu:
>
>> John Smith <assemblywizard@gmail.com> wrote:
>>>Idiot, check your spelling, it's "group troll."
>>
>> Well, let's see if he ment "poll" or "troll":
>>
>>
>> 0 2 4 6 8 10
>> /
>> /
>> /
>> /
>> /
>> /
>> /
>> /
>> POLL-O-METER
>
>
>
> So what appliances does everyone hope Santa brings them for Xmas?
>
> HF, VHF, UHF, KENWOOD, YAESU, ICOM, Cobra?
>
>
> I couldn't think of anything for myself, so I hope I just get a some
> componants and a new soldering iron for projects so I can keep moving
> forward in ham radio.
>
> SC

And spell check for your PC. :-)

5381. Re: ferrrite in linear tank coil ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-19 06:36:07 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <k9pvl2ho0bocntlf25u2hcrbisepomc2rb@4ax.com>
Source record: 9532

On Sat, 18 Nov 2006 21:15:25 GMT, "W3JDR" <joe@roccis.com> wrote:

>Ferrite in the tank coil reduces the number of turns needed for a given coil
>inductance but it also reduces the "unloaded Q" of the COIL, increasing
>tuned circuit losses.

When reducing the number of turns, the resistive losses would go down,
especially if a thicker wire can be used in the same space. Does the
ferrite core losses _always_ increase faster than the coil resistive
losses are reduced ?

Paul OH3LWR

5382. crapathon goes on

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-19 07:24:03 UTC
From: Mark@kb9rqz.aprs
Message-ID: <jj10m2d5sudbuosv580cam10kdrefkkm6p@4ax.com>
Source record: 9533
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Sun, 19 Nov 2006 00:25:33 GMT, Slow Code <my.mail@no.spam> wrote:

>jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote in
>news:ej8knc$kn5$1@news.hawaii.edu:
>
>> John Smith <assemblywizard@gmail.com> wrote:
>>>Idiot, check your spelling, it's "group troll."
>>
>> Well, let's see if he ment "poll" or "troll":
>>
>>
>> 0 2 4 6 8 10
>> /
>> /
>> /
>> /
>> /
>> /
>> /
>> /
>> POLL-O-METER
>
>
>
>So what appliances does everyone hope Santa brings them for Xmas?
>
>HF, VHF, UHF, KENWOOD, YAESU, ICOM, Cobra?
>
>
>I couldn't think of anything for myself, so I hope I just get a some
>componants and a new soldering iron for projects so I can keep moving
>forward in ham radio.

funny you still have described a single home breww project

I have
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5383. Re: Radio Shack store robbed

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-19 10:41:29 UTC
From: JOHN D <jawnd393one@yahoo.com>
Message-ID: <txW7h.4875$d42.4102@trndny07>
Source record: 9534
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap

I wonder if the robbers were able to make it out of the store without
signing up for a new cell phone contract.

5384. Re: ferrrite in linear tank coil ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-19 14:42:00 UTC
From: Telstar Electronics <briangriffey@sbcglobal.net>
Message-ID: <1163947320.301105.300080@m73g2000cwd.googlegroups.com>
Source record: 9535

> If the preceding stage is clean, does it matter? The main point of the tank
> is impedance matching. If the stage before isn't too clean it can also
> double as a filter, but if the input to the tank is pretty clean, then the Q
> doesn't really matter all that much. Indeed, lower Q is an advantage in
> terms of being able to operate across the band without retuning.
>
Not sure I agree with that. What about losses? Lower Q means higher
losses...

www.telstar-electronics.com

5385. FS: Service Manuals and some Surplus Items

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-19 19:40:35 UTC
From: Norm VE3CZI <ve3czi@arrl.net>
Message-ID: <Wq28h.2757$J32.1508@read1.cgocable.net>
Source record: 9536
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Have a quantity of Radio Communications Service Manuals, both Commercial &
Amateur that I have rescued from the Dumpster. Most ot them are in Like New
Condition.

Please check my site: www.rodemi.com for what is available. I am
updating the site as time allows.
I recently retired from the Commercial 2-way radio business

Thanks for looking....Norm VE3CZI
Email me Directly: <insert Call Sign> at arrl.net ....<call sign> is
ve3czi

5386. Re: ferrrite in linear tank coil ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-19 23:22:24 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12m1ppk29p54u82@corp.supernews.com>
Source record: 9537

Telstar Electronics wrote:
> . . .
> Not sure I agree with that. What about losses? Lower Q means higher
> losses...

Loss is related to the ratio of unloaded Q to loaded Q. All else being equal, lowering the unloaded Q will increase loss, but lowering the loaded Q will decrease loss. As others have posted, the unloaded Q is a characteristic of the tank circuit itself, usually primarily the inductor; loaded Q is largely dictated by the external load and how it's coupled to the tank. Hence the tendency to keep the inductor Q high but not make the loaded Q any higher than necessary for harmonic and spur reduction.

Roy Lewallen, W7EL

5387. HP 3582A ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-19 23:54:56 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <k968h.8441$Sw1.7887@newssvr13.news.prodigy.com>
Source record: 9538
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.opinion,rec.audio.tech,rec.radio.amateur.equipment,rec.antiques.radio+phono

I'm not certain to which group I should post this question, so I'm shot gunning hoping to find it. If anyone can point me, please do. However.... Has anyone used the HP 3582A audio spectrum analyzer to plot the freq response of audio devices like mikes, speakers, etc. Knowing the mike response I'd like to see the spectrum of plucked guitar strings and their harmonics and see how different manufacturers sound varies in a plot. I got a 3582A at a swap meet, its complex and probably overkill but that's what I have and I am anxious to try it out and would appreciate any tips.
Thanks

--

73
Hank WD5JFR

5388. Re: HP 3582A ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-20 00:58:38 UTC
From: someone <someone@arcanemethod.com>
Message-ID: <aOadnahee6cjYP3YnZ2dnUVZ_qCdnZ2d@giganews.com>
Source record: 9539
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.opinion,rec.audio.tech,rec.radio.amateur.equipment,rec.antiques.radio+phono

"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in
news:k968h.8441$Sw1.7887@newssvr13.news.prodigy.com:

> I'm not certain to which group I should post this question, so I'm
> shot gunning hoping to find it. If anyone can point me, please do.
> However.... Has anyone used the HP 3582A audio spectrum analyzer to
> plot the freq response of audio devices like mikes, speakers, etc.
> Knowing the mike response I'd like to see the spectrum of plucked
> guitar strings and their harmonics and see how different manufacturers
> sound varies in a plot. I got a 3582A at a swap meet, its complex and
> probably overkill but that's what I have and I am anxious to try it
> out and would appreciate any tips. Thanks
>

The 3582A is just one of many two-channel FFT analyzers which can be used
to measure the frequency response of a system (output re input). What
specifically is your question? Perhaps all you need is to get an operating
manual and learn how to use it?

5389. Re: HP 3582A ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-20 03:17:09 UTC
From: Bill <bbaka@comcast.net>
Message-ID: <V698h.14660$yl4.12189@newssvr12.news.prodigy.com>
Source record: 9540
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro

someone wrote:
> "Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in
> news:k968h.8441$Sw1.7887@newssvr13.news.prodigy.com:
>
>> I'm not certain to which group I should post this question, so I'm
>> shot gunning hoping to find it. If anyone can point me, please do.
>> However.... Has anyone used the HP 3582A audio spectrum analyzer to
>> plot the freq response of audio devices like mikes, speakers, etc.
>> Knowing the mike response I'd like to see the spectrum of plucked
>> guitar strings and their harmonics and see how different manufacturers
>> sound varies in a plot. I got a 3582A at a swap meet, its complex and
>> probably overkill but that's what I have and I am anxious to try it
>> out and would appreciate any tips. Thanks
>>
>
> The 3582A is just one of many two-channel FFT analyzers which can be used
> to measure the frequency response of a system (output re input). What
> specifically is your question? Perhaps all you need is to get an operating
> manual and learn how to use it?
>
Spectrum analyzers do a whole lot better with continuous signals than
they do with a plucked guitar string, unless you can capture the audio
and analyze it digitally. If it is an actual FFT that you can use and
you got it cheap enough you may have made a killing in the instrument
department. Why I go to flea markets and especially estate sales where
the widow is running it. About 3 months ago I bought some 30 year old
equipment, brand new in the box from a widow who just wanted to find a
good home for her departed husband's "junk". Tektronix used to have plug
ins for their line of scopes to do just about anything so if you can't
master what you have, check E-bay.
Bill Baka

5390. Re: HP 3582A ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-20 08:33:24 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <ejrp8kqpf1@puck.litech.org>
Source record: 9541

In rec.radio.amateur.homebrew Henry Kolesnik <kolesnik@sbcglobal.net> wrote:
> I'm not certain to which group I should post this question, so I'm shot
> gunning hoping to find it. If anyone can point me, please do. However....
> Has anyone used the HP 3582A audio spectrum analyzer to plot the freq
> response of audio devices like mikes, speakers, etc. Knowing the mike
> response I'd like to see the spectrum of plucked guitar strings and their
> harmonics and see how different manufacturers sound varies in a plot. I got
> a 3582A at a swap meet, its complex and probably overkill but that's what I
> have and I am anxious to try it out and would appreciate any tips.
> Thanks

I've done this, some years back, with much more primitive gear. and
found that the spectrum of a plucked guitar string varies with time;
ditto for the natural and left-hand-stopped harmonics. If you listen
closely, you can _hear_ the variation: the higher frequencies die much
more quickly.

I'm not sure of the physical mechanisms that are involved, but suspect
that they include the nonlinearities in the strings, the woods. The
shape of the soundbox probably has a strong influence as well, or so I
think. I would not be at all amazed to find that this holds true for
plucked chordophones in general.

I would expect the spectrum of a continuously-driven string -- a bowed
string, such as a violin, viola, violoncello, viol, or vielle string,
OTOH -- to have a spectrum that was closer to time-invariant, once
the string got up to constant amplitude and as long as the bowing
continued. A hurdy-gurdy wheel is the ideal here, since it acts as a
bow as long as it is being turned.

But you're wanting the response of a plucked string, not that of a
bowed string. I suppose you could try two different approaches. One of
them would be to build a rotating-wheel bowing machine to look at the
spectra of strings continuously-bowed with different speeds, at
various distances from the bridge, and at different pressures. Another
would be to build a mechanical string-plucker, so that you could get
consistent values of plucking force, while (again) varying force,
distance from the bridge, and so on.

An advantage of the mechanical plucking machine would be that you
would (should, in a perfect world) be able to use the output of
multiple runs where all the variables were the same, and that you
could build some very nice "3-d" plots to show the variation in
spectra as the distance from the bridge (or the force, or some other
variable) changed.

Still, it is an interesting project -- the more so to me since I've
been a classical guitarist for 49 years, and learned that strings from
different manufacturers, and even different styles of string from the
same manufacturer, can sound *very* different on the same instrument.
That was why Segovia standardized on Augustine strings -- or so he
told us one night, at a meeting of the Houston Classical Guitar
Society, back around 1965.

Unfortunately, the same strings can sound very different on two or
three different instruments, too. None of this is in any way easy.

This probably would get a fair amount of interest in, say,
rec.music.makers.

Posted to, and followups set to, rec.radio.amateur.homebrew, where
I read it.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

5391. Re: HP 3582A ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-20 08:49:30 UTC
From: Zilog <VMI@Advalvas.be>
Message-ID: <45616c1a$0$21496$ba620e4c@news.skynet.be>
Source record: 9542
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.opinion,rec.audio.tech,rec.radio.amateur.equipment,rec.antiques.radio+phono

Henry Kolesnik wrote:
> I'm not certain to which group I should post this question, so I'm shot
> gunning hoping to find it. If anyone can point me, please do. However....
> Has anyone used the HP 3582A audio spectrum analyzer to plot the freq
> response of audio devices like mikes, speakers, etc. Knowing the mike
> response I'd like to see the spectrum of plucked guitar strings and their
> harmonics and see how different manufacturers sound varies in a plot. I got
> a 3582A at a swap meet, its complex and probably overkill but that's what I
> have and I am anxious to try it out and would appreciate any tips.
> Thanks
>
Hi,
Have a check here:
http://www.buildyourguitar.com/resources/lemme/index.htm
It can help you I think,

Zilog

5392. Re: HP 3582A ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-20 10:39:18 UTC
From: Mike Young <boat042-spam@yahoo.com>
Message-ID: <qBf8h.8520$6t.4406@newssvr11.news.prodigy.com>
Source record: 9543
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.opinion,rec.audio.tech,rec.radio.amateur.equipment,rec.antiques.radio+phono

"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:k968h.8441$Sw1.7887@newssvr13.news.prodigy.com...
> I'm not certain to which group I should post this question, so I'm shot
> gunning hoping to find it. If anyone can point me, please do.
> However....
> Has anyone used the HP 3582A audio spectrum analyzer to plot the freq
> response of audio devices like mikes, speakers, etc. Knowing the mike
> response I'd like to see the spectrum of plucked guitar strings and their
> harmonics and see how different manufacturers sound varies in a plot. I
> got a 3582A at a swap meet, its complex and probably overkill but that's
> what I have and I am anxious to try it out and would appreciate any tips.
> Thanks

Another option, FWIW, is to use the PC to capture and analyze. The audible spectrum would seem to be quite unchallenging for common desktops. Compression schemes such as MP3 and WMA, after all, operate on the frequency domain. In fact, Windows Media Player delivers the FFT stream to visualization modules. There's likely free software somewhere that can do what you're looking to do. OTOH, you then have the soundcard's non-linearities to deal with, which is likely not on par with lab or even studio grade equipment.

5393. Re: HP 3582A ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-20 11:18:38 UTC
From: Arny Krueger <arnyk@hotpop.com>
Message-ID: <CLCdna5ZmZKTEvzYnZ2dnUVZ_tCdnZ2d@comcast.com>
Source record: 9544
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.opinion,rec.audio.tech,rec.radio.amateur.equipment,rec.antiques.radio+phono

"Mike Young" <boat042-spam@yahoo.com> wrote in message
news:qBf8h.8520$6t.4406@newssvr11.news.prodigy.com
> "Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
> news:k968h.8441$Sw1.7887@newssvr13.news.prodigy.com...

>> I'm not certain to which group I should post this
>> question, so I'm shot gunning hoping to find it. If
>> anyone can point me, please do. However....
>> Has anyone used the HP 3582A audio spectrum analyzer to
>> plot the freq response of audio devices like mikes,
>> speakers, etc. Knowing the mike response I'd like to
>> see the spectrum of plucked guitar strings and their
>> harmonics and see how different manufacturers sound
>> varies in a plot. I got a 3582A at a swap meet, its
>> complex and probably overkill but that's what I have and I am anxious to
>> try it out and would appreciate any
>> tips. Thanks
>
> Another option, FWIW, is to use the PC to capture and
> analyze. The audible spectrum would seem to be quite
> unchallenging for common desktops. Compression schemes
> such as MP3 and WMA, after all, operate on the frequency
> domain. In fact, Windows Media Player delivers the FFT
> stream to visualization modules. There's likely free
> software somewhere that can do what you're looking to do.
> OTOH, you then have the soundcard's non-linearities to
> deal with, which is likely not on par with lab or even
> studio grade equipment.

There are studio grade PC audio interfaces, and some are among the
highest-performing audio components around. Some are on a par with the very
best lab equipment.

There is free PC software called RMAA that will automatically conduct a
representative suite of audio tests, and produce reports in a few minutes:

http://audio.rightmark.org/products/rmaa.shtml

5394. The Boatanchor Classifieds

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-20 13:56:53 UTC
From: "Jeff James, W2NBC" <w2nbc@optonline.net>
Message-ID: <Hui8h.4$JW5.1@newsfe09.lga>
Source record: 9545

The Boatanchor Classifieds
http://www.dealamerica.com/deal/cgi-bin/ads/bcads.cgi
Dedicated to Vintage Amateur Radio..

5395. Re: HP 3582A ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-20 14:13:15 UTC
From: kludge@panix.com
Message-ID: <ejsd5r$gc8$1@panix2.panix.com>
Source record: 9546
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.opinion,rec.audio.tech,rec.radio.amateur.equipment,rec.antiques.radio+phono

Henry Kolesnik <kolesnik@sbcglobal.net> wrote:
>I'm not certain to which group I should post this question, so I'm shot
>gunning hoping to find it. If anyone can point me, please do. However....
>Has anyone used the HP 3582A audio spectrum analyzer to plot the freq
>response of audio devices like mikes, speakers, etc. Knowing the mike
>response I'd like to see the spectrum of plucked guitar strings and their
>harmonics and see how different manufacturers sound varies in a plot. I got
>a 3582A at a swap meet, its complex and probably overkill but that's what I
>have and I am anxious to try it out and would appreciate any tips.

Yes, lots of people have used HP FFT analyzers for all kinds of things.
There isn't a lot of trickery... they pretty much work.
--scott
--
"C'est un Nagra. C'est suisse, et tres, tres precis."

5396. Re: HP 3582A ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-20 14:38:54 UTC
From: jack <jdwalton@comcast.net>
Message-ID: <TqudnRNSmd_0IPzYnZ2dnUVZ_rSdnZ2d@comcast.com>
Source record: 9547
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.opinion,rec.audio.tech,rec.radio.amateur.equipment,rec.antiques.radio+phono

One thing which you can do with these older analyzers is measure much higher voltages than possible on a sound card FFT, much lower frequencies -- they were used for vibration analysis as well as audio -- they are also very well isolated -- you can find a repro of the manual on EBay for ten bucks.

5397. Re: HP 3582A ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-20 14:45:09 UTC
From: Arny Krueger <arnyk@hotpop.com>
Message-ID: <osadnViG4rXoIvzYnZ2dnUVZ_oednZ2d@comcast.com>
Source record: 9548
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.opinion,rec.audio.tech,rec.radio.amateur.equipment,rec.antiques.radio+phono

"jack" <jdwalton@comcast.net> wrote in message
news:TqudnRNSmd_0IPzYnZ2dnUVZ_rSdnZ2d@comcast.com

> One thing which you can do with these older analyzers is
> measure much higher voltages than possible on a sound
> card FFT,

Easy enough to address. I use a 5K RN50 potentiomenter for the purpose. If I want an accurate voltage measurement of audio, I use a voltmeter.

> much lower frequencies -- they were used for
> vibration analysis as well as audio

Not much difference between most vibrations and what a subwoofer does. If an audio interface is flat within 0.1 dB at 20 Hz, then it is pretty good an octave or two below that!

> -- they are also very well isolated

There is this amazingly good audio isolation transformer at Radio Shack. Sells for under $20 a pair...

> -- you can find a repro of the manual on EBay for ten bucks.

You can find an audio interface that will outperform say a HP 334 for $30. For $200 you're in the same league as some of the older, but not all that old AP stuff.

5398. Re: HP 3582A ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-20 14:47:59 UTC
From: Arny Krueger <arnyk@hotpop.com>
Message-ID: <xdWdnQL7lfeDXfzYnZ2dnUVZ_r2dnZ2d@comcast.com>
Source record: 9549
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.opinion,rec.audio.tech,rec.radio.amateur.equipment,rec.antiques.radio+phono

"Arny Krueger" <arnyk@hotpop.com> wrote in message
news:osadnViG4rXoIvzYnZ2dnUVZ_oednZ2d@comcast.com
> "jack" <jdwalton@comcast.net> wrote in message
> news:TqudnRNSmd_0IPzYnZ2dnUVZ_rSdnZ2d@comcast.com
>
>> One thing which you can do with these older analyzers is
>> measure much higher voltages than possible on a sound
>> card FFT,
>
> Easy enough to address. I use a 5K RN50 potentiomenter
> for the purpose. If I want an accurate voltage
> measurement of audio, I use a voltmeter.

Correction - make that RV4N - example:

http://www.alliedelec.com/Search/ProductDetail.asp?SKU=753-1445

5399. Re: HP 3582A ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-20 17:39:01 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1164044341.585568.85120@m73g2000cwd.googlegroups.com>
Source record: 9550

Mike Young wrote:
> "Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
> news:k968h.8441$Sw1.7887@newssvr13.news.prodigy.com...
> > I'm not certain to which group I should post this question, so I'm shot
> > gunning hoping to find it. If anyone can point me, please do.
> > However....
> > Has anyone used the HP 3582A audio spectrum analyzer to plot the freq
> > response of audio devices like mikes, speakers, etc. Knowing the mike
> > response I'd like to see the spectrum of plucked guitar strings and their
> > harmonics and see how different manufacturers sound varies in a plot. I
> > got a 3582A at a swap meet, its complex and probably overkill but that's
> > what I have and I am anxious to try it out and would appreciate any tips.
> > Thanks
>
> Another option, FWIW, is to use the PC to capture and analyze. The audible
> spectrum would seem to be quite unchallenging for common desktops.
> Compression schemes such as MP3 and WMA, after all, operate on the frequency
> domain. In fact, Windows Media Player delivers the FFT stream to
> visualization modules. There's likely free software somewhere that can do
> what you're looking to do. OTOH, you then have the soundcard's
> non-linearities to deal with, which is likely not on par with lab or even
> studio grade equipment.

Actually, pretty much any modern PC audio card will have plenty low enough distortion for the application, and quite likely better than the HP3582. The 3582, is, after all, quite an old instrument. The advent of digital audio changed the whole playing field for audio range ADCs and DACs, as well as support parts like op amps (though codecs as used in most inexpensive PC audio systems don't need additional preams on their inputs anyway). Frequency response at the low end can be an issue; there are many vibrations that are too low in frequency for a sound card to deal with. Think "seismic" and you'll understand. The AC coupling in the HP E1433 is programmable to very low frequencies, as it's actually a feedback control system run through the DSP following the ADC, but most AC coupling will have a 3dB corner frequency around 1Hz, or higher if it's really just for audio. Sound cards may well use codecs whose ADCs have digital AC coupling, as well, and the card may not provide a way to turn that off.

Another package that can be used to do FFTs on captured audio, and to otherwise manipulate the audio file, is the free Scilab package. You can play to your heart's content with math functions on the audio (or on pretty much anything else you can represent numerically), but of course you can get yourself into trouble if you don't understand what you're doing. And along those lines, I'd strongly caution you to not

read too much into what Scott wrote, "Yes, lots of people have used HP FFT analyzers for all kinds of things.
There isn't a lot of trickery... they pretty much work." The _analyzers_ may work, but if you don't understand what they do, you may make very bad measurements with them, and you may badly misinterpret the results you see. There are, I believe, HP/Agilent ap notes on making _good_ measurements and properly interpreting the results.
Well, I KNOW there are, though finding them on the web may be a bit of a challenge.

Cheers,
Tom

5400. Re: HP 3582A ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-20 20:17:49 UTC
From: JimL <jimbethladd@aol.com>
Message-ID: <456212cb$0$10746$ec3e2dad@news.usenetmonster.com>
Source record: 9551

"K7ITM" <k7itm@msn.com> wrote in message
news:1164044341.585568.85120@m73g2000cwd.googlegroups.com...
> Mike Young wrote:
>> "Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
>> news:k968h.8441$Sw1.7887@newssvr13.news.prodigy.com...
>> > I'm not certain to which group I should post this question, so I'm shot
>> > gunning hoping to find it. If anyone can point me, please do.
>> > However....
>> > Has anyone used the HP 3582A audio spectrum analyzer to plot the freq
>> > response of audio devices like mikes, speakers, etc. Knowing the mike
>> > response I'd like to see the spectrum of plucked guitar strings and
>> > their
>> > harmonics and see how different manufacturers sound varies in a plot.
>> > I
>> > got a 3582A at a swap meet, its complex and probably overkill but
>> > that's
>> > what I have and I am anxious to try it out and would appreciate any
>> > tips.
>> > Thanks
>>
>> Another option, FWIW, is to use the PC to capture and analyze. The
>> audible
>> spectrum would seem to be quite unchallenging for common desktops.
>> Compression schemes such as MP3 and WMA, after all, operate on the
>> frequency
>> domain. In fact, Windows Media Player delivers the FFT stream to
>> visualization modules. There's likely free software somewhere that can do
>> what you're looking to do. OTOH, you then have the soundcard's
>> non-linearities to deal with, which is likely not on par with lab or even
>> studio grade equipment.
>
> Actually, pretty much any modern PC audio card will have plenty low
> enough distortion for the application, and quite likely better than the
> HP3582. The 3582, is, after all, quite an old instrument. The advent
> of digital audio changed the whole playing field for audio range ADCs
> and DACs, as well as support parts like op amps (though codecs as used
> in most inexpensive PC audio systems don't need additional preams on
> their inputs anyway). Frequency response at the low end can be an
> issue; there are many vibrations that are too low in frequency for a
> sound card to deal with. Think "seismic" and you'll understand. The
> AC coupling in the HP E1433 is programmable to very low frequencies, as
> it's actually a feedback control system run through the DSP following
> the ADC, but most AC coupling will have a 3dB corner frequency around
> 1Hz, or higher if it's really just for audio. Sound cards may well use

> codecs whose ADCs have digital AC coupling, as well, and the card may
> not provide a way to turn that off.
>
> Another package that can be used to do FFTs on captured audio, and to
> otherwise manipulate the audio file, is the free Scilab package. You
> can play to your heart's content with math functions on the audio (or
> on pretty much anything else you can represent numerically), but of
> course you can get yourself into trouble if you don't understand what
> you're doing. And along those lines, I'd strongly caution you to not
> read too much into what Scott wrote, "Yes, lots of people have used HP
> FFT analyzers for all kinds of things.
> There isn't a lot of trickery... they pretty much work." The
> _analyzers_ may work, but if you don't understand what they do, you may
> make very bad measurements with them, and you may badly misinterpret
> the results you see. There are, I believe, HP/Agilent ap notes on
> making _good_ measurements and properly interpreting the results.
> Well, I KNOW there are, though finding them on the web may be a bit of
> a challenge.
>
> Cheers,
> Tom
>
Hi- there is a HP newsgroup on Yahoo, try that. Jim.

5401. Tapped capacitor tanks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-20 21:54:09 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12m4902i6dq8t15@corp.supernews.com>
Source record: 9552

I've been playing with oscillators a bit here, and I wanted to ask if the way I'm intuitively thinking about the operation of a tapped capacitor tank is the way other people do:

Say we have an inductor L in parallel with tapped capacitors, C1 and C2. If the loaded Q of the tank is reasonably high (say, >10 -- which you'd want for any decent oscillator anyway), we can pretty much ignore the "input" and "output" of the tank, as their effect on what happens within the tank isn't significant. As such, we can just look at the current circulating around the tank, and from the "top" of the tank to the "bottom" you get 90 degrees phase shift going from C1 to ground and then another 90 degrees from ground through C2. Hence, from the top to the bottom you have 180 degrees of phase shift, with the values (ratios) of C1/C2 just setting the magnitude of the output voltage vs. the input. Sound good?

I started going through the math involved and determined that you can readily confuse yourself if you don't make the "high Q" assumption. For instance, something like a 1 ohm source and 1 ohm load feeding a tank of 159.2mH (j1 ohms) and 2 318.3mF caps (-j/2 ohms) has such a horribly low Q that there isn't a 180 degree phase shift top to bottom, nor is the resonant frequency 1Hz.

Thanks,
---Joel Kolstad

5402. Re: Tapped capacitor tanks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-20 23:29:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12m4eicmqlfjjdc@corp.supernews.com>
Source record: 9553

Joel Kolstad wrote:
> I've been playing with oscillators a bit here, and I wanted to ask if the way
> I'm intuitively thinking about the operation of a tapped capacitor tank is the
> way other people do:
>
> Say we have an inductor L in parallel with tapped capacitors, C1 and C2. If
> the loaded Q of the tank is reasonably high (say, >10 -- which you'd want for
> any decent oscillator anyway), we can pretty much ignore the "input" and
> "output" of the tank, as their effect on what happens within the tank isn't
> significant. As such, we can just look at the current circulating around the
> tank, and from the "top" of the tank to the "bottom" you get 90 degrees phase
> shift going from C1 to ground and then another 90 degrees from ground through
> C2. Hence, from the top to the bottom you have 180 degrees of phase shift,
> with the values (ratios) of C1/C2 just setting the magnitude of the output
> voltage vs. the input. Sound good?

Sorry, no. EH antenna inventors and apologists notwithstanding, the
phase of current doesn't change as it goes through a capacitor.

> . . .

Roy Lewallen, W7EL

5403. Re: Tapped capacitor tanks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-21 00:36:47 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12m4igu11b6c6de@corp.supernews.com>
Source record: 9554

Hi Roy,

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:12m4eicmqlfjjdc@corp.supernews.com...
> Sorry, no. EH antenna inventors and apologists notwithstanding, the phase of
> current doesn't change as it goes through a capacitor.

Agreed. I'm being rather loose in my terminology here, what I mean by "you get 90 degrees of phase shift going through the capacitor" is that the voltage across the capacitor ends up (must be) 90 degrees out of phase with respect to the reference current as you consider the capacitor's effect.

You don't disagree that the voltage at the top of a tapped capacitor L-C tank is 180 degrees out of phase what that at the bottom at resonance, do you?

---Joel

5404. Re: Group poll.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-21 00:54:50 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <u7s8h.1376$tM1.1345@newsread1.news.pas.earthlink.net>
Source record: 9555
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"U-Know-Who" <no-one@nowhere.com> wrote in
news:5lO7h.283$_H5.256@tornado.texas.rr.com:

>
> "Slow Code" <my.mail@no.spam> wrote in message
> news:1wN7h.626$sf5.622@newsread4.news.pas.earthlink.net...
>> jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote in
>> news:ej8knc$kn5$1@news.hawaii.edu:
>>
>>> John Smith <assemblywizard@gmail.com> wrote:
>>>>Idiot, check your spelling, it's "group troll."
>>>
>>> Well, let's see if he ment "poll" or "troll":
>>>
>>>
>>> 0 2 4 6 8 10
>>> /
>>> /
>>> /
>>> /
>>> /
>>> /
>>> /
>>> /
>>> POLL-O-METER
>>
>>
>>
>> So what appliances does everyone hope Santa brings them for Xmas?
>>
>> HF, VHF, UHF, KENWOOD, YAESU, ICOM, Cobra?
>>
>>
>> I couldn't think of anything for myself, so I hope I just get a some
>> componants and a new soldering iron for projects so I can keep moving
>> forward in ham radio.
>>
>> SC
>
> And spell check for your PC. :-)

Which one do you have? I want Santa to bring me a different one. The one
you have doesn't work.

SC

5405. Re: Radio Shack store robbed

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-21 00:55:35 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <b8s8h.1394$tM1.938@newsread1.news.pas.earthlink.net>
Source record: 9556
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap

"JOHN D" <jawnd393one@yahoo.com> wrote in
news:txW7h.4875$d42.4102@trndny07:

> I wonder if the robbers were able to make it out of the store without
> signing up for a new cell phone contract.

They clerk probably offered to give them their free battery of the month
on their way out the door too.

SC

5406. crapthon contiues

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-21 01:14:54 UTC
From: Mark@kb9rqz.aprs
Message-ID: <knk4m29aki1hhucfdqa4keek5vo2htc6cu@4ax.com>
Source record: 9557
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap

On Tue, 21 Nov 2006 00:55:35 GMT, Slow Code <my.mail@no.spam> wrote:

>"JOHN D" <jawnd393one@yahoo.com> wrote in
>news:txW7h.4875$d42.4102@trndny07:
>
>> I wonder if the robbers were able to make it out of the store without
>> signing up for a new cell phone contract.
>
>
>They clerk probably offered to give them their free battery of the month
>on their way out the door too.

can't you say something postive sc
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5407. crapthon goes on

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-21 01:15:39 UTC
From: Mark@kb9rqz.aprs
Message-ID: <pok4m2ta9qrj4rutbpcsi81tblc558s7b1@4ax.com>
Source record: 9558
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

```
On Tue, 21 Nov 2006 00:54:50 GMT, Slow Code <my.mail@no.spam> wrote:

>"U-Know-Who" <no-one@nowhere.com> wrote in
>news:5lO7h.283$_H5.256@tornado.texas.rr.com:
>
>>
>> "Slow Code" <my.mail@no.spam> wrote in message
>> news:1wN7h.626$sf5.622@newsread4.news.pas.earthlink.net...
>>> jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote in
>>> news:ej8knc$kn5$1@news.hawaii.edu:
>>>
>>>> John Smith <assemblywizard@gmail.com> wrote:
>>>>>Idiot, check your spelling, it's "group troll."
>>>>
>>>> Well, let's see if he ment "poll" or "troll":
>>>>
>>>>
>>>> 0 2 4 6 8 10
>>>> /
>>>> /
>>>> /
>>>> /
>>>> /
>>>> /
>>>> /
>>>> /
>>>> POLL-O-METER
>>>
>>>
>>>
>>> So what appliances does everyone hope Santa brings them for Xmas?
>>>
>>> HF, VHF, UHF, KENWOOD, YAESU, ICOM, Cobra?
>>>
>>>
>>> I couldn't think of anything for myself, so I hope I just get a some
>>> componants and a new soldering iron for projects so I can keep moving
>>> forward in ham radio.
>>>
>>> SC
>>
>> And spell check for your PC. :-)
>
```

>
>Which one do you have? I want Santa to bring me a different one. The one
>you have doesn't work.
could you say something postive SC?

just as a change you sourbitter OM
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5408. Intersil CA3162E/CA3161E A/D BCD/7Segment problem Weller Soldering Station

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-21 03:14:00 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <Y9u8h.7543$y92.6054@tornado.tampabay.rr.com>
Source record: 9559

Subject: Intersil CA3162E/CA3161E A/D BCD/7Segment problem Weller Soldering Station

Hi
I am trying to fil my Weller soldering station which has lost its temperature readout. This particular model has the Intersil CA3162E/CA3161E A/D and BCD/7Segment chips. When first turned on the display flashes "EEE" and then goes blank. I shotgunned the repair by replacing the filter caps in the power supply and though I had it fixed but it is back to same problem.

In reading the Intersil application notes for the A/D convertor I don't see a logical mode where EEE would be displayed

Does anyone have advice for troubleshooting this configuration?

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

5409. Re: Tapped capacitor tanks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-21 04:21:24 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1164082884.070560.213160@m73g2000cwd.googlegroups.com>
Source record: 9560

On Nov 20, 4:36 pm, "Joel Kolstad" <JKolstad71HatesS...@yahoo.com>
wrote:
> Hi Roy,
>
> "Roy Lewallen" <w...@eznec.com> wrote in
messagenews:12m4eicmqlfjjdc@corp.supernews.com...
>
> > Sorry, no. EH antenna inventors and apologists notwithstanding, the phase of
> > current doesn't change as it goes through a capacitor.Agreed. I'm being rather loose in
my terminology here, what I mean by "you
> get 90 degrees of phase shift going through the capacitor" is that the voltage
> across the capacitor ends up (must be) 90 degrees out of phase with respect to
> the reference current as you consider the capacitor's effect.
>
> You don't disagree that the voltage at the top of a tapped capacitor L-C tank
> is 180 degrees out of phase what that at the bottom at resonance, do you?
>
> ---Joel

Joel, what do you mean by "at the top" and "at the bottom"? Voltage
measured with respect to what point? Clearly, if there is the same
current through two capacitors in series, the voltages across each of
them must be in phase, so the total voltage across the two is the
simple arithmetic sum of the voltage across each. That assumes that
they are ideal capacitors, but practical ones will come close. On the
other hand, the currents in the two may not be exactly in phase, as you
perhaps discovered with your low-Q tank. If the current at the node
between the capacitors is contributed to by some external load or
source, and if that additional current is not small compared with the
tank's circulating current, then the capacitor currents may not be in
phase, and the voltages then would also not be in phase, and you'd need
to add them vectorially to get the right result.

Of course, Spice will simulate all this for you very nicely, using
either a transient analysis, or a frequency-domain analysis if all the
parts can be assumed to behave linearly.

Cheers,
Tom

5410. Re: Intersil CA3162E/CA3161E A/D BCD/7Segment problem Weller Soldering Station

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-21 04:37:26 UTC
From: w9gb <spam_protect@arrl.net>
Message-ID: <R-2dnSv3V_AUH__YnZ2dnUVZ_sednZ2d@comcast.com>
Source record: 9561

"**THE-RFI-EMI-GUY**" <rhyolite@nettally.com> wrote in message
news:Y9u8h.7543$y92.6054@tornado.tampabay.rr.com...
> Subject: Intersil CA3162E/CA3161E A/D BCD/7Segment problem Weller
> Soldering Station
>
> Hi
> I am trying to fil my Weller soldering station which has lost its
> temperature readout. This particular model has the Intersil
> CA3162E/CA3161E A/D and BCD/7Segment chips. When first turned on the
> display flashes "EEE" and then goes blank. I shotgunned the repair by
> replacing the filter caps in the power supply and though I had it fixed
> but it is back to same problem.
>
> In reading the Intersil application notes for the A/D convertor I don't
> see a logical mode where EEE would be displayed
>
> Does anyone have advice for troubleshooting this configuration?
>
> --
> Joe Leikhim K4SAT
> "The RFI-EMI-GUY"

Joe -

Which model are you trying to repair? EC 2002M ?

Positive your handpiece is okay? (Type-K thermocouple can go bad)

Bob Wurth just happens to have replacement control board
on eBay -- item number: 270057328135

reasonable price

Greg

5411. Re: Intersil CA3162E/CA3161E A/D BCD/7Segment problem Weller Soldering Station

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-21 04:45:25 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <4562849B.4070706@nettally.com>
Source record: 9562

It is an EC2002A from way back. A nice clean unit except for the display problem. I dug into it this weekend hoping it was just a bad capacitor in the PS. It did start to work for a short time. There are numerous potentiometers in the thing, its possible one is intermittent.

w9gb wrote:

>"**THE-RFI-EMI-GUY**" <rhyolite@nettally.com> wrote in message
>news:Y9u8h.7543$y92.6054@tornado.tampabay.rr.com...
>
>
>>Subject: Intersil CA3162E/CA3161E A/D BCD/7Segment problem Weller
>>Soldering Station
>>
>>Hi
>>I am trying to fil my Weller soldering station which has lost its
>>temperature readout. This particular model has the Intersil
>>CA3162E/CA3161E A/D and BCD/7Segment chips. When first turned on the
>>display flashes "EEE" and then goes blank. I shotgunned the repair by
>>replacing the filter caps in the power supply and though I had it fixed
>>but it is back to same problem.
>>
>>In reading the Intersil application notes for the A/D convertor I don't
>>see a logical mode where EEE would be displayed
>>
>>Does anyone have advice for troubleshooting this configuration?
>>
>>--
>>Joe Leikhim K4SAT
>>"The RFI-EMI-GUY"ï¿½
>>
>>
>
>Joe -
>
>Which model are you trying to repair? EC 2002M ?
>
>Positive your handpiece is okay? (Type-K thermocouple can go bad)
>
>Bob Wurth just happens to have replacement control board
>on eBay -- item number: 270057328135
>
>reasonable price

>
>Greg
>
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

5412. Re: Tapped capacitor tanks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-21 12:56:05 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1164113765.806813.185040@m7g2000cwm.googlegroups.com>
Source record: 9563

K7ITM wrote:>
> Of course, Spice will simulate all this for you very nicely, using
> either a transient analysis, or a frequency-domain analysis if all the
> parts can be assumed to behave linearly.
>
> Cheers,
> Tom

Andy writes
I'll second that. J , try your ideas out on SPICE. Try to figure
out
what it will do before you simulate it, and then use the simulation to
check your conclusions..... I've found it to be invaluable in
straightening
me out on some of the ways I "thought" nature worked, and in getting
a lot of things straight.....

Same with EZNEC, if you have it..... I learned a lot more about
how
antennae really work from EZNEC than in 30 years of cutting wires and
hooking up SWR meters......

Simulators are wonderful things. And no one has to know about the
times one turns out to be wrr...wrrro....wr.r..........
imprecise....

Andy W4OAH

5413. Re: ferrrite in linear tank coil ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-21 15:08:11 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <45631675$1$30315$9b4e6d93@newsspool1.arcor-online.net>
Source record: 9564

"Roy Lewallen" <w7el@eznec.com> schrieb im Newsbeitrag
news:12m1ppk29p54u82@corp.supernews.com...
> Loss is related to the ratio of unloaded Q to loaded Q. All else being
> equal, lowering the unloaded Q will increase loss, but lowering the
> loaded Q will decrease loss. As others have posted, the unloaded Q is a
> characteristic of the tank circuit itself, usually primarily the
> inductor; loaded Q is largely dictated by the external load and how it's
> coupled to the tank. Hence the tendency to keep the inductor Q high but
> not make the loaded Q any higher than necessary for harmonic and spur
> reduction.

I would add: To high the Q and you wan't be able to modulate it anymore (AM,
FM, etc).

- Henry

5414. Re: Tapped capacitor tanks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-21 15:20:08 UTC
From: john jardine <john@jjdesigns.fsnet.co.uk>
Message-ID: <45630c4d$0$21188$88260bb3@free.teranews.com>
Source record: 9565

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> wrote in message
news:12m4902i6dq8t15@corp.supernews.com...
[...]
>
> I started going through the math involved and determined that you can
readily
> confuse yourself if you don't make the "high Q" assumption. For instance,
> something like a 1 ohm source and 1 ohm load feeding a tank of 159.2mH (j1
> ohms) and 2 318.3mF caps (-j/2 ohms) has such a horribly low Q that there
> isn't a 180 degree phase shift top to bottom, nor is the resonant
frequency
> 1Hz.
>
> Thanks,
> ---Joel Kolstad
>
>
>
Made an inductance meter based on a resonant LC circuit and used a PIC to
back calculate the inductance and Q values based on known F and C and
currents. Circuit was able to work down to Q values of <1 at frequencies
down to 5Hz. Worked well.
Did the programming and found it just wouldn't calculate the correct L
values when working at low Q. Spent hours doing tests until it dawned on me
that I'd stupidly programmed in the "standard" resonance formula.
Suddenly became sweetness and light when I reprogrammed for ...
Frequency= 1/2*pi * sqrt(1/LC -R^2/L^2).
I continue to live and learn :)
john

--
Posted via a free Usenet account from http://www.teranews.com

5415. Re: ferrrite in linear tank coil ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-21 16:36:47 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1164127007.753192.125990@b28g2000cwb.googlegroups.com>
Source record: 9566

Ya know, I built an 80/40 similar transmitter back in 1960 and used a chunk of ferrite from a BC radio loop antenna inside the 80 coil form to resonate it on 80 meters - the ferrite was moved around until the tank made the best power out on an RF ammeter then it was glued in that position... A tube VTVM from Heathkit was used to help build the transmitter - and the kit SWL receiver from Lafayette Radio which received the entire ham band with the dial at one setting :)
Lots of bean soup and 'day old' bread from the bakery...Good memories...

I think that is why I subconciously posted the word ferrite when commenting about the current trend to toroids in the tank circuit...

denny / k8do

73, Bill W6WRT
> Bill, there is a transmitter described in the 1967 ARRL handbook
> that does indeed have a small piece of 1/2 dia ferrite rod (broken off a
> BCB loop stick) inside the 80meter tank coil to decrease the number of
> turns needed in the coil. This was a two tube transmitter using a 12by7
> and a 1625. Plug in coils are used for the oscillator and final tank
> circuits.

5416. Re: Tapped capacitor tanks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-21 16:39:11 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1164127150.956065.227610@h48g2000cwc.googlegroups.com>
Source record: 9567

Quite a stutter you have there... However my wife uses that word
frequently while, like you, I can't quite agree with her...

denny / k8do
AndyS wrote:

> Simulators are wonderful things. And no one has to know about the
> times one turns out to be wrr...wrrro....wr.r..........
> imprecise....
>
> Andy W4OAH

5417. Re: Tapped capacitor tanks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-21 17:09:50 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1164128990.022036.196250@m7g2000cwm.googlegroups.com>
Source record: 9568

Denny wrote:
> Quite a stutter you have there... However my wife uses that word
> frequently while, like you, I can't quite agree with her...
>
> denny / k8do
> AndyS wrote:
>
> > Simulators are wonderful things. And no one has to know about the
> > times one turns out to be wrr...wrrro....wr.r..........
> > imprecise....
> >
> > Andy W4OAH

5418. Re: Tapped capacitor tanks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-21 17:12:31 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1164129151.627133.281200@b28g2000cwb.googlegroups.com>
Source record: 9569

Denny wrote:
> Quite a stutter you have there... However my wife uses that word
> frequently while, like you, I can't quite agree with her...
>
> denny / k8do

Andy comments:

My wife has no problem with saying "YOU ARE WRONG !!""
Her speech has always been flawless...

Personally, I think that overuse of a particular description shows
a character flaw.... But I love her.... and keep my mouth shut....

Andy in Eureka

5419. GR 1650-B STX-107 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-21 23:01:38 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <mzL8h.17668$B31.6161@newssvr27.news.prodigy.net>
Source record: 9570
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono,rec.radio.amateur.boatanchors

Anyone have a spare copy of the Student-Experimenter pamphlet GR Pub.
STX-107 "The Universal Impedance Bridge"? I'd like to get a copy, scan or
the original.
tnx

--

73
Hank WD5JFR

5420. Re: Intersil CA3162E/CA3161E A/D BCD/7Segment problem Weller Soldering Station

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-22 03:24:05 UTC
From: w9gb <spam_protect@arrl.net>
Message-ID: <35WdnQKRSMIEX_7YnZ2dnUVZ_qKdnZ2d@comcast.com>
Source record: 9571

"**THE-RFI-EMI-GUY**" <rhyolite@nettally.com> wrote in message
news:4562849B.4070706@nettally.com...

It is an EC2002A from way back. A nice clean unit except for the display problem. I dug into it this weekend hoping it was just a bad capacitor in the PS. It did start to work for a short time. There are numerous potentiometers in the thing, its possible one is intermittent.
==========

I probably have a ceramic based board of that era around in my Weller parts.

A local distributor just cleared out his inventory on eBay of Weller boards of that era. I think I posted most of my schematics and Tech Sheets I had in stock --

w9gb

5421. Re: ferrrite in linear tank coil ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-22 15:50:27 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <q7s8m2ptnl7dad3a4llc4fd99n857ibicm@4ax.com>
Source record: 9572

ORIGINAL MESSAGE:

On Sat, 18 Nov 2006 21:15:25 GMT, "W3JDR" <joe@roccis.com> wrote:

>The inclusion of ferrite has
>little to do with "loaded Q" and thus little to do with the bandwidth of the
>circuit (at least for practical first-order considerations; small tuned
>circuit losses do have a small second-order effect on bandwidth).

---------- REPLY FOLLOWS ----------

It isn't a question of "Q", it's a question of whether the ferrite
goes into saturation on current peaks. If it does not, then all is ok
but if it does, severe distortion of the RF waveform will occur and
harmonic generation will be excessive. Powdered iron is a much better
choice for this application.

Bill, W6WRT

5422. HD Radio on an Analog Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-22 18:57:00 UTC
From: Al Lorona <al_lorona@agilent.com>
Message-ID: <1164221004.219572@newsreg.cos.agilent.com>
Source record: 9573

Hi, Everybody,

Over the past couple of years several AM broadcast stations in the L.A. area have begun transmitting the new "HD Radio" signal. A "high quality" digital signal is superimposed on the standard AM signal and so the station can be received with either type of receiver. I believe there are about ten stations now doing this here in L.A. and probably everywhere else in the country.

Have you tried this?: Tune in a local HD AM broadcast station on your general coverage receiver in SSB mode, either USB or LSB. When you zero beat the station you will hear a loud rushing noise floor behind the program audio. This morning, Rush Limbaugh and Dan Patrick sounded like they were each doing their shows from in front of Niagara Falls.

Even in AM mode, as you approach the station from either direction you'll hear a hideous broadband noise until you get onto channel center. It's really annoying and bad for AM DXing because of the interference (in the form of increased noise floor) these local stations cause to the weak DX ones on either side of them.

Al W6LX

5423. Re: Group poll.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-23 00:01:57 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <Vx59h.2178$ql2.1579@newsread3.news.pas.earthlink.net>
Source record: 9574
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

```
Joe Bloe <abaslon@comcast.net> wrote in
news:oei7m2hhbvm46q3qmkkfl4k7ui4tdtqei9@4ax.com:

> On Tue, 21 Nov 2006 00:54:50 GMT, Slow Code <my.mail@no.spam> wrote:
>
>>"U-Know-Who" <no-one@nowhere.com> wrote in
>>news:5lO7h.283$_H5.256@tornado.texas.rr.com:
>>
>>>
>>> "Slow Code" <my.mail@no.spam> wrote in message
>>> news:1wN7h.626$sf5.622@newsread4.news.pas.earthlink.net...
>>>> jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote in
>>>> news:ej8knc$kn5$1@news.hawaii.edu:
>>>>
>>>>> John Smith <assemblywizard@gmail.com> wrote:
>>>>>>Idiot, check your spelling, it's "group troll."
>>>>>
>>>>> Well, let's see if he ment "poll" or "troll":
>>>>>
>>>>>
>>>>> 0 2 4 6 8 10
>>>>> /
>>>>> /
>>>>> /
>>>>> /
>>>>> /
>>>>> /
>>>>> /
>>>>> /
>>>>> POLL-O-METER
>>>>
>>>>
>>>>
>>>> So what appliances does everyone hope Santa brings them for Xmas?
>>>>
>>>> HF, VHF, UHF, KENWOOD, YAESU, ICOM, Cobra?
>>>>
>>>>
>>>> I couldn't think of anything for myself, so I hope I just get a some
>>>> componants and a new soldering iron for projects so I can keep moving
>>>> forward in ham radio.
>>>>
>>>> SC
```

>>>
>>> And spell check for your PC. :-)
>>
>>
>>Which one do you have? I want Santa to bring me a different one. The
>>one you have doesn't work.
>>
>>SC
>
>
> Clip and paste to "Word for Windows". . . It's got the best spell
> checker in the market. Just leave it running in the backgrould and
> call it up when you need to type out a letter or two.

Thanks, I'll pass that on to U-Know-Who, but he probably don't have word,
just computer games.

SC

5424. I just start the threads, you people have to keep them going.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-23 00:01:59 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <Xx59h.2180$ql2.36@newsread3.news.pas.earthlink.net>
Source record: 9575
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.swap

I just start the threads, You people need to keep them going.

But if I see a Pro-coder getting ganged up on by CW haters, I'll
come back in and help kick some no-code ass.

Sc

5425. Re: ferrrite in linear tank coil ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-23 00:13:56 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <8J59h.5539$IW2.4215@trndny03>
Source record: 9576

Bill,

What you say is very true, but the context the clip was taken from had
nothing to do with distortion, it was about Q and bandwidth.

Joe
W3JDR

"Bill Turner" <noway@nowhow.com> wrote in message
news:q7s8m2ptnl7dad3a4llc4fd99n857ibicm@4ax.com...
> ORIGINAL MESSAGE:
>
> On Sat, 18 Nov 2006 21:15:25 GMT, "W3JDR" <joe@roccis.com> wrote:
>
>
>>The inclusion of ferrite has
>>little to do with "loaded Q" and thus little to do with the bandwidth of
>>the
>>circuit (at least for practical first-order considerations; small tuned
>>circuit losses do have a small second-order effect on bandwidth).
>
> ------------ REPLY FOLLOWS ------------
>
> It isn't a question of "Q", it's a question of whether the ferrite
> goes into saturation on current peaks. If it does not, then all is ok
> but if it does, severe distortion of the RF waveform will occur and
> harmonic generation will be excessive. Powdered iron is a much better
> choice for this application.
>
> Bill, W6WRT

5426. Ownership change at International Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-23 00:20:28 UTC
From: w9gb <spam_protect@arrl.net>
Message-ID: <pKSdnRC3vYHSdPnYnZ2dnUVZ_hydnZ2d@comcast.com>
Source record: 9577
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

ANNOUNCING the SALE of INTERNATIONAL RADIO
http://www.qth.com/inrad/

George, W2VJN and Georgia are pleased to announce that effective January 1st, 2007 International Radio will be under new ownership. We wish to thank our many customers for their business and friendship over the almost ten years we have owned this company. We have learned much and worked hard, and it has all been good, but it is time for us to look ahead.

International Radio will be in the very capable hands of new owners Trey, N5KO, and Mark, AG9A. Trey and Mark are dedicated radio amateurs who appreciate all aspects of this hobby - especially contesting! They have ideas for the future, and they will not only sustain Inrad; they will improve it. We look forward to helping them succeed in any way we can. In particular, George will stay involved in the development of new products.

For more than two years we have been assisted by Laurie, our employee extraordinaire. Many of you know her and we know you join us in thanking her for her hard work and dedication. We will keep her as a valued friend.

Our final day in business will be December 15th, 2006. International Radio will then be CLOSED until January 1st, 2007. Online orders will be gladly accepted during this time and fulfilled when we reopen in January. Watch the website for the announcement of the annual New Year's Day Sale.

George, W2VJN

5427. crapthon goes on

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-23 01:06:42 UTC
From: Mark@kb9rqz.aprs
Message-ID: <70t9m2ddgqvtjuld66h1apql8oica0foee@4ax.com>
Source record: 9578
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Thu, 23 Nov 2006 00:01:57 GMT, Slow Code <my.mail@no.spam> wrote:

>Joe Bloe <abaslon@comcast.net> wrote in
>news:oei7m2hhbvm46q3qmkkfl4k7ui4tdtqei9@4ax.com:
>
>> On Tue, 21 Nov 2006 00:54:50 GMT, Slow Code <my.mail@no.spam> wrote:
>>
>>>"U-Know-Who" <no-one@nowhere.com> wrote in
>>>news:5lO7h.283$_H5.256@tornado.texas.rr.com:
>>>
>>>>
>>>> "Slow Code" <my.mail@no.spam> wrote in message
>>>> news:1wN7h.626$sf5.622@newsread4.news.pas.earthlink.net...
>>>>> jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote in
>>>>> news:ej8knc$kn5$1@news.hawaii.edu:
>>>>>
>>>>>> John Smith <assemblywizard@gmail.com> wrote:
>>>>>>>Idiot, check your spelling, it's "group troll."
>>>>>>
>>>>>> Well, let's see if he ment "poll" or "troll":
>>>>>>
>>>>>>
>>>>>> 0 2 4 6 8 10
>>>>>> /
>>>>>> /
>>>>>> /
>>>>>> /
>>>>>> /
>>>>>> /
>>>>>> /
>>>>>> /
>>>>>> POLL-O-METER
>>>>>
>>>>>
>>>>>
>>>>> So what appliances does everyone hope Santa brings them for Xmas?
>>>>>
>>>>> HF, VHF, UHF, KENWOOD, YAESU, ICOM, Cobra?
>>>>>
>>>>>
>>>>> I couldn't think of anything for myself, so I hope I just get a some
>>>>> componants and a new soldering iron for projects so I can keep moving
>>>>> forward in ham radio.

>>>>>
>>>>> SC
>>>>
>>>> And spell check for your PC. :-)
>>>
>>>
>>>Which one do you have? I want Santa to bring me a different one. The
>>>one you have doesn't work.
>>>
>>>SC
>>
>>
>> Clip and paste to "Word for Windows". . . It's got the best spell
>> checker in the market. Just leave it running in the backgrould and
>> call it up when you need to type out a letter or two.
>
>
>Thanks, I'll pass that on to U-Know-Who, but he probably don't have word,
>just computer games.
>
>SC
ah right on time
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5428. Re: HD Radio on an Analog Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-23 01:54:57 UTC
From: Roger Leone <raleoneTAKEOUT@sbcglobal.net>
Message-ID: <Rb79h.9178$6t.2964@newssvr11.news.prodigy.com>
Source record: 9579

Info isn't plentiful on this, but these may be of interest:

http://www.ibiquity.com/

http://users.tns.net/~bb/hdrsn.htm

Roger K6XQ

5429. crapthon goes on

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-23 02:28:03 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1164248883.800192.209290@j44g2000cwa.googlegroups.com>
Source record: 9580
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.swap

Slow Code wrote:
> I just start the threads, You people need to keep them going.

no we don't we and you and the ARS would better off if you stoped

5430. Re: Group poll.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-23 03:16:57 UTC
From: U-Know-Who <no-one@nowhere.com>
Message-ID: <Jo89h.2462$Gk5.1576@tornado.texas.rr.com>
Source record: 9581
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

```
"Slow Code" <my.mail@no.spam> wrote in message
news:Vx59h.2178$ql2.1579@newsread3.news.pas.earthlink.net...
> Joe Bloe <abaslon@comcast.net> wrote in
> news:oei7m2hhbvm46q3qmkkfl4k7ui4tdtqei9@4ax.com:
>
>> On Tue, 21 Nov 2006 00:54:50 GMT, Slow Code <my.mail@no.spam> wrote:
>>
>>>"U-Know-Who" <no-one@nowhere.com> wrote in
>>>news:5lO7h.283$_H5.256@tornado.texas.rr.com:
>>>
>>>>
>>>> "Slow Code" <my.mail@no.spam> wrote in message
>>>> news:1wN7h.626$sf5.622@newsread4.news.pas.earthlink.net...
>>>>> jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote in
>>>>> news:ej8knc$kn5$1@news.hawaii.edu:
>>>>>
>>>>>> John Smith <assemblywizard@gmail.com> wrote:
>>>>>>>Idiot, check your spelling, it's "group troll."
>>>>>>
>>>>>> Well, let's see if he ment "poll" or "troll":
>>>>>>
>>>>>>
>>>>>> 0 2 4 6 8 10
>>>>>> /
>>>>>> /
>>>>>> /
>>>>>> /
>>>>>> /
>>>>>> /
>>>>>> /
>>>>>> /
>>>>>> POLL-O-METER
>>>>>
>>>>>
>>>>>
>>>>> So what appliances does everyone hope Santa brings them for Xmas?
>>>>>
>>>>> HF, VHF, UHF, KENWOOD, YAESU, ICOM, Cobra?
>>>>>
>>>>>
>>>>> I couldn't think of anything for myself, so I hope I just get a some
>>>>> componants and a new soldering iron for projects so I can keep moving
>>>>> forward in ham radio.
```

>>>>>
>>>>> SC
>>>>
>>>> And spell check for your PC. :-)
>>>
>>>
>>>Which one do you have? I want Santa to bring me a different one. The
>>>one you have doesn't work.
>>>
>>>SC
>>
>>
>> Clip and paste to "Word for Windows". . . It's got the best spell
>> checker in the market. Just leave it running in the backgrould and
>> call it up when you need to type out a letter or two.
>
>
> Thanks, I'll pass that on to U-Know-Who, but he probably don't have word,
> just computer games.
>
> SC

I have Office Pro 2003

5431. Re: GR 1650-B STX-107 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-23 03:26:57 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <5y89h.18054$B31.16463@newssvr27.news.prodigy.net>
Source record: 9582
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono,rec.radio.amateur.boatanchors

Scratch the request as I got it from the GR guy.
tnx
Hank
"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:mzL8h.17668$B31.6161@newssvr27.news.prodigy.net...
> Anyone have a spare copy of the Student-Experimenter pamphlet GR Pub.
> STX-107 "The Universal Impedance Bridge"? I'd like to get a copy, scan or
> the original.
> tnx
>
> --
>
> 73
> Hank WD5JFR
>

5432. Re: ferrrite in linear tank coil ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-23 03:36:41 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <af5am214c4jgv6l0kc5eokba806sb3v813@4ax.com>
Source record: 9583

ORIGINAL MESSAGE:

On Thu, 23 Nov 2006 00:13:56 GMT, "W3JDR" <joe@roccis.com> wrote:

>Bill,
>
>What you say is very true, but the context the clip was taken from had
>nothing to do with distortion, it was about Q and bandwidth.
>
>Joe
>W3JDR

------------ REPLY FOLLOWS ------------

If you go clear back to the original question you will see this:

" Many amps produced today use ferrite in the tank (usually toroids)
for 160/80 meters..."

My response was that the toroids were almost certainly powdered iron,
not ferrite. All the stuff about Q and bandwidth came much later. I
stand by my original statement: powdered iron, not ferrite, and the
reasons have EVERYTHING to do with distortion.

Bill, W6WRT

5433. Re: I just start the threads, you people have to keep them going.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-23 07:27:42 UTC
From: The Poet <tcsshortwave@yahoo.com>
Message-ID: <1164266862.849860.131870@l12g2000cwl.googlegroups.com>
Source record: 9584
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.swap

Slow Code wrote:
> I just start the threads, You people need to keep them going.
>
> But if I see a Pro-coder getting ganged up on by CW haters, I'll
> come back in and help kick some no-code ass.
>
> Sc

Well, looks like most sensible people have your posts blocked, other
than myself and the uninitiated... so they never see your posts to
reply.

Me, I still find your idiocy to be somewhat entertaining... but in
time, I too shall tire of it and decide to "clean up my boards".

John Poet
"License? We don't need no stinkin' license"

5434. Re: HP 3582A ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-23 08:17:28 UTC
From: Pete KE9OA <p.gianako@comcast.net>
Message-ID: <M46dnSbmypKOxPjYnZ2dnUVZ_o2dnZ2d@comcast.com>
Source record: 9585
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.opinion,rec.audio.tech,rec.radio.amateur.equipment,rec.antiques.radio+phono

Agilent has a PDF version of the 3582 manual on their website, as a free download.

Pete

"jack" <jdwalton@comcast.net> wrote in message news:TqudnRNSmd_0IPzYnZ2dnUVZ_rSdnZ2d@comcast.com...
> One thing which you can do with these older analyzers is measure much higher
> voltages than possible on a sound card FFT, much lower frequencies -- they
> were used for vibration analysis as well as audio -- they are also very well
> isolated -- you can find a repro of the manual on EBay for ten bucks.
>
>
>

5435. Re: HP 3582A ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-23 13:05:01 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <10h9h.18130$B31.2441@newssvr27.news.prodigy.net>
Source record: 9586
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.opinion,rec.audio.tech,rec.radio.amateur.equipment,rec.antiques.radio+phono
Body handling: HTML body converted to readable text

Pete
I saw it and got it several days ago but I sure can't make the thing work
like a spectrrum analyzer. And I know how to use a HP 141T and its plugins!
I don't think there's anything wrong with it as it behaves per the manual
Any other help appreciated. Perhaps someone has used one for music study as
I want to.

--

73
Hank WD5JFR

"Pete KE9OA" wrote in message
news:M46dnSbmypKOxPjYnZ2dnUVZ_o2dnZ2d@comcast.com...
> Agilent has a PDF version of the 3582 manual on their website, as a free
> download.
>
> Pete
>
> "jack" wrote in message
> news:TqudnRNSmd_0IPzYnZ2dnUVZ_rSdnZ2d@comcast.com...
>> One thing which you can do with these older analyzers is measure much
>> higher
>> voltages than possible on a sound card FFT, much lower frequencies --
>> they
>> were used for vibration analysis as well as audio -- they are also very
>> well
>> isolated -- you can find a repro of the manual on EBay for ten bucks.
>>
>>
>>
>
>

5436. 5 Radio Frequency Interference Ferrite (RFI) Reducers for Round Cables

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-23 18:09:53 UTC
From: muldawer@gmail.com
Message-ID: <1164305393.592161.319420@k70g2000cwa.googlegroups.com>
Source record: 9587

5 Radio Frequency Interference Ferrite (RFI) Reducers for Round Cables

Cut down on RFI (radio frequency interference) with this effective and easy to use clamp-type split ferrite choke core. Simply snap it over any coax cable, AC or audio cord.

Features/Specifications: Split ferrite RFI reducer for round cables
Clamp-type fitting
Uses high-performance ferrites (Nickel-Zinc) that reduce high frequency noise
Split ferrite assembly are fully enclosed in a Nylon case
Can be installed before or after product setup and assembly

Package Includes: RFI reducer for round cables

Product Requirements:
Suitable round cable

RFI filters can be pretty important when cables are run through big bundles of other cables or near strong power supplies. Put this RFI reducer on your round coax, AC, or audio cord to improve the signal quality. This Radio Frequency Interference Reducer is made with high-performance ferrites (Nickel-Zinc) to ensure a better filter process. It is small, only 1.2 inches long and snaps on in an instant. Here is a picture of the product in use:
http://64.70.175.67/images/FS/RFI/RFI2.jpg

$10.00 (shipping inc.) I accept Paypal!

5437. crapthon goes on

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-23 18:16:39 UTC
From: Mark@kb9rqz.aprs
Message-ID: <lapbm2tf5gitrg1cqfg2rg1m3bo16dnba3@4ax.com>
Source record: 9588
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.swap

On 22 Nov 2006 23:27:42 -0800, "The Poet" <tcsshortwave@yahoo.com>
wrote:

>
>Slow Code wrote:
>> I just start the threads, You people need to keep them going.
>>
>> But if I see a Pro-coder getting ganged up on by CW haters, I'll
>> come back in and help kick some no-code ass.
>>
>> Sc
>
>
>Well, looks like most sensible people have your posts blocked, other
>than myself and the uninitiated... so they never see your posts to
>reply.

I don't believe in blinders that is how the jews of europe deid
>
>Me, I still find your idiocy to be somewhat entertaining... but in
>time, I too shall tire of it and decide to "clean up my boards".
>
>
>John Poet
>"License? We don't need no stinkin' license"
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5438. Re: HP 3582A ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-23 21:15:20 UTC
From: Pete KE9OA <p.gianako@comcast.net>
Message-ID: <YYCdnXiPw5D3kvvYnZ2dnUVZ_tqdnZ2d@comcast.com>
Source record: 9589
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.opinion,rec.audio.tech,rec.radio.amateur.equipment,rec.antiques.radio+phono
Body handling: HTML body converted to readable text

Hi Hank,

This unit should operate like any other spectrum analyzer. Make sure that
you have it for recursive operation. This button is just above the "ARM"
button.
It took me a little while to figure mine out too.

Pete

"Henry Kolesnik" wrote in message
news:10h9h.18130$B31.2441@newssvr27.news.prodigy.net...
> Pete
> I saw it and got it several days ago but I sure can't make the thing work
> like a spectrrum analyzer. And I know how to use a HP 141T and its
> plugins! I don't think there's anything wrong with it as it behaves per
> the manual Any other help appreciated. Perhaps someone has used one for
> music study as I want to.
>
> --
>
> 73
> Hank WD5JFR
>
> "Pete KE9OA" wrote in message
> news:M46dnSbmypKOxPjYnZ2dnUVZ_o2dnZ2d@comcast.com...
>> Agilent has a PDF version of the 3582 manual on their website, as a free
>> download.
>>
>> Pete
>>
>> "jack" wrote in message
>> news:TqudnRNSmd_0IPzYnZ2dnUVZ_rSdnZ2d@comcast.com...
>>> One thing which you can do with these older analyzers is measure much
>>> higher
>>> voltages than possible on a sound card FFT, much lower frequencies --
>>> they
>>> were used for vibration analysis as well as audio -- they are also very
>>> well
>>> isolated -- you can find a repro of the manual on EBay for ten bucks.
>>>
>>>
>>>

>>
>>
>
>

5439. FYI: Found this Radio site

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-23 23:02:22 UTC
From: Martin Johnson <ac7lk@aol.com>
Message-ID: <3oCdnQLTALoPtfvYnZ2dnUVZ_oSdnZ2d@nventure.com>
Source record: 9590
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.amateur.spacerec.radio.scanner

intersting amateur mode :

http://www.kc7zwg.org

is this illegal?

5440. OOPS FYI: UPDATE !

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-23 23:05:14 UTC
From: Martin Johnson <ac7lk@aol.com>
Message-ID: <qIOdnZdU4v_dtPvYnZ2dnUVZ_uCdnZ2d@nventure.com>
Source record: 9591
Cross-posted to: alabama.birmingham.radio.amateur,clem.hamradio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.rado.amateur.equipment,tamu.hamradio.bulletins,tnn.radio.amateur

sorry, i checked the wrong link
here is the real one:

never seen this done before.....
what is it anyway???

http://www.kc7zwg.org

is this illegal amateur radio activity ?

5441. Re: Group poll.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-23 23:10:31 UTC
From: Martin Johnson <ac7lk@aol.com>
Message-ID: <qIOdnZZU4v_nt_vYnZ2dnUVZ_uCdnZ2d@nventure.com>
Source record: 9592
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

MOTOROLA ! > of course....
http://www.kc7zwg.org
like that one......

Slow Code wrote:

> jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote in
> news:ej8knc$kn5$1@news.hawaii.edu:
>
>> John Smith <assemblywizard@gmail.com> wrote:
>>>Idiot, check your spelling, it's "group troll."
>>
>> Well, let's see if he ment "poll" or "troll":
>>
>>
>> 0 2 4 6 8 10
>> /
>> /
>> /
>> /
>> /
>> /
>> /
>> /
>> POLL-O-METER
>
>
>
> So what appliances does everyone hope Santa brings them for Xmas?
>
> HF, VHF, UHF, KENWOOD, YAESU, ICOM, Cobra?
>
>
> I couldn't think of anything for myself, so I hope I just get a some
> componants and a new soldering iron for projects so I can keep moving
> forward in ham radio.
>
> SC

5442. Re: Group poll.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 01:37:40 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <E1s9h.2642$ql2.1992@newsread3.news.pas.earthlink.net>
Source record: 9593
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"U-Know-Who" <no-one@nowhere.com> wrote in
news:Jo89h.2462$Gk5.1576@tornado.texas.rr.com:

>
> "Slow Code" <my.mail@no.spam> wrote in message
> news:Vx59h.2178$ql2.1579@newsread3.news.pas.earthlink.net...
>> Joe Bloe <abaslon@comcast.net> wrote in
>> news:oei7m2hhbvm46q3qmkkfl4k7ui4tdtqei9@4ax.com:
>>
>>> On Tue, 21 Nov 2006 00:54:50 GMT, Slow Code <my.mail@no.spam> wrote:
>>>
>>>>"U-Know-Who" <no-one@nowhere.com> wrote in
>>>>news:5lO7h.283$_H5.256@tornado.texas.rr.com:
>>>>
>>>>>
>>>>> "Slow Code" <my.mail@no.spam> wrote in message
>>>>> news:1wN7h.626$sf5.622@newsread4.news.pas.earthlink.net...
>>>>>> jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote in
>>>>>> news:ej8knc$kn5$1@news.hawaii.edu:
>>>>>>
>>>>>>> John Smith <assemblywizard@gmail.com> wrote:
>>>>>>>>Idiot, check your spelling, it's "group troll."
>>>>>>>
>>>>>>> Well, let's see if he ment "poll" or "troll":
>>>>>>>
>>>>>>>
>>>>>>> 0 2 4 6 8 10
>>>>>>> /
>>>>>>> /
>>>>>>> /
>>>>>>> /
>>>>>>> /
>>>>>>> /
>>>>>>> /
>>>>>>> /
>>>>>>> POLL-O-METER
>>>>>>
>>>>>>
>>>>>>
>>>>>> So what appliances does everyone hope Santa brings them for Xmas?
>>>>>>
>>>>>> HF, VHF, UHF, KENWOOD, YAESU, ICOM, Cobra?
>>>>>>

>>>>>>
>>>>>> I couldn't think of anything for myself, so I hope I just get a
>>>>>> some componants and a new soldering iron for projects so I can keep
>>>>>> moving forward in ham radio.
>>>>>>
>>>>>> SC
>>>>>
>>>>> And spell check for your PC. :-)
>>>>
>>>>
>>>>Which one do you have? I want Santa to bring me a different one. The
>>>>one you have doesn't work.
>>>>
>>>>SC
>>>
>>>
>>> Clip and paste to "Word for Windows". . . It's got the best spell
>>> checker in the market. Just leave it running in the backgrould and
>>> call it up when you need to type out a letter or two.
>>
>>
>> Thanks, I'll pass that on to U-Know-Who, but he probably don't have
>> word, just computer games.
>>
>> SC
>
> I have Office Pro 2003

WOW

SC

5443. Re: I just start the threads, you people have to keep them going.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 01:37:50 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <O1s9h.2647$ql2.395@newsread3.news.pas.earthlink.net>
Source record: 9594
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.swap

"The Poet" <tcsshortwave@yahoo.com> wrote in
news:1164266862.849860.131870@l12g2000cwl.googlegroups.com:

>
> Slow Code wrote:
>> I just start the threads, You people need to keep them going.
>>
>> But if I see a Pro-coder getting ganged up on by CW haters, I'll
>> come back in and help kick some no-code ass.
>>
>> Sc
>
>
> Well, looks like most sensible people have your posts blocked, other
> than myself and the uninitiated... so they never see your posts to
> reply.
>
> Me, I still find your idiocy to be somewhat entertaining... but in
> time, I too shall tire of it and decide to "clean up my boards".
>
>
> John Poet

A lot of liberals and retards have me killfiled already. I won't truely
be happy until I'm in your killfile too, then I think we'll have about all
of the liberals and retards covered and I won't have to worry about seeing
retarded follow-ups.

SC

5444. Re: Group poll.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 02:09:54 UTC
From: U-Know-Who <no-one@nowhere.com>
Message-ID: <Svs9h.2203$_H5.295@tornado.texas.rr.com>
Source record: 9595
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"Slow Code" <my.mail@no.spam> wrote in message
news:E1s9h.2642$ql2.1992@newsread3.news.pas.earthlink.net...
> "U-Know-Who" <no-one@nowhere.com> wrote in
> news:Jo89h.2462$Gk5.1576@tornado.texas.rr.com:
>
>>
>> "Slow Code" <my.mail@no.spam> wrote in message
>> news:Vx59h.2178$ql2.1579@newsread3.news.pas.earthlink.net...
>>> Joe Bloe <abaslon@comcast.net> wrote in
>>> news:oei7m2hhbvm46q3qmkkfl4k7ui4tdtqei9@4ax.com:
>>>
>>>> On Tue, 21 Nov 2006 00:54:50 GMT, Slow Code <my.mail@no.spam> wrote:
>>>>
>>>>>"U-Know-Who" <no-one@nowhere.com> wrote in
>>>>>news:5lO7h.283$_H5.256@tornado.texas.rr.com:
>>>>>
>>>>>>
>>>>>> "Slow Code" <my.mail@no.spam> wrote in message
>>>>>> news:1wN7h.626$sf5.622@newsread4.news.pas.earthlink.net...
>>>>>>> jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote in
>>>>>>> news:ej8knc$kn5$1@news.hawaii.edu:
>>>>>>>
>>>>>>>> John Smith <assemblywizard@gmail.com> wrote:
>>>>>>>>>Idiot, check your spelling, it's "group troll."
>>>>>>>>
>>>>>>>> Well, let's see if he ment "poll" or "troll":
>>>>>>>>
>>>>>>>>
>>>>>>>> 0 2 4 6 8 10
>>>>>>>> /
>>>>>>>> /
>>>>>>>> /
>>>>>>>> /
>>>>>>>> /
>>>>>>>> /
>>>>>>>> /
>>>>>>>> /
>>>>>>>> POLL-O-METER
>>>>>>>
>>>>>>>
>>>>>>>
>>>>>>> So what appliances does everyone hope Santa brings them for Xmas?
>>>>>>>

>>>>>>> HF, VHF, UHF, KENWOOD, YAESU, ICOM, Cobra?
>>>>>>>
>>>>>>>
>>>>>>> I couldn't think of anything for myself, so I hope I just get a
>>>>>>> some componants and a new soldering iron for projects so I can keep
>>>>>>> moving forward in ham radio.
>>>>>>>
>>>>>>> SC
>>>>>>
>>>>>> And spell check for your PC. :-)
>>>>>
>>>>>
>>>>>Which one do you have? I want Santa to bring me a different one. The
>>>>>one you have doesn't work.
>>>>>
>>>>>SC
>>>>
>>>>
>>>> Clip and paste to "Word for Windows". . . It's got the best spell
>>>> checker in the market. Just leave it running in the backgrould and
>>>> call it up when you need to type out a letter or two.
>>>
>>>
>>> Thanks, I'll pass that on to U-Know-Who, but he probably don't have
>>> word, just computer games.
>>>
>>> SC
>>
>> I have Office Pro 2003
>
>
> WOW
>
> SC

I ran your posts through it. It said to please excuse the idiot in Colorado
who can't afford a high-speed connection.

5445. crapthon goes on

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 02:16:28 UTC
From: Mark@kb9rqz.aprs
Message-ID: <5flcm294aom3297ibmkvf1cjabeucgmr6c@4ax.com>
Source record: 9596
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.swap

On Fri, 24 Nov 2006 01:37:50 GMT, Slow Code <my.mail@no.spam> wrote:

>"The Poet" <tcsshortwave@yahoo.com> wrote in
>news:1164266862.849860.131870@l12g2000cwl.googlegroups.com:
>
>>
>> Slow Code wrote:
>>> I just start the threads, You people need to keep them going.
>>>
>>> But if I see a Pro-coder getting ganged up on by CW haters, I'll
>>> come back in and help kick some no-code ass.
>>>
>>> Sc
>>
>>
>> Well, looks like most sensible people have your posts blocked, other
>> than myself and the uninitiated... so they never see your posts to
>> reply.
>>
>> Me, I still find your idiocy to be somewhat entertaining... but in
>> time, I too shall tire of it and decide to "clean up my boards".
>>
>>
>> John Poet
>
>
>A lot of liberals and retards have me killfiled already. I won't truely
>be happy until I'm in your killfile too, then I think we'll have about all
>of the liberals and retards covered and I won't have to worry about seeing
>retarded follow-ups.

get help old man
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5446. Re: NEW HOBBY TYPE SWAP AND SHOP and its really unique

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 03:31:00 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <gnpcm291p22nj9f6a6omom03ldn0pqh8md@4ax.com>
Source record: 9597

ORIGINAL MESSAGE:

On 23 Nov 2006 19:01:03 -0800, "ve3ab" <ve3ab@personainternet.com>
wrote:

>Hello: Earl Andrews VE3AB here. I have created a fledgling Swap and
>Shop Web Site for hobby people such as myself and your selves. A
>typical Ad is only 1 dollar per month!

---------- REPLY FOLLOWS ----------

A typical ad on rec.radio.swap is free! As is www.eham.net and
www.qth.com

It's not a bad idea, but I'd suggest you aim toward another market.
Ham radio ain't it.

Bill, W6WRT

5447. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 06:22:12 UTC
From: Mike Monett <No@email.adr>
Message-ID: <Xns9885DE0E4B95Noemailadr@208.49.80.251>
Source record: 9448

"AndyS" <andysharpe@juno.com> wrote:

>
> Mike Monett wrote:

>> "AndyS" <andysharpe@juno.com> wrote:
>>
>> > My ear copy can still pick those out, and many of the "processors"
>> > can't deal with noisy sigs in that region. They tend to fall apart
>> > when anything below tangential sensitivity is received.
>>
>> > Andy W4OAH in Eureka, Texas

[...]

> Andy comments:\
>
> Mike,

> The comments you have attributed to me in the above post
> are in error. You mistakenly copied another's comments and
> put my name in front of it..... Not a problem for me,but
> I get into enough trouble on my own without having to catch
> any hell for other people... (grin)
>
> Andy W4OAH
>

Andy, here is your complete post with the original formatting:

~~~~~~
Subject: Re: CW to FM Remodulator?
Date: 3 Nov 2006 04:27:39 -0800
From: "AndyS" <andysharpe@juno.com>
Newsgroups: rec.radio.amateur.homebrew

ka9s3@comcast.net wrote:>
> Have any of you ever done this and how did it work out for you?
>
> - Jeff

Andy writes:
Jeff, I haven't tried this method, but one rule of thumb I have
always
believed in is:
~~~~~~

"No matter how much you shift, limit, amplify or divide noise, it still
ends up as noise"

The only effective way I have ever found is to narrow the bandwidth
around the signal until the signal starts to get degraded. If done
digitally, it can be done by digital processing, but that changes only
the technique, not the principle...

So, while I would really like to try out some of these "improved
methods",
I am not confident enough in them to spend a weekend wiring together
some hardware.... In my younger years, I probly would've, tho....

Personally, as a CW operator of some 45 years, I have found that my
ears/brain does a lot better job of filtering than one would suppose,
especially
if I am copying some standard message where I sort of know the words
the other fellow will send. I only need 2 or 3 letters per word to
fill in
the pieces with devastating accuracy (grin).....

But, good luck on your efforts. If you do build up something, please

come back and post it here. I am sure that there are many
experimenters who try something like that if someone thinks it shows
promise..... But, please, take some actual measurements. And with
S/N ratios of around the 0 db level. My ear copy can still pick those

out, and many of the "processors" can't deal with noisy sigs in that
region....they tend to fall apart when anything below tangential
sensitivity is received....

Andy W4OAH in Eureka, Texas
~~~~~~

It appears everything after "Andy writes:" was written by you. If it was
written by someone else, you did not indicate so.

It also appears the Period key on your keyboard is sticking and producing
too many periods. I have gathered the extra ones and put them here in case
you run out and need some in the future:

.. ..

Regards,

Mike Monett

Antiviral, Antibacterial Silver Solution:
http://silversol.freewebpage.org/index.htm
SPICE Analysis of Crystal Oscillators:
http://silversol.freewebpage.org/spice/xtal/clapp.htm
Noise-Rejecting Wideband Sampler:
http://www3.sympatico.ca/add.automation/sampler/intro.htm
~~~~~~

5448. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 14:11:04 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <%3D9h.173$gG1.142@newsfe03.lga>
Source record: 9449

"Mike Monett" <No@email.adr> wrote in message
news:Xns9885DE0E4B95Noemailadr@208.49.80.251...
> Andy writes:
> Jeff, I haven't tried this method, but one rule of thumb I have
> always
> believed in is:
>
> "No matter how much you shift, limit, amplify or divide noise, it still
> ends up as noise"
>
> The only effective way I have ever found is to narrow the bandwidth
> around the signal until the signal starts to get degraded. If done
> digitally, it can be done by digital processing, but that changes only
> the technique, not the principle...

Actually, digital processing CAN change the principle.

FIR filters and similar digital filters do provide a way to reduce the bandwidth digitally, and as you point out, reducing the bandwidth reduces the noise. This helps the same way a crystal filter helps, except perhaps giving a little more flexibility.

However, many modern radios have digital noise reduction which is quite a different animal. With digital noise reduction, the incoming signal is analyzed to identify noise components and differentiate them from signal components. The noise is then subtracted from the signal. While this isn't perfect, it can result in quite a substantial reduction in noise without reducing bandwidth.

The combination of bandwidth reduction and digital noise reduction can greatly improve readability.

I agree that other typical analog techniques don't really affect things all that much, but I'm not convinced that the same techniques that are used for noise reduction digitally couldn't be duplicated with analog components; I've just never seen it done, and without some considerable creativity on the part of the designer it will be quite complex.

One analog behavior I have noticed that helps, at least with CW. For passive balanced mixers, there is a diode threshold voltage required for the signal to be detected. If the gain is managed so that the noise level is very close to this threshold, the signal to noise ratio seems to be improved (although I have not personally validated this analytically). Of course, if the signal is at the noise level this doesn't help, and if the signal is barely above the noise level the adjustment is too critical to be a great help, but where the signal has enough headroom, it can pretty dramatically

improve the pleasure of listening to a weak signal.

..

5449. Re: CW to FM Remodulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 14:47:23 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <%BD9h.6025$IW2.891@trndny03>
Source record: 9450

```
For passive balanced mixers, there is a diode threshold voltage required for
the signal to be detected.
----------------------------------------

This is news to me - can you please elaborate?

Joe
W3JDR

"xpyttl" <xpyttl_NOSPAM@earthling.net> wrote in message
news:%3D9h.173$gG1.142@newsfe03.lga...
> "Mike Monett" <No@email.adr> wrote in message
> news:Xns9885DE0E4B95Noemailadr@208.49.80.251...
>> Andy writes:
>> Jeff, I haven't tried this method, but one rule of thumb I have
>> always
>> believed in is:
>>
>> "No matter how much you shift, limit, amplify or divide noise, it still
>> ends up as noise"
>>
>> The only effective way I have ever found is to narrow the bandwidth
>> around the signal until the signal starts to get degraded. If done
>> digitally, it can be done by digital processing, but that changes only
>> the technique, not the principle...
>
> Actually, digital processing CAN change the principle.
>
> FIR filters and similar digital filters do provide a way to reduce the
> bandwidth digitally, and as you point out, reducing the bandwidth reduces
> the noise. This helps the same way a crystal filter helps, except perhaps
> giving a little more flexibility.
>
> However, many modern radios have digital noise reduction which is quite a
> different animal. With digital noise reduction, the incoming signal is
> analyzed to identify noise components and differentiate them from signal
> components. The noise is then subtracted from the signal. While this
> isn't perfect, it can result in quite a substantial reduction in noise
> without reducing bandwidth.
>
> The combination of bandwidth reduction and digital noise reduction can
> greatly improve readability.
>
> I agree that other typical analog techniques don't really affect things
> all that much, but I'm not convinced that the same techniques that are
```

> used for noise reduction digitally couldn't be duplicated with analog
> components; I've just never seen it done, and without some considerable
> creativity on the part of the designer it will be quite complex.
>
> One analog behavior I have noticed that helps, at least with CW. For
> passive balanced mixers, there is a diode threshold voltage required for
> the signal to be detected. If the gain is managed so that the noise level
> is very close to this threshold, the signal to noise ratio seems to be
> improved (although I have not personally validated this analytically). Of
> course, if the signal is at the noise level this doesn't help, and if the
> signal is barely above the noise level the adjustment is too critical to
> be a great help, but where the signal has enough headroom, it can pretty
> dramatically improve the pleasure of listening to a weak signal.
>
> ..
>
>

5450. Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 17:03:25 UTC
From: maxfoo <maxfoo@punkass.com>
Message-ID: <3r8em2hgqap3pbpoqi7m4dghfuouloadfp@4ax.com>
Source record: 9451
Cross-posted to: alt.binaries.schematics.electronic,sci.electronics.cad,sci.electronics.design,sci.electronics.misc,comp.arch.embedded,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

GAWD, These kids nowadays have it made!
Check out this kewl hotwheels radar gun on sale for $20.00 at Walmart.
I wonder if it's accurate though, I might just pick one up and
dissect it!!
Anyone already get one of these, is it accurate? TIA

http://www.walmart.com/catalog/product.do?product_id=4661205

5451. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 17:24:23 UTC
From: Donald <Donald@dontdoithere.com>
Message-ID: <R-SdnQxemOVUt_rYnZ2dnUVZ_r2dnZ2d@comcast.com>
Source record: 9452
Cross-posted to: alt.binaries.schematics.electronic,sci.electronics.cad,sci.electronics.design,sci.electronics.misc,comp.arch.embedded,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

maxfoo wrote:

> GAWD, These kids nowadays have it made!
> Check out this kewl hotwheels radar gun on sale for $20.00 at Walmart.
> I wonder if it's accurate though, I might just pick one up and
> dissect it!!
> Anyone already get one of these, is it accurate? TIA
>
> http://www.walmart.com/catalog/product.do?product_id=4661205
>
>
>
The link did not work.

Please post the real name of the product.

Thank You

Donald

5452. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 17:29:22 UTC
From: Donald <Donald@dontdoithere.com>
Message-ID: <R-SdnQ9emOVptvrYnZ2dnUVZ_r2dnZ2d@comcast.com>
Source record: 9453
Cross-posted to: alt.binaries.schematics.electronic,sci.electronics.cad,sci.electronics.design,sci.electronics.misc,comp.arch.embedded,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

Donald wrote:

> maxfoo wrote:
>
>> GAWD, These kids nowadays have it made!
>> Check out this kewl hotwheels radar gun on sale for $20.00 at Walmart.
>> I wonder if it's accurate though, I might just pick one up and dissect
>> it!!
>> Anyone already get one of these, is it accurate? TIA
>>
>> http://www.walmart.com/catalog/product.do?product_id=4661205
>>
>>
>>
> The link did not work.
>
> Please post the real name of the product.
>
> Thank You
>
> Donald

Never mind, it worked the third time.

donald

5453. Re: Intersil CA3162E/CA3161E A/D BCD/7Segment problem Weller Soldering Station

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 17:51:16 UTC
From: w9gb <spam_protect@arrl.net>
Message-ID: <xKGdnXt-1NCErPrYnZ2dnUVZ_uCdnZ2d@comcast.com>
Source record: 9454

"**THE-RFI-EMI-GUY**" <rhyolite@nettally.com> wrote in message
news:Y9u8h.7543$y92.6054@tornado.tampabay.rr.com...
> Subject: Intersil CA3162E/CA3161E A/D BCD/7Segment problem Weller
> Soldering Station
>
> Hi
> I am trying to fil my Weller soldering station which has lost its
> temperature readout. This particular model has the Intersil
> CA3162E/CA3161E A/D and BCD/7Segment chips. When first turned on the
> display flashes "EEE" and then goes blank. I shotgunned the repair by
> replacing the filter caps in the power supply and though I had it fixed
> but it is back to same problem.
>
> In reading the Intersil application notes for the A/D convertor I don't
> see a logical mode where EEE would be displayed
> Does anyone have advice for troubleshooting this configuration?
> --
> Joe Leikhim K4SAT
> "The RFI-EMI-GUY"&#65533;

Joe -

I went to my files and found the EC3000/EC4000 Tech Sheet (I have not yet
posted this one).
This model had the slide switch between READ and SET.

It shows an ICL 7137 as the main display IC and a MOG 2374 as the control
board IC.

The resistor values on the display board are critical for proper F readings

g. beat
w9gb

5454. Re: Intersil CA3162E/CA3161E A/D BCD/7Segment problem Weller Soldering Station

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 18:06:41 UTC
From: w9gb <spam_protect@arrl.net>
Message-ID: <XcednWgfgbkqqfrYnZ2dnUVZ_sydnZ2d@comcast.com>
Source record: 9455

"**THE-RFI-EMI-GUY**" <rhyolite@nettally.com> wrote in message
news:Y9u8h.7543$y92.6054@tornado.tampabay.rr.com...
> Subject: Intersil CA3162E/CA3161E A/D BCD/7Segment problem Weller
> Soldering Station
>
> Hi
> I am trying to fil my Weller soldering station which has lost its
> temperature readout. This particular model has the Intersil
> CA3162E/CA3161E A/D and BCD/7Segment chips. When first turned on the
> display flashes "EEE" and then goes blank. I shotgunned the repair by
> replacing the filter caps in the power supply and though I had it fixed
> but it is back to same problem.
>
> In reading the Intersil application notes for the A/D convertor I don't
> see a logical mode where EEE would be displayed
> Does anyone have advice for troubleshooting this configuration?
> --
> Joe Leikhim K4SAT
> "The RFI-EMI-GUY"

Double check the voltage on the secondary of your transformer. Red 24 VAC, Blue 9 VAC and Yellow - Common. On SOME models, like the EC3000 and EC4000 series a 1 ohm resistor is placed in series with the BLUE wire usually just inside the transformer (wrap/solder joint with wire lead).

I did have one -- where that resistor "opened" -- that caused similar problems. The 9 VAC feeds both the +5 and -5 VDC voltages using 1N4004 diodes and 3.9 Kohm dropping resistor on negative 5 and 7805 for positive 5 VDC.

w9gb

5455. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 19:08:50 UTC
From: maxfoo <maxfoo@punkass.com>
Message-ID: <cngem2pab698qdvea9as3r81m6c8kikn8o@4ax.com>
Source record: 9456
Cross-posted to: alt.binaries.schematics.electronic,sci.electronics.cad,sci.electronics.design,sci.electronics.misc,comp.arch.embedded,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

On Fri, 24 Nov 2006 10:24:23 -0700, Donald <Donald@dontdoithere.com> wrote:

>maxfoo wrote:
>
>> GAWD, These kids nowadays have it made!
>> Check out this kewl hotwheels radar gun on sale for $20.00 at Walmart.
>> I wonder if it's accurate though, I might just pick one up and
>> dissect it!!
>> Anyone already get one of these, is it accurate? TIA
>>
>> http://www.walmart.com/catalog/product.do?product_id=4661205
>>
>>
>>
>The link did not work.
>
>Please post the real name of the product.
>
>Thank You
>
>Donald

Walmart.com is temporarily unavailable due to high traffic volume. We appreciate
your patience. Please check back shortly to see our great values.

Gawd, now I have to go to the store to pick one up :(

5456. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 19:26:07 UTC
From: Impmon <impmon@digi.mon>
Message-ID: <gmhem2db2fk4227ftfkd5nak4i268qej6c@4ax.com>
Source record: 9457
Cross-posted to: alt.binaries.schematics.electronic,sci.electronics.cad,sci.electronics.design,sci.electronics.misc,comp.arch.embedded,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

On Fri, 24 Nov 2006 12:03:25 -0500, maxfoo <maxfoo@punkass.com> wrote:

>GAWD, These kids nowadays have it made!
>Check out this kewl hotwheels radar gun on sale for $20.00 at Walmart.
>I wonder if it's accurate though, I might just pick one up and
>dissect it!!
>Anyone already get one of these, is it accurate? TIA

And how high can it record speed? I'd like to try and nail a few
pimple-faced, pill-popping, high school dropouts who thinks 25MPH
speed limit means it's OK to rip down the road at 75. If it's
accurate enough, a video camera recording the speed and the offending
vehicle with its license place would stop them hopefully before they
get a new hood ornament in the form of a 3 year old child.
--
When you hear the toilet flush, and hear the words "uh oh", it's already
too late. - by anonymous Mother in Austin, TX
Spam block in place, no emil reply is expected at all.

5457. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 19:29:31 UTC
From: default <default@defaulter.net>
Message-ID: <mjhem29bjc52hfjm502cfm9f4b5q7s0fqc@4ax.com>
Source record: 9472
Cross-posted to: alt.binaries.schematics.electronic,sci.electronics.cad,sci.electronics.design,sci.electronics.misc,comp.arch.embedded,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

On Sat, 25 Nov 2006 02:39:27 GMT, Impmon <impmon@digi.mon> wrote:

>Hmmm... since it is the same as x-band, I wonder if I used those on
>freeway, maybe I could scare a few lead foots who has radar detector?
>Say I'm coasting down the expressway at posted speed limit when
>someone zips past me as if the driver's pants were on fire. Pick up
>the toy gun and zap the offending car. If the driver has radar
>detector on, he'd panic and slow down a bit.
>--

Very easy to build a gunn diode oscillator and scare the pants off
leadfoot at a 5+ mile range.

You need a gunn diode, 8 volt regulated supply, one small bypass cap
and copper end cap pipe fitting and piece of copper/ and some brass
screws to make a mount for the diode.

If you have an old radar detector with good gunn oscillator it can
also make a good X band source for triggering radar detectors - just
isolate the diode/horn sub assembly (you don't need the other parts
just the gunn diode, cavity, bypass cap and power supply). Tune the
cavity screws for maximum effect.

-----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

5458. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 19:34:47 UTC
From: default <default@defaulter.net>
Message-ID: <72iem21r81d3varidmgqe5248sa3bhi8dr@4ax.com>
Source record: 9473
Cross-posted to: alt.binaries.schematics.electronic,sci.electronics.cad,sci.electronics.design,sci.electronics.misc,comp.arch.embedded,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

On Fri, 24 Nov 2006 19:26:07 GMT, Impmon <impmon@digi.mon> wrote:

>If it's
>accurate enough, a video camera recording the speed and the offending
>vehicle with its license place would stop them hopefully before they
>get a new hood ornament in the form of a 3 year old child.
>--

A video camera with on screen timer and known distance markers could
do the same thing - poor man's Vascar system . . .

Then you'd only have to fight the bureaucracy to make a citizens
arrest stick . . . or just convince the local TV station to take up
your cause - that would probably be a lot easier than dealing directly
with government.

-----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

5459. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 19:34:55 UTC
From: maxfoo <maxfoo@punkass.com>
Message-ID: <h8iem21p36es3lpeodmrl5rupii7g3jt3m@4ax.com>
Source record: 9459
Cross-posted to: alt.binaries.schematics.electronic,sci.electronics.cad,sci.electronics.design,sci.electronics.misc,comp.arch.embedded,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

On Fri, 24 Nov 2006 14:39:59 -0500, John Popelish <jpopelish@rica.net> wrote:

>Impmon wrote:
>
>> And how high can it record speed? I'd like to try and nail a few
>> pimple-faced, pill-popping, high school dropouts who thinks 25MPH
>> speed limit means it's OK to rip down the road at 75. If it's
>> accurate enough, a video camera recording the speed and the offending
>> vehicle with its license place would stop them hopefully before they
>> get a new hood ornament in the form of a 3 year old child.
>
>I suspect its readout is scaled to Hotwheels scale, not
>actual speed.

Nope, it does "real speed" the amazon review says;

Amazon.com Review
Ever wonder just how fast you get your favorite Hot Wheels car to go? Or how speedy you are on your own bike? You donï¿½t need to be pulled over by a cop to find out. The Hot Wheels Radar Gun does the job for you, using all sorts of state-of-the-art technology. Just set the scale to 1/64th or real speed, and MPH or KPH, aim the gun at objects coming toward you or moving away, squeeze the trigger, and check out the digital readout. Simple as that! Now you can set new speed goals, and actually find out if youï¿½ve attained them. The 1/64th scale speed reflects the fact that Hot Wheels cars are 1/64th the size of a real car. So if a Hot Wheels car goes 10 MPH, the calculation is 10 MPH X 64 = 640 MPH! Now we begin to understand why those wheels are so hot! Requires four "AAA" batteries (not included).--Emilie Coulter

Product Description
Now you can read the speed of your favorite Hot Wheels racing vehicles. With point-and-read real-life styling and super-cool graphics. Not for use with some Hot Wheels vehicles. Requires 4 AAA batteries- not included.

5460. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 19:39:18 UTC
From: Dave <W1MCE@comcast.net>
Message-ID: <l8qdnWTzHqP71_rYnZ2dnUVZ_tydnZ2d@comcast.com>
Source record: 9460
Cross-posted to: alt.binaries.schematics.electronic,sci.electronics.cad,sci.electronics.design,sci.electronics.misc,comp.arch.embedded,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

maxfoo wrote:

> GAWD, These kids nowadays have it made!
> Check out this kewl hotwheels radar gun on sale for $20.00 at Walmart.
> I wonder if it's accurate though, I might just pick one up and
> dissect it!!
> Anyone already get one of these, is it accurate? TIA
>
> http://www.walmart.com/catalog/product.do?product_id=4661205
>
>
>

The link worked using Netscape 7.1 and IE 7.1

5461. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 19:39:59 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <yuudnR9GOOej1frYnZ2dnUVZ_v2dnZ2d@adelphia.com>
Source record: 9458
Cross-posted to: alt.binaries.schematics.electronic,sci.electronics.cad,sci.electronics.design,sci.electronics.misc,comp.arch.embedded,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

Impmon wrote:

> And how high can it record speed? I'd like to try and nail a few
> pimple-faced, pill-popping, high school dropouts who thinks 25MPH
> speed limit means it's OK to rip down the road at 75. If it's
> accurate enough, a video camera recording the speed and the offending
> vehicle with its license place would stop them hopefully before they
> get a new hood ornament in the form of a 3 year old child.

I suspect its readout is scaled to Hotwheels scale, not
actual speed.

5462. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 19:49:23 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <yuudnR5GOOfv1_rYnZ2dnUVZ_v2dnZ2d@adelphia.com>
Source record: 9461
Cross-posted to: alt.binaries.schematics.electronic,sci.electronics.cad,sci.electronics.design,sci.electronics.misc,comp.arch.embedded,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

maxfoo wrote:
> On Fri, 24 Nov 2006 14:39:59 -0500, John Popelish <jpopelish@rica.net> wrote:

>> I suspect its readout is scaled to Hotwheels scale, not
>> actual speed.
>
>
> Nope, it does "real speed" the amazon review says;
>
> Amazon.com Review
> Ever wonder just how fast you get your favorite Hot Wheels car to go? Or how
> speedy you are on your own bike? You don’t need to be pulled over by a cop to
> find out. The Hot Wheels Radar Gun does the job for you, using all sorts of
> state-of-the-art technology. Just set the scale to 1/64th or real speed, and MPH
> or KPH, aim the gun at objects coming toward you or moving away, squeeze the
> trigger, and check out the digital readout. Simple as that! Now you can set new
> speed goals, and actually find out if you’ve attained them. The 1/64th scale
> speed reflects the fact that Hot Wheels cars are 1/64th the size of a real car.
> So if a Hot Wheels car goes 10 MPH, the calculation is 10 MPH X 64 = 640 MPH!
> Now we begin to understand why those wheels are so hot! Requires four "AAA"
> batteries (not included).--Emilie Coulter
(snip)

I stand corrected. Thank you.

5463. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 21:20:29 UTC
From: maxfoo <maxfoo@punkass.com>
Message-ID: <kboem29mk5r7fm6bpi0bmsj7ph18e1kqbq@4ax.com>
Source record: 9462
Cross-posted to: alt.binaries.schematics.electronic,sci.electronics.cad,sci.electronics.design,sci.electronics.misc,comp.arch.embedded,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

On Fri, 24 Nov 2006 19:26:07 GMT, Impmon <impmon@digi.mon> wrote:

>On Fri, 24 Nov 2006 12:03:25 -0500, maxfoo <maxfoo@punkass.com> wrote:
>
>>GAWD, These kids nowadays have it made!
>>Check out this kewl hotwheels radar gun on sale for $20.00 at Walmart.
>>I wonder if it's accurate though, I might just pick one up and
>>dissect it!!
>>Anyone already get one of these, is it accurate? TIA
>
>And how high can it record speed? I'd like to try and nail a few
>pimple-faced, pill-popping, high school dropouts who thinks 25MPH
>speed limit means it's OK to rip down the road at 75. If it's
>accurate enough, a video camera recording the speed and the offending
>vehicle with its license place would stop them hopefully before they
>get a new hood ornament in the form of a 3 year old child.

On the box it claims it does actual speeds up to 100 MPH. It's a hot item on
EBAY, but you can get it cheaper at Walmart or Amazon, the sell it on ebay! ;)

5464. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 22:11:49 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <1M2dnRXxNvmP8_rYnZ2dnUVZ_vqdnZ2d@adelphia.com>
Source record: 9463
Cross-posted to: alt.binaries.schematics.electronic,sci.electronics.cad,sci.electronics.design,sci.electronics.misc,comp.arch.embedded,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair
Body handling: Inline uuencoded payload not displayed: spacer.gif

its a toy - doesn't say up to what speed it can read!

Features & Specifications

Now you can read the speed of your favorite Hot Wheels racing vehicles
with this Hot Wheels Radar Gun. With point-and-read real-life styling, and a
sharp, streamlined design, you'll prove once and for all who's king of the
road.

a.. Sleek red and silver design
b.. Cool graphics
c.. Simple point-and-read real life styling
d.. Not for use with some Hot Wheels vehicles
e.. Uses 4 AAA batteries, not included

Shipping Weight (in pounds): 2.0

Product in Inches (L x W x H): 15.0 x 3.75 x 10.0

Assembled in Country of Origin: Imported

Origin of Components: Imported

Wal-Mart No.: 000776692

"maxfoo" <maxfoo@punkass.com> wrote in message
news:cngem2pab698qdvea9as3r81m6c8kikn8o@4ax.com...
> On Fri, 24 Nov 2006 10:24:23 -0700, Donald <Donald@dontdoithere.com>
> wrote:
>
>>maxfoo wrote:
>>
>>> GAWD, These kids nowadays have it made!
>>> Check out this kewl hotwheels radar gun on sale for $20.00 at Walmart.
>>> I wonder if it's accurate though, I might just pick one up and
>>> dissect it!!
>>> Anyone already get one of these, is it accurate? TIA
>>>
>>> http://www.walmart.com/catalog/product.do?product_id=4661205
>>>
>>>
>>>
>>The link did not work.
>>

>>Please post the real name of the product.
>>
>>Thank You
>>
>>Donald
>
>
> Walmart.com is temporarily unavailable due to high traffic volume. We
> appreciate
> your patience. Please check back shortly to see our great values.
>
> Gawd, now I have to go to the store to pick one up :(
>
>

[Inline uuencoded payload not displayed: spacer.gif]

5465. Re: Group poll.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 22:26:15 UTC
From: Mark@kb9rqz.aprs
Message-ID: <ibsem294is2bjap55r5757hvfbiadrkilf@4ax.com>
Source record: 9464
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On 24 Nov 2006 09:28:00 GMT, Steveo <moparholic@hotmail.com> wrote:

>"U-Know-Who" <no-one@nowhere.com> wrote:
>> "Slow Code" <my.mail@no.spam> wrote in message
>> news:E1s9h.2642$ql2.1992@newsread3.news.pas.earthlink.net...
>> > "U-Know-Who" <no-one@nowhere.com> wrote in
>> > news:Jo89h.2462$Gk5.1576@tornado.texas.rr.com:
>> >
>> >>
>> >> "Slow Code" <my.mail@no.spam> wrote in message
>> >> news:Vx59h.2178$ql2.1579@newsread3.news.pas.earthlink.net...
>> >>> Joe Bloe <abaslon@comcast.net> wrote in
>> >>> news:oei7m2hhbvm46q3qmkkfl4k7ui4tdtqei9@4ax.com:
>> >>>
>> >>>> On Tue, 21 Nov 2006 00:54:50 GMT, Slow Code <my.mail@no.spam> wrote:
>> >>>>
>> >>>>>"U-Know-Who" <no-one@nowhere.com> wrote in
>> >>>>>news:5lO7h.283$_H5.256@tornado.texas.rr.com:
>> >>>>>
>> >>>>>>
>> >>>>>> "Slow Code" <my.mail@no.spam> wrote in message
>> >>>>>> news:1wN7h.626$sf5.622@newsread4.news.pas.earthlink.net...
>> >>>>>>> jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote in
>> >>>>>>> news:ej8knc$kn5$1@news.hawaii.edu:
>> >>>>>>>
>> >>>>>>>> John Smith <assemblywizard@gmail.com> wrote:
>> >>>>>>>>>Idiot, check your spelling, it's "group troll."
>> >>>>>>>>
>> >>>>>>>> Well, let's see if he ment "poll" or "troll":
>> >>>>>>>>
>> >>>>>>>>
>> >>>>>>>> 0 2 4 6 8 10
>> >>>>>>>> /
>> >>>>>>>> /
>> >>>>>>>> /
>> >>>>>>>> /
>> >>>>>>>> /
>> >>>>>>>> /
>> >>>>>>>> /
>> >>>>>>>> /
>> >>>>>>>> POLL-O-METER
>> >>>>>>>
>> >>>>>>>

>> >>>>>>>
>> >>>>>>> So what appliances does everyone hope Santa brings them for Xmas?
>> >>>>>>>
>> >>>>>>> HF, VHF, UHF, KENWOOD, YAESU, ICOM, Cobra?
>> >>>>>>>
>> >>>>>>>
>> >>>>>>> I couldn't think of anything for myself, so I hope I just get a
>> >>>>>>> some componants and a new soldering iron for projects so I can
>> >>>>>>> keep moving forward in ham radio.
>> >>>>>>>
>> >>>>>>> SC
>> >>>>>>
>> >>>>>> And spell check for your PC. :-)
>> >>>>>
>> >>>>>
>> >>>>>Which one do you have? I want Santa to bring me a different one.
>> >>>>>The one you have doesn't work.
>> >>>>>
>> >>>>>SC
>> >>>>
>> >>>>
>> >>>> Clip and paste to "Word for Windows". . . It's got the best spell
>> >>>> checker in the market. Just leave it running in the backgrould and
>> >>>> call it up when you need to type out a letter or two.
>> >>>
>> >>>
>> >>> Thanks, I'll pass that on to U-Know-Who, but he probably don't have
>> >>> word, just computer games.
>> >>>
>> >>> SC
>> >>
>> >> I have Office Pro 2003
>> >
>> >
>> > WOW
>> >
>> > SC
>>
>> I ran your posts through it. It said to please excuse the idiot in
>> Colorado who can't afford a high-speed connection.
I gues you are trying convnce me that you arw ole woger
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5466. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-24 23:54:38 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <j61fm2t1fgt67i1qtcri332mb1u60sbcvi@4ax.com>
Source record: 9465
Cross-posted to: alt.binaries.schematics.electronic,sci.electronics.cad,sci.electronics.design,sci.electronics.misc,comp.arch.embedded,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

On Fri, 24 Nov 2006 12:03:25 -0500, the renowned maxfoo
<maxfoo@punkass.com> wrote:

>GAWD, These kids nowadays have it made!
>Check out this kewl hotwheels radar gun on sale for $20.00 at Walmart.
>I wonder if it's accurate though, I might just pick one up and
>dissect it!!
>Anyone already get one of these, is it accurate? TIA
>
>http://www.walmart.com/catalog/product.do?product_id=4661205
>

Interesting. Someone must be out there flogging a set of components
for radar guns. I bought a Bushnell one for measuring baseball speed
for < $100 not too long ago. It seems to agree fairly well (within a
couple MPH) with the professional models.

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

5467. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-25 01:28:19 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <12mf71kl0u1l985@corp.supernews.com>
Source record: 9466
Cross-posted to: alt.binaries.schematics.electronic,sci.electronics.cad,sci.electronics.design,sci.electronics.misc,comp.arch.embedded,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

Unit operates on 10.525 Ghz and has a range of 39 (Thirty Nine) Feet....

Now for the laugh of the day. I was in the local Office Depot and saw a
pair of GMRS/FRS Ht's on the shelf. The package claimed 14 (Fourteen)
Miles range on GMRS High Power....

Dave N

John Doe wrote:
> its a toy - doesn't say up to what speed it can read!
>
> Features & Specifications
>
>
> Now you can read the speed of your favorite Hot Wheels racing vehicles
> with this Hot Wheels Radar Gun. With point-and-read real-life styling, and a
> sharp, streamlined design, you'll prove once and for all who's king of the
> road.
>
> a.. Sleek red and silver design
> b.. Cool graphics
> c.. Simple point-and-read real life styling
> d.. Not for use with some Hot Wheels vehicles
> e.. Uses 4 AAA batteries, not included
>
>
>
> Shipping Weight (in pounds): 2.0
>
> Product in Inches (L x W x H): 15.0 x 3.75 x 10.0
>
> Assembled in Country of Origin: Imported
>
> Origin of Components: Imported
>
> Wal-Mart No.: 000776692
>
>
>
> "maxfoo" <maxfoo@punkass.com> wrote in message
> news:cngem2pab698qdvea9as3r81m6c8kikn8o@4ax.com...
>
>>On Fri, 24 Nov 2006 10:24:23 -0700, Donald <Donald@dontdoithere.com>

>>wrote:
>>
>>
>>>maxfoo wrote:
>>>
>>>
>>>>GAWD, These kids nowadays have it made!
>>>>Check out this kewl hotwheels radar gun on sale for $20.00 at Walmart.
>>>>I wonder if it's accurate though, I might just pick one up and
>>>>dissect it!!
>>>>Anyone already get one of these, is it accurate? TIA
>>>>
>>>>http://www.walmart.com/catalog/product.do?product_id=4661205
>>>>
>>>>
>>>>
>>>
>>>The link did not work.
>>>
>>>Please post the real name of the product.
>>>
>>>Thank You
>>>
>>>Donald
>>
>>
>>Walmart.com is temporarily unavailable due to high traffic volume. We
>>appreciate
>>your patience. Please check back shortly to see our great values.
>>
>>Gawd, now I have to go to the store to pick one up :(
>>
>>
>
>
>

5468. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-25 02:10:18 UTC
From: maxfoo <maxfoo@punkass.com>
Message-ID: <ma9fm294923vh4fj34r0bhnftmld6u9jkj@4ax.com>
Source record: 9467
Cross-posted to: alt.binaries.schematics.electronic,sci.electronics.cad,sci.electronics.design,sci.electronics.misc,comp.arch.embedded,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

On Fri, 24 Nov 2006 19:28:19 -0600, "David G. Nagel" <nagel@core.com> wrote:

>Unit operates on 10.525 Ghz and has a range of 39 (Thirty Nine) Feet....

That is correct! It uses a 10.525GHz DRO circuitry.
Someone took it apart and posted the photos on the web.

http://www.austech.info/showthread.php?t=135840&page=1

5469. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-25 02:39:27 UTC
From: Impmon <impmon@digi.mon>
Message-ID: <a1bfm2tab4kdqkoo4inu83ignq8vg23r7v@4ax.com>
Source record: 9468
Cross-posted to: alt.binaries.schematics.electronic,sci.electronics.cad,sci.electronics.design,sci.electronics.misc,comp.arch.embedded,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

On Fri, 24 Nov 2006 21:10:18 -0500, maxfoo <maxfoo@punkass.com> wrote:

>>Unit operates on 10.525 Ghz and has a range of 39 (Thirty Nine) Feet....
>
>That is correct! It uses a 10.525GHz DRO circuitry.
>Someone took it apart and posted the photos on the web.
>
>http://www.austech.info/showthread.php?t=135840&page=1

Hmmm... since it is the same as x-band, I wonder if I used those on
freeway, maybe I could scare a few lead foots who has radar detector?
Say I'm coasting down the expressway at posted speed limit when
someone zips past me as if the driver's pants were on fire. Pick up
the toy gun and zap the offending car. If the driver has radar
detector on, he'd panic and slow down a bit.
--
When you hear the toilet flush, and hear the words "uh oh", it's already
too late. - by anonymous Mother in Austin, TX
Spam block in place, no emil reply is expected at all.

5470. Re: OOPS FYI: UPDATE !

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-25 14:13:50 UTC
From: Telstar Electronics <briangriffey@sbcglobal.net>
Message-ID: <1164464030.119590.170470@l12g2000cwl.googlegroups.com>
Source record: 9469

Martin Johnson wrote:
> sorry, i checked the wrong link
> here is the real one:
>
> never seen this done before.....
> what is it anyway???
>
> http://www.kc7zwg.org
>
> is this illegal amateur radio activity ?

Microwave link...

www.telstar-electronics.com

5471. Re: Group poll.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-25 16:37:01 UTC
From: U-Know-Who <no-one@nowhere.com>
Message-ID: <Ni_9h.5102$Gk5.2155@tornado.texas.rr.com>
Source record: 9470
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

```
<Mark@kb9rqz.aprs> wrote in message
news:ibsem294is2bjap55r5757hvfbiadrkilf@4ax.com...
> On 24 Nov 2006 09:28:00 GMT, Steveo <moparholic@hotmail.com> wrote:
>
>>"U-Know-Who" <no-one@nowhere.com> wrote:
>>> "Slow Code" <my.mail@no.spam> wrote in message
>>> news:E1s9h.2642$ql2.1992@newsread3.news.pas.earthlink.net...
>>> > "U-Know-Who" <no-one@nowhere.com> wrote in
>>> > news:Jo89h.2462$Gk5.1576@tornado.texas.rr.com:
>>> >
>>> >>
>>> >> "Slow Code" <my.mail@no.spam> wrote in message
>>> >> news:Vx59h.2178$ql2.1579@newsread3.news.pas.earthlink.net...
>>> >>> Joe Bloe <abaslon@comcast.net> wrote in
>>> >>> news:oei7m2hhbvm46q3qmkkfl4k7ui4tdtqei9@4ax.com:
>>> >>>
>>> >>>> On Tue, 21 Nov 2006 00:54:50 GMT, Slow Code <my.mail@no.spam>
>>> >>>> wrote:
>>> >>>>
>>> >>>>>"U-Know-Who" <no-one@nowhere.com> wrote in
>>> >>>>>news:5lO7h.283$_H5.256@tornado.texas.rr.com:
>>> >>>>>
>>> >>>>>>
>>> >>>>>> "Slow Code" <my.mail@no.spam> wrote in message
>>> >>>>>> news:1wN7h.626$sf5.622@newsread4.news.pas.earthlink.net...
>>> >>>>>>> jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote in
>>> >>>>>>> news:ej8knc$kn5$1@news.hawaii.edu:
>>> >>>>>>>
>>> >>>>>>>> John Smith <assemblywizard@gmail.com> wrote:
>>> >>>>>>>>>Idiot, check your spelling, it's "group troll."
>>> >>>>>>>>
>>> >>>>>>>> Well, let's see if he ment "poll" or "troll":
>>> >>>>>>>>
>>> >>>>>>>>
>>> >>>>>>>> 0 2 4 6 8 10
>>> >>>>>>>> /
>>> >>>>>>>> /
>>> >>>>>>>> /
>>> >>>>>>>> /
>>> >>>>>>>> /
>>> >>>>>>>> /
>>> >>>>>>>> /
>>> >>>>>>>> /
```

>>> >>>>>>>> POLL-O-METER
>>> >>>>>>>
>>> >>>>>>>
>>> >>>>>>>
>>> >>>>>>>> So what appliances does everyone hope Santa brings them for
>>> >>>>>>>> Xmas?
>>> >>>>>>>
>>> >>>>>>>> HF, VHF, UHF, KENWOOD, YAESU, ICOM, Cobra?
>>> >>>>>>>
>>> >>>>>>>
>>> >>>>>>>> I couldn't think of anything for myself, so I hope I just get a
>>> >>>>>>>> some componants and a new soldering iron for projects so I can
>>> >>>>>>>> keep moving forward in ham radio.
>>> >>>>>>>
>>> >>>>>>>> SC
>>> >>>>>>
>>> >>>>>> And spell check for your PC. :-)
>>> >>>>>
>>> >>>>>
>>> >>>>>Which one do you have? I want Santa to bring me a different one.
>>> >>>>>The one you have doesn't work.
>>> >>>>>
>>> >>>>>SC
>>> >>>>
>>> >>>>
>>> >>>> Clip and paste to "Word for Windows". . . It's got the best
>>> >>>> spell
>>> >>>> checker in the market. Just leave it running in the backgrould and
>>> >>>> call it up when you need to type out a letter or two.
>>> >>>
>>> >>>
>>> >>> Thanks, I'll pass that on to U-Know-Who, but he probably don't have
>>> >>> word, just computer games.
>>> >>>
>>> >>> SC
>>> >>
>>> >> I have Office Pro 2003
>>> >
>>> >
>>> > WOW
>>> >
>>> > SC
>>>
>>> I ran your posts through it. It said to please excuse the idiot in
>>> Colorado who can't afford a high-speed connection.
> I gues you are trying convnce me that you arw ole woger

WTF are you babbling about?

> http://kb9rqz.blogspot.com/
>

> --
> Posted via a free Usenet account from http://www.teranews.com
>

5472. Re: HP 3582A ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-26 01:44:29 UTC
From: Bret Ludwig <bretldwig@yahoo.com>
Message-ID: <1164505469.463980.294350@j44g2000cwa.googlegroups.com>
Source record: 9471
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.opinion,rec.audio.tech

Arny Krueger wrote:
> "Arny Krueger" <arnyk@hotpop.com> wrote in message
> news:osadnViG4rXoIvzYnZ2dnUVZ_oednZ2d@comcast.com
> > "jack" <jdwalton@comcast.net> wrote in message
> > news:TqudnRNSmd_0IPzYnZ2dnUVZ_rSdnZ2d@comcast.com
> >
> >> One thing which you can do with these older analyzers is
> >> measure much higher voltages than possible on a sound
> >> card FFT,
> >
> > Easy enough to address. I use a 5K RN50 potentiomenter
> > for the purpose. If I want an accurate voltage
> > measurement of audio, I use a voltmeter.
>
> Correction - make that RV4N - example:
>
> http://www.alliedelec.com/Search/ProductDetail.asp?SKU=753-1445

High dollar pots.
https://taweber.powweb.com/store/potsord.htm

wp105L-CP $4.75 1 Meg Linear, Conductive Plastic Element, 2 watts,
medium friction. Requires .390" hole.
Click for Pic

5473. Re: Intersil CA3162E/CA3161E A/D BCD/7Segment problem Weller Soldering Station

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-27 00:09:12 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <l0qah.12543$y92.5676@tornado.tampabay.rr.com>
Source record: 9474

Thanks

w9gb wrote:

>"**THE-RFI-EMI-GUY**" <rhyolite@nettally.com> wrote in message
>news:Y9u8h.7543$y92.6054@tornado.tampabay.rr.com...
>
>
>>Subject: Intersil CA3162E/CA3161E A/D BCD/7Segment problem Weller
>>Soldering Station
>>
>>Hi
>>I am trying to fil my Weller soldering station which has lost its
>>temperature readout. This particular model has the Intersil
>>CA3162E/CA3161E A/D and BCD/7Segment chips. When first turned on the
>>display flashes "EEE" and then goes blank. I shotgunned the repair by
>>replacing the filter caps in the power supply and though I had it fixed
>>but it is back to same problem.
>>
>>In reading the Intersil application notes for the A/D convertor I don't
>>see a logical mode where EEE would be displayed
>>Does anyone have advice for troubleshooting this configuration?
>>--
>>Joe Leikhim K4SAT
>>"The RFI-EMI-GUY"ï¿½
>>
>>
>
>Double check the voltage on the secondary of your transformer. Red 24 VAC,
>Blue 9 VAC and Yellow - Common. On SOME models, like the EC3000 and EC4000
>series a 1 ohm resistor is placed in series with the BLUE wire usually just
>inside the transformer (wrap/solder joint with wire lead).
>
>I did have one -- where that resistor "opened" -- that caused similar
>problems. The 9 VAC feeds both the +5 and -5 VDC voltages using 1N4004
>diodes and 3.9 Kohm dropping resistor on negative 5 and 7805 for positive 5
>VDC.
>
>w9gb
>
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

5474. Re: HP 3582A ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-27 01:47:54 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <etrah.16081$9v5.11989@newssvr29.news.prodigy.net>
Source record: 9475
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.opinion,rec.audio.tech,rec.radio.amateur.equipment,rec.antiques.radio+phono
Body handling: HTML body converted to readable text

Pete
Thanks for the tip on the ARM button now I'm getting closer to what I
know...
Next I've got figure out what all the FFT is about.
Hank
"Pete KE9OA" wrote in message
news:YYCdnXiPw5D3kvvYnZ2dnUVZ_tqdnZ2d@comcast.com...
> Hi Hank,
>
> This unit should operate like any other spectrum analyzer. Make sure that
> you have it for recursive operation. This button is just above the "ARM"
> button.
> It took me a little while to figure mine out too.
>
> Pete
>
> "Henry Kolesnik" wrote in message
> news:10h9h.18130$B31.2441@newssvr27.news.prodigy.net...
>> Pete
>> I saw it and got it several days ago but I sure can't make the thing
>> work like a spectrrum analyzer. And I know how to use a HP 141T and its
>> plugins! I don't think there's anything wrong with it as it behaves per
>> the manual Any other help appreciated. Perhaps someone has used one for
>> music study as I want to.
>>
>> --
>>
>> 73
>> Hank WD5JFR
>>
>> "Pete KE9OA" wrote in message
>> news:M46dnSbmypKOxPjYnZ2dnUVZ_o2dnZ2d@comcast.com...
>>> Agilent has a PDF version of the 3582 manual on their website, as a free
>>> download.
>>>
>>> Pete
>>>
>>> "jack" wrote in message
>>> news:TqudnRNSmd_0IPzYnZ2dnUVZ_rSdnZ2d@comcast.com...
>>>> One thing which you can do with these older analyzers is measure much
>>>> higher

>>>> voltages than possible on a sound card FFT, much lower frequencies --
>>>> they
>>>> were used for vibration analysis as well as audio -- they are also very
>>>> well
>>>> isolated -- you can find a repro of the manual on EBay for ten bucks.
>>>>
>>>>
>>>>
>>>
>>>
>>
>>
>
>

5475. Re: HP 3582A ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-27 16:32:01 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <5qEah.16239$9v5.12349@newssvr29.news.prodigy.net>
Source record: 9476
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.opinion,rec.audio.tech,rec.radio.amateur.equipment,rec.antiques.radio+phono
Body handling: HTML body converted to readable text

FYI
I just got my eBay CD with the ops and service manual and first glance tells
me that it has what I need. It's 202 pages and much more comprehensive than
the Agilent download and has examples on how to use it.
Thanks to all who tried to help me.

--

73
Hank WD5JFR
"Henry Kolesnik" wrote in message
news:etrah.16081$9v5.11989@newssvr29.news.prodigy.net...
> Pete
> Thanks for the tip on the ARM button now I'm getting closer to what I
> know...
> Next I've got figure out what all the FFT is about.
> Hank
> "Pete KE9OA" wrote in message
> news:YYCdnXiPw5D3kvvYnZ2dnUVZ_tqdnZ2d@comcast.com...
>> Hi Hank,
>>
>> This unit should operate like any other spectrum analyzer. Make sure that
>> you have it for recursive operation. This button is just above the "ARM"
>> button.
>> It took me a little while to figure mine out too.
>>
>> Pete
>>
>> "Henry Kolesnik" wrote in message
>> news:10h9h.18130$B31.2441@newssvr27.news.prodigy.net...
>>> Pete
>>> I saw it and got it several days ago but I sure can't make the thing
>>> work like a spectrrum analyzer. And I know how to use a HP 141T and its
>>> plugins! I don't think there's anything wrong with it as it behaves per
>>> the manual Any other help appreciated. Perhaps someone has used one for
>>> music study as I want to.
>>>
>>> --
>>>
>>> 73
>>> Hank WD5JFR
>>>

>>> "Pete KE9OA" wrote in message
>>> news:M46dnSbmypKOxPjYnZ2dnUVZ_o2dnZ2d@comcast.com...
>>>> Agilent has a PDF version of the 3582 manual on their website, as a
>>>> free download.
>>>>
>>>> Pete
>>>>
>>>> "jack" wrote in message
>>>> news:TqudnRNSmd_0IPzYnZ2dnUVZ_rSdnZ2d@comcast.com...
>>>>> One thing which you can do with these older analyzers is measure much
>>>>> higher
>>>>> voltages than possible on a sound card FFT, much lower frequencies --
>>>>> they
>>>>> were used for vibration analysis as well as audio -- they are also
>>>>> very well
>>>>> isolated -- you can find a repro of the manual on EBay for ten bucks.
>>>>>
>>>>>
>>>>>
>>>>
>>>>
>>>
>>>
>>
>>
>
>

5476. Re: HP 3582A ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-27 16:46:14 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <qDEah.16247$9v5.8591@newssvr29.news.prodigy.net>
Source record: 9477
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.opinion,rec.audio.tech,rec.radio.amateur.equipment,rec.antiques.radio+phono
Body handling: HTML body converted to readable text

```
Oops, ops only, no service
"Henry Kolesnik" wrote in message
news:5qEah.16239$9v5.12349@newssvr29.news.prodigy.net...
> FYI
> I just got my eBay CD with the ops and service manual and first glance
> tells me that it has what I need. It's 202 pages and much more
> comprehensive than the Agilent download and has examples on how to use it.
> Thanks to all who tried to help me.
>
> --
>
> 73
> Hank WD5JFR
> "Henry Kolesnik" wrote in message
> news:etrah.16081$9v5.11989@newssvr29.news.prodigy.net...
>> Pete
>> Thanks for the tip on the ARM button now I'm getting closer to what I
>> know...
>> Next I've got figure out what all the FFT is about.
>> Hank
>> "Pete KE9OA" wrote in message
>> news:YYCdnXiPw5D3kvvYnZ2dnUVZ_tqdnZ2d@comcast.com...
>>> Hi Hank,
>>>
>>> This unit should operate like any other spectrum analyzer. Make sure
>>> that you have it for recursive operation. This button is just above the
>>> "ARM" button.
>>> It took me a little while to figure mine out too.
>>>
>>> Pete
>>>
>>> "Henry Kolesnik" wrote in message
>>> news:10h9h.18130$B31.2441@newssvr27.news.prodigy.net...
>>>> Pete
>>>> I saw it and got it several days ago but I sure can't make the thing
>>>> work like a spectrrum analyzer. And I know how to use a HP 141T and
>>>> its plugins! I don't think there's anything wrong with it as it behaves
>>>> per the manual Any other help appreciated. Perhaps someone has used
>>>> one for music study as I want to.
>>>>
>>>> --
```

>>>>
>>>> 73
>>>> Hank WD5JFR
>>>>
>>>> "Pete KE9OA" wrote in message
>>>> news:M46dnSbmypKOxPjYnZ2dnUVZ_o2dnZ2d@comcast.com...
>>>>> Agilent has a PDF version of the 3582 manual on their website, as a
>>>>> free download.
>>>>>
>>>>> Pete
>>>>>
>>>>> "jack" wrote in message
>>>>> news:TqudnRNSmd_0IPzYnZ2dnUVZ_rSdnZ2d@comcast.com...
>>>>>> One thing which you can do with these older analyzers is measure much
>>>>>> higher
>>>>>> voltages than possible on a sound card FFT, much lower frequencies --
>>>>>> they
>>>>>> were used for vibration analysis as well as audio -- they are also
>>>>>> very well
>>>>>> isolated -- you can find a repro of the manual on EBay for ten bucks.
>>>>>>
>>>>>>
>>>>>>
>>>>>
>>>>>
>>>>
>>>>
>>>
>>>
>>
>>
>
>

5477. Re: HP 3582A ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-27 18:13:31 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1164651211.002236.24250@f16g2000cwb.googlegroups.com>
Source record: 9478

On Nov 20, 6:45 am, "Arny Krueger" <a...@hotpop.com> wrote:

> There is this amazingly good audio isolation transformer at Radio Shack.
> Sells for under $20 a pair...

Can you be a bit more specific? I found a two-channel "Ground Loop
Isolator," #270-054. Is that what you're talking about? I didn't find
much else in the way of aurio isolation transformers there. From one
of the reviews, it sounds like the frequency response may not be all
that good; there are no specs on the web site (that I could find) that
tell us what the response or distortion is.

Cheers,
Tom

5478. Re: Group poll.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-28 00:22:35 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <fjLah.4143$tM1.1155@newsread1.news.pas.earthlink.net>
Source record: 9479
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"U-Know-Who" <no-one@nowhere.com> wrote in
news:Svs9h.2203$_H5.295@tornado.texas.rr.com:

>
> "Slow Code" <my.mail@no.spam> wrote in message
> news:E1s9h.2642$ql2.1992@newsread3.news.pas.earthlink.net...
>> "U-Know-Who" <no-one@nowhere.com> wrote in
>> news:Jo89h.2462$Gk5.1576@tornado.texas.rr.com:
>>
>>>
>>> "Slow Code" <my.mail@no.spam> wrote in message
>>> news:Vx59h.2178$ql2.1579@newsread3.news.pas.earthlink.net...
>>>> Joe Bloe <abaslon@comcast.net> wrote in
>>>> news:oei7m2hhbvm46q3qmkkfl4k7ui4tdtqei9@4ax.com:
>>>>
>>>>> On Tue, 21 Nov 2006 00:54:50 GMT, Slow Code <my.mail@no.spam> wrote:
>>>>>
>>>>>"U-Know-Who" <no-one@nowhere.com> wrote in
>>>>>news:5lO7h.283$_H5.256@tornado.texas.rr.com:
>>>>>
>>>>>>
>>>>>>> "Slow Code" <my.mail@no.spam> wrote in message
>>>>>>> news:1wN7h.626$sf5.622@newsread4.news.pas.earthlink.net...
>>>>>>>> jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote in
>>>>>>>> news:ej8knc$kn5$1@news.hawaii.edu:
>>>>>>>>
>>>>>>>>> John Smith <assemblywizard@gmail.com> wrote:
>>>>>>>>>Idiot, check your spelling, it's "group troll."
>>>>>>>>>
>>>>>>>>> Well, let's see if he ment "poll" or "troll":
>>>>>>>>>
>>>>>>>>>
>>>>>>>>> 0 2 4 6 8 10
>>>>>>>>> /
>>>>>>>>> /
>>>>>>>>> /
>>>>>>>>> /
>>>>>>>>> /
>>>>>>>>> /
>>>>>>>>> /
>>>>>>>>> /
>>>>>>>>> POLL-O-METER
>>>>>>>>

>>>>>>>>
>>>>>>>>
>>>>>>>> So what appliances does everyone hope Santa brings them for Xmas?
>>>>>>>>
>>>>>>>> HF, VHF, UHF, KENWOOD, YAESU, ICOM, Cobra?
>>>>>>>>
>>>>>>>>
>>>>>>>> I couldn't think of anything for myself, so I hope I just get a
>>>>>>>> some componants and a new soldering iron for projects so I can
>>>>>>>> keep moving forward in ham radio.
>>>>>>>>
>>>>>>>> SC
>>>>>>>
>>>>>>> And spell check for your PC. :-)
>>>>>>
>>>>>>
>>>>>>Which one do you have? I want Santa to bring me a different one.
>>>>>>The one you have doesn't work.
>>>>>>
>>>>>>SC
>>>>>
>>>>>
>>>>> Clip and paste to "Word for Windows". . . It's got the best spell
>>>>> checker in the market. Just leave it running in the backgrould and
>>>>> call it up when you need to type out a letter or two.
>>>>
>>>>
>>>> Thanks, I'll pass that on to U-Know-Who, but he probably don't have
>>>> word, just computer games.
>>>>
>>>> SC
>>>
>>> I have Office Pro 2003
>>
>>
>> WOW
>>
>> SC
>
> I ran your posts through it. It said to please excuse the idiot in
> Colorado who can't afford a high-speed connection.

Your CB radio not back from the repair shop so you got to attack real
radio operators? I knew you went for those "easy-to-burn-up' Cobra and
Galaxy brand appliances.

Oh, and I don't live in colorado, I'm ya alls next door neighbor.

Howdy Neighbor. Heee Heee Heeeeeeee!
SC

5479. Re: I just crap on the threads, you people have to smell them.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-28 00:22:41 UTC
From: Markie Morgan <my.mail@no.spam>
Message-ID: <ljLah.4148$tM1.3705@newsread1.news.pas.earthlink.net>
Source record: 9480
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Mark in the Dark, wrote in
news:5flcm294aom3297ibmkvf1cjabeucgmr6c@4ax.com:

> On Fri, 24 Nov 2006 01:37:50 GMT, Slow Code <my.mail@no.spam> wrote:
>
>>"The Poet" <tcsshortwave@yahoo.com> wrote in
>>news:1164266862.849860.131870@l12g2000cwl.googlegroups.com:
>>
>>>
>>> Slow Code wrote:
>>>> I just start the threads, You people need to keep them going.
>>>>
>>>> But if I see a Pro-coder getting ganged up on by CW haters, I'll
>>>> come back in and help kick some no-code ass.
>>>>
>>>> Sc
>>>
>>>
>>> Well, looks like most sensible people have your posts blocked, other
>>> than myself and the uninitiated... so they never see your posts to
>>> reply.
>>>
>>> Me, I still find your idiocy to be somewhat entertaining... but in
>>> time, I too shall tire of it and decide to "clean up my boards".
>>>
>>>
>>> John Poet
>>
>>
>>A lot of liberals and retards have me killfiled already. I won't truely
>>be happy until I'm in your killfile too, then I think we'll have about
>>all of the liberals and retards covered and I won't have to worry about
>>seeing retarded follow-ups.
>
> get help old man

I jsut carp on thraeds, you peolpe hav to smlel them.

Mark

http://kb9rqz.blogspot.com/

5480. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-28 00:26:16 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <ImLah.4171$tM1.3684@newsread1.news.pas.earthlink.net>
Source record: 9481
Cross-posted to: alt.binaries.schematics.electronic,sci.electronics.cad,sci.electronics.design,sci.electronics.misc,comp.arch.embedded,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

maxfoo <maxfoo@punkass.com> wrote in
news:3r8em2hgqap3pbpoqi7m4dghfuouloadfp@4ax.com:

> GAWD, These kids nowadays have it made!
> Check out this kewl hotwheels radar gun on sale for $20.00 at Walmart.
> I wonder if it's accurate though, I might just pick one up and
> dissect it!!
> Anyone already get one of these, is it accurate? TIA
>
> http://www.walmart.com/catalog/product.do?product_id=4661205

They'll grow up and want to be state troopers.

SC

5481. kookathon

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-28 00:28:55 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1164673735.806539.85210@14g2000cws.googlegroups.com>
Source record: 9482
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

Markie Morgan wrote:
>
fraud

5482. Re: Group poll.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-28 00:44:19 UTC
From: Mark@kb9rqz.aprs
Message-ID: <8i1nm29084f6poimg38gl89ch1ge8rth2c@4ax.com>
Source record: 9483
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Tue, 28 Nov 2006 00:22:35 GMT, Slow Code <my.mail@no.spam> wrote:

>"U-Know-Who" <no-one@nowhere.com> wrote in
>news:Svs9h.2203$_H5.295@tornado.texas.rr.com:
>
>>
>> "Slow Code" <my.mail@no.spam> wrote in message
>> news:E1s9h.2642$ql2.1992@newsread3.news.pas.earthlink.net...
>>> "U-Know-Who" <no-one@nowhere.com> wrote in
>>> news:Jo89h.2462$Gk5.1576@tornado.texas.rr.com:
>>>
>>>>
>>>> "Slow Code" <my.mail@no.spam> wrote in message
>>>> news:Vx59h.2178$ql2.1579@newsread3.news.pas.earthlink.net...
>>>>> Joe Bloe <abaslon@comcast.net> wrote in
>>>>> news:oei7m2hhbvm46q3qmkkfl4k7ui4tdtqei9@4ax.com:
>>>>>
>>>>>> On Tue, 21 Nov 2006 00:54:50 GMT, Slow Code <my.mail@no.spam> wrote:
>>>>>>
>>>>>>>"U-Know-Who" <no-one@nowhere.com> wrote in
>>>>>>>news:5lO7h.283$_H5.256@tornado.texas.rr.com:
>>>>>>>
>>>>>>>>
>>>>>>>> "Slow Code" <my.mail@no.spam> wrote in message
>>>>>>>> news:1wN7h.626$sf5.622@newsread4.news.pas.earthlink.net...
>>>>>>>>> jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote in
>>>>>>>>> news:ej8knc$kn5$1@news.hawaii.edu:
>>>>>>>>>
>>>>>>>>>> John Smith <assemblywizard@gmail.com> wrote:
>>>>>>>>>>>Idiot, check your spelling, it's "group troll."
>>>>>>>>>>
>>>>>>>>>> Well, let's see if he ment "poll" or "troll":
>>>>>>>>>>
>>>>>>>>>>
>>>>>>>>>> 0 2 4 6 8 10
>>>>>>>>>> /
>>>>>>>>>> /
>>>>>>>>>> /
>>>>>>>>>> /
>>>>>>>>>> /
>>>>>>>>>> /
>>>>>>>>>> /
>>>>>>>>>> /

>>>>>>>>>> POLL-O-METER
>>>>>>>>>
>>>>>>>>>
>>>>>>>>>
>>>>>>>>>> So what appliances does everyone hope Santa brings them for Xmas?
>>>>>>>>>
>>>>>>>>>> HF, VHF, UHF, KENWOOD, YAESU, ICOM, Cobra?
>>>>>>>>>
>>>>>>>>>
>>>>>>>>>> I couldn't think of anything for myself, so I hope I just get a
>>>>>>>>>> some componants and a new soldering iron for projects so I can
>>>>>>>>>> keep moving forward in ham radio.
>>>>>>>>>
>>>>>>>>>> SC
>>>>>>>>
>>>>>>>> And spell check for your PC. :-)
>>>>>>>
>>>>>>>
>>>>>>>Which one do you have? I want Santa to bring me a different one.
>>>>>>>The one you have doesn't work.
>>>>>>>
>>>>>>>SC
>>>>>>
>>>>>>
>>>>>> Clip and paste to "Word for Windows". . . It's got the best spell
>>>>>> checker in the market. Just leave it running in the backgrould and
>>>>>> call it up when you need to type out a letter or two.
>>>>>
>>>>>
>>>>> Thanks, I'll pass that on to U-Know-Who, but he probably don't have
>>>>> word, just computer games.
>>>>>
>>>>> SC
>>>>
>>>> I have Office Pro 2003
>>>
>>>
>>> WOW
>>>
>>> SC
>>
>> I ran your posts through it. It said to please excuse the idiot in
>> Colorado who can't afford a high-speed connection.
>
>
>Your CB radio not back from the repair shop so you got to attack real
>radio operators? I knew you went for those "easy-to-burn-up' Cobra and
>Galaxy brand appliances.

nah stev he just misses your shit
>
>Oh, and I don't live in colorado, I'm ya alls next door neighbor.
>
>Howdy Neighbor. Heee Heee Heeeeeeee!
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5483. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-28 04:39:16 UTC
From: Donald <Donald@dontdoithere.com>
Message-ID: <MsudnQQEf-jvIPbYnZ2dnUVZ_tWdnZ2d@comcast.com>
Source record: 9484
Cross-posted to: alt.binaries.schematics.electronic,sci.electronics.cad,sci.electronics.design,sci.electronics.misc,comp.arch.embedded,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

Slow Code wrote:

>
> They'll grow up and want to be state troopers.
>
> SC

They want to grow up to shoot bullets at live people.

At least 50 at a time.

5484. Free-2007 WA1KPD Old Tyme Radio Calendar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-28 04:56:39 UTC
From: Carl WA1KPD <Nantucketbound@yahoo.com>
Message-ID: <eZSdndGU7soVXPbYnZ2dnUVZ_tqdnZ2d@comcast.com>
Source record: 9485
Cross-posted to: alt.binaries.pictures.radio,rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

The 2007 WA1KPD Old Tyme Radio Calendar is available for downloading at:

http://home.comcast.net/~chnord/wa1kpd.html

Click on the link on the top of the page and it will automatically download.

Enjoy it, share it and have a Happy 2007!

73, WA1KPD and family

--
Carl
WA1KPD
Visit My Boatanchor Collection at
http://home.comcast.net/~chnord/wa1kpd.html

5485. Re: Free-2007 WA1KPD Old Tyme Radio Calendar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-28 05:23:39 UTC
From: Jeffrey D Angus <jangus@socal.rr.com>
Message-ID: <vJPah.26692$Fg.10460@tornado.socal.rr.com>
Source record: 9487
Cross-posted to: alt.binaries.pictures.radio,rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Carl WA1KPD wrote:

> The 2007 WA1KPD Old Tyme Radio Calendar is available

Thanks Carl.

Jeff

--
RESTRICTED AREA. Anyone intruding shall immediately become subject to
the jurisdiction of military law. Intruders will be subject to lethal
force, without warning, and on sight. USE OF DEADLY FORCE IS AUTHORIZED
under the Internal Security Act of 1950.

5486. Re: Free-2007 WA1KPD Old Tyme Radio Calendar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-28 05:28:00 UTC
From: Tom Adkins <newton5@remove.comcast.net>
Message-ID: <EpSdncs-j9taWvbYnZ2dnUVZ_tadnZ2d@comcast.com>
Source record: 9486
Cross-posted to: alt.binaries.pictures.radio,rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Carl WA1KPD wrote:
> The 2007 WA1KPD Old Tyme Radio Calendar is available for downloading at:
>
> http://home.comcast.net/~chnord/wa1kpd.html
>
> Click on the link on the top of the page and it will automatically download.
>
> Enjoy it, share it and have a Happy 2007!
>
> 73, WA1KPD and family
>
> --
> Carl
> WA1KPD
> Visit My Boatanchor Collection at
> http://home.comcast.net/~chnord/wa1kpd.html
>
>
>

Hey, Thanks Carl!
Happy 2007 to you and yours!.

5487. Kenwood TS430S Repair

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-28 14:42:34 UTC
From: tladotse <w4tki.kenn@gmail.com>
Message-ID: <1164724954.578824.323140@h54g2000cwb.googlegroups.com>
Source record: 9488

I have a 430 and there is no power output. Receiver works fine. Don't know if it is the finals or the power management circuit. I have used the rig for several years and many hours of use. I was using Groton Electronics for repair but they went out of business. Does anyone know of a reliable place that will work on the Kenwood 430s.
Thanks

5488. Re: Kenwood TS430S Repair

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-28 15:11:06 UTC
From: gsm@mendelson.com
Message-ID: <slrnemok7v.6v1.gsm@cable.mendelson.com>
Source record: 9489

tladotse wrote:
> I have a 430 and there is no power output. Receiver works fine. Don't
> know if it is the finals or the power management circuit. I have used
> the rig for several years and many hours of use. I was using Groton
> Electronics for repair but they went out of business. Does anyone know
> of a reliable place that will work on the Kenwood 430s.
> Thanks

There is a TS-430 Yahoo group. Ask there. No power out can be caused by
many things, one of them is a bad connection easily fixed.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 Fax ONLY: 972-2-648-1443 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

5489. Re: NEW HOBBY TYPE SWAP AND SHOP and its really unique

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-28 19:21:18 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12mp31fe855hbb9@corp.supernews.com>
Source record: 9490

"Bill Turner" <noway@nowhow.com> wrote in message
news:gnpcm291p22nj9f6a6omom03ldn0pqh8md@4ax.com...
> A typical ad on rec.radio.swap is free! As is www.eham.net and
> www.qth.com

Yeah, but I bet that there are hundreds or thousands of times more parts sold on eBay than eHam & QTH combined... (and of course eBay isn't free) -- There's definite value in a large selection and easy search/sorting functionality.

> It's not a bad idea, but I'd suggest you aim toward another market.
> Ham radio ain't it.

I doubt he'll make enough money to cover his web hosting services bill any time soon. :-)

5490. Re: NEW HOBBY TYPE SWAP AND SHOP and its really unique

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-28 19:42:29 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnemp495.2ds.bit-bucket@shell.config.com>
Source record: 9491

```
On Tue, 28 Nov 2006 11:21:18 -0800, Joel Kolstad wrote:
> "Bill Turner" <noway@nowhow.com> wrote in message
> news:gnpcm291p22nj9f6a6omom03ldn0pqh8md@4ax.com...
>> A typical ad on rec.radio.swap is free! As is www.eham.net and
>> www.qth.com
>
> Yeah, but I bet that there are hundreds or thousands of times more parts sold
> on eBay than eHam & QTH combined... (and of course eBay isn't free) -- There's
> definite value in a large selection and easy search/sorting functionality.
>
>> It's not a bad idea, but I'd suggest you aim toward another market.
>> Ham radio ain't it.
>
> I doubt he'll make enough money to cover his web hosting services bill any
> time soon. :-)

I doubt if he'll read _any_ followups to his drive-by spam posting(s)
```

5491. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-28 19:43:28 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12mp4b1fnef4b99@corp.supernews.com>
Source record: 9492
Cross-posted to: alt.binaries.schematics.electronic,sci.electronics.cad,sci.electronics.design,sci.electronics.misc,comp.arch.embedded,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

"Spehro Pefhany" <speffSNIP@interlogDOTyou.knowwhat> wrote in message news:j61fm2t1fgt67i1qtcri332mb1u60sbcvi@4ax.com...
> Interesting. Someone must be out there flogging a set of components
> for radar guns.

If you look at the web page where they tore it apart, you'll see it's little more than a microwave transistor oscillator using a DRO, another transistor for the mix, and a PIC microcontroller for all the "smarts." The PCB itself is a pair of (planar) antennas for Tx and Rx.

Clever idea... I wouldn't be surprised if someone thought it up and realized they'd make a lot more money selling the design (and consulting on it) to toy copmanies than just publishing it in, e.g., QEX.

5492. Re: Free-2007 WA1KPD Old Tyme Radio Calendar

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-28 20:30:31 UTC
From: bcdlr <on30ng@gmail.com>
Message-ID: <1164745831.171268.294140@80g2000cwy.googlegroups.com>
Source record: 9493

Great calendar!!

Dan KB9JLO

5493. need help with xmission line xformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-28 23:01:04 UTC
From: sdeyoreo@hotmail.com
Message-ID: <0oepm21bc3hsjo1io0n0ipru5724bf63h0@4ax.com>
Source record: 9494

I work in a screening lab and have these 1:1 xmission line xformers:
http://www.futureelectronics.com/wirelessrf/docs/ETC1-1-13.pdf

I need to measure their insertion loss, per spec to 3 GHz. But I've never used one before and am not sure how to connect it.
I connected it as shown in this tutorial:
http://www.bytemark.com/products/tlttheory.htm
using an HP8753D in CW mode as a source and an HP power meter across the outputs as RL. Does that seems ok? I'm not sure about using the power meter across the output. Should I load one output and connect the power meter to the other, then measure insertion loss? Then switch load an p.m. and I would check amplitude balance also?

My problem is after "cal'ing out" my fixture, I get a bad dip in the insertion loss around 2GHz, like there's parallel C across the 'inductor' and it's resonating and opening up.

I made a short fixture on regular copper clad with 1/8inch wide traces for 50 ohm, short runs anyway, with SMAs in and out. Using the HP8753 in CW and a power meter, I took reference readings it with copper foil across where the DUT would be, then put in a DUT and took readings.

5494. WTD: QUALCOMM SYNTHESIZER BOARD (750 - 1000 MHz)

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-28 23:58:46 UTC
From: "Richard W. Solomon, W1KSZ" <w1ksz@earthlink.net>
Message-ID: <e9jpm2hpkfcbloudrh8q88rj9sh0eh93mi@4ax.com>
Source record: 9495

Anyone have one or know where I can get one ?

Thanks, Dick, W1KSZ

5495. Re: Kenwood TS430S Repair

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-29 04:49:00 UTC
From: sailtamarack@yahoo.ca
Message-ID: <1164775740.235193.154160@14g2000cws.googlegroups.com>
Source record: 9496

Check reviews of repair shops at eham:

http://www.eham.net/reviews/products/26
http://www.eham.net/forums/ModsAndRepairs/5895

Yahoo groups for advice:

http://groups.yahoo.com/group/Amateur-repairs/
http://groups.yahoo.com/group/TS-440/

Good luck - Roger

5496. Re: Kenwood TS430S Repair

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-29 12:25:24 UTC
From: Sam Morgan <ka5oai@cox.net>
Message-ID: <Q_ebh.12214$XH4.6536@newsfe14.lga>
Source record: 9497

tladotse wrote:
> I have a 430 and there is no power output. Receiver works fine. Don't
> know if it is the finals or the power management circuit. I have used
> the rig for several years and many hours of use. I was using Groton
> Electronics for repair but they went out of business. Does anyone know
> of a reliable place that will work on the Kenwood 430s.
> Thanks
>
B&B Technical Services fixed mine.
http://www.amateur-repairs.com/FULL_MONTE_TS-430.htm
Good service, did take some time, about 3 weeks, but the results were worth the
wait.

Usual disclaimer, not connected, just a satisfied customer.

5497. MILITARY SURPLUS-VAR POTS

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-29 15:21:24 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <Uzhbh.387685$QZ1.94361@bgtnsc04-news.ops.worldnet.att.net>
Source record: 9348

I have about 300 NOS from military surplus at 100K ohms, 3" shafts by CRL: body at 1.375" dia from the 1940's. I have opened and checked several of them and they all tested as marked. NO stains or rust- most are still in sealed packing. Wt is 2.5 oz sealed or 1.1 oz unpacked. Stock up while they are available. 1-10 ea $0.50 ea, 11-20 at $0.35 ea, 21- at $0.25 each. No 'handling' charges- you pay exact shipping only.

I also have some 1 meg with on-off switch and a few 5K coming soon.

Offered here before going to you-know-where.
Pse check my rating on Ebay for seller: heytubeguy

take a look at some of my other stuff while you are there: tnx

5498. Grounding crystal cases

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 00:22:51 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12ms92ses02ofa0@corp.supernews.com>
Source record: 9349

Anyone have an opinion on whether or not crystal cases (e.g., HC49, HC45, etc.) ought to be grounded or not? I've done some Googling, and I've found various cases where people recommend it (albeit without much explanation as to what they think will change when they do it) and no cases where it was specifically not recommended.

Thanks,
---Joel

5499. Re: Grounding crystal cases

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 00:28:10 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <SApbh.75$0h4.69@newsfe02.lga>
Source record: 9350

Most of the time when I've seen crystal cases grounded it has been in
crystal filters, where it is supposed to help with feedthru.

..

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> wrote in message
news:12ms92ses02ofa0@corp.supernews.com...
> Anyone have an opinion on whether or not crystal cases (e.g., HC49, HC45,
> etc.) ought to be grounded or not? I've done some Googling, and I've
> found various cases where people recommend it (albeit without much
> explanation as to what they think will change when they do it) and no
> cases where it was specifically not recommended.
>
> Thanks,
> ---Joel
>
>

5500. Re: Grounding crystal cases

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 00:58:33 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <eklabp$70c$1@theodyn.ncf.ca>
Source record: 9351

"Joel Kolstad" (JKolstad71HatesSpam@yahoo.com) writes:
> Anyone have an opinion on whether or not crystal cases (e.g., HC49, HC45,
> etc.) ought to be grounded or not? I've done some Googling, and I've found
> various cases where people recommend it (albeit without much explanation as to
> what they think will change when they do it) and no cases where it was
> specifically not recommended.
>
I don't know. FT-243 crystal sockets had no means of grounding the crystal
case, which likely wouldn't have mattered since except for the metal access
side, they were bakelite. But it was pretty common to see a grounding
"spring" on HC6 crystal holders, at least those had metal cases. ANd it
seems more common to see metal cased crystals on circuit boards grounded
than not grounded.

Now, perhaps those springs on the old HC6 sockets were there more to
hold the crystal in place. But I always assumed that by grounding them
you'd stabilize the capacitance of the case to the rest of the crystal.
If you just leave the case ungrounded, then external things can affect
that capacitance.

Obviously the case affects the tuning of the crystal. I remember one
guy writing in CQ forty years ago where he'd open up HC6 crystals so he
could grind them on frequency, and he made the point that he couldn't
measure the new frequency accurately unless the case was back on at least
partially. Given that, if you ground the case you put things at a known
level.

If nothing else, grounding the case adds mechanical stability. WIth that
in mind, is there some reason you can come up with why you shouldn't ground
the case (trying to figure that out might help to figure out whether
they should be grounded).

Michael VE2BVW

5501. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 01:24:13 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <OImdnR8FQIknr_PYnZ2dnUVZ_sidnZ2d@web-ster.com>
Source record: 9352
Cross-posted to: alt.binaries.schematics.electronic,sci.electronics.cad,sci.electronics.design,sci.electronics.misc,comp.arch.embedded,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

maxfoo wrote:

> GAWD, These kids nowadays have it made!
> Check out this kewl hotwheels radar gun on sale for $20.00 at Walmart.
> I wonder if it's accurate though, I might just pick one up and
> dissect it!!
> Anyone already get one of these, is it accurate? TIA
>
> http://www.walmart.com/catalog/product.do?product_id=4661205
>
>
>

So, can you bend it down a few hundred megahertz into the amateur 10GHz band? Without spending more than you would for a Gunnplexer?

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

5502. Re: Group poll.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 02:28:58 UTC
From: U-Know-Who <no-one@nowhere.com>
Message-ID: <KIrbh.5898$_H5.4204@tornado.texas.rr.com>
Source record: 9353
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap
Body handling: HTML body converted to readable text; Inline uuencoded payload not displayed: us.gif; Inline uuencoded payload not displayed: email.pgif?md5=31fb0db8720a7a479ee0d18335a181c6; Inline uuencoded payload not displayed: email.pgif?md5=3d7c97f9400f246e36c866d08b142fe5

```
"Slow Code" wrote in message
news:fjLah.4143$tM1.1155@newsread1.news.pas.earthlink.net...
> "U-Know-Who" wrote in
> news:Svs9h.2203$_H5.295@tornado.texas.rr.com:
>
>>
>> "Slow Code" wrote in message
>> news:E1s9h.2642$ql2.1992@newsread3.news.pas.earthlink.net...
>>> "U-Know-Who" wrote in
>>> news:Jo89h.2462$Gk5.1576@tornado.texas.rr.com:
>>>
>>>>
>>>> "Slow Code" wrote in message
>>>> news:Vx59h.2178$ql2.1579@newsread3.news.pas.earthlink.net...
>>>>> Joe Bloe wrote in
>>>>> news:oei7m2hhbvm46q3qmkkfl4k7ui4tdtqei9@4ax.com:
>>>>>
>>>>>> On Tue, 21 Nov 2006 00:54:50 GMT, Slow Code wrote:
>>>>>>
>>>>>>>"U-Know-Who" wrote in
>>>>>>>news:5lO7h.283$_H5.256@tornado.texas.rr.com:
>>>>>>>
>>>>>>>>
>>>>>>>> "Slow Code" wrote in message
>>>>>>>> news:1wN7h.626$sf5.622@newsread4.news.pas.earthlink.net...
>>>>>>>>> jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote in
>>>>>>>>> news:ej8knc$kn5$1@news.hawaii.edu:
>>>>>>>>>
>>>>>>>>>> John Smith wrote:
>>>>>>>>>>>Idiot, check your spelling, it's "group troll."
>>>>>>>>>>
>>>>>>>>>> Well, let's see if he ment "poll" or "troll":
>>>>>>>>>>
>>>>>>>>>>
>>>>>>>>>> 0 2 4 6 8 10
>>>>>>>>>> /
>>>>>>>>>> /
>>>>>>>>>> /
>>>>>>>>>> /
>>>>>>>>>> /
```

>>>>>>>>>> /
>>>>>>>>>> /
>>>>>>>>>> /
>>>>>>>>>> POLL-O-METER
>>>>>>>>>
>>>>>>>>>
>>>>>>>>>
>>>>>>>>>> So what appliances does everyone hope Santa brings them for Xmas?
>>>>>>>>>
>>>>>>>>>> HF, VHF, UHF, KENWOOD, YAESU, ICOM, Cobra?
>>>>>>>>>
>>>>>>>>>
>>>>>>>>>> I couldn't think of anything for myself, so I hope I just get a
>>>>>>>>>> some componants and a new soldering iron for projects so I can
>>>>>>>>>> keep moving forward in ham radio.
>>>>>>>>>
>>>>>>>>>> SC
>>>>>>>>>
>>>>>>>>> And spell check for your PC. :-)
>>>>>>>>
>>>>>>>>
>>>>>>>>Which one do you have? I want Santa to bring me a different one.
>>>>>>>>The one you have doesn't work.
>>>>>>>>
>>>>>>>>SC
>>>>>>
>>>>>>
>>>>>> Clip and paste to "Word for Windows". . . It's got the best spell
>>>>>> checker in the market. Just leave it running in the backgrould and
>>>>>> call it up when you need to type out a letter or two.
>>>>>
>>>>>
>>>>> Thanks, I'll pass that on to U-Know-Who, but he probably don't have
>>>>> word, just computer games.
>>>>>
>>>>> SC
>>>>
>>>> I have Office Pro 2003
>>>
>>>
>>> WOW
>>>
>>> SC
>>
>> I ran your posts through it. It said to please excuse the idiot in
>> Colorado who can't afford a high-speed connection.
>
>
> Your CB radio not back from the repair shop so you got to attack real
> radio operators? I knew you went for those "easy-to-burn-up' Cobra and

> Galaxy brand appliances.
>
> Oh, and I don't live in colorado, I'm ya alls next door neighbor.
>
> Howdy Neighbor. Heee Heee Heeeeeeee!
> SC

IP Information 4.230.12.15
Record Type: IP Address
Cached Whois: Cached today
IP Location: United States - Texas - Houston - Level 3 Communications
Inc
Reverse DNS: dialup-4.230.12.15.Dial1.Houston1.Level3.net
Blacklist Status: Currently Listed (history)

Whois Record

OrgName: Level 3 Communications, Inc.
OrgID: LVLT
Address: 1025 Eldorado Blvd.
City: Broomfield
StateProv: CO
PostalCode: 80021
Country: US

NetRange: 4.0.0.0 - 4.255.255.255
CIDR: 4.0.0.0/8
NetName: LVLT-ORG-4-8
NetHandle: NET-4-0-0-0-1
Parent:
NetType: Direct Allocation
NameServer: NS1.LEVEL3.NET
NameServer: NS2.LEVEL3.NET
Comment:
RegDate:
Updated: 2004-06-04

OrgAbuseHandle: APL8-ARIN
OrgAbuseName: Abuse POC LVLT
OrgAbusePhone: +1-877-453-8353
OrgAbuseEmail:

OrgTechHandle: ARINC4-ARIN
OrgTechName: ARIN Contact
OrgTechPhone: +1-800-436-8489
OrgTechEmail:

OrgTechHandle: TPL1-ARIN
OrgTechName: Tech POC LVLT
OrgTechPhone: +1-877-453-8353
OrgTechEmail:

Better?

[Inline uuencoded payload not displayed: us.gif]

[Inline uuencoded payload not displayed: email.pgif?md5=31fb0db8720a7a479ee0d18335a181c6]

[Inline uuencoded payload not displayed: email.pgif?md5=3d7c97f9400f246e36c866d08b142fe5]

```
begin 666 email.pgif?md5=8ecfbf2a78e928d27cd9055f00d72b6c
MB5!.1PT*&@H````-24A$4@```*D````3! ,````9JC /````&%!,5$7___\`
M``"_O[_?W]^?GY]?7U]_?W\_/S\:VQM!```!=TE$051XG.V2RT[#,!!%KVPG
M_0W+!M:C.G1M4=-U!(1N+1Y99X/Z^UR;`"TJ0ETBL.1Z[#,^F70"_(_?-?Q>
M' $CWW&54M3I@"6!2?:8]6HOGH#FJ_6#M^,XJ><#]BRX&-<_U=T?L7Z,UI)?
M'AX)CU9'9NAQO9W4\++,.V!WB\5@\7)7>#,4OFU=GHKU+]#9NW(@UKX496>%S!^'+TR1_1M#[WC%5\XQFIU(I-?*_
Z
MH3CZOEH]6B"KM&&?LH-!!W1CDO9)\,0_=5TY?TW89,8ZC>N.3=T0UM9VQ5(B
MYBB;\VPU;+X/G1+$8N6V"P&:,P0[\PBC)+#ET#Z(MA[KNH.=K8Q\R8FU=.W%
M\'(('361"Y9"H\Q6*9Q6`L4=.BGG\(*R,-5S74PEFXZEGJW*B7(.FG/I+!?M
M+,!)`.
```

5503. Radio designer software

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 03:30:00 UTC
From: Iitoi <Iitoi.2i2tpo@news.radiobanter.com>
Message-ID: <Iitoi.2i2tpo@news.radiobanter.com>
Source record: 9356

I have a copy of the old ARRL "Radio Designer" software, but it does not run on modern OS's, and ARRL has not renewed their agreement with the author.

Can anyone recommend a similarly capable software package which will run on an XP platform. Need not be freeware, but also cannot afford a professional 'commercial' package.

Suggestions?

The Man in the Maze
QRL at Baboquivari Peak, AZ

--
Iitoi

5504. Re: Kenwood TS430S Repair

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 04:03:59 UTC
From: w9gb <spam_protect@arrl.net>
Message-ID: <_4edneS1pNuvxfPYnZ2dnUVZ_qOdnZ2d@comcast.com>
Source record: 9354

"Sam Morgan" <ka5oai@cox.net> wrote in message
news:Q_ebh.12214$XH4.6536@newsfe14.lga...
> tladotse wrote:
>> I have a 430 and there is no power output. Receiver works fine. Don't
>> know if it is the finals or the power management circuit. I have used
>> the rig for several years and many hours of use. I was using Groton
>> Electronics for repair but they went out of business. Does anyone know
>> of a reliable place that will work on the Kenwood 430s.
>> Thanks
>>
> B&B Technical Services fixed mine.
> http://www.amateur-repairs.com/FULL_MONTE_TS-430.htm
> Good service, did take some time, about 3 weeks, but the results were
> worth the wait.
>
> Usual disclaimer, not connected, just a satisfied customer.

Bill Leahy, K0ZL, who is owner and chief bench tech -
is also the moderator for the TS-430 and TS-440 Yahoo groups.

w9gb

5505. Texas CB Forum

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 07:27:55 UTC
From: DJboutit <Recordking@Hotmail.com>
Message-ID: <%Jvbh.10317$Gk5.6611@tornado.texas.rr.com>
Source record: 9355

For anybody in Texas to come & chat about this great hobby CB Radio & to meet others from Texas into CB www.texascbforum.co.nr

5506. Re: Radio designer software

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 08:56:16 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <Q0xbh.1081357$084.226667@attbi_s22>
Source record: 9357

I have the Windows XP on a 2004 Dell computer, and the Radio Designer program works perfectly. I have been using that program ever since it came out, no problem. Your difficulty can probably be fixed by the right technician.

Bill W0IYH

"Iitoi" <Iitoi.2i2tpo@news.radiobanter.com> wrote in message news:Iitoi.2i2tpo@news.radiobanter.com...
>
> I have a copy of the old ARRL "Radio Designer" software, but it does not
> run on modern OS's, and ARRL has not renewed their agreement with the
> author.
>
> Can anyone recommend a similarly capable software package which will
> run on an XP platform. Need not be freeware, but also cannot afford a
> professional 'commercial' package.
>
> Suggestions?
>
> The Man in the Maze
> QRL at Baboquivari Peak, AZ
>
>
>
>
> --
> Iitoi

5507. Re: Radio designer software

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 10:24:40 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <ljybh.12800$ki3.9856@trndny01>
Source record: 9358

I also have ARRL Designer running fine under Windows XP, on an HP Pavillion computer. However, I have had problems in the past with compatibility with certain video cards, especially under Win98.

Joe
W3JDR

"William E. Sabin" <w.sabin@mchsi.com> wrote in message
news:Q0xbh.1081357$084.226667@attbi_s22...
>I have the Windows XP on a 2004 Dell computer, and the Radio Designer
>program works perfectly. I have been using that program ever since it came
>out, no problem. Your difficulty can probably be fixed by the right
>technician.
>
> Bill W0IYH
>
> "Iitoi" <Iitoi.2i2tpo@news.radiobanter.com> wrote in message
> news:Iitoi.2i2tpo@news.radiobanter.com...
>>
>> I have a copy of the old ARRL "Radio Designer" software, but it does not
>> run on modern OS's, and ARRL has not renewed their agreement with the
>> author.
>>
>> Can anyone recommend a similarly capable software package which will
>> run on an XP platform. Need not be freeware, but also cannot afford a
>> professional 'commercial' package.
>>
>> Suggestions?
>>
>> The Man in the Maze
>> QRL at Baboquivari Peak, AZ
>>
>>
>>
>>
>> --
>> Iitoi
>
>

5508. Re: Radio designer software

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 12:29:54 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <69Abh.1081494$084.483735@attbi_s22>
Source record: 9359

I also graduated from Win 98 Dell and had no trouble. I am sure the problem
can be resolved, although I am not the right person to do it.

Bill W0IYH

"W3JDR" <joe@roccis.com> wrote in message
news:Ijybh.12800$ki3.9856@trndny01...
>I also have ARRL Designer running fine under Windows XP, on an HP Pavillion
>computer. However, I have had problems in the past with compatibility with
>certain video cards, especially under Win98.
>
> Joe
> W3JDR
>
>
> "William E. Sabin" <w.sabin@mchsi.com> wrote in message
> news:Q0xbh.1081357$084.226667@attbi_s22...
>>I have the Windows XP on a 2004 Dell computer, and the Radio Designer
>>program works perfectly. I have been using that program ever since it came
>>out, no problem. Your difficulty can probably be fixed by the right
>>technician.
>>
>> Bill W0IYH
>>
>> "Iitoi" <Iitoi.2i2tpo@news.radiobanter.com> wrote in message
>> news:Iitoi.2i2tpo@news.radiobanter.com...
>>>
>>> I have a copy of the old ARRL "Radio Designer" software, but it does not
>>> run on modern OS's, and ARRL has not renewed their agreement with the
>>> author.
>>>
>>> Can anyone recommend a similarly capable software package which will
>>> run on an XP platform. Need not be freeware, but also cannot afford a
>>> professional 'commercial' package.
>>>
>>> Suggestions?
>>>
>>> The Man in the Maze
>>> QRL at Baboquivari Peak, AZ
>>>
>>>
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>>>
>>> --
>>> Iitoi

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>>
>
>

5509. Re: Grounding crystal cases

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 12:53:33 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1164891213.101071.288580@80g2000cwy.googlegroups.com>
Source record: 9360

Joel Kolstad wrote:
> Anyone have an opinion on whether or not crystal cases (e.g., HC49, HC45,
> etc.) ought to be grounded or not? I've done some Googling, and I've found
> various cases where people recommend it (albeit without much explanation as to
> what they think will change when they do it) and no cases where it was
> specifically not recommended.

For most solid-state oscillators it makes sense to ground.

For tube oscillators where the two pins to the crystal could be at high potential, it is probably better to not ground. In some Pierce or Modified Pierce oscillators you find either plate or screen potential; nominally this is supposed to be blocked by a ceramic capacitor (e.g. 0.001uF) in most designs but you'd be surprised how often this was left out!

Tim.

5510. Free PC Oscilloscope Software Preferences ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 15:54:19 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1164902059.411326.97880@80g2000cwy.googlegroups.com>
Source record: 9361
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

I am looking for a free oscilloscope program for the PC to run under Windows XP. Does anyone have any preferences ? It needs to be quasi-real....not just a toy, but it can be very simple. I have no need for spectrum analysis and single trace would suffice, but I do need a calibrated timebase, for example. So far what I have found does not meet my needs (time axis won't run slow enough, uncalibrated timebase, doesn't quite work properly on my computer....etc.).

Steve

5511. Re: Free PC Oscilloscope Software Preferences ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 16:03:19 UTC
From: psdayama <psdayama@gmail.com>
Message-ID: <1164902599.181722.219350@h54g2000cwb.googlegroups.com>
Source record: 9362
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

skavanagh72nospam@yahoo.ca wrote:

> I am looking for a free oscilloscope program for the PC to run under
> Windows XP. Does anyone have any preferences ? It needs to be
> quasi-real....not just a toy, but it can be very simple. I have no
> need for spectrum analysis and single trace would suffice, but I do
> need a calibrated timebase, for example. So far what I have found does
> not meet my needs (time axis won't run slow enough, uncalibrated
> timebase, doesn't quite work properly on my computer....etc.).
>
> Steve

What is bandwidth required? There is good 'winscope' available free
for
frequencies upto 20Khz.

5512. Re: Free PC Oscilloscope Software Preferences ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 16:22:26 UTC
From: a7yvm109gf5d1@netzero.com
Message-ID: <1164903746.654158.203950@j72g2000cwa.googlegroups.com>
Source record: 9363
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

skavanagh72nospam@yahoo.ca wrote:
> I am looking for a free oscilloscope program for the PC to run under
> Windows XP. Does anyone have any preferences ? It needs to be
> quasi-real....not just a toy, but it can be very simple. I have no
> need for spectrum analysis and single trace would suffice, but I do
> need a calibrated timebase, for example. So far what I have found does
> not meet my needs (time axis won't run slow enough, uncalibrated
> timebase, doesn't quite work properly on my computer....etc.).
>
> Steve

LOL what? An oscilloscope is hardware, what are you gonna do with
software without hardware somewhere? What are you gonna scope with this
program????
I mean you can download a free logic analyzer program, but without the
hardware what's the use?
Here's a free software that lets you control an oscilloscope...
http://www.rigolna.com/support_download.aspx

So it's free, and then what??

5513. Re: Free PC Oscilloscope Software Preferences ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 16:54:40 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1164905679.901864.13160@j72g2000cwa.googlegroups.com>
Source record: 9364
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

psdayama wrote:

> What is bandwidth required? There is good 'winscope' available free
> for frequencies upto 20Khz.

Bandwidth required is whatever the sound card can provide....so 20 kHz
is fine. But the WINSCOPE I have found (by Konstantin Zeldovich) is
limited to a 50ms scan time. I want to measure time differences of up
to at least 100ms so this is not adequate.

But thanks for your suggestion.

Steve

5514. Re: Free PC Oscilloscope Software Preferences ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 16:57:53 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1164905873.798206.295740@l12g2000cwl.googlegroups.com>
Source record: 9365
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

a7yvm109gf5d1@netzero.com wrote:

> LOL what? An oscilloscope is hardware, what are you gonna do with
> software without hardware somewhere?

Sound card !

> I mean you can download a free logic analyzer program

That could be useful in some circumstances....any suggestions as to good ones (that don't use serial ports as it has to run on a modern notebook) ?

Steve

5515. Re: Free PC Oscilloscope Software Preferences ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 17:15:44 UTC
From: Don Cleveland <don.nospam.cleveland@cisg.net>
Message-ID: <blEbh.4085$J32.2755@read1.cgocable.net>
Source record: 9366
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

<skavanagh72nospam@yahoo.ca> wrote in message
news:1164902059.411326.97880@80g2000cwy.googlegroups.com...
>I am looking for a free oscilloscope program for the PC to run under
> Windows XP. Does anyone have any preferences ? It needs to be
> quasi-real....not just a toy, but it can be very simple. I have no
> need for spectrum analysis and single trace would suffice, but I do
> need a calibrated timebase, for example. So far what I have found does
> not meet my needs (time axis won't run slow enough, uncalibrated
> timebase, doesn't quite work properly on my computer....etc.).
>
> Steve
>

Take a look at:

http://www.cleverscope.com/download/

They claim to have sound card support, so it might be worth a look.

Don

5516. Re: Free PC Oscilloscope Software Preferences ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 17:17:57 UTC
From: OBones <obones_gfd_@_gfd_altern.org>
Message-ID: <456f1241$0$31672$426a34cc@news.free.fr>
Source record: 9367
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

skavanagh72nospam@yahoo.ca wrote:

> That could be useful in some circumstances....any suggestions as to
> good ones (that don't use serial ports as it has to run on a modern
> notebook) ?

You can always use a USB to serial converter.

5517. Re: Radio designer software

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 17:35:51 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12mu5jo6pks3c21@corp.supernews.com>
Source record: 9368

"Iitoi" <Iitoi.2i2tpo@news.radiobanter.com> wrote in message
news:Iitoi.2i2tpo@news.radiobanter.com...
> Can anyone recommend a similarly capable software package which will
> run on an XP platform. Need not be freeware, but also cannot afford a
> professional 'commercial' package.

I'd suggest trying out Ansoft SV,
http://www.ansoft.com/ansoftdesignersv/capabilities.cfm. I think one can make
a good argument it's -- by far -- the most powerful free RF simulation tool
out there. The user interface is a little odd, but only a little -- nowhere
near as different as, say, Eagle PCB is. There's a excellent tutorial for it
here:
http://www.elektronikschule.de/~krausg/Ansoft%20Designer%20SV/English%20Tutorial%20Version
/index_english.html
...by Gunthard Kraus.

There's also PUFF which... holy deja vu, Batman!... Gunthard Krauss has a page
on getting to work with Windows XP. Sayre's book, "Complete Wireless Design."
is almost the unofficial manual for it. It's nowhere near as powerful as
Ansoft, but you might want to try it out anyway; in its day it was really
quite good.

---Joel Kolstad

5518. Re: Free PC Oscilloscope Software Preferences ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 18:35:08 UTC
From: a7yvm109gf5d1@netzero.com
Message-ID: <1164911708.209016.34730@16g2000cwy.googlegroups.com>
Source record: 9369
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

skavanagh72nospam@yahoo.ca wrote:
> a7yvm109gf5d1@netzero.com wrote:
>
> > LOL what? An oscilloscope is hardware, what are you gonna do with
> > software without hardware somewhere?
>
> Sound card !

Bush league amateur stuff! What probe can you use? What can you probe worth a damn with 20Hz-20KHz? Except audio itself?

5519. Re: Free PC Oscilloscope Software Preferences ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 18:47:09 UTC
From: a7yvm109gf5d1@netzero.com
Message-ID: <1164912429.103016.81610@16g2000cwy.googlegroups.com>
Source record: 9370
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

skavanagh72nospam@yahoo.ca wrote:
> a7yvm109gf5d1@netzero.com wrote:
>
> > LOL what? An oscilloscope is hardware, what are you gonna do with
> > software without hardware somewhere?
>
> Sound card !

Get real...

>
> > I mean you can download a free logic analyzer program
>
> That could be useful in some circumstances....any suggestions as to
> good ones (that don't use serial ports as it has to run on a modern
> notebook) ?

Sure, here's the free program. When you're ready, buy the logic analyzer and stop wasting time with bush league amateur stuff. It's your time to waste, but life is short.

http://www.pctestinstruments.com/downloads.htm

5520. Where to purchase Fair-Rite toroid?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 18:57:23 UTC
From: "John, N9JG" <john@Xremove.MeYgotwals.com>
Message-ID: <nQFbh.1347$eb5.349@newsreading01.news.tds.net>
Source record: 9371

Amidon sells the Fair-Rite toroid 5977003801 as Core Number FT-240-77 @ $9 each. In an attempt to get a better price, I contacted Lodestone Pacific and was told that this particular item has a "grid" of 50 which means their minimum order quantity is 50. I don't mind ordering 10 toroids, but 50 toroids would last me several lifetimes. A company called Kreg Component also handles this item, but it is on back order. Any suggestions on where to buy this toroid at a better price than Amidon?

5521. Re: Radio designer software

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 19:03:29 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <ekn9u1$e82$1@theodyn.ncf.ca>
Source record: 9372

Iitoi (Iitoi.2i2tpo@news.radiobanter.com) writes:
> I have a copy of the old ARRL "Radio Designer" software, but it does not
> run on modern OS's, and ARRL has not renewed their agreement with the
> author.
>
> Can anyone recommend a similarly capable software package which will
> run on an XP platform. Need not be freeware, but also cannot afford a
> professional 'commercial' package.
>
This has come up in the past, ever since the ARRL stopped selling the
software. Go to groups.google.com and do a search of this newsgroup using
<arrl "radio designer"> as the searchwords. You're at least going to find
discussion about alternatives after the ARRL version left the scene. It
was apparently a truncated version of some commercial software and at
one point at least there was a free student version of that commercial
software. Read the threads, and it may be helpful finding an alternative.
Though perhaps enough time has elapsed that the alternatives mentioned
have passed into history also, or don't run on recent operating systems.

Michael VE2BVW

5522. Re: Free PC Oscilloscope Software Preferences ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 19:23:50 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1164914630.712555.49460@n67g2000cwd.googlegroups.com>
Source record: 9373
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Don Cleveland wrote:

> Take a look at:
>
> http://www.cleverscope.com/download/

That works very nicely for my current requirement. Hope it doesn't
evaporate after 30 days or something !

Thanks, Don.

Steve

5523. Re: Free PC Oscilloscope Software Preferences ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 19:25:46 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1164914746.337955.174800@f1g2000cwa.googlegroups.com>
Source record: 9374
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

> Sure, here's the free program. When you're ready, buy the logic
> analyzer and stop wasting time with bush league amateur stuff.

Sometimes the bush league amateur stuff is all that is needed !

> http://www.pctestinstruments.com/downloads.htm

Thanks for the link.

Steve

5524. Re: Free PC Oscilloscope Software Preferences ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 20:03:53 UTC
From: Jan Panteltje <pNaonStpealmtje@yahoo.com>
Message-ID: <ekndfh$u6l$1@news.datemas.de>
Source record: 9375
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On a sunny day (30 Nov 2006 10:47:09 -0800) it happened
a7yvm109gf5d1@netzero.com wrote in
<1164912429.103016.81610@16g2000cwy.googlegroups.com>:

>skavanagh72nospam@yahoo.ca wrote:
>> a7yvm109gf5d1@netzero.com wrote:
>>
>> > LOL what? An oscilloscope is hardware, what are you gonna do with
>> > software without hardware somewhere?
>>
>> Sound card !
>
>Get real...
>
>>
>> > I mean you can download a free logic analyzer program
>>
>> That could be useful in some circumstances....any suggestions as to
>> good ones (that don't use serial ports as it has to run on a modern
>> notebook) ?
>
>Sure, here's the free program. When you're ready, buy the logic
>analyzer and stop wasting time with bush league amateur stuff. It's
>your time to waste, but life is short.
>
>http://www.pctestinstruments.com/downloads.htm

It should not be impossible to get a 100$ FPGA board, generate a VGA display,
use a 100MHz flash DC and have 100MHz logic analiser / digital storage scope
for little more then that plus the price of the probe and a few discrete
components.
Like for example here:
http://www.fpga4fun.com/
http://www.fpga4fun.com/digitalscope.html

5525. Re: Radio designer software

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 20:11:20 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1164917480.169829.124270@l12g2000cwl.googlegroups.com>
Source record: 9376

From: Iitoi on Wed, Nov 29 2006 7:30 pm

>I have a copy of the old ARRL "Radio Designer" software, but it does not
>run on modern OS's, and ARRL has not renewed their agreement with the
>author.
>
>Can anyone recommend a similarly capable software package which will
>run on an XP platform. Need not be freeware, but also cannot afford a
>professional 'commercial' package.
>
>Suggestions?

I would suggest "LTSpice" from Linear Technology. A freebie!

A full SPICE program that includes a schematic-capture option in
addition to the regular Netlist circuit entry. NO limitations on
number of parts. Some general-purpose models included in supplied
library. Runs fine on my XP Home operating system. Allows
printout of schematics, waveform-response displays from my system.

This SPICE derivative was originally supplied as a marketing aid
to demonstrate Linear's switched power-supply ICs...and apparently
someone at Linear had the bright idea to supply it as a freebie.
We can all benefit from that "marketing mistake" and enjoy a full-
on SPICE program.

I've already used it for a few months and find it matches the
commercially-packaged products from Intusoft and Orcad. Yes, it
does do oscillators without any need to add special components
to start one up. :-)

As with all SPICE derivatives, those not familiar with SPICE have
a learning curve that might be steep. By now, though, SPICE is
rather standardized and - usually - what is written about them in
the recent past will apply here. The schematic-capture drawing
function (converts automatically to a Netlist) is a bit clunky to
use but then so are the commercial programs that have that.

So far, the supplied models in LTSpice Library all seem to follow
the actual parts...such as with workhorse 2N3904 and 2N3906 and
1N4148 semiconductors, plus some others such as a few LEDs,
several standard zeners. Some of the inductors and capacitors
used with switching supplies are in the Library with reasonable
internal characteristics (ESR on electrolytics, DC resistance
and interwinding capacity on coils). One can add other SPICE
models with a supplied model-entry function but I've not tried

that yet...that be a prodigious side project. There's a couple of websites devoted to using LTSpice already on the 'web, one of those for modeling audio TUBE amplifiers.

www.linear.com Look in, about 5 MB FREE download.

LenAnderson@ieee.org

5526. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 21:13:48 UTC
From: Bill Jeffrey <wjeffreyAT@alum.DOTmit.edu>
Message-ID: <UPHbh.223$B42.75@newsfe12.phx>
Source record: 9377
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.repair

Tim Wescott wrote:

> maxfoo wrote:
>
>> GAWD, These kids nowadays have it made!
>> Check out this kewl hotwheels radar gun on sale for $20.00 at Walmart.
>> I wonder if it's accurate though, I might just pick one up and dissect
>> it!!
>> Anyone already get one of these, is it accurate? TIA
>>
>> http://www.walmart.com/catalog/product.do?product_id=4661205
>>
>>
>>
> So, can you bend it down a few hundred megahertz into the amateur 10GHz
> band? Without spending more than you would for a Gunnplexer?
>

Probably not if the tuning element is a DRO.

Bill

5527. Re: Free PC Oscilloscope Software Preferences ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 21:44:07 UTC
From: Clifford Heath <no@spam.please.net>
Message-ID: <456f50a7$0$16558$afc38c87@news.optusnet.com.au>
Source record: 9378
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Jan Panteltje wrote:
> It should not be impossible to get a 100$ FPGA board, generate a VGA display,
> use a 100MHz flash DC and have 100MHz logic analiser / digital storage scope

100MSPS != 100MHz

5528. Re: Free PC Oscilloscope Software Preferences ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-11-30 22:26:49 UTC
From: ian field <dai.ode@ntlworld.com>
Message-ID: <JUIbh.1101$I6.90@newsfe3-gui.ntli.net>
Source record: 9379
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"Don Cleveland" <don.nospam.cleveland@cisg.net> wrote in message
news:blEbh.4085$J32.2755@read1.cgocable.net...
>
> <skavanagh72nospam@yahoo.ca> wrote in message
> news:1164902059.411326.97880@80g2000cwy.googlegroups.com...
>>I am looking for a free oscilloscope program for the PC to run under
>> Windows XP. Does anyone have any preferences ? It needs to be
>> quasi-real....not just a toy, but it can be very simple. I have no
>> need for spectrum analysis and single trace would suffice, but I do
>> need a calibrated timebase, for example. So far what I have found does
>> not meet my needs (time axis won't run slow enough, uncalibrated
>> timebase, doesn't quite work properly on my computer....etc.).
>>
>> Steve
>>
>
> Take a look at:
>
> http://www.cleverscope.com/download/
>
> They claim to have sound card support, so it might be worth a look.
>
> Don
>
>

Thanks for the link - by sheer co-incidence I was also looking for something
like that, and it looks like a good one too.

5529. Re: Group poll.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-01 00:40:50 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <mSKbh.5852$1s6.3802@newsread2.news.pas.earthlink.net>
Source record: 9380
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

```
"U-Know-Who" <no-one@nowhere.com> wrote in
news:Klrbh.5898$_H5.4204@tornado.texas.rr.com:

>
> "Slow Code" <my.mail@no.spam> wrote in message
> news:fjLah.4143$tM1.1155@newsread1.news.pas.earthlink.net...
>> "U-Know-Who" <no-one@nowhere.com> wrote in
>> news:Svs9h.2203$_H5.295@tornado.texas.rr.com:
>>
>>>
>>> "Slow Code" <my.mail@no.spam> wrote in message
>>> news:E1s9h.2642$ql2.1992@newsread3.news.pas.earthlink.net...
>>>> "U-Know-Who" <no-one@nowhere.com> wrote in
>>>> news:Jo89h.2462$Gk5.1576@tornado.texas.rr.com:
>>>>
>>>>>
>>>>> "Slow Code" <my.mail@no.spam> wrote in message
>>>>> news:Vx59h.2178$ql2.1579@newsread3.news.pas.earthlink.net...
>>>>>> Joe Bloe <abaslon@comcast.net> wrote in
>>>>>> news:oei7m2hhbvm46q3qmkkfl4k7ui4tdtqei9@4ax.com:
>>>>>>
>>>>>>> On Tue, 21 Nov 2006 00:54:50 GMT, Slow Code <my.mail@no.spam>
>>>>>>> wrote:
>>>>>>>
>>>>>>>>"U-Know-Who" <no-one@nowhere.com> wrote in
>>>>>>>>news:5lO7h.283$_H5.256@tornado.texas.rr.com:
>>>>>>>>
>>>>>>>>>
>>>>>>>>> "Slow Code" <my.mail@no.spam> wrote in message
>>>>>>>>> news:1wN7h.626$sf5.622@newsread4.news.pas.earthlink.net...
>>>>>>>>>> jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote in
>>>>>>>>>> news:ej8knc$kn5$1@news.hawaii.edu:
>>>>>>>>>>
>>>>>>>>>>> John Smith <assemblywizard@gmail.com> wrote:
>>>>>>>>>>>>Idiot, check your spelling, it's "group troll."
>>>>>>>>>>>
>>>>>>>>>>> Well, let's see if he ment "poll" or "troll":
>>>>>>>>>>>
>>>>>>>>>>>
>>>>>>>>>> 0 2 4 6 8 10
>>>>>>>>>> /
>>>>>>>>>> /
>>>>>>>>>> /
```

>>>>>>>>>>> /
>>>>>>>>>>> /
>>>>>>>>>>> /
>>>>>>>>>>> /
>>>>>>>>>>> /
>>>>>>>>>>> POLL-O-METER
>>>>>>>>>>
>>>>>>>>>>
>>>>>>>>>>
>>>>>>>>>> So what appliances does everyone hope Santa brings them for
>>>>>>>>>> Xmas?
>>>>>>>>>>
>>>>>>>>>> HF, VHF, UHF, KENWOOD, YAESU, ICOM, Cobra?
>>>>>>>>>>
>>>>>>>>>>
>>>>>>>>>> I couldn't think of anything for myself, so I hope I just get a
>>>>>>>>>> some componants and a new soldering iron for projects so I can
>>>>>>>>>> keep moving forward in ham radio.
>>>>>>>>>>
>>>>>>>>>> SC
>>>>>>>>>
>>>>>>>>> And spell check for your PC. :-)
>>>>>>>>>
>>>>>>>>>
>>>>>>>>>Which one do you have? I want Santa to bring me a different one.
>>>>>>>>>The one you have doesn't work.
>>>>>>>>>
>>>>>>>>>SC
>>>>>>>>
>>>>>>>>
>>>>>>>> Clip and paste to "Word for Windows". . . It's got the best
>>>>>>>> spell
>>>>>>>> checker in the market. Just leave it running in the backgrould
>>>>>>>> and call it up when you need to type out a letter or two.
>>>>>>
>>>>>>
>>>>>> Thanks, I'll pass that on to U-Know-Who, but he probably don't
>>>>>> have word, just computer games.
>>>>>>
>>>>>> SC
>>>>>
>>>>> I have Office Pro 2003
>>>>
>>>>
>>>> WOW
>>>>
>>>> SC
>>>
>>> I ran your posts through it. It said to please excuse the idiot in
>>> Colorado who can't afford a high-speed connection.

>>
>>
>> Your CB radio not back from the repair shop so you got to attack real
>> radio operators? I knew you went for those "easy-to-burn-up' Cobra
>> and Galaxy brand appliances.
>>
>> Oh, and I don't live in colorado, I'm ya alls next door neighbor.
>>
>> Howdy Neighbor. Heee Heee Heeeeeeee!
>> SC
>
> IP Information 4.230.12.15
> Record Type: IP Address
> Cached Whois: Cached today
> IP Location: United States - Texas - Houston - Level 3
> Communications
> Inc
> Reverse DNS: dialup-4.230.12.15.Dial1.Houston1.Level3.net
> Blacklist Status: Currently Listed (history)
>

From: "U-Know-Who" <no-one@nowhere.com>
Subject: Re: Group poll.
Message-ID: <Klrbh.5898$_H5.4204@tornado.texas.rr.com>
Date: Thu, 30 Nov 2006 02:28:58 GMT
NNTP-Posting-Host: 67.10.92.242

nslookup 67.10.92.242
Canonical name: cpe-67-10-92-242.houston.res.rr.com
Addresses: 67.10.92.242

Howdy Neighbor!

SC

5530. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-01 00:55:42 UTC
From: maxfoo <maxfoo@punkass.com>
Message-ID: <4suum215ap2tbgprbde7s6jm47h51t3fo8@4ax.com>
Source record: 9381
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.repair

On Thu, 30 Nov 2006 14:13:48 -0700, Bill Jeffrey <wjeffreyAT@alum.DOTmit.edu>
wrote:

>
>
>Tim Wescott wrote:
>
>> maxfoo wrote:
>>
>>> GAWD, These kids nowadays have it made!
>>> Check out this kewl hotwheels radar gun on sale for $20.00 at Walmart.
>>> I wonder if it's accurate though, I might just pick one up and dissect
>>> it!!
>>> Anyone already get one of these, is it accurate? TIA
>>>
>>> http://www.walmart.com/catalog/product.do?product_id=4661205
>>>
>>>
>>>
>> So, can you bend it down a few hundred megahertz into the amateur 10GHz
>> band? Without spending more than you would for a Gunnplexer?
>>
>
>Probably not if the tuning element is a DRO.
>
>Bill

The DRO has a tuning slut above it. You might be able to tune off frequency by a
few MHz. The DRO puts out very little power <-30dBm might be a good idea to add
an amp from mini-circuit, smdi, rfmd or hittite microwave, you should be able to
get free samples from those companies. Another idea is to just get another puck
in place of the one in the cavity. free sample pucks are available at shf
microwave.

5531. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-01 01:10:35 UTC
From: maxfoo <maxfoo@punkass.com>
Message-ID: <o10vm29btutb1o4oq9iv6fuadagrh26339@4ax.com>
Source record: 9382
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.repair

On Thu, 30 Nov 2006 19:55:42 -0500, maxfoo <maxfoo@punkass.com> wrote:

>On Thu, 30 Nov 2006 14:13:48 -0700, Bill Jeffrey <wjeffreyAT@alum.DOTmit.edu>
>wrote:
>
>>
>>
>>Tim Wescott wrote:
>>
>>> maxfoo wrote:
>>>
>>>> GAWD, These kids nowadays have it made!
>>>> Check out this kewl hotwheels radar gun on sale for $20.00 at Walmart.
>>>> I wonder if it's accurate though, I might just pick one up and dissect
>>>> it!!
>>>> Anyone already get one of these, is it accurate? TIA
>>>>
>>>> http://www.walmart.com/catalog/product.do?product_id=4661205
>>>>
>>>>
>>>>
>>> So, can you bend it down a few hundred megahertz into the amateur 10GHz
>>> band? Without spending more than you would for a Gunnplexer?
>>>
>>
>>Probably not if the tuning element is a DRO.
>>
>>Bill
>
>The DRO has a tuning slut above it. You might be able to tune off frequency by a
>few MHz. The DRO puts out very little power <-30dBm might be a good idea to add
>an amp from mini-circuit, smdi, rfmd or hittite microwave, you should be able to
>get free samples from those companies. Another idea is to just get another puck
>in place of the one in the cavity. free sample pucks are available at shf
>microwave.
>
>
>
>
Also you might try trimming the cavity to give it more area thus decreasing the
frequency.
BTW, These guys sell pucks
http://www.morganelectroceramics.com/microwave/puck_resonators.htm

5532. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-01 01:17:54 UTC
From: Homer J Simpson <nobody@nowhere.com>
Message-ID: <6pLbh.7465$YV4.3023@edtnps89>
Source record: 9383
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.repair

"maxfoo" <maxfoo@punkass.com> wrote in message
news:4suum215ap2tbgprbde7s6jm47h51t3fo8@4ax.com...

> The DRO has a tuning slut above it.

Oh, the imagery!

5533. Re: Group poll.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-01 01:27:15 UTC
From: U-Know-Who <no-one@nowhere.com>
Message-ID: <TxLbh.6768$_H5.3321@tornado.texas.rr.com>
Source record: 9384
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"Slow Code" <my.mail@no.spam> wrote in message
news:mSKbh.5852$1s6.3802@newsread2.news.pas.earthlink.net...
> "U-Know-Who" <no-one@nowhere.com> wrote in
> news:Klrbh.5898$_H5.4204@tornado.texas.rr.com:
>
>>
>> "Slow Code" <my.mail@no.spam> wrote in message
>> news:fjLah.4143$tM1.1155@newsread1.news.pas.earthlink.net...
>>> "U-Know-Who" <no-one@nowhere.com> wrote in
>>> news:Svs9h.2203$_H5.295@tornado.texas.rr.com:
>>>
>>>>
>>>> "Slow Code" <my.mail@no.spam> wrote in message
>>>> news:E1s9h.2642$ql2.1992@newsread3.news.pas.earthlink.net...
>>>>> "U-Know-Who" <no-one@nowhere.com> wrote in
>>>>> news:Jo89h.2462$Gk5.1576@tornado.texas.rr.com:
>>>>>
>>>>>>
>>>>>> "Slow Code" <my.mail@no.spam> wrote in message
>>>>>> news:Vx59h.2178$ql2.1579@newsread3.news.pas.earthlink.net...
>>>>>>> Joe Bloe <abaslon@comcast.net> wrote in
>>>>>>> news:oei7m2hhbvm46q3qmkkfl4k7ui4tdtqei9@4ax.com:
>>>>>>>
>>>>>>>>> On Tue, 21 Nov 2006 00:54:50 GMT, Slow Code <my.mail@no.spam>
>>>>>>>>> wrote:
>>>>>>>>>
>>>>>>>>>>"U-Know-Who" <no-one@nowhere.com> wrote in
>>>>>>>>>>news:5lO7h.283$_H5.256@tornado.texas.rr.com:
>>>>>>>>>>
>>>>>>>>>>>
>>>>>>>>>>> "Slow Code" <my.mail@no.spam> wrote in message
>>>>>>>>>>> news:1wN7h.626$sf5.622@newsread4.news.pas.earthlink.net...
>>>>>>>>>>>> jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote in
>>>>>>>>>>>> news:ej8knc$kn5$1@news.hawaii.edu:
>>>>>>>>>>>>
>>>>>>>>>>>>> John Smith <assemblywizard@gmail.com> wrote:
>>>>>>>>>>>>>Idiot, check your spelling, it's "group troll."
>>>>>>>>>>>>>
>>>>>>>>>>>>> Well, let's see if he ment "poll" or "troll":
>>>>>>>>>>>>>
>>>>>>>>>>>>>
>>>>>>>>>>>>> 0 2 4 6 8 10
>>>>>>>>>>>>> /

>>>>>>>>>>>> /
>>>>>>>>>>>> /
>>>>>>>>>>>> /
>>>>>>>>>>>> /
>>>>>>>>>>>> /
>>>>>>>>>>>> /
>>>>>>>>>>>> /
>>>>>>>>>>>> POLL-O-METER
>>>>>>>>>>>
>>>>>>>>>>>
>>>>>>>>>>>
>>>>>>>>>>>> So what appliances does everyone hope Santa brings them for
>>>>>>>>>>>> Xmas?
>>>>>>>>>>>
>>>>>>>>>>>> HF, VHF, UHF, KENWOOD, YAESU, ICOM, Cobra?
>>>>>>>>>>>
>>>>>>>>>>>
>>>>>>>>>>>> I couldn't think of anything for myself, so I hope I just get a
>>>>>>>>>>>> some componants and a new soldering iron for projects so I can
>>>>>>>>>>>> keep moving forward in ham radio.
>>>>>>>>>>>
>>>>>>>>>>>> SC
>>>>>>>>>>>
>>>>>>>>>>>> And spell check for your PC. :-)
>>>>>>>>>>
>>>>>>>>>>
>>>>>>>>>>>Which one do you have? I want Santa to bring me a different one.
>>>>>>>>>>>The one you have doesn't work.
>>>>>>>>>>
>>>>>>>>>>>SC
>>>>>>>>>
>>>>>>>>>
>>>>>>>>>> Clip and paste to "Word for Windows". . . It's got the best
>>>>>>>>>> spell
>>>>>>>>>> checker in the market. Just leave it running in the backgrould
>>>>>>>>>> and call it up when you need to type out a letter or two.
>>>>>>>>
>>>>>>>>
>>>>>>>> Thanks, I'll pass that on to U-Know-Who, but he probably don't
>>>>>>>> have word, just computer games.
>>>>>>>>
>>>>>>>> SC
>>>>>>>
>>>>>>> I have Office Pro 2003
>>>>>
>>>>>
>>>>> WOW
>>>>>
>>>>> SC
>>>>

>>>> I ran your posts through it. It said to please excuse the idiot in
>>>> Colorado who can't afford a high-speed connection.
>>>
>>>
>>> Your CB radio not back from the repair shop so you got to attack real
>>> radio operators? I knew you went for those "easy-to-burn-up' Cobra
>>> and Galaxy brand appliances.
>>>
>>> Oh, and I don't live in colorado, I'm ya alls next door neighbor.
>>>
>>> Howdy Neighbor. Heee Heee Heeeeeeee!
>>> SC
>>
>> IP Information 4.230.12.15
>> Record Type: IP Address
>> Cached Whois: Cached today
>> IP Location: United States - Texas - Houston - Level 3
>> Communications
>> Inc
>> Reverse DNS: dialup-4.230.12.15.Dial1.Houston1.Level3.net
>> Blacklist Status: Currently Listed (history)
>>
>
>
> From: "U-Know-Who" <no-one@nowhere.com>
> Subject: Re: Group poll.
> Message-ID: <Klrbh.5898$_H5.4204@tornado.texas.rr.com>
> Date: Thu, 30 Nov 2006 02:28:58 GMT
> NNTP-Posting-Host: 67.10.92.242
>
>
> nslookup 67.10.92.242
> Canonical name: cpe-67-10-92-242.houston.res.rr.com
> Addresses: 67.10.92.242
>
>
>
> Howdy Neighbor!
>
> SC
>

Yeah, but I have high speed. I can afford it. You, well now I understand why
you like CW so much. It goes well with the spark gap that you use...of
course most hams have real equipment, but you can only use what you can
kludge together with old beer cans and salvaged copper wire.

5534. Re: Radio designer software

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-01 02:05:28 UTC
From: Ted KX4OM <kilocycles@yahoo.com>
Message-ID: <552vm2tj07pqft6hrc2736vgl33nbktbil@4ax.com>
Source record: 9385

Ansoft's Designer SV is available as a student feature-limited
download, and is the replacement for Serenade SV, upon which the ARRL
program was based. I DL'd the demo, and IMHO, it is not oriented
toward the HF RF market.

You won't find it onAnsoft'sr web site, but Serenade SV 8.5 is still
available. I sent Ansoft an email, explained that I would be using it
for amateur R&D/experimentation for the purpose of publishing in
amateur periodicals (which is true - QRP Quarterly), and they agreed
that if the Ansoft Designer SV did not meet my needs, they would try
to find a CD of Serenade SV and send it to me. In the meantime, doing
some serious Googling, I found a copy on a university web site, and I
used that. It runs fine on XP.

If you search the ARRL web site, you'll find some examples in the
January 2001 issue of QST that explored Serenade SV.

Good luck!

On Thu, 30 Nov 2006 03:30:00 +0000, Iitoi
<Iitoi.2i2tpo@news.radiobanter.com> wrote:

>
>I have a copy of the old ARRL "Radio Designer" software, but it does not
>run on modern OS's, and ARRL has not renewed their agreement with the
>author.
>
>Can anyone recommend a similarly capable software package which will
>run on an XP platform. Need not be freeware, but also cannot afford a
>professional 'commercial' package.
>
>Suggestions?
>
>The Man in the Maze
>QRL at Baboquivari Peak, AZ

5535. Re: Free PC Oscilloscope Software Preferences ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-01 02:13:03 UTC
From: Ted KX4OM <kilocycles@yahoo.com>
Message-ID: <vm3vm2psv2c5f5kn32suj76sls4kil2lhs@4ax.com>
Source record: 9386

With respect to "what can you measure", do some searching on mixing RF signals down to baseband, for example, to look at 9 MHz crystal filter performance. There have been numerous threads on Yahoo groups lately on that, so you should be able to find some info.

5536. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-01 02:30:07 UTC
From: maxfoo <maxfoo@punkass.com>
Message-ID: <hq4vm29d4cqqbfltmd8jmro6t9m9j8ikmq@4ax.com>
Source record: 9387
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.repair

On Fri, 01 Dec 2006 01:17:54 GMT, "Homer J Simpson" <nobody@nowhere.com> wrote:

>
>"maxfoo" <maxfoo@punkass.com> wrote in message
>news:4suum215ap2tbgprbde7s6jm47h51t3fo8@4ax.com...
>
>> The DRO has a tuning slut above it.
>
>Oh, the imagery!
>
>
Yup, she does a lapdance right over that puck and tunes it to excitation. :)

5537. Re: Free PC Oscilloscope Software Preferences ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-01 03:11:39 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1164942699.479569.272780@l12g2000cwl.googlegroups.com>
Source record: 9388

Ted KX4OM wrote:
> With respect to "what can you measure", do some searching on mixing RF
> signals down to baseband,

Hmmm..now you have me thinking about what can be done with this "bush league" test equipment and a downconverter....I'm thinking perhaps two-tone intermodulation tests on RF amplifers....Cleverscope does have a spectrum analyzer....

Steve

5538. Re: Where to purchase Fair-Rite toroid?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-01 04:04:12 UTC
From: sailtamarack@yahoo.ca
Message-ID: <1164945852.054478.167880@j44g2000cwa.googlegroups.com>
Source record: 9389

Try going here for vendor info:

http://www.smeter.net/forums/about125.html

Roger

John, N9JG wrote:
> Amidon sells the Fair-Rite toroid 5977003801 as Core Number FT-240-77 @ $9
> each. In an attempt to get a better price, I contacted Lodestone Pacific and
> was told that this particular item has a "grid" of 50 which means their
> minimum order quantity is 50. I don't mind ordering 10 toroids, but 50
> toroids would last me several lifetimes. A company called Kreg Component
> also handles this item, but it is on back order. Any suggestions on where to
> buy this toroid at a better price than Amidon?

5539. Re: Free PC Oscilloscope Software Preferences ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-01 04:59:45 UTC
From: sailtamarack@yahoo.ca
Message-ID: <1164949185.885305.324470@80g2000cwy.googlegroups.com>
Source record: 9390
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Visual Analyser is free. Uses your soundcard as a scope, spectrum
analyzer, audio signal generator, voltmeter etc. Scope has zoom,
trigger, calibrate, screen capture and more.

Download at http://hacca.altervista.org/

Roger

Usual disclaimer - not affiliated wit author - just a satisfied user.

skavanagh72nospam@yahoo.ca wrote:
> I am looking for a free oscilloscope program for the PC to run under
> Windows XP. Does anyone have any preferences ? It needs to be
> quasi-real....not just a toy, but it can be very simple. I have no
> need for spectrum analysis and single trace would suffice, but I do
> need a calibrated timebase, for example. So far what I have found does
> not meet my needs (time axis won't run slow enough, uncalibrated
> timebase, doesn't quite work properly on my computer....etc.).
>
> Steve

5540. Re: Free PC Oscilloscope Software Preferences ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-01 10:17:08 UTC
From: Jan Panteltje <pNaonStpealmtje@yahoo.com>
Message-ID: <ekovf5$1r2$1@news.datemas.de>
Source record: 9391
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On a sunny day (Fri, 01 Dec 2006 08:44:07 +1100) it happened Clifford Heath
<no@spam.please.net> wrote in
<456f50a7$0$16558$afc38c87@news.optusnet.com.au>:

>Jan Panteltje wrote:
>> It should not be impossible to get a 100$ FPGA board, generate a VGA display,
>> use a 100MHz flash DC and have 100MHz logic analiser / digital storage scope
>
>100MSPS != 100MHz

OK
But good enough for me.

5541. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-01 12:27:56 UTC
From: JoeBloe <joebloe@thebarattheendoftheuniverse.org>
Message-ID: <qt70n2d3focflt4epe7m4f04ihs944fbgj@4ax.com>
Source record: 9392
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.repair

On Thu, 30 Nov 2006 21:30:07 -0500, maxfoo <maxfoo@punkass.com> Gave
us:

>On Fri, 01 Dec 2006 01:17:54 GMT, "Homer J Simpson" <nobody@nowhere.com> wrote:
>
>>
>>"maxfoo" <maxfoo@punkass.com> wrote in message
>>news:4suum215ap2tbgprbde7s6jm47h51t3fo8@4ax.com...
>>
>>> The DRO has a tuning slut above it.
>>
>>Oh, the imagery!
>>
>>
>Yup, she does a lapdance right over that puck and tunes it to excitation. :)
>
Pucking perverts!

5542. Re: Those wonderful TOYS!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-01 14:30:55 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <z0Xbh.6553$Ka1.5652@news01.roc.ny>
Source record: 9393
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.repair

Bill Jeffrey wrote:
>
>
> Tim Wescott wrote:
>
>> maxfoo wrote:
>>
>>> GAWD, These kids nowadays have it made!
>>> Check out this kewl hotwheels radar gun on sale for $20.00 at Walmart.
>>> I wonder if it's accurate though, I might just pick one up and
>>> dissect it!!
>>> Anyone already get one of these, is it accurate? TIA
>>>
>>> http://www.walmart.com/catalog/product.do?product_id=4661205
>>>
>>>
>>>
>> So, can you bend it down a few hundred megahertz into the amateur
>> 10GHz band? Without spending more than you would for a Gunnplexer?
>>
>
> Probably not if the tuning element is a DRO.
>
> Bill

There's been quite a bit of discussion about the radar gun on the
Microwave mailing list, http://www.valinet.com/mailman/listinfo/microwave
and a bit on http://www.austech.info/showthread.php?t=135840

I ordered two.

- Galen, W8LNA

5543. Re: Free PC Oscilloscope Software Preferences ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-01 15:32:38 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1164987158.237972.178340@l12g2000cwl.googlegroups.com>
Source record: 9394
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

sailtamarack@yahoo.ca wrote:
> Visual Analyser is free. Uses your soundcard as a scope, spectrum
> analyzer, audio signal generator, voltmeter etc. Scope has zoom,
> trigger, calibrate, screen capture and more.
>
> Download at http://hacca.altervista.org/

Yes...that one looks pretty good for my needs too. Thanks.

Steve

5544. Re: Where to purchase Fair-Rite toroid?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-01 17:12:15 UTC
From: "Joe L." <joe@falseaddress2004.net>
Message-ID: <joe-BE5EB7.11121401122006@comcast.dca.giganews.com>
Source record: 9395

In article <nQFbh.1347$eb5.349@newsreading01.news.tds.net>,
"John, N9JG" <john@Xremove.MeYgotwals.com> wrote:

> Amidon sells the Fair-Rite toroid 5977003801 as Core Number FT-240-77 @ $9
> each. In an attempt to get a better price, I contacted Lodestone Pacific and
> was told that this particular item has a "grid" of 50 which means their
> minimum order quantity is 50. I don't mind ordering 10 toroids, but 50
> toroids would last me several lifetimes. A company called Kreg Component
> also handles this item, but it is on back order. Any suggestions on where to
> buy this toroid at a better price than Amidon?

John,

It's tough to find better pricing in low quantities. Considering that
even small toroids are at least $0.50, a big one like FT-240-77 for $9
doesn't seem out of line for 1~10 pcs. At least Amidon makes it possible
to buy in such small quantities. Another good supplier is Ocean State
Electronics (http://www.oselectronics.com) and their price is $8.75.

So, whatcha building anyway?

--
Joe K9LY

5545. Re: Where to purchase Fair-Rite toroid?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-01 17:54:06 UTC
From: "John, N9JG" <john@Xremove.MeYgotwals.com>
Message-ID: <2%Zbh.1390$eb5.709@newsreading01.news.tds.net>
Source record: 9396

Yes, Amidon's price is fair, but if I can buy 10 of these large toroids for $6 rather than $10, I would probably bite.

These toroids are for use as common-mode filters for wires leading to/from electronic equipment. My ham rig operates primarily in the bands between 1.8 & 21.5 MHz.

"Joe L." <joe@falseaddress2004.net> wrote in message news:joe-BE5EB7.11121401122006@comcast.dca.giganews.com...
> In article <nQFbh.1347$eb5.349@newsreading01.news.tds.net>,
> "John, N9JG" <john@Xremove.MeYgotwals.com> wrote:
>
>> Amidon sells the Fair-Rite toroid 5977003801 as Core Number FT-240-77 @
>> $9
>> each. In an attempt to get a better price, I contacted Lodestone Pacific
>> and
>> was told that this particular item has a "grid" of 50 which means their
>> minimum order quantity is 50. I don't mind ordering 10 toroids, but 50
>> toroids would last me several lifetimes. A company called Kreg Component
>> also handles this item, but it is on back order. Any suggestions on where
>> to
>> buy this toroid at a better price than Amidon?
>
> John,
>
> It's tough to find better pricing in low quantities. Considering that
> even small toroids are at least $0.50, a big one like FT-240-77 for $9
> doesn't seem out of line for 1~10 pcs. At least Amidon makes it possible
> to buy in such small quantities. Another good supplier is Ocean State
> Electronics (http://www.oselectronics.com) and their price is $8.75.
>
> So, whatcha building anyway?
>
> --
> Joe K9LY

5546. Re: Where to purchase Fair-Rite toroid?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-01 19:45:57 UTC
From: dplatt@radagast.org
Message-ID: <12n11jlm8qb5g0b@corp.supernews.com>
Source record: 9397

In article <2%Zbh.1390$eb5.709@newsreading01.news.tds.net>,
John, N9JG <john@Xremove.MeYgotwals.com> wrote:

>Yes, Amidon's price is fair, but if I can buy 10 of these large toroids for
>$6 rather than $10, I would probably bite.
>
>These toroids are for use as common-mode filters for wires leading to/from
>electronic equipment. My ham rig operates primarily in the bands between 1.8
>& 21.5 MHz.

You might want to check with electronic-surplus stores. Most of the ones around here have a fair supply of ferrite cylinders and toroids of various sizes (some pre-wound with wire, others bare). A lot of them appear to have been intended for power-supply filtering applications of one sort or another, and might be suitable for your needs.

Being that they're ferrite, there's little or no standardization in labelling or color coding (and many of them are "naked" ferrite with no coding at all) - you'd have to buy a few, and then run some inductance-vs.-frequency tests to see if you could figure out what sort of ferrite mix was used and whether its inductance and loss in your frequency range is acceptable.

It's a bit of a carp-shoot, but if you're lucky you might be able to pick up a bunch of usable ones (if not necessarily of the exact same size and mix you were thinking of) for rather less money... maybe as little as a dollar or two each.

Hmmm. As an example, I just checked one surplus dealer (www.mpja.com) and see that they have a Magnetics ferrite toroid, 1.9" OD, made by Magnetics, of a type "J" ferrite mix (permeability 5000), intended for EMI/RFI filtering (and for broadband transformers below 1 MHz). Data sheet for this mix can be found at

http://www.mag-inc.com/pdf/Ferrites/2006_Materials_J.pdf

MPJA sells these for $3.95 each in onesies, $2.95 if you want 20 or more. If those would do, you could buy 20 for the same $60 that you were hoping to be able to spend for ten of the Fair-Rite toroids.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5547. Re: Group poll.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-02 01:41:42 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <qR4ch.5481$sf5.538@newsread4.news.pas.earthlink.net>
Source record: 9398
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

"U-Know-Who" <no-one@nowhere.com> wrote in
news:TxLbh.6768$_H5.3321@tornado.texas.rr.com:

>
> "Slow Code" <my.mail@no.spam> wrote in message
> news:mSKbh.5852$1s6.3802@newsread2.news.pas.earthlink.net...
>> "U-Know-Who" <no-one@nowhere.com> wrote in
>> news:Klrbh.5898$_H5.4204@tornado.texas.rr.com:
>>
>>>
>>> "Slow Code" <my.mail@no.spam> wrote in message
>>> news:fjLah.4143$tM1.1155@newsread1.news.pas.earthlink.net...
>>>> "U-Know-Who" <no-one@nowhere.com> wrote in
>>>> news:Svs9h.2203$_H5.295@tornado.texas.rr.com:
>>>>
>>>>>
>>>>> "Slow Code" <my.mail@no.spam> wrote in message
>>>>> news:E1s9h.2642$ql2.1992@newsread3.news.pas.earthlink.net...
>>>>>> "U-Know-Who" <no-one@nowhere.com> wrote in
>>>>>> news:Jo89h.2462$Gk5.1576@tornado.texas.rr.com:
>>>>>>
>>>>>>>
>>>>>>> "Slow Code" <my.mail@no.spam> wrote in message
>>>>>>> news:Vx59h.2178$ql2.1579@newsread3.news.pas.earthlink.net...
>>>>>>>> Joe Bloe <abaslon@comcast.net> wrote in
>>>>>>>> news:oei7m2hhbvm46q3qmkkfl4k7ui4tdtqei9@4ax.com:
>>>>>>>>
>>>>>>>>> On Tue, 21 Nov 2006 00:54:50 GMT, Slow Code <my.mail@no.spam>
>>>>>>>>> wrote:
>>>>>>>>>
>>>>>>>>>>"U-Know-Who" <no-one@nowhere.com> wrote in
>>>>>>>>>>news:5lO7h.283$_H5.256@tornado.texas.rr.com:
>>>>>>>>>>
>>>>>>>>>>> "Slow Code" <my.mail@no.spam> wrote in message
>>>>>>>>>>> news:1wN7h.626$sf5.622@newsread4.news.pas.earthlink.net...
>>>>>>>>>>>> jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote in
>>>>>>>>>>>> news:ej8knc$kn5$1@news.hawaii.edu:
>>>>>>>>>>>>
>>>>>>>>>>>>> John Smith <assemblywizard@gmail.com> wrote:
>>>>>>>>>>>>>>Idiot, check your spelling, it's "group troll."
>>>>>>>>>>>>>
>>>>>>>>>>>>> Well, let's see if he ment "poll" or "troll":

>>>>>>>>>>>>>
>>>>>>>>>>>>>
>>>>>>>>>>>>> 0 2 4 6 8 10
>>>>>>>>>>>>> /
>>>>>>>>>>>>> /
>>>>>>>>>>>>> /
>>>>>>>>>>>>> /
>>>>>>>>>>>>> /
>>>>>>>>>>>>> /
>>>>>>>>>>>>> /
>>>>>>>>>>>>> /
>>>>>>>>>>>>> POLL-O-METER
>>>>>>>>>>>>>
>>>>>>>>>>>>>
>>>>>>>>>>>>>
>>>>>>>>>>>>> So what appliances does everyone hope Santa brings them for
>>>>>>>>>>>>> Xmas?
>>>>>>>>>>>>>
>>>>>>>>>>>>> HF, VHF, UHF, KENWOOD, YAESU, ICOM, Cobra?
>>>>>>>>>>>>>
>>>>>>>>>>>>>
>>>>>>>>>>>>> I couldn't think of anything for myself, so I hope I just get
>>>>>>>>>>>>> a some componants and a new soldering iron for projects so I
>>>>>>>>>>>>> can keep moving forward in ham radio.
>>>>>>>>>>>>>
>>>>>>>>>>>>> SC
>>>>>>>>>>>>>
>>>>>>>>>>>>> And spell check for your PC. :-)
>>>>>>>>>>>
>>>>>>>>>>>
>>>>>>>>>>>Which one do you have? I want Santa to bring me a different
>>>>>>>>>>>one. The one you have doesn't work.
>>>>>>>>>>>
>>>>>>>>>>>SC
>>>>>>>>>
>>>>>>>>>
>>>>>>>>> Clip and paste to "Word for Windows". . . It's got the best
>>>>>>>>> spell
>>>>>>>>> checker in the market. Just leave it running in the backgrould
>>>>>>>>> and call it up when you need to type out a letter or two.
>>>>>>>>
>>>>>>>>
>>>>>>>>> Thanks, I'll pass that on to U-Know-Who, but he probably don't
>>>>>>>>> have word, just computer games.
>>>>>>>>
>>>>>>>>> SC
>>>>>>>
>>>>>>> I have Office Pro 2003
>>>>>>
>>>>>>

>>>>>> WOW
>>>>>>
>>>>>> SC
>>>>>
>>>>> I ran your posts through it. It said to please excuse the idiot in
>>>>> Colorado who can't afford a high-speed connection.
>>>>
>>>>
>>>> Your CB radio not back from the repair shop so you got to attack real
>>>> radio operators? I knew you went for those "easy-to-burn-up' Cobra
>>>> and Galaxy brand appliances.
>>>>
>>>> Oh, and I don't live in colorado, I'm ya alls next door neighbor.
>>>>
>>>> Howdy Neighbor. Heee Heee Heeeeeeee!
>>>> SC
>>>
>>> IP Information 4.230.12.15
>>> Record Type: IP Address
>>> Cached Whois: Cached today
>>> IP Location: United States - Texas - Houston - Level 3
>>> Communications
>>> Inc
>>> Reverse DNS: dialup-4.230.12.15.Dial1.Houston1.Level3.net
>>> Blacklist Status: Currently Listed (history)
>>>
>>
>>
>> From: "U-Know-Who" <no-one@nowhere.com>
>> Subject: Re: Group poll.
>> Message-ID: <Klrbh.5898$_H5.4204@tornado.texas.rr.com>
>> Date: Thu, 30 Nov 2006 02:28:58 GMT
>> NNTP-Posting-Host: 67.10.92.242
>>
>>
>> nslookup 67.10.92.242
>> Canonical name: cpe-67-10-92-242.houston.res.rr.com
>> Addresses: 67.10.92.242
>>
>>
>>
>> Howdy Neighbor!
>>
>> SC
>>
>
> Yeah, but I have high speed. I can afford it.

But you're bankrupt when it comes to radio skills. No need worry though,
I'm here to help you.

Ok, repeat after me:

di-dah A, di-dah A
dah-di-di-dit B, dah-di-di-dit B
dah-di-dah-dit C, dah-di-dah-dit C
dah-di-dit D, dah-di-dit D ....

SC

5548. kookathon

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-02 02:23:09 UTC
From: Mark@kb9rqz.aprs
Message-ID: <ero1n2lq4d5nvgtcmj6lva6frj8uos47n1@4ax.com>
Source record: 9399
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.swap

On Sat, 02 Dec 2006 01:41:42 GMT, Slow Code <my.mail@no.spam> wrote:

>"U-Know-Who" <no-one@nowhere.com> wrote in
>news:TxLbh.6768$_H5.3321@tornado.texas.rr.com:
>
>>
>> "Slow Code" <my.mail@no.spam> wrote in message
>> news:mSKbh.5852$1s6.3802@newsread2.news.pas.earthlink.net...
>>> "U-Know-Who" <no-one@nowhere.com> wrote in
>>> news:Klrbh.5898$_H5.4204@tornado.texas.rr.com:
>>>
>>>>
>>>> "Slow Code" <my.mail@no.spam> wrote in message
>>>> news:fjLah.4143$tM1.1155@newsread1.news.pas.earthlink.net...
>>>>> "U-Know-Who" <no-one@nowhere.com> wrote in
>>>>> news:Svs9h.2203$_H5.295@tornado.texas.rr.com:
>>>>>
>>>>>>
>>>>>> "Slow Code" <my.mail@no.spam> wrote in message
>>>>>> news:E1s9h.2642$ql2.1992@newsread3.news.pas.earthlink.net...
>>>>>>> "U-Know-Who" <no-one@nowhere.com> wrote in
>>>>>>> news:Jo89h.2462$Gk5.1576@tornado.texas.rr.com:
>>>>>>>
>>>>>>>>
>>>>>>>> "Slow Code" <my.mail@no.spam> wrote in message
>>>>>>>> news:Vx59h.2178$ql2.1579@newsread3.news.pas.earthlink.net...
>>>>>>>>> Joe Bloe <abaslon@comcast.net> wrote in
>>>>>>>>> news:oei7m2hhbvm46q3qmkkfl4k7ui4tdtqei9@4ax.com:
>>>>>>>>>
>>>>>>>>>>> On Tue, 21 Nov 2006 00:54:50 GMT, Slow Code <my.mail@no.spam>
>>>>>>>>>>> wrote:
>>>>>>>>>>>
>>>>>>>>>>>>"U-Know-Who" <no-one@nowhere.com> wrote in
>>>>>>>>>>>>news:5lO7h.283$_H5.256@tornado.texas.rr.com:
>>>>>>>>>>>>
>>>>>>>>>>>>>
>>>>>>>>>>>>> "Slow Code" <my.mail@no.spam> wrote in message
>>>>>>>>>>>>> news:1wN7h.626$sf5.622@newsread4.news.pas.earthlink.net...
>>>>>>>>>>>>>> jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote in
>>>>>>>>>>>>>> news:ej8knc$kn5$1@news.hawaii.edu:
>>>>>>>>>>>>>>
>>>>>>>>>>>>>>> John Smith <assemblywizard@gmail.com> wrote:
>>>>>>>>>>>>>>>Idiot, check your spelling, it's "group troll."

>>>>>>>>>>>>>>
>>>>>>>>>>>>>> Well, let's see if he ment "poll" or "troll":
>>>>>>>>>>>>>>
>>>>>>>>>>>>>>
>>>>>>>>>>>>>> 0 2 4 6 8 10
>>>>>>>>>>>>>> /
>>>>>>>>>>>>>> /
>>>>>>>>>>>>>> /
>>>>>>>>>>>>>> /
>>>>>>>>>>>>>> /
>>>>>>>>>>>>>> /
>>>>>>>>>>>>>> /
>>>>>>>>>>>>>> /
>>>>>>>>>>>>>> POLL-O-METER
>>>>>>>>>>>>>>
>>>>>>>>>>>>>>
>>>>>>>>>>>>>>
>>>>>>>>>>>>>> So what appliances does everyone hope Santa brings them for
>>>>>>>>>>>>>> Xmas?
>>>>>>>>>>>>>>
>>>>>>>>>>>>>> HF, VHF, UHF, KENWOOD, YAESU, ICOM, Cobra?
>>>>>>>>>>>>>>
>>>>>>>>>>>>>>
>>>>>>>>>>>>>> I couldn't think of anything for myself, so I hope I just get
>>>>>>>>>>>>>> a some componants and a new soldering iron for projects so I
>>>>>>>>>>>>>> can keep moving forward in ham radio.
>>>>>>>>>>>>>>
>>>>>>>>>>>>>> SC
>>>>>>>>>>>>>>
>>>>>>>>>>>>>> And spell check for your PC. :-)
>>>>>>>>>>>>>
>>>>>>>>>>>>>
>>>>>>>>>>>>>Which one do you have? I want Santa to bring me a different
>>>>>>>>>>>>>one. The one you have doesn't work.
>>>>>>>>>>>>>
>>>>>>>>>>>>>SC
>>>>>>>>>>>
>>>>>>>>>>>
>>>>>>>>>>> Clip and paste to "Word for Windows". . . It's got the best
>>>>>>>>>>> spell
>>>>>>>>>>> checker in the market. Just leave it running in the backgrould
>>>>>>>>>>> and call it up when you need to type out a letter or two.
>>>>>>>>>
>>>>>>>>>
>>>>>>>>> Thanks, I'll pass that on to U-Know-Who, but he probably don't
>>>>>>>>> have word, just computer games.
>>>>>>>>>
>>>>>>>>> SC
>>>>>>>>
>>>>>>>> I have Office Pro 2003

>>>>>>>
>>>>>>>
>>>>>>> WOW
>>>>>>>
>>>>>>> SC
>>>>>>
>>>>>> I ran your posts through it. It said to please excuse the idiot in
>>>>>> Colorado who can't afford a high-speed connection.
>>>>>
>>>>>
>>>>> Your CB radio not back from the repair shop so you got to attack real
>>>>> radio operators? I knew you went for those "easy-to-burn-up' Cobra
>>>>> and Galaxy brand appliances.
>>>>>
>>>>> Oh, and I don't live in colorado, I'm ya alls next door neighbor.
>>>>>
>>>>> Howdy Neighbor. Heee Heee Heeeeeeee!
>>>>> SC
>>>>
>>>> IP Information 4.230.12.15
>>>> Record Type: IP Address
>>>> Cached Whois: Cached today
>>>> IP Location: United States - Texas - Houston - Level 3
>>>> Communications
>>>> Inc
>>>> Reverse DNS: dialup-4.230.12.15.Dial1.Houston1.Level3.net
>>>> Blacklist Status: Currently Listed (history)
>>>>
>>>
>>>
>>> From: "U-Know-Who" <no-one@nowhere.com>
>>> Subject: Re: Group poll.
>>> Message-ID: <Klrbh.5898$_H5.4204@tornado.texas.rr.com>
>>> Date: Thu, 30 Nov 2006 02:28:58 GMT
>>> NNTP-Posting-Host: 67.10.92.242
>>>
>>>
>>> nslookup 67.10.92.242
>>> Canonical name: cpe-67-10-92-242.houston.res.rr.com
>>> Addresses: 67.10.92.242
>>>
>>>
>>>
>>> Howdy Neighbor!
>>>
>>> SC
>>>
>>
>> Yeah, but I have high speed. I can afford it.
>

>
>But you're bankrupt when it comes to radio skills. No need worry though,
>I'm here to help you.
>
>Ok, repeat after me:
>
>di-dah A, di-dah A
>dah-di-di-dit B, dah-di-di-dit B
>dah-di-dah-dit C, dah-di-dah-dit C
>dah-di-dit D, dah-di-dit D ....

you offered no help with radio skill steve
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5549. FS: TR relays de W7ZFB

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-02 02:47:27 UTC
From: msix@nmia.com
Message-ID: <ekqpfv$ep6$1@iruka.swcp.com>
Source record: 9400

Small SPDT silver-plated BNC coax relays
These are Danbury-Knudsen, FXR or Motorola,
flat to 600MHz, 100W
FXR, NOS, 115VAC coil, 2 x 1.5 x 1 inches
D-K, used, 18-24VDC coil, 2 x 1.5 x 1 inches
D-K, used, 18-24VDC coil, 2 x 1.5 x 1 inches
D-K, used, 12VDC coil, 2 x 1.5 x 1 inches
Motorola, NOS, 13.6VDC coil, 3 x 2.5 x 1.5 inches
All 5 for $42 pp 48

73 John
n

5550. Re: Classic Computer for a Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-03 00:35:01 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <VYoch.6166$tM1.86@newsread1.news.pas.earthlink.net>
Source record: 9401
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Alex" <samalex@gmail.com> wrote in
news:1164727510.256694.183240@h54g2000cwb.googlegroups.com:

> Hey Guys,
>
> I'm a new ham radio operator, but I've been working with computers for
> most of my life. I'm now in the process of setting-up my first 'ham
> shack', and instead of going with the latest and greatest, I hope to
> employee several classic computers to help me along. I have quite a
> collection in my closet I plan on pulling out, but I'd like opinions of
> others on what they would use in such a situation.
>
> First, I do want to connect my radio to the computer, and many of the
> technologies used by ham radio operators, like slow scan TV, packet
> radio, etc, can be used on most of the classic computers in some form
> or fashion. This I don't think I'll have a problem, no matter which
> systemI go with.
>
> One of the main things I do want to do is have the computer on my home
> network. I don't need a web browser or even a GUI interface... the
> main thing I would really need is Telnet and FTP. I also want
> something with a word processor and spreadsheet program -- even
> Visicalc would be nice to use.
>
> And finally I want something fun.. which is the entire point of this
> venture :) I know some older computers still have huge repositories of
> software online, and whether it's a game or neat utility, I'd love to
> setup a classic computer I can really use and have fun with while in my
> 'ham shack'.
>
> Here's a list of computers I have around me now:
> Tandy Color Computer 2
> Tandy Color Computer 3 (128K model)
> Commodore Amiga 500
> Apple II (original, not PLUS)
> Mac Classic
>
> And though I don't currently own one, I'm looking at getting a
> Commodore 128 as well, either from a friend of possibly from ebay.
>
> Anyway, just curious what others would choose if you had to pick a
> computer or even a couple of older computers to use again. Also if
> there's any ham operators out there with experience with older systems,

> I'd love some feedback!
>
> Take care, and thanks in advance for any ideas.
>
> Alex

Hi Alex, You sound like a brand new no-code Tech. Welcome to ham radio.

All those computers you mentioned will work fine, but if you really want to do any serious computer work you're going to want to invest in a Vic 20, or a TI-99, or a Commodore 64. Power users swear by'em.

SC

5551. Re: Guide Lines for this news group

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-03 00:35:09 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <1Zoch.6172$tM1.5232@newsread1.news.pas.earthlink.net>
Source record: 9402
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Danny Richardson <n_group@k6mhe.com> wrote in
news:tqh3n2h7gjtdevv66fvnmv0be7clnpf019@4ax.com:

> On Sat, 02 Dec 2006 09:48:44 -0800, Bill Turner <noway@nowhow.com>
> wrote:
>
>>ORIGINAL MESSAGE:
>>
>>On Sat, 2 Dec 2006 08:19:07 -0800, "Caveat Lector" <CL@nowhere.com>
>> wrote:
>>
>>>Maybe this will help(a little) to get rid of the off topic posts
>>>
>>>For what this News Group is about and applicable guide lines see URL:
>>>
>>>http://www.faqs.org/faqs/radio/personal-intro/
>>>
>>>Thanks for reading
>>>73 CL
>>>
>>
>>------------ REPLY FOLLOWS ------------
>>
>>Dream on, CL. These guys already know that and they don't care. It's
>>been that way forever. It's the Curse of Usenet.
>>
>>Bill, W6WRT
>
> After years of resisting I'm ready for a moderated antenna group. I've
> used my kill filter more times in the last three months than I've ever
> done in the previous ten years.
>
> I, for one, am sick and tired of the foul-mouth off topic postings
> and, if that requires a moderated group to get rid of them it would be
> a very small price to pay.
>
> Danny,

I know what you mean Dan. With the anticipation that ham radio is going
to get dumbed down again real soon, the dumb-it-downers like Lenny,
Markie, Opus and a few others are really trashing the groups with anti
code test hate. We can only hope the code requirement is retained and
increased so that they can't get on HF and mess that up too.

SC

5552. kookathon on clockwork

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-03 01:15:10 UTC
From: Mark@kb9rqz.aprs
Message-ID: <3894n2t4fqkg169sq5bv75ctdrit785g5v@4ax.com>
Source record: 9403
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sun, 03 Dec 2006 00:35:01 GMT, Slow Code <my.mail@no.spam> wrote:

>"Alex" <samalex@gmail.com> wrote in
>news:1164727510.256694.183240@h54g2000cwb.googlegroups.com:
>
>> Hey Guys,
>>
>> I'm a new ham radio operator, but I've been working with computers for
>> most of my life. I'm now in the process of setting-up my first 'ham
>> shack', and instead of going with the latest and greatest, I hope to
>> employee several classic computers to help me along. I have quite a
>> collection in my closet I plan on pulling out, but I'd like opinions of
>> others on what they would use in such a situation.
>>
>> First, I do want to connect my radio to the computer, and many of the
>> technologies used by ham radio operators, like slow scan TV, packet
>> radio, etc, can be used on most of the classic computers in some form
>> or fashion. This I don't think I'll have a problem, no matter which
>> systemI go with.
>>
>> One of the main things I do want to do is have the computer on my home
>> network. I don't need a web browser or even a GUI interface... the
>> main thing I would really need is Telnet and FTP. I also want
>> something with a word processor and spreadsheet program -- even
>> Visicalc would be nice to use.
>>
>> And finally I want something fun.. which is the entire point of this
>> venture :) I know some older computers still have huge repositories of
>> software online, and whether it's a game or neat utility, I'd love to
>> setup a classic computer I can really use and have fun with while in my
>> 'ham shack'.
>>
>> Here's a list of computers I have around me now:
>> Tandy Color Computer 2
>> Tandy Color Computer 3 (128K model)
>> Commodore Amiga 500
>> Apple II (original, not PLUS)
>> Mac Classic
>>
>> And though I don't currently own one, I'm looking at getting a
>> Commodore 128 as well, either from a friend of possibly from ebay.
>>
>> Anyway, just curious what others would choose if you had to pick a

>> computer or even a couple of older computers to use again. Also if
>> there's any ham operators out there with experience with older systems,
>> I'd love some feedback!
>>
>> Take care, and thanks in advance for any ideas.
>>
>> Alex
>
>
>Hi Alex, You sound like a brand new no-code Tech. Welcome to ham radio.

kookathon on clockwork
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5553. kookathon on clockwork

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-03 01:19:24 UTC
From: Mark@kb9rqz.aprs
Message-ID: <pe94n2p9k96848kvvnbblmrddfohbho8v7@4ax.com>
Source record: 9404
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sun, 03 Dec 2006 00:35:09 GMT, Slow Code <my.mail@no.spam> wrote:

>Danny Richardson <n_group@k6mhe.com> wrote in
>news:tqh3n2h7gjtdevv66fvnmv0be7clnpf019@4ax.com:
>
>> On Sat, 02 Dec 2006 09:48:44 -0800, Bill Turner <noway@nowhow.com>
>> wrote:
>>
>>>ORIGINAL MESSAGE:
>>>
>>>On Sat, 2 Dec 2006 08:19:07 -0800, "Caveat Lector" <CL@nowhere.com>
>>> wrote:
>>>
>>>>Maybe this will help(a little) to get rid of the off topic posts
>>>>
>>>>For what this News Group is about and applicable guide lines see URL:
>>>>
>>>>http://www.faqs.org/faqs/radio/personal-intro/
>>>>
>>>>Thanks for reading
>>>>73 CL
>>>>
>>>
>>>------------ REPLY FOLLOWS ------------
>>>
>>>Dream on, CL. These guys already know that and they don't care. It's
>>>been that way forever. It's the Curse of Usenet.
>>>
>>>Bill, W6WRT
>>
>> After years of resisting I'm ready for a moderated antenna group. I've
>> used my kill filter more times in the last three months than I've ever
>> done in the previous ten years.
>>
>> I, for one, am sick and tired of the foul-mouth off topic postings
>> and, if that requires a moderated group to get rid of them it would be
>> a very small price to pay.
>>
>> Danny,
>
>
>I know what you mean Dan. With the anticipation that ham radio is going
>to get dumbed down again real soon, the dumb-it-downers like Lenny,

>Markie, Opus and a few others are really trashing the groups with anti
>code test hate. We can only hope the code requirement is retained and
>increased so that they can't get on HF and mess that up too.

but you have admitted to being a Bad Ham and that YOU want to kill the
ARS steve
'

and you keep trolling ngs looking for more thread to trol with

and you are band on time

kookathon on clockwork
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5554. Re: Where to purchase Fair-Rite toroid?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-03 03:25:03 UTC
From: hayseed <nothere@bogus.com>
Message-ID: <457250fd$0$3487$a82e2bb9@reader.athenanews.com>
Source record: 9405

Try Dan's small parts at:

http://www.danssmallpartsandkits.net/

-Bob

5555. Re: Guide Lines for this news group

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-03 03:32:56 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1165116776.575952.37510@16g2000cwy.googlegroups.com>
Source record: 9406
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Slow Code wrote:
> Danny Richardson <n_group@k6mhe.com> wrote in
> news:tqh3n2h7gjtdevv66fvnmv0be7clnpf019@4ax.com:
>
> > On Sat, 02 Dec 2006 09:48:44 -0800, Bill Turner <noway@nowhow.com>
> > wrote:
> >
> >>ORIGINAL MESSAGE:
> >>
> >>On Sat, 2 Dec 2006 08:19:07 -0800, "Caveat Lector" <CL@nowhere.com>
> >> wrote:
> >>
> >>>Maybe this will help(a little) to get rid of the off topic posts
> >>>
> >>>For what this News Group is about and applicable guide lines see URL:
> >>>
> >>>http://www.faqs.org/faqs/radio/personal-intro/
> >>>
> >>>Thanks for reading
> >>>73 CL
> >>>
> >>
> >>------------ REPLY FOLLOWS ------------
> >>
> >>Dream on, CL. These guys already know that and they don't care. It's
> >>been that way forever. It's the Curse of Usenet.
> >>
> >>Bill, W6WRT
> >
> > After years of resisting I'm ready for a moderated antenna group. I've
> > used my kill filter more times in the last three months than I've ever
> > done in the previous ten years.
> >
> > I, for one, am sick and tired of the foul-mouth off topic postings
> > and, if that requires a moderated group to get rid of them it would be
> > a very small price to pay.
> >
> > Danny,
>
>
> I know what you mean Dan.

No you don't. You're one of the foul-mouthed off-topic posters that
Dan is complaining about.

> With the anticipation that ham radio is going
> to get dumbed down again real soon, the dumb-it-downers

It got "dumbed-down" when a license was issued to you.

BTW, what is your call?

5556. Re: Guide Lines for this news group

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-03 03:44:24 UTC
From: "A. G. Bell" <hello?@marksakook>
Message-ID: <gq6nq.ubo.19.1@news.alt.net>
Source record: 9407
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

<hot-ham-and-cheese@hotmail.com> wrote in message
news:1165116776.575952.37510@16g2000cwy.googlegroups.com...
>
> Slow Code wrote:
> > Danny Richardson <n_group@k6mhe.com> wrote in
> > news:tqh3n2h7gjtdevv66fvnmv0be7clnpf019@4ax.com:
> >
> > > On Sat, 02 Dec 2006 09:48:44 -0800, Bill Turner <noway@nowhow.com>
> > > wrote:
> > >
> > >>ORIGINAL MESSAGE:
> > >>
> > >>On Sat, 2 Dec 2006 08:19:07 -0800, "Caveat Lector" <CL@nowhere.com>
> > >> wrote:
> > >>
> > >>>Maybe this will help(a little) to get rid of the off topic posts
> > >>>
> > >>>For what this News Group is about and applicable guide lines see URL:
> > >>>
> > >>>http://www.faqs.org/faqs/radio/personal-intro/
> > >>>
> > >>>Thanks for reading
> > >>>73 CL
> > >>>
> > >>
> > >>------------ REPLY FOLLOWS ------------
> > >>
> > >>Dream on, CL. These guys already know that and they don't care. It's
> > >>been that way forever. It's the Curse of Usenet.
> > >>
> > >>Bill, W6WRT
> > >
> > > After years of resisting I'm ready for a moderated antenna group. I've
> > > used my kill filter more times in the last three months than I've ever
> > > done in the previous ten years.
> > >
> > > I, for one, am sick and tired of the foul-mouth off topic postings
> > > and, if that requires a moderated group to get rid of them it would be
> > > a very small price to pay.
> > >
> > > Danny,
> >
> >

> > I know what you mean Dan.
>
> No you don't. You're one of the foul-mouthed off-topic posters that
> Dan is complaining about.
>
> > With the anticipation that ham radio is going
> > to get dumbed down again real soon, the dumb-it-downers
>
> It got "dumbed-down" when a license was issued to you.
>
> BTW, what is your call?
>
What is YOUR call, Billy? Which part of Ohio do you live in? Cincinnati
maybe?

5557. Re: Guide Lines for this news group

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-03 04:01:51 UTC
From: Mark@kb9rqz.aprs
Message-ID: <gvi4n25epo22b8c4jt50mcvksmlmj7n9fp@4ax.com>
Source record: 9408
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sat, 2 Dec 2006 22:44:24 -0500, "A. G. Bell" <hello?@marksakook>
wrote:

>
><hot-ham-and-cheese@hotmail.com> wrote in message
>news:1165116776.575952.37510@16g2000cwy.googlegroups.com...
>>
>> Slow Code wrote:
>> > Danny Richardson <n_group@k6mhe.com> wrote in
>> > news:tqh3n2h7gjtdevv66fvnmv0be7clnpf019@4ax.com:
>> >
>> > > On Sat, 02 Dec 2006 09:48:44 -0800, Bill Turner <noway@nowhow.com>
>> > > wrote:
>> > >
>> > >>ORIGINAL MESSAGE:
>> > >>
>> > >>On Sat, 2 Dec 2006 08:19:07 -0800, "Caveat Lector" <CL@nowhere.com>
>> > >> wrote:
>> > >>
>> > >>>Maybe this will help(a little) to get rid of the off topic posts
>> > >>>
>> > >>>For what this News Group is about and applicable guide lines see URL:
>> > >>>
>> > >>>http://www.faqs.org/faqs/radio/personal-intro/
>> > >>>
>> > >>>Thanks for reading
>> > >>>73 CL
>> > >>>
>> > >>
>> > >>------------ REPLY FOLLOWS ------------
>> > >>
>> > >>Dream on, CL. These guys already know that and they don't care. It's
>> > >>been that way forever. It's the Curse of Usenet.
>> > >>
>> > >>Bill, W6WRT
>> > >
>> > > After years of resisting I'm ready for a moderated antenna group. I've
>> > > used my kill filter more times in the last three months than I've ever
>> > > done in the previous ten years.
>> > >
>> > > I, for one, am sick and tired of the foul-mouth off topic postings
>> > > and, if that requires a moderated group to get rid of them it would be
>> > > a very small price to pay.

>> > >
>> > > Danny,
>> >
>> >
>> > I know what you mean Dan.
>>
>> No you don't. You're one of the foul-mouthed off-topic posters that
>> Dan is complaining about.
>>
>> > With the anticipation that ham radio is going
>> > to get dumbed down again real soon, the dumb-it-downers
>>
>> It got "dumbed-down" when a license was issued to you.
>>
>> BTW, what is your call?
>>
>What is YOUR call, Billy? Which part of Ohio do you live in? Cincinnati
>maybe?

BB's call is well know and esily located

My and My name are at the the top of the Page

your call if any and Slow Code's call are something you are rightly
ashamed to post
>
>
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5558. Re: Classic Computer for a Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-03 04:46:56 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <V4SdnbQmHK5dy-_YnZ2dnUVZ_vqdnZ2d@bright.net>
Source record: 9409
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

I second that! The VIC-20 is awesome (and easy to write machine
language programs for it). My first ham use for the VIC-20 was a CW
keyer program. I still have two VIC-20s and a C-64...

Scott
N0EDV

Slow Code wrote:

> "Alex" <samalex@gmail.com> wrote in
> news:1164727510.256694.183240@h54g2000cwb.googlegroups.com:
>
>
>>Hey Guys,
>>
>>I'm a new ham radio operator, but I've been working with computers for
>>most of my life. I'm now in the process of setting-up my first 'ham
>>shack', and instead of going with the latest and greatest, I hope to
>>employee several classic computers to help me along. I have quite a
>>collection in my closet I plan on pulling out, but I'd like opinions of
>>others on what they would use in such a situation.
>>
>>First, I do want to connect my radio to the computer, and many of the
>>technologies used by ham radio operators, like slow scan TV, packet
>>radio, etc, can be used on most of the classic computers in some form
>>or fashion. This I don't think I'll have a problem, no matter which
>>systemI go with.
>>
>>One of the main things I do want to do is have the computer on my home
>>network. I don't need a web browser or even a GUI interface... the
>>main thing I would really need is Telnet and FTP. I also want
>>something with a word processor and spreadsheet program -- even
>>Visicalc would be nice to use.
>>
>>And finally I want something fun.. which is the entire point of this
>>venture :) I know some older computers still have huge repositories of
>>software online, and whether it's a game or neat utility, I'd love to
>>setup a classic computer I can really use and have fun with while in my
>>'ham shack'.
>>
>>Here's a list of computers I have around me now:
>>Tandy Color Computer 2
>>Tandy Color Computer 3 (128K model)
>>Commodore Amiga 500

>>Apple II (original, not PLUS)
>>Mac Classic
>>
>>And though I don't currently own one, I'm looking at getting a
>>Commodore 128 as well, either from a friend of possibly from ebay.
>>
>>Anyway, just curious what others would choose if you had to pick a
>>computer or even a couple of older computers to use again. Also if
>>there's any ham operators out there with experience with older systems,
>>I'd love some feedback!
>>
>>Take care, and thanks in advance for any ideas.
>>
>>Alex
>
>
>
> Hi Alex, You sound like a brand new no-code Tech. Welcome to ham radio.
>
> All those computers you mentioned will work fine, but if you really want
> to do any serious computer work you're going to want to invest in a Vic
> 20, or a TI-99, or a Commodore 64. Power users swear by'em.
>
> SC

5559. Re: Where to purchase Fair-Rite toroid?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-03 06:31:53 UTC
From: Claus <a@a.dk>
Message-ID: <45726f5a$0$20279$edfadb0f@dread16.news.tele.dk>
Source record: 9410

Hi all..
when i need toroids i use
www.kitsandparts.com
great price and fast delivery
and he is fast if you should need an answer for
somthing..
vy 73 de oz1lqb

5560. Re: Classic Computer for a Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-03 16:48:14 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <12n5vug58gbrg57@corp.supernews.com>
Source record: 9411
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

What you really need is an Altair.

Dave N

Scott wrote:
> I second that! The VIC-20 is awesome (and easy to write machine
> language programs for it). My first ham use for the VIC-20 was a CW
> keyer program. I still have two VIC-20s and a C-64...
>
> Scott
> N0EDV
>
> Slow Code wrote:
>
>> "Alex" <samalex@gmail.com> wrote in
>> news:1164727510.256694.183240@h54g2000cwb.googlegroups.com:
>>
>>> Hey Guys,
>>>
>>> I'm a new ham radio operator, but I've been working with computers for
>>> most of my life. I'm now in the process of setting-up my first 'ham
>>> shack', and instead of going with the latest and greatest, I hope to
>>> employee several classic computers to help me along. I have quite a
>>> collection in my closet I plan on pulling out, but I'd like opinions of
>>> others on what they would use in such a situation.
>>>
>>> First, I do want to connect my radio to the computer, and many of the
>>> technologies used by ham radio operators, like slow scan TV, packet
>>> radio, etc, can be used on most of the classic computers in some form
>>> or fashion. This I don't think I'll have a problem, no matter which
>>> systemI go with.
>>>
>>> One of the main things I do want to do is have the computer on my home
>>> network. I don't need a web browser or even a GUI interface... the
>>> main thing I would really need is Telnet and FTP. I also want
>>> something with a word processor and spreadsheet program -- even
>>> Visicalc would be nice to use.
>>>
>>> And finally I want something fun.. which is the entire point of this
>>> venture :) I know some older computers still have huge repositories of
>>> software online, and whether it's a game or neat utility, I'd love to
>>> setup a classic computer I can really use and have fun with while in my
>>> 'ham shack'.
>>>

>>> Here's a list of computers I have around me now:
>>> Tandy Color Computer 2
>>> Tandy Color Computer 3 (128K model)
>>> Commodore Amiga 500
>>> Apple II (original, not PLUS)
>>> Mac Classic
>>>
>>> And though I don't currently own one, I'm looking at getting a
>>> Commodore 128 as well, either from a friend of possibly from ebay.
>>>
>>> Anyway, just curious what others would choose if you had to pick a
>>> computer or even a couple of older computers to use again. Also if
>>> there's any ham operators out there with experience with older systems,
>>> I'd love some feedback!
>>>
>>> Take care, and thanks in advance for any ideas.
>>> Alex
>>
>>
>>
>>
>> Hi Alex, You sound like a brand new no-code Tech. Welcome to ham radio.
>> All those computers you mentioned will work fine, but if you really want
>> to do any serious computer work you're going to want to invest in a Vic
>> 20, or a TI-99, or a Commodore 64. Power users swear by'em.
>> SC

5561. Re: Guide Lines for this news group

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-03 17:00:08 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1165165208.082088.45350@16g2000cwy.googlegroups.com>
Source record: 9412
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Mark@kb9rqz.aprs wrote:
> On Sat, 2 Dec 2006 22:44:24 -0500, "A. G. Bell" <hello?@marksakook>
> wrote:
>
> >
> ><hot-ham-and-cheese@hotmail.com> wrote in message
> >news:1165116776.575952.37510@16g2000cwy.googlegroups.com...
> >>
> >> Slow Code wrote:
> >> > Danny Richardson <n_group@k6mhe.com> wrote in
> >> > news:tqh3n2h7gjtdevv66fvnmv0be7clnpf019@4ax.com:
> >> >
> >> > > On Sat, 02 Dec 2006 09:48:44 -0800, Bill Turner <noway@nowhow.com>
> >> > > wrote:
> >> > >
> >> > >>ORIGINAL MESSAGE:
> >> > >>
> >> > >>On Sat, 2 Dec 2006 08:19:07 -0800, "Caveat Lector" <CL@nowhere.com>
> >> > >> wrote:
> >> > >>
> >> > >>>Maybe this will help(a little) to get rid of the off topic posts
> >> > >>>
> >> > >>>For what this News Group is about and applicable guide lines see URL:
> >> > >>>
> >> > >>>http://www.faqs.org/faqs/radio/personal-intro/
> >> > >>>
> >> > >>>Thanks for reading
> >> > >>>73 CL
> >> > >>>
> >> > >>
> >> > >>---------- REPLY FOLLOWS ----------
> >> > >>
> >> > >>Dream on, CL. These guys already know that and they don't care. It's
> >> > >>been that way forever. It's the Curse of Usenet.
> >> > >>
> >> > >>Bill, W6WRT
> >> > >
> >> > > After years of resisting I'm ready for a moderated antenna group. I've
> >> > > used my kill filter more times in the last three months than I've ever
> >> > > done in the previous ten years.
> >> > >
> >> > > I, for one, am sick and tired of the foul-mouth off topic postings
> >> > > and, if that requires a moderated group to get rid of them it would be

> >> > > a very small price to pay.
> >> > >
> >> > > Danny,
> >> >
> >> >
> >> > I know what you mean Dan.
> >>
> >> No you don't. You're one of the foul-mouthed off-topic posters that
> >> Dan is complaining about.
> >>
> >> > With the anticipation that ham radio is going
> >> > to get dumbed down again real soon, the dumb-it-downers
> >>
> >> It got "dumbed-down" when a license was issued to you.
> >>
> >> BTW, what is your call?
> >>
> >What is YOUR call, Billy? Which part of Ohio do you live in? Cincinnati
> >maybe?
>
> BB's call is well know and esily located
>
> My and My name are at the the top of the Page
>
> your call if any and Slow Code's call are something you are rightly
> ashamed to post

I wouldn't blame him for being ashamed of it, but for what it's worth,
his call is W4NTI.

5562. Re: Classic Computer for a Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-03 17:01:54 UTC
From: pltrgyst <pltrgyst@spamlessxhost.org>
Message-ID: <1n06n2l5iote3d7qmmrllpjf999d6b1tco@4ax.com>
Source record: 9413
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sun, 03 Dec 2006 10:48:14 -0600, "David G. Nagel" <nagel@core.com> wrote:

>What you really need is an Altair.

...or an Imsai, or an Intel SDK. 8;)

-- Larry

5563. Re: Classic Computer for a Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-03 17:07:02 UTC
From: Cecil Moore <mycall@hotmail.com>
Message-ID: <WuDch.907$hI.279@newssvr11.news.prodigy.net>
Source record: 9414
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

David G. Nagel wrote:
> What you really need is an Altair.

An IBM-650 would probably do the job.
--
73, Cecil http://www.w5dxp.com

5564. Re: Classic Computer for a Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-03 17:49:47 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <Zv-dnSL7W9Smk-7YnZ2dnUVZ_uqdnZ2d@bright.net>
Source record: 9415
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Yes, forgot about the SDK-85. Used that in tech school way back in
1981. That was a smoking little bare-bones computer system...

Scott

pltrgyst wrote:
> On Sun, 03 Dec 2006 10:48:14 -0600, "David G. Nagel" <nagel@core.com> wrote:
>
>
>>What you really need is an Altair.
>
>
> ...or an Imsai, or an Intel SDK. 8;)
>
> -- Larry

5565. Re: Classic Computer for a Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-03 18:08:11 UTC
From: Count Floyd <CountFloyd@MonsterChillerHorrorTheater>
Message-ID: <g40vCXBzNU8x-pn2-zRdCZdWrUQre@localhost>
Source record: 9416
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Sun, 3 Dec 2006 17:07:02 UTC, Cecil Moore <mycall@hotmail.com>
wrote:

> David G. Nagel wrote:
> > What you really need is an Altair.
>
> An IBM-650 would probably do the job.
Any IBM PS/2 model would be perfect. They can be had for next to
nothing and are well-nigh indestructible.

--
"What do you mean there's no movie?"

5566. Re: Guide Lines for this news group

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-03 19:15:30 UTC
From: Mark@kb9rqz.aprs
Message-ID: <lf86n2tlbpllc55djdbac0jcrn8bk9o4o2@4ax.com>
Source record: 9417
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

```
On 3 Dec 2006 09:00:08 -0800, hot-ham-and-cheese@hotmail.com wrote:

>
>Mark@kb9rqz.aprs wrote:
>> On Sat, 2 Dec 2006 22:44:24 -0500, "A. G. Bell" <hello?@marksakook>
>> wrote:
>>
>> >
>> ><hot-ham-and-cheese@hotmail.com> wrote in message
>> >news:1165116776.575952.37510@16g2000cwy.googlegroups.com...
>> >>
>> >> Slow Code wrote:
>> >> > Danny Richardson <n_group@k6mhe.com> wrote in
>> >> > news:tqh3n2h7gjtdevv66fvnmv0be7clnpf019@4ax.com:
>> >> >
>> >> > > On Sat, 02 Dec 2006 09:48:44 -0800, Bill Turner <noway@nowhow.com>
>> >> > > wrote:
>> >> > >
>> >> > >>ORIGINAL MESSAGE:
>> >> > >>
>> >> > >>On Sat, 2 Dec 2006 08:19:07 -0800, "Caveat Lector" <CL@nowhere.com>
>> >> > >> wrote:
>> >> > >>
>> >> > >>>Maybe this will help(a little) to get rid of the off topic posts
>> >> > >>>
>> >> > >>>For what this News Group is about and applicable guide lines see URL:
>> >> > >>>
>> >> > >>>http://www.faqs.org/faqs/radio/personal-intro/
>> >> > >>>
>> >> > >>>Thanks for reading
>> >> > >>>73 CL
>> >> > >>>
>> >> > >>
>> >> > >>------------ REPLY FOLLOWS ------------
>> >> > >>
>> >> > >>Dream on, CL. These guys already know that and they don't care. It's
>> >> > >>been that way forever. It's the Curse of Usenet.
>> >> > >>
>> >> > >>Bill, W6WRT
>> >> > >>
>> >> > > After years of resisting I'm ready for a moderated antenna group. I've
>> >> > > used my kill filter more times in the last three months than I've ever
>> >> > > done in the previous ten years.
```

>> >> > >
>> >> > > I, for one, am sick and tired of the foul-mouth off topic postings
>> >> > > and, if that requires a moderated group to get rid of them it would be
>> >> > > a very small price to pay.
>> >> > >
>> >> > > Danny,
>> >> >
>> >> >
>> >> > I know what you mean Dan.
>> >>
>> >> No you don't. You're one of the foul-mouthed off-topic posters that
>> >> Dan is complaining about.
>> >>
>> >> > With the anticipation that ham radio is going
>> >> > to get dumbed down again real soon, the dumb-it-downers
>> >>
>> >> It got "dumbed-down" when a license was issued to you.
>> >>
>> >> BTW, what is your call?
>> >>
>> >What is YOUR call, Billy? Which part of Ohio do you live in? Cincinnati
>> >maybe?
>>
>> BB's call is well know and esily located
>>
>> My and My name are at the the top of the Page
>>
>> your call if any and Slow Code's call are something you are rightly
>> ashamed to post
>
>I wouldn't blame him for being ashamed of it, but for what it's worth,
>his call is W4NTI.

I don't blame him either really

after all going outright annymouse as opposed to efort to divert spam
to dead ends, is the wisest thing the ProCoders have been trying in
years
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5567. Re: Classic Computer for a Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-04 01:22:32 UTC
From: Sam Morgan <ndahouse@cox.net>
Message-ID: <aLKch.2554$Rj.2394@newsfe19.lga>
Source record: 9418

> "Alex" <samalex@gmail.com> wrote in
> news:1164727510.256694.183240@h54g2000cwb.googlegroups.com:
>
>> Hey Guys,
>>
>> I'm a new ham radio operator, but I've been working with computers for
>> most of my life. I'm now in the process of setting-up my first 'ham
>> shack', and instead of going with the latest and greatest, I hope to
>> employee several classic computers to help me along. I have quite a
>> collection in my closet I plan on pulling out, but I'd like opinions of
>> others on what they would use in such a situation.
>>
>> First, I do want to connect my radio to the computer, and many of the
>> technologies used by ham radio operators, like slow scan TV, packet
>> radio, etc, can be used on most of the classic computers in some form
>> or fashion. This I don't think I'll have a problem, no matter which
>> systemI go with.
>>
>> One of the main things I do want to do is have the computer on my home
>> network. I don't need a web browser or even a GUI interface... the
>> main thing I would really need is Telnet and FTP. I also want
>> something with a word processor and spreadsheet program -- even
>> Visicalc would be nice to use.
>>
>> And finally I want something fun.. which is the entire point of this
>> venture :) I know some older computers still have huge repositories of
>> software online, and whether it's a game or neat utility, I'd love to
>> setup a classic computer I can really use and have fun with while in my
>> 'ham shack'.
>>
>> Here's a list of computers I have around me now:
>> Tandy Color Computer 2
>> Tandy Color Computer 3 (128K model)
>> Commodore Amiga 500
>> Apple II (original, not PLUS)
>> Mac Classic
>>
>> And though I don't currently own one, I'm looking at getting a
>> Commodore 128 as well, either from a friend of possibly from ebay.
>>
>> Anyway, just curious what others would choose if you had to pick a
>> computer or even a couple of older computers to use again. Also if
>> there's any ham operators out there with experience with older systems,
>> I'd love some feedback!

>>
>> Take care, and thanks in advance for any ideas.
>>
Be very careful with those C=64's I started with one in 1990 and look what
happened to me: http://members.cox.net/linux2/toyroom.html

5568. FYI: New Radio Site!

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-04 02:28:55 UTC
From: KC7ZWG <kc7zwg@kc7zwg.org>
Message-ID: <07udnWt98cefFe7YnZ2dnUVZ_rOdnZ2d@nventure.com>
Source record: 9419
Cross-posted to: ncf.sigs.radio-tv.shortwave,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,sachsnet.hobby.amateur+cb-funk,su.org.ham-radio,tamu.hamradio.bulletins,tnn.radio.amateur

http://kc7zwg.org/

--
Martin Johnson - KC7ZWG
kc7zwg@kc7zwg.com - http://www.kc7zwg.com

5569. Re: Classic Computer for a Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-04 21:36:21 UTC
From: Alex <samalex@gmail.com>
Message-ID: <1165268181.290218.307850@j44g2000cwa.googlegroups.com>
Source record: 9420

Sam Morgan wrote:
> Be very careful with those C=64's I started with one in 1990 and look what
> happened to me: http://members.cox.net/linux2/toyroom.html

Hi Sam,

Actually I love your setup! When I as single I had an office scarily similar to what you have now, and we even have alot of the same books! I even have those two boxes of Suse 7.2 and 8.1 on my shelves, plus OS/2, though mine's 3.0 Warp (still shrink wrapped btw).

When my wife and I married last year and she moved in, our offices got consolidated and most of my books got put in the closet. It's fine for the most part as most of the books I don't use, but it's still neat to walk into an office and have floor to ceiling computer books :) Always something on hand for those late nights when you can't sleep. hehe

A friend of mine has a C64 he's not using, and he plans on sending it to me. Also another guy I met on QRZ is sending me his old cable he used with the Tandy TRS-80 Coco 3 to do packet radio. It goes from the RS-232 port to a TNC, so maybe I can get something going there.

So tons of fun stuff on the horizon!

Take care, and thanks for the pictures! I love'em!

Alex

5570. Re: Classic Computer for a Ham Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-04 21:38:58 UTC
From: Alex <samalex@gmail.com>
Message-ID: <1165268338.115791.307510@80g2000cwy.googlegroups.com>
Source record: 9421
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Slow Code wrote:

> Hi Alex, You sound like a brand new no-code Tech. Welcome to ham radio.
>
> All those computers you mentioned will work fine, but if you really want
> to do any serious computer work you're going to want to invest in a Vic
> 20, or a TI-99, or a Commodore 64. Power users swear by'em.
>
> SC

Hi SC,

Yup, I got my tech ticket a few months ago, and I'm now working on learning code and studying for the general ticket. I hope maybe January or February, but not until I can get my ham nook setup in the garage plus move my radio from the car to the garage so I can actually focus on the radio :) It's hard learning how to ragchew while on the interstate. hehe

I do have a C64 on the way, and that plus what I have now should be enough to get me going. Too much fun!

Take care,

Alex

5571. Need a new website?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-05 01:26:53 UTC
From: tolga@tolgasenel.com
Message-ID: <1165282013.357719.172360@73g2000cwn.googlegroups.com>
Source record: 9422

Hello friends,

If you need a new website, we are offering the best and most affordable services ever. Our new Website Builder tool will allow you to create custom designed, professional Flash websites in matter of hours...Check out our rates, as little as 12.95$ a month, on our website. No computer knowledge or experience is neccessary. No extra charge for domain registration, web hosting or computer support. Check out our packages starting at 12.95/month today!

http://www.MyBestDealEver.com (My Best Deal Ever.com)

thank you,

info@MyBestDealEver.com

(813) 317-6226

5572. Free Shipping

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-05 02:13:27 UTC
From: Brian <kb9bvn@earthlink.net>
Message-ID: <bB4dh.7527$1s6.1806@newsread2.news.pas.earthlink.net>
Source record: 9423

Free shipping until January!

http://www.hamradparts.com

73 de KB9BVN

5573. Re: Wealth Online Now a Reality !

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-05 17:48:40 UTC
From: carlos <carlos_not_carla@carlos.net>
Message-ID: <4575B0F8.D16F80D6@carlos.net>
Source record: 9424

z

5574. Re: Need a new website?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-05 18:18:11 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <cudbn2do3qh5j3gvnvu5sntufjmiuvjps3@4ax.com>
Source record: 9425

Please folks, do not reply to these off topic posts.

If these idiots never get any replies, they will eventually give up
and go away.

Thanks,

Bill, W6WRT

5575. Re: Wealth Online Now a Reality !

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-05 18:18:47 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <ivdbn2hsjqu4asnn5tc95srh6v11a6le1c@4ax.com>
Source record: 9426

Please folks, do not reply to these off topic posts.

If these idiots never get any replies, they will eventually give up
and go away.

Thanks,

Bill, W6WRT

5576. Re: Need a new website?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-05 20:11:00 UTC
From: info@tampabn.com
Message-ID: <1165349460.346775.74520@16g2000cwy.googlegroups.com>
Source record: 9427

Bill Turner (whatever that W6WRT means, noone cares i am sure):

The only idiot that we all can see who replied to the original email is YOU!! Stop being you please...

I re-read the message below, from the best deal ever etc..., its not like they are saying hot mommas with live web cameras...they are selling a product which is legit. There are 5 million new businesses in a year in this country alone that dont have a website. Why dont you leave your wise comments to yourself..

Do we enjoy seeing unrelated messages in our groups, NO! but just because YOU wasted a second of your useless time, it does not mean that you can make remarks like that...just ignore their message and life goes on...No need to be rude.

Thanks,

Bill Turner wrote:
> Please folks, do not reply to these off topic posts.
>
> If these idiots never get any replies, they will eventually give up
> and go away.
>
> Thanks,
>
> Bill, W6WRT

5577. Need Help - Harris Filter??

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-06 04:33:56 UTC
From: bcdlr <on30ng@gmail.com>
Message-ID: <1165379636.910100.60470@16g2000cwy.googlegroups.com>
Source record: 9428

I have a Harris filter in my junk box, or at least I think it is a
Harris filter.
On top of can:
P/N 700-0423-00
FREQ 10.000 MHZ
T136
SN. 6385

Does anybody have any info on this guy?
He is 1-3/8"L x 1"W x 3/4"H (approx.) and has five pins - three on one
end and two on the other. It is totally sealed 'can'
--
Dan KB9JLO

5578. Lookie Who's Querying Others About Their Call.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-06 11:40:54 UTC
From: k4yz_01@yahoo.com
Message-ID: <1165405254.606462.247100@j44g2000cwa.googlegroups.com>
Source record: 9429
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

hot-ham-and-cheese@hotmail.com wrote:
> Slow Code wrote:

> > I know what you mean Dan.
>
> No you don't. You're one of the foul-mouthed off-topic posters that
> Dan is complaining about.

I guess he's in good company then, Brain...There's you, Morkie,
Lennie, Frankie, and Toiddie to keep him warm!

> > With the anticipation that ham radio is going
> > to get dumbed down again real soon, the dumb-it-downers
>
> It got "dumbed-down" when a license was issued to you.

Pot / Kettle / Black

> BTW, what is your call?

What does it matter, Brain?

You don't sign YOUR call here!

You unceremoniously dropped your "billybeeper" personna for
"hot-ham-and-cheese", trying to hide your identity until your ego
overcame situational awareness and you did sign a post.

I can't help but wonder which one of the other annonnies may be you
right now...Afterall, that is your MO.

No matter...You'll do it again...You'll let your ego get ahead of
your common sense and you'll out yourself again. You always do.

Steve, K4YZ

5579. Q of coils made on ceramic form?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-06 15:57:30 UTC
From: eternalsquire@comcast.net
Message-ID: <1165420650.198866.59380@n67g2000cwd.googlegroups.com>
Source record: 9430

All,

I've been hearing how winding coils on discarded plastic pill bottles is not suitable for RF tank circuits due to low Q, and that these would not be safe for tube circuits anyway due to melting point.

I have access to kaolinite clay (white porcelain) and a kiln, and I was wondering if I molded and fired this type of clay for coil forms, what effect on a tank circuit Q this form would have.

Thanks in advance,

The Eternal Squire

5580. Re: Need a new website?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-06 16:17:28 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <r1rdn257pauhbs4qs1jvrf7jlovkg865i3@4ax.com>
Source record: 9431

ORIGINAL MESSAGE:

On 5 Dec 2006 12:11:00 -0800, info@tampabn.com wrote:

>Bill Turner (whatever that W6WRT means, noone cares i am sure):
>
>The only idiot that we all can see who replied to the original email is
>YOU!! Stop being you please...
>
>I re-read the message below, from the best deal ever etc..., its not
>like they are saying hot mommas with live web cameras...they are
>selling a product which is legit.

------------ REPLY FOLLOWS ------------

Are you remotely aware this is a newsgroup for Amateur Radio Operators
who like to build (i.e. homebrew) their own equipment?

If your "legit" product is not related to the homebrewing of radio
equipment, it does not belong here.

That mysterious "W6WRT" is my amateur radio callsign. What's yours?

Bill, W6WRT

5581. cyber vandal at work

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-06 16:54:19 UTC
From: Mark@kb9rqz.aprs
Message-ID: <gdtdn25khm60mgi5uh8tmnq2674d7qidp1@4ax.com>
Source record: 9432
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On 6 Dec 2006 03:40:54 -0800, k4yz_01@yahoo.com wrote:

>
cyber vandal at work

steve all yu are doing is enaging in cyber vandalism you don't discuss
you do't try to make a papoint anymore

and if you insit on fraudletly altering the atributioan this is all
you get
currnet count of your cyber vadalism attacktoday is 40 and conuting
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5582. Re: Q of coils made on ceramic form?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-06 17:08:03 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12ndu7k4d99a283@corp.supernews.com>
Source record: 9433

<eternalsquire@comcast.net> wrote in message
news:1165420650.198866.59380@n67g2000cwd.googlegroups.com...
> I've been hearing how winding coils on discarded plastic pill bottles
> is not suitable for RF tank circuits due to low Q, and that these would
> not be safe for tube circuits anyway due to melting point.

What frequencies are your coils going to be operating at? I'd be really
surprised if pill bottles had any significant loss at HF.

You must be talking pretty high power designs if you're able to melt plastic!

5583. Re: Need Help - Harris Filter??

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-06 18:26:43 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <DXDdh.16659$j7.335585@news.indigo.ie>
Source record: 9434

On Tue, 05 Dec 2006 20:33:56 -0800, bcdlr wrote:

> I have a Harris filter in my junk box, or at least I think it is a
> Harris filter.
> On top of can:
> P/N 700-0423-00
> FREQ 10.000 MHZ
> T136
> SN. 6385

Is it a filter? It sounds more like an oscillator.

73, Ed. EI9GQ.

--
Remove 'X' to reply by e-mail.
linux 2.6.17

5584. Re: Q of coils made on ceramic form?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-06 20:43:40 UTC
From: Chris Jones <lugnut808@nospam.yahoo.com>
Message-ID: <12neaqmk66lgt1a@corp.supernews.com>
Source record: 9435

eternalsquire@comcast.net wrote:

> All,
>
> I've been hearing how winding coils on discarded plastic pill bottles
> is not suitable for RF tank circuits due to low Q, and that these would
> not be safe for tube circuits anyway due to melting point.
>
> I have access to kaolinite clay (white porcelain) and a kiln, and I was
> wondering if I molded and fired this type of clay for coil forms, what
> effect on a tank circuit Q this form would have.
>
> Thanks in advance,
>
> The Eternal Squire

Although the frequency is probably not the same as what you're going to use the coils for, one way to test the loss of an insulator material is to put some in the microwave oven (along with a mug of water to provide a load for the magnetron). If the insulator material gets hot, then it is lossy. Of course you would have to fire the clay before testing it, otherwise the water content would make it get hot anyway.

If the pill bottles are polypropylene or a similar non-polar plastic then they are probably not very lossy, but of course if the current through the wire makes the wire hot by normal I^2*R losses, then the hot wire would melt the plastic. This would only be a concern in a power amplifier or tube circuits as you mentioned.

Chris

5585. Re: A QRZ Trivia Question That Smegma Radio May Find Educational

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-07 00:50:45 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <FzJdh.7332$sf5.980@newsread4.news.pas.earthlink.net>
Source record: 9436
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"KC4UAI" <kc4uai@gmail.com> wrote in
news:1165422633.729925.259700@79g2000cws.googlegroups.com:

>
> I for one don't want to loose my ticket. Despite what SC says, I
> worked for that Extra...
>
> -= bob =-

Post restructuring License EXAM

(Simplified test approved by all book and magazine publiher and
VE whorehou$e$ who $ay "We need more ham$")

Please PRINT (that means no squiggly lines)

YOUR NAME (what they call you) _____

ADDRESS (where you live) _____

BIRTHDATE (when you were born) _____

EXAM

Instructions: Make a circle (one of these round things O) around the
letter of the best answer! This is so we know what your answer to the
question is!

1. You TALK into a microphone with your _____.

A. Hands
B. Feet
C. Toes
D. Mouth
E. Armpits

2. When you talk into a microphone, you talk into _____.

A. the front
B. the back
C. the top
D. the bottom
E. the wire

3. "HEADPHONES" are worn over the _____.

A. Knees
B. Eyes

C. Toes
D. Ears
E. Lips

4. What do you do with the AC line cord coming out of a power supply?

A. Hold it in the air to pick up signals
B. Pull on it to start the motor
C. Talk into the plug to get real "skip DX"
D. Hook it to your antenna
E. Insert the plug into a source of power

5. A "two meter" radio is:

A. twice as strong as a one-meter radio
B. two one-meter radios in series
C. a CB with two meters on the front panel
D. a good doorstop
E. yo mama

6. A "ten-foot mast" is how long?

A. Ten feet
B. Ten pounds
C. Two meters
D. Tree-top tall
E. yo mama

7. A "Triband antenna" is made to work on how many bands?

A. 1
B. 2
C. 3
D. 4
E. 10

8. The "Marconi" antenna is named after:

A. Marconi
B. Mantovani
C. macaroni
D. Dean Martin
E. yo mama

9. What colors of DIODES can you buy at a Radio Shack store?

A. Red, blue and black
B. Red, yellow and green
C. Orange and brown
D. I am colorblind so this is a discriminatory question and I should automatically get my license because you have been mean to me.
E. I have no intention of ever using DIODES, so I should get my license for free.

10. What color of SLURPEE can you buy at 7-11?

A. Red, blue and black
B. Red, yellow and green
C. Orange and brown
D. I am colorblind so this is a discriminatory question and I should automatically get my license and free slurpees forever because you have been mean to me.

END OF EXAM.

YOUR SIGNATURE (slap yo tag here)

Scoring:

Get THREE correct and you get an EXTRA!!!!
Get TWO right and you get an ADVANCED!!!!
Get ONE right and you get a GENERAL!!!
Miss them all? Just blow the VE and get a no-code Tech Markie!!!

5586. kook right on time

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-07 00:53:03 UTC
From: Mark@kb9rqz.aprs
Message-ID: <jepen2l4g9t4rim762tflm65oro8ssn4dl@4ax.com>
Source record: 9437
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Thu, 07 Dec 2006 00:50:45 GMT, Slow Code <my.mail@no.spam> wrote:

>"KC4UAI" <kc4uai@gmail.com> wrote in
>news:1165422633.729925.259700@79g2000cws.googlegroups.com:
>
>>
>> I for one don't want to loose my ticket. Despite what SC says, I
>> worked for that Extra...
>>
>> -= bob =-
>
>
>
>Post restructuring License EXAM

kook right on time
can you tell about anything steve?
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5587. Re: Q of coils made on ceramic form?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-07 02:11:18 UTC
From: Richard Knoppow <dickburk@ix.netcom.com>
Message-ID: <aLKdh.7426$sf5.5311@newsread4.news.pas.earthlink.net>
Source record: 9438

"Chris Jones" <lugnut808@nospam.yahoo.com> wrote in message
news:12neaqmk66lgt1a@corp.supernews.com...
> eternalsquire@comcast.net wrote:
>
>> All,
>>
>> I've been hearing how winding coils on discarded plastic
>> pill bottles
>> is not suitable for RF tank circuits due to low Q, and
>> that these would
>> not be safe for tube circuits anyway due to melting
>> point.
>>
>> I have access to kaolinite clay (white porcelain) and a
>> kiln, and I was
>> wondering if I molded and fired this type of clay for
>> coil forms, what
>> effect on a tank circuit Q this form would have.
>>
>> Thanks in advance,
>>
>> The Eternal Squire
>
> Although the frequency is probably not the same as what
> you're going to use
> the coils for, one way to test the loss of an insulator
> material is to put
> some in the microwave oven (along with a mug of water to
> provide a load for
> the magnetron). If the insulator material gets hot, then
> it is lossy. Of
> course you would have to fire the clay before testing it,
> otherwise the
> water content would make it get hot anyway.
>
> If the pill bottles are polypropylene or a similar
> non-polar plastic then
> they are probably not very lossy, but of course if the
> current through the
> wire makes the wire hot by normal I^2*R losses, then the
> hot wire would
> melt the plastic. This would only be a concern in a power
> amplifier or
> tube circuits as you mentioned.

>
> Chris

FWIW, I looked at a number of old pill bottles out of curiousity, they are all marked PP No.5 which is Polypropylene. Checking in a microwave oven sounds like a good idea.

--

Richard Knoppow
Los Angeles, CA, USA
dickburk@ix.netcom.com

5588. QRP Rig

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-07 02:57:46 UTC
From: Doug Birky <dgbirky@voyager.net>
Message-ID: <12nf5133n0pdjdb@corp.supernews.com>
Source record: 9440

I have built a Tiny Tornado on 40m. It TX and RX fine. I have my ICOM751 tuned to 7.040 for help in tuning. I notice that when I turn the Tornado on, I get a solid tone. It does transmit fine, but when I release the key, I get this solid tone. Anyone else experience this?

Thanks,
Doug / KB8M

5589. Re: Where to purchase Fair-Rite toroid?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-07 03:30:00 UTC
From: Ted KX4OM <kilocycles@yahoo.com>
Message-ID: <hg2fn2ps1ci1v8gqqs6j0t1phumb5fjcd5@4ax.com>
Source record: 9439

If you can translate Fair-Rite's part numbers (obvious after awhile),
CWS Byremark has an extensive stock of all types with reasonable price
and shipping. For common types, it's had to beat Diz's bundles at
kitsandparts, though.
Ted
On Sat, 02 Dec 2006 20:25:03 -0700, hayseed <nothere@bogus.com> wrote:

>Try Dan's small parts at:
>
>http://www.danssmallpartsandkits.net/
>
>-Bob

5590. Streaming Repeater Audio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-07 06:22:47 UTC
From: Bevis <kc7zwg@kc7zwg.org>
Message-ID: <bLOdnXJakprPLurYnZ2dnUVZ_vSdnZ2d@nventure.com>
Source record: 9441

http://kc7zwg.com

there is a link on the page to listen
to the repeaters and Echolink/IRLP LIVE

--
Martin Johnson - KC7ZWG
kc7zwg@kc7zwg.com - http://www.kc7zwg.com

5591. LIVE Streaming Repeater audio

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-07 06:25:11 UTC
From: Bevis <kc7zwg@kc7zwg.org>
Message-ID: <bLOdnW1akpp-LurYnZ2dnUVZ_vSdnZ2d@nventure.com>
Source record: 9442
Cross-posted to: alt.ham-radio.digital-voice,alt.ham-radio.marketplace,alt.ham-radio.nocode,alt.ham-radio.spread,alt.ham-radio.vhf-uhf,alt.radio.amateur,aus.radio.amateur,fr.rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

http://kc7zwg.com

there is a link on the page to listen
to the repeaters and Echolink/IRLP LIVE

--
Martin Johnson - KC7ZWG
kc7zwg@kc7zwg.com - http://www.kc7zwg.com

5592. Re: QRP Rig

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-07 12:09:14 UTC
From: Arlon Nelson <anelson@min.midco.net>
Message-ID: <z_WdnS78iOr6meXYnZ2dnUVZ_obinZ2d@midco.net>
Source record: 9443

Doug Birky wrote:
> I have built a Tiny Tornado on 40m. It TX and RX fine. I have my ICOM751
> tuned to 7.040 for help in tuning. I notice that when I turn the Tornado on,
> I get a solid tone. It does transmit fine, but when I release the key, I get
> this solid tone. Anyone else experience this?
>
> Thanks,
> Doug / KB8M
>
>
Doug

That is normal, got the same thing in mine. Its the oscillator that runs
all the time.

Nels W0TUP

5593. Re: Need Help - Harris Filter??

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-07 17:19:15 UTC
From: bcdlr <on30ng@gmail.com>
Message-ID: <1165511955.087517.292500@n67g2000cwd.googlegroups.com>
Source record: 9444

I think that's what it appears to be but I can't find any information
on it that way either.
Any ideas?

Dan KB9JLO

Eamon Skelton wrote:
> On Tue, 05 Dec 2006 20:33:56 -0800, bcdlr wrote:
>
> > I have a Harris filter in my junk box, or at least I think it is a
> > Harris filter.
> > On top of can:
> > P/N 700-0423-00
> > FREQ 10.000 MHZ
> > T136
> > SN. 6385
>
> Is it a filter? It sounds more like an oscillator.
>
> 73, Ed. EI9GQ.
>

5594. Re: Q of coils made on ceramic form?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-07 17:51:35 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1165513895.564967.19540@16g2000cwy.googlegroups.com>
Source record: 9445

eternalsquire@comcast.net wrote:
> All,
>
> I've been hearing how winding coils on discarded plastic pill bottles
> is not suitable for RF tank circuits due to low Q, and that these would
> not be safe for tube circuits anyway due to melting point.
>
> I have access to kaolinite clay (white porcelain) and a kiln, and I was
> wondering if I molded and fired this type of clay for coil forms, what
> effect on a tank circuit Q this form would have.
>
> Thanks in advance,
>
> The Eternal Squire

There will be very little effect on Q of an inductor wound on a 1/16" to 1/8" thick wall of translucent plastic as used in pill bottles...as compared to ceramic or epoxy-paper or other plastics as used in commercial coil formers. A quick check on any Q Meter will prove that. [I've done that out of curiosity many many years ago and little change]

A visual clue is the old B&W "coil stock" of heavy wire held in place by cemented-on strips of polystyrene (usually in four strips per long coil stock, equidistant around the circumference. Those were used in the 50s and 60s primarily in tube amplifier circuits under about 200 W.

Using ceramic formers for anything under 400 W (give or take) power level is overkill in insulation. Back in the 30s and 40s use of ceramic was easy in the industry (plastics industry hadn't developed far yet for electronics applications)...so already-in-place ceramics work was an easy way to go for manufacturers of "radio parts." That led many to believe that ceramic forms are "necessary."

The BEST way to go is to sit down and do some grunge work of calculation of RF currents and voltages in a power amplifier L-C network...to see what ACTUAL loss will do insofar as heat dissipation. Q - as measured - will be the same a low or high power levels so the measurements at low levels will still apply to high power applications.

If heat dissipation is a real concern, then that can be simulated with simple AC through a resistance wound around the former in question. Any resistance wire will do, such as the elements out

of an old toaster, hair dryer, etc. Set the low frequency power dissipation the same as what was calculated for RF and watch the results.

By the way, some pill bottles are still molded from polystyrenes with some high end medications stuffed in (of all things) polycarbonate (expensive) containers. The much-storied "Q Dope" (supposedly so great to use on small coils, which it isn't in longevity) is polystyrene with lots of solvent. Q Dope will pull away from most surfaces ("lifts") after several months due to adsorbed moisture in the air, losing some of its good properties. Spar or boat varnish (from petroleum products) is better and longer-lasting, doesn't smell as good as Q Dope but can also be used on floors and furniture. I use McCloskey "Gym Seal" myself...rather expensive in do-it-yourself stores, though.

Just having some kind of ceramic molded is never a panacea. Without some good RF dielectric loss measurement gear you won't be able to know if the ceramic mix has strange stuff in it that could result in it being a lossy dielectric. Some ceramic coffee mugs can heat up by themselves due to trace-whatevers fired in with the ceramic. That indicates a dielectric loss at 2.4 GHz...but you won't know what the effect is at lower RF without measuring it.

I would say you have a needless worry on former material. If you want to fire your own ceramics, go for it! :-)

LenAnderson@ieee.org

5595. Re: Need Help - Harris Filter??

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-07 19:05:01 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <xBZdh.16678$j7.335657@news.indigo.ie>
Source record: 9446

On Thu, 07 Dec 2006 09:19:15 -0800, bcdlr wrote:

> I think that's what it appears to be but I can't find any information
> on it that way either.
> Any ideas?
>
> Dan KB9JLO

A 10MHz oscillator in a sealed metal can could be a TCXO
or possibly even an OCXO.

Has it a similar pinout to the unit at the bottom of
this page?

http://www.vectron.com/products/ocxo/co724725.htm

73, Ed. EI9GQ

--
Remove 'X' to reply by e-mail.
linux 2.6.17

5596. Re: QRP Rig

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-07 20:07:52 UTC
From: Yukio YANO <yano@shaw.ca>
Message-ID: <sw_dh.446185$R63.373306@pd7urf1no>
Source record: 9447

Arlon Nelson wrote:
> Doug Birky wrote:
>> I have built a Tiny Tornado on 40m. It TX and RX fine. I have my ICOM751
>> tuned to 7.040 for help in tuning. I notice that when I turn the
>> Tornado on,
>> I get a solid tone. It does transmit fine, but when I release the key,
>> I get
>> this solid tone. Anyone else experience this?
>>
>> Thanks,
>> Doug / KB8M
>>
>>
> Doug
>
> That is normal, got the same thing in mine. Its the oscillator that runs
> all the time.
>
> Nels W0TUP
Sounds like a Direct-Conversion Rx./Tx. set-up to me. Where the Local
Oscillator is the same as the Rx/Tx Frequency. The ICOM751 should
normally be Zero-Beated to the signal in SSB Mode. But using Incremental
Tune to set the Side-Tone in CW Mode else you would end up chasing a CW.
signal up and down the band. The other source of the problem might be RF
leakage from an unshielded Tiny Tornado, radiating back through the Rx
Rf stage ! This was how German Submarines were detected, even during
"Radio Silence" in WW2. They were leaking the LO (Rx +/- IF) back to the
antenna in the RX mode. This was Cured by an extra RF stage between the
antenna and the first mixer. This is how unlicensed TV sets were
detected in Great Britain, BC (before Cable).

Yukio YANO VE5 YS

5597. James Kim: new vs old tech

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-07 21:33:59 UTC
From: notbob <notbob@nothome.com>
Message-ID: <RqmdneZhJOJaFeXYnZ2dnUVZ_vCdnZ2d@comcast.com>
Source record: 9298
Cross-posted to: alt.ham-radio,alt.ham-radio.hf,alt.ham-radio.morse,rec.radio.amateur.homebrew

No doubt many are saddened by the senseless loss of James Kim, the family man that perished in the mountains of Western Oregon early this week. I think what makes it all the more tragic is that here was a person who was on the cutting edge of all the latest and greatest high tech computer and communications technology. Blackberries, photo cellphones, wifi PDA's and laptops, etc. I'm stunned a person in such a high tech vector could become so completely isolated in such a short distance from the mainstream.

This worries me because it highlights the shortcomings of all this new high tech gimcrackery. As I understand it, even satellite cellphones require a service provider with a nearby uplink antenna. So, this brings up my question, as a non ham:

How long do you think it would have taken James, or anyone in that situation, to make contact with outside help and get him and his family out of there if he'd had something like a basic QRP tranceiver and antenna and knew how to use it?

Any thoughts you may have on this issue would be appreciated.

nb

5598. Re: James Kim: new vs old tech

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-07 21:57:59 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12nh3j99rckbla2@corp.supernews.com>
Source record: 9299
Cross-posted to: alt.ham-radio,alt.ham-radio.hf,alt.ham-radio.morse,rec.radio.amateur.homebrew

"notbob" <notbob@nothome.com> wrote in message
news:RqmdneZhJOJaFeXYnZ2dnUVZ_vCdnZ2d@comcast.com...
> This worries me because it highlights the shortcomings of all this new
> high tech gimcrackery.

I'm not sure what "shortcomings" you're referring to; no cell phone or WiFi vendor suggests that you're somehow going to be able to get service out in the middle of nowhere, miles from any populated town.

> As I understand it, even satellite cellphones
> require a service provider with a nearby uplink antenna.

No, plenty are 100% standalone. You're probably thinking of models that effectively act like traditional cordless phones back to a basestation so that the handset itself can be small and light and have good battery life.

> How long do you think it would have taken James, or anyone in that
> situation, to make contact with outside help and get him and his
> family out of there if he'd had something like a basic QRP tranceiver
> and antenna and knew how to use it?

(Assuming an HF band transceiver...) Not long at all.

If he had made various short hikes from the car to the surrounding hill tops perhaps he could have managed to hit a cell phone tower as well and successfully made a call.

> Any thoughts you may have on this issue would be appreciated.

Although we'll probably never know exactly what he was thinking, I've been on the road in question and to most people it justs scream "do not enter!" in winter... at least not without much better equipment and supplies, including a different vehicle.

I'd be curious to learn if he used a piece of mapping/routing software to choose his course; I've seen some that will choose the road he did because it is shorter, in mileage, than the main highway out to the coast -- not considering that the road is narrow, gravel, and otherwise rather treacherous in winter. (Even in summer it's significantly slower than the main highway.)

---Joel

5599. Re: James Kim: new vs old tech

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-07 23:25:58 UTC
From: BakersT <nomailpls@domain.invalid>
Message-ID: <nomailpls-A87843.18255707122006@news.lga.highwinds-media.com>
Source record: 9300
Cross-posted to: alt.ham-radio,alt.ham-radio.hf,alt.ham-radio.morse,rec.radio.amateur.homebrew

In article <RqmdneZhJOJaFeXYnZ2dnUVZ_vCdnZ2d@comcast.com>,
notbob <notbob@nothome.com> wrote:

[snip]
> This worries me because it highlights the shortcomings of all this new
> high tech gimcrackery. As I understand it, even satellite cellphones
> require a service provider with a nearby uplink antenna. So, this
> brings up my question, as a non ham:
>
> How long do you think it would have taken James, or anyone in that
> situation, to make contact with outside help and get him and his
> family out of there if he'd had something like a basic QRP tranceiver
> and antenna and knew how to use it?
>
> Any thoughts you may have on this issue would be appreciated.

Well, the _right_ high tech gimcrackery (a "personnel locator beacon",
e.g. <http://www.landfallnavigation.com/spwff1.html>) would almost
certainly have been effective. And I'm sorry for his family's loss, and
can appreciate that Mr. Kim must have felt that taking action was
necessary to save his wife and children, but had he _stayed_put_ he'd be
alive today.

5600. Re: ARS License Numbers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-08 00:35:02 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <Wq2eh.8176$ql2.2474@newsread3.news.pas.earthlink.net>
Source record: 9301
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

N2EY@AOL.COM wrote in
news:1165230883.655037.78140@n67g2000cwd.googlegroups.com:

> These are the numbers of current, unexpired
> amateur radio licenses held by individuals
> on the stated dates, and the percentage of
> the total number of active licenses that
> class contains:
>
> As of May 14, 2000:
>
> Novice - 49,329 (7.3%)
> Technician - 205,394 (30.4%)
> Technician Plus - 128,860 (19.1%)
> General - 112,677 (16.7%)
> Advanced - 99,782 (14.8%)
> Extra - 78,750 (11.7%)
>
> Total Tech/TechPlus - 334,254 (49.5%)
>
> Total General/Advanced/Extra - 291,209 (43.2%)
>
> Total all classes - 674,792
>
> As of December 2, 2006:
>
> Novice - 23,801 (3.6%) [decrease of 25,528]
> Technician - 288,922 (44.0%) [increase of 83,528]
> Technician Plus - 33,644 (5.1%) [decrease of 95,216]
> General - 131,409 (20.0%) [increase of 18,732]
> Advanced - 70,183 (10.7%) [decrease of 29,599]
> Extra - 108,154 (16.5%) [increase of 29,404]
>
> (percentages may not add up to exactly 100.0% due to rounding)
>
> Total Tech/TechPlus - 322,566 (49.2%) [decrease of 11,688]
>
> Total General/Advanced/Extra - 309,746 (47.2%) [increase of 18,537]
>
> Total all classes - 656,113 (decrease of 18,679)
>
> Note that these totals do not include licenses
> that have expired but are in the grace period.

>
> They also do not include club, military
> or other station-only licenses.
>
> Note also that effective April 15, 2000, new
> Novice, Technician Plus and Advanced licenses
> are no longer issued.
>
> Since April 15, 2000, FCC has renewed all existing
> Technician Plus licenses as Technician. By May of
> 2010, the number of Technician Plus licenses will drop
> to zero, because all of them will have been renewed as
> Technician or allowed to expire. It is therefore
> informative to consider the totals of the two classes,
> since the Technician class includes a significant
> number of Technician Plus licenses renewed as
> Technician.
>
> 73 de Jim, N2EY

Thanks for posting this Jim. Maybe now people will see that dumbing down ham radio was a bad idea.

SC

5601. Re: Guide Lines for this news group

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-08 00:35:11 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <3r2eh.8183$ql2.2149@newsread3.news.pas.earthlink.net>
Source record: 9302
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

hot-ham-and-cheese@hotmail.com wrote in
news:1165116776.575952.37510@16g2000cwy.googlegroups.com:

>
> Slow Code wrote:
>> Danny Richardson <n_group@k6mhe.com> wrote in
>> news:tqh3n2h7gjtdevv66fvnmv0be7clnpf019@4ax.com:
>>
>> > On Sat, 02 Dec 2006 09:48:44 -0800, Bill Turner <noway@nowhow.com>
>> > wrote:
>> >
>> >>ORIGINAL MESSAGE:
>> >>
>> >>On Sat, 2 Dec 2006 08:19:07 -0800, "Caveat Lector" <CL@nowhere.com>
>> >> wrote:
>> >>
>> >>>Maybe this will help(a little) to get rid of the off topic posts
>> >>>
>> >>>For what this News Group is about and applicable guide lines see
>> >>>URL:
>> >>>
>> >>>http://www.faqs.org/faqs/radio/personal-intro/
>> >>>
>> >>>Thanks for reading
>> >>>73 CL
>> >>>
>> >>
>> >>------------ REPLY FOLLOWS ------------
>> >>
>> >>Dream on, CL. These guys already know that and they don't care. It's
>> >>been that way forever. It's the Curse of Usenet.
>> >>
>> >>Bill, W6WRT
>> >
>> > After years of resisting I'm ready for a moderated antenna group.
>> > I've used my kill filter more times in the last three months than
>> > I've ever done in the previous ten years.
>> >
>> > I, for one, am sick and tired of the foul-mouth off topic postings
>> > and, if that requires a moderated group to get rid of them it would
>> > be a very small price to pay.
>> >
>> > Danny,

>>
>>
>> I know what you mean Dan.
>
> No you don't. You're one of the foul-mouthed off-topic posters that
> Dan is complaining about.
>
>> With the anticipation that ham radio is going
>> to get dumbed down again real soon, the dumb-it-downers
>
> It got "dumbed-down" when a license was issued to you.
>
> BTW, what is your call?

Don't worry about my callsign. Just keep practicing CW. No matter how fast and good you already are at it you can always improve your skills.

SC

5602. Re: ARS License Numbers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-08 01:34:03 UTC
From: Mark@kb9rqz.aprs
Message-ID: <t6ghn2drji894n7u87dgki0t7j891h2c0p@4ax.com>
Source record: 9303
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Fri, 08 Dec 2006 00:35:02 GMT, Slow Code <my.mail@no.spam> wrote:

>N2EY@AOL.COM wrote in
>news:1165230883.655037.78140@n67g2000cwd.googlegroups.com:
>
>> These are the numbers of current, unexpired
>> amateur radio licenses held by individuals
>> on the stated dates, and the percentage of
>> the total number of active licenses that
>> class contains:
>>
>> As of May 14, 2000:
>>
>> Novice - 49,329 (7.3%)
>> Technician - 205,394 (30.4%)
>> Technician Plus - 128,860 (19.1%)
>> General - 112,677 (16.7%)
>> Advanced - 99,782 (14.8%)
>> Extra - 78,750 (11.7%)
>>
>> Total Tech/TechPlus - 334,254 (49.5%)
>>
>> Total General/Advanced/Extra - 291,209 (43.2%)
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>> Total all classes - 674,792
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>> As of December 2, 2006:
>>
>> Novice - 23,801 (3.6%) [decrease of 25,528]
>> Technician - 288,922 (44.0%) [increase of 83,528]
>> Technician Plus - 33,644 (5.1%) [decrease of 95,216]
>> General - 131,409 (20.0%) [increase of 18,732]
>> Advanced - 70,183 (10.7%) [decrease of 29,599]
>> Extra - 108,154 (16.5%) [increase of 29,404]
>>
>> (percentages may not add up to exactly 100.0% due to rounding)
>>
>> Total Tech/TechPlus - 322,566 (49.2%) [decrease of 11,688]
>>
>> Total General/Advanced/Extra - 309,746 (47.2%) [increase of 18,537]
>>
>> Total all classes - 656,113 (decrease of 18,679)
>>

>> Note that these totals do not include licenses
>> that have expired but are in the grace period.
>>
>> They also do not include club, military
>> or other station-only licenses.
>>
>> Note also that effective April 15, 2000, new
>> Novice, Technician Plus and Advanced licenses
>> are no longer issued.
>>
>> Since April 15, 2000, FCC has renewed all existing
>> Technician Plus licenses as Technician. By May of
>> 2010, the number of Technician Plus licenses will drop
>> to zero, because all of them will have been renewed as
>> Technician or allowed to expire. It is therefore
>> informative to consider the totals of the two classes,
>> since the Technician class includes a significant
>> number of Technician Plus licenses renewed as
>> Technician.
>>
>> 73 de Jim, N2EY
>
>
>Thanks for posting this Jim. Maybe now people will see that dumbing down
>ham radio was a bad idea.

we do which is why we want to end the dummbing by ending the mode
welfare that exists in it
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5603. Re: Guide Lines for this news group

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-08 01:40:45 UTC
From: Mark@kb9rqz.aprs
Message-ID: <pighn2hfsl332bn3rt0l7hdat6n569cq1j@4ax.com>
Source record: 9304
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Fri, 08 Dec 2006 00:35:11 GMT, Slow Code <my.mail@no.spam> wrote:

>hot-ham-and-cheese@hotmail.com wrote in
>news:1165116776.575952.37510@16g2000cwy.googlegroups.com:
>
>>
>> Slow Code wrote:
>>> Danny Richardson <n_group@k6mhe.com> wrote in
>>> news:tqh3n2h7gjtdevv66fvnmv0be7clnpf019@4ax.com:
>>>
>>> > On Sat, 02 Dec 2006 09:48:44 -0800, Bill Turner <noway@nowhow.com>
>>> > wrote:
>>> >
>>> >>ORIGINAL MESSAGE:
>>> >>
>>> >>On Sat, 2 Dec 2006 08:19:07 -0800, "Caveat Lector" <CL@nowhere.com>
>>> >> wrote:
>>> >>
>>> >>>Maybe this will help(a little) to get rid of the off topic posts
>>> >>>
>>> >>>For what this News Group is about and applicable guide lines see
>>> >>>URL:
>>> >>>
>>> >>>http://www.faqs.org/faqs/radio/personal-intro/
>>> >>>
>>> >>>Thanks for reading
>>> >>>73 CL
>>> >>>
>>> >>
>>> >>------------ REPLY FOLLOWS ------------
>>> >>
>>> >>Dream on, CL. These guys already know that and they don't care. It's
>>> >>been that way forever. It's the Curse of Usenet.
>>> >>
>>> >>Bill, W6WRT
>>> >
>>> > After years of resisting I'm ready for a moderated antenna group.
>>> > I've used my kill filter more times in the last three months than
>>> > I've ever done in the previous ten years.
>>> >
>>> > I, for one, am sick and tired of the foul-mouth off topic postings
>>> > and, if that requires a moderated group to get rid of them it would
>>> > be a very small price to pay.

>>> >
>>> > Danny,
>>>
>>>
>>> I know what you mean Dan.
>>
>> No you don't. You're one of the foul-mouthed off-topic posters that
>> Dan is complaining about.
>>
>>> With the anticipation that ham radio is going
>>> to get dumbed down again real soon, the dumb-it-downers
>>
>> It got "dumbed-down" when a license was issued to you.
>>
>> BTW, what is your call?
>
>
>Don't worry about my callsign.

why not we think you don't have one
> Just keep practicing CW.

why? BB fuinds it usles to what he interested in as do I

> No matter how fast
>and good you already are at it you can always improve your skills.

so what?

i suspect I am the best Swordmans in RRAP so what
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5604. Re: James Kim: new vs old tech

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-08 01:50:53 UTC
From: notbob <notbob@nothome.com>
Message-ID: <9O6dnUXug7NgWeXYnZ2dnUVZ_v2dnZ2d@comcast.com>
Source record: 9305
Cross-posted to: alt.ham-radio,alt.ham-radio.hf,alt.ham-radio.morse,rec.radio.amateur.homebrew

On 2006-12-07, Joel Kolstad <JKolstad71HatesSpam@yahoo.com> wrote:

> I'd be curious to learn if he used a piece of mapping/routing software to
> choose his course;

I'm sure I've heard he had a mapquest or similar generated map.

> considering that the road is narrow, gravel......

That would have been a flashing red light for me. In fact, I think I took that hwy (42?) from 5 to the coast back in '75. Is that the highway that's the usual detour to the Coast when 5 at Grant's Pass is closed? If so, we did take it in snowy weather at night and were even less prepared than he was (I was real young and real stupid). But, I was smart enough to stay on the road that actually had traffic, including trucks, on it despite it becoming pretty lonesome on some stretches. We also put on chains (the state patrol required it).

nb

5605. FA:NOS DUAL AIR VAR + PARTS....

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-08 02:11:03 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <XQ3eh.167074$Fi1.40832@bgtnsc05-news.ops.worldnet.att.net>
Source record: 9306

Have several parts and other stuff too:

NIB DUAL 100PF Johnson
'N' CONNECTORS, WHEAT BULBS, CHIMNEY CLIPS, DIODES, ELECTROLYTICS,
BIRD PLUG-IN, BIRD COAXWITCH 72-2,

more stuff coming; have a look and tnx

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

HEYTUBEGUY

5606. Re: James Kim: new vs old tech

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-08 12:31:41 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <MKOdnQmHSMGyxuTYnZ2dnUVZ_sqdnZ2d@bright.net>
Source record: 9307
Cross-posted to: alt.ham-radio,alt.ham-radio.hf,alt.ham-radio.morse,rec.radio.amateur.homebrew

I agree...here in the Northern U.S. where we (usually) get plenty of snow and ice, we were taught to stay with the vehicle (and it's always a good idea to have an emergency supply of food and water in the car, especially in the winter months). In the case of an air search and rescue, it's far easier to spot a car on the ground (which is usually very near to a road) rather than spot a person in the woods...

Scott

BakersT wrote:

> Well, the _right_ high tech gimcrackery (a "personnel locator beacon",
> e.g. <http://www.landfallnavigation.com/spwff1.html>) would almost
> certainly have been effective. And I'm sorry for his family's loss, and
> can appreciate that Mr. Kim must have felt that taking action was
> necessary to save his wife and children, but had he _stayed_put_ he'd be
> alive today.

5607. Re: James Kim: new vs old tech

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-08 12:57:39 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1165582659.943048.9020@16g2000cwy.googlegroups.com>
Source record: 9308
Cross-posted to: alt.ham-radio,alt.ham-radio.hf,alt.ham-radio.morse,rec.radio.amateur.homebrew

That is really rugged country... And even with a determined multi day search by air and snowmobile they only found her by accident... Likely if she hadn't had the umbrella they would have sailed right on past without seeing her... It is sheer happenstance that any survived.. Given this coddled, technological world we live in, we have lost our fear of nature... We walk around in freezing weather wearing only a light jacket, get into a self heating car and drive away from the suburban streets into rugged country with the Sirius music playing and the kids banging on the gameboy...But when our technological tools fail, we are totally unequipped to survive in a situation of being stranded in a hostile environment...

Could I have made the same mistake? Maybe... But, I am the product of Northern Michigan, I live in a rural area, I drive 5000# of 4X4 truck, I usually wear a -20F parka, even to run to the store 2.5 miles away... Maybe my inherent caution would have made me question that road and turn around... Maybe not... Glad it was not me...

denny

5608. Re: James Kim: new vs old tech

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-08 13:21:17 UTC
From: Lois <Lois_Lane@planet.net>
Message-ID: <457966CD.872B448@planet.net>
Source record: 9309
Cross-posted to: alt.ham-radio,alt.ham-radio.hf,alt.ham-radio.morse,rec.radio.amateur.homebrew

Official Oregon State maps indicated in red ink the roads
that are closed in winter, off the shelf Rand McNally map did not.

with all the trees out there, too bad he did not carry a leatherman
tool.

burning the tires was smart.

wonder if he knew how to build igloo or other type of shelter.

> I'd be curious to learn if he used a piece of mapping/routing software to
> choose his course; I've seen some that will choose the road he did because it
> is shorter, in mileage, than the main highway out to the coast -- not
> considering that the road is narrow, gravel, and otherwise rather treacherous
> in winter. (Even in summer it's significantly slower than the main highway.)
>
> ---Joel

5609. Re: James Kim: new vs old tech

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-08 13:22:58 UTC
From: Lois <Lois_Lane@planet.net>
Message-ID: <45796732.64507C9A@planet.net>
Source record: 9310
Cross-posted to: alt.ham-radio,alt.ham-radio.hf,alt.ham-radio.morse,rec.radio.amateur.homebrew

wonder if he used the cell phone(s) for a few min
at the top of every hour as a beacon to help recsue
try to loacte him by special gear ?

BakersT wrote:
>
> In article <RqmdneZhJOJaFeXYnZ2dnUVZ_vCdnZ2d@comcast.com>,
> notbob <notbob@nothome.com> wrote:
>
> [snip]
> > This worries me because it highlights the shortcomings of all this new
> > high tech gimcrackery. As I understand it, even satellite cellphones
> > require a service provider with a nearby uplink antenna. So, this
> > brings up my question, as a non ham:
> >
> > How long do you think it would have taken James, or anyone in that
> > situation, to make contact with outside help and get him and his
> > family out of there if he'd had something like a basic QRP tranceiver
> > and antenna and knew how to use it?
> >
> > Any thoughts you may have on this issue would be appreciated.
>
> Well, the _right_ high tech gimcrackery (a "personnel locator beacon",
> e.g. <http://www.landfallnavigation.com/spwff1.html>) would almost
> certainly have been effective. And I'm sorry for his family's loss, and
> can appreciate that Mr. Kim must have felt that taking action was
> necessary to save his wife and children, but had he _stayed_put_ he'd be
> alive today.

5610. Re: James Kim: new vs old tech

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-08 13:26:28 UTC
From: Lois <Lois_Lane@planet.net>
Message-ID: <45796804.E069D9F1@planet.net>
Source record: 9311
Cross-posted to: alt.ham-radio,alt.ham-radio.hf,alt.ham-radio.morse,rec.radio.amateur.homebrew

we never travel in that type of area but
when we do travel by car, got plenty of food,
several boxes cereal for me not the kids !,
cooler with drinks and h2o and several
road flares (makes fires fast) and my 2m/440 mobile kenwood
and ht.

also have old cb from 1975 and it works.

Scott wrote:
>
> I agree...here in the Northern U.S. where we (usually) get plenty of
> snow and ice, we were taught to stay with the vehicle (and it's always a
> good idea to have an emergency supply of food and water in the car,
> especially in the winter months). In the case of an air search and
> rescue, it's far easier to spot a car on the ground (which is usually
> very near to a road) rather than spot a person in the woods...
>

5611. Re: James Kim: new vs old tech

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-08 13:33:33 UTC
From: Topaz305RK <k7sam@arrl.net>
Message-ID: <predna-jM7ky9OTYnZ2dnUVZ_v2nnZ2d@vnet-inc.com>
Source record: 9312
Cross-posted to: alt.ham-radio,alt.ham-radio.hf,alt.ham-radio.morse,rec.radio.amateur.homebrew

Well put.

Living in northeast Montana teaches one to NEVER go out, anywhere, unless you are prepared to spend time in a hostile environment. There are those who do the same thing every year up here, fortunately it usually has a happier ending. Nature is very unforgiving and could care less who you are, where you are from, what you do, etc., etc. Lose sight of that and forget to respect nature and some hard life lessons will bestow themselves upon you, some of them can, unfortunately, be self critiquing.

5612. Re: James Kim: new vs old tech

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-08 14:07:09 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <elbridfnm3@puck.litech.org>
Source record: 9313
Cross-posted to: alt.ham-radio,alt.ham-radio.hf,alt.ham-radio.morse,rec.radio.amateur.homebrew

On Fri, 08 Dec 2006 08:26:28 -0500, Lois <Lois_Lane@planet.net> wrote in
<45796804.E069D9F1@planet.net>:

> Scott wrote:
>>
>> I agree...here in the Northern U.S. where we (usually) get plenty of
>> snow and ice, we were taught to stay with the vehicle (and it's always a
>> good idea to have an emergency supply of food and water in the car,
>> especially in the winter months). In the case of an air search and
>> rescue, it's far easier to spot a car on the ground (which is usually
>> very near to a road) rather than spot a person in the woods...
>>

> we never travel in that type of area but when we do travel by car,
> got plenty of food, several boxes cereal for me not the kids !,
> cooler with drinks and h2o and several road flares (makes fires
> fast) and my 2m/440 mobile kenwood and ht.

> also have old cb from 1975 and it works.

Yes, indeed. Any road trip into the western half of the US (New Mexico
and points west) this time of year will see me do these:

o Move the HF rig into the van, as well as the FM dual-bander;
o Install the HF antenna mount on the van;
o Carry a straight key and antennas for 40, 20, and 10 meters;
o Carry both 2m HTs, spare batteries, and battery chargers for them;
o Load up with food, water, cloth blankets, flares, kitty litter,
reflective Mylar blankets[1], 2 shovels, and flashlights; and
o Give _very_ serious thought to what _else_ I should carry.

We've got to drive from OKC and back over this weekend, and that's how
I'll load up the van today, even though the forecast is for good wx.
I've been called an over-cautious fuddy-duddy because I think like
that, and I'm still alive because I think like that.

Even on well-traveled roads, you can get into Too Much Trouble in bad
weather; back roads in untraveled country are, as we've just seen, far
more dangerous.

Garrison Keillor said it very well indeed:

"Life is complicated, but winter narrows it down to a
few simple problems: heat, food, shelter, plumbing.
And it focuses you in wonderful ways. You don't have
to search for your personal identity in winter; winter

gives it to you. You are prey in winter; nature is
making a serious attempt to kill you."

[1] Life-savers when it's _cold_.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

5613. Re: QRP Rig

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-08 21:41:24 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <4579DC02.4020401@invalid.invalid>
Source record: 9319

Doug Birky wrote:
> I have built a Tiny Tornado on 40m. It TX and RX fine. I have my ICOM751
> tuned to 7.040 for help in tuning. I notice that when I turn the Tornado on,
> I get a solid tone. It does transmit fine, but when I release the key, I get
> this solid tone. Anyone else experience this?

This is a direct-conversion receiver: the beat-frequency oscillator
operates just off the 7.040MHz frequency. Enough of it leaks out of the
unit (especially depending on what kind of case you put it in) to be
picked up by your IC-751.

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

5614. Re: Super Glue doesn't work any more

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-08 21:43:51 UTC
From: west <restccq2@verizon.net>
Message-ID: <r0leh.39$495.3@trnddc06>
Source record: 9314

"Al Lorona" <al_lorona@agilent.com> wrote in message
news:1163118766.320439@newsreg.cos.agilent.com...
> Thank you all for your replies. Tom's treatise on reinforcement was
> well-taken on this end and is something I am going to try in the future.
>
> The opinion seems to be that Super Glue has not really changed but that
> plastics have changed into a form not as easily repaired by Super Glue.
> However, judging from the way Super Glue used to bond my skin vs. how much
> less so now, I still suspect that a weakening of the formula may have
taken
> place, perhaps in response to a lawsuit by someone who accidentally glued
> the palm of their hand to the sole of their shoe or something ridiculous
> like that. Lawyers are continually ruining products and processes for the
> rest of us as they search for the next target from which to extract
punitive
> damages.
>
> By the way, I never said what kind of failure it was; someone else assumed
a
> fan blade had cracked. Actually, it was one of the supporting struts that
> had cracked. I am fairly confident that with some reinforcement a crack
like
> this one has a very good chance of being repaired. However, I believe
epoxy
> is better indicated in this particular case as one of the posters pointed
> out. Epoxy is one tough glue.
>
> Thanks again.
>
> Al

Al,

You had the best answer. I never seen so much bs in a thread. When the glue first came out it was not uncommon for the emergency rooms around the country to have patients with eyes glued shut. Just like the 84 year old lady who successfully sued McDonalds because of burning her crotch with their hot coffee. Now they serve their coffee at a lower temperature. Doesn't taste as good.

Cordially,
west
>
>
>

5615. Re: Super Glue doesn't work any more

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-08 22:03:29 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <12njo9ibd7k31ec@corp.supernews.com>
Source record: 9315

"west" <restccq2@verizon.net> wrote in message news:r0leh.39$495.3@trnddc06...
> You had the best answer. I never seen so much bs in a thread. When the glue
> first came out it was not uncommon for the emergency rooms around the
> country to have patients with eyes glued shut.

I remember reading the MSDS for super glue many years ago and it specifically mentioned that it wouldn't actually harm your eye, and the best thing to do was just wait until the skin naturally dies rather than trying to force open the lids. Ewwww....

I'm sure it stings like a @#$@ though; just getting my eyes close to the stuff makes them sting from the fumes.

> Just like the 84 year old
> lady who successfully sued McDonalds because of burning her crotch with
> their hot coffee.

Just to be fair to Ronald, the particular McDonalds in question was serving their coffee considerably hotter than they own internal guidelines said they should have been.

> Now they serve their coffee at a lower temperature.

Definitely a case of one bad apple (the restaurant) ruining it for everyone.

5616. Re: Super Glue doesn't work any more

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-08 23:02:03 UTC
From: kd5sak <kd5sak@sbcglobal.net>
Message-ID: <L9meh.117$yC5.106@newssvr27.news.prodigy.net>
Source record: 9316

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> wrote in message
news:12njo9ibd7k31ec@corp.supernews.com...
> "west" <restccq2@verizon.net> wrote in message
> news:r0leh.39$495.3@trnddc06...

>
> Just to be fair to Ronald, the particular McDonalds in question was
> serving their coffee considerably hotter than they own internal guidelines
> said they should have been.
>
>> Now they serve their coffee at a lower temperature.
>
> Definitely a case of one bad apple (the restaurant) ruining it for
> everyone.
>
>
Didn't ruin it for everyone, my Mom had already taken care of coffee for me.
She sneaked a dose of castor oil into a cup of coffee to trick me into
drinking it when I was seven years old.
That's the last cup of coffee I ever had. I still detect a slight tinge of
castor oil when I smell coffee cooking.(G) Waagh! I'm just glad she didn't
find a way to spoil the smell of gunsmoke for me.

HWB

5617. Re: What's REALLY Going to Happen When the Code Test Drops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-09 01:25:01 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <Nfoeh.8470$ql2.7534@newsread3.news.pas.earthlink.net>
Source record: 9320
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"K4YZ" <k4yz_02@yahoo.com> wrote in
news:1165407544.057957.176440@n67g2000cwd.googlegroups.com:

>
> snot-scam-and-sleaze@hotmail.com wrote:
>> Mark@kb9rqz.aprs wrote:
>> > On 27 Nov 2006 15:37:54 -0800, hot-ham-and-cheese@hotmail.com wrote:
>> > >Mark@kb9rqz.aprs wrote:
>> > >> On Sun, 26 Nov 2006 19:59:00 -0500, ". . . _" <ProCoder@anon>
>> > >> wrote:
>> > >>
>> > >> >This site will help you work on your CW.
>> > >> >http://www.cq2k.com/
>> > >> >
>> > >> well it did not work 6 years ago, why would I expect to work now?
>> > >>
>> > >> assuming I was willing to put the time into trying
>> > >
>> > >They've repackaged it and are selling it as "New and Improved."
>> > >
>> > >All they did was change the timing so that you now have to take the
>> > >5WPM exam at 13-15WPM.
>> >
>> > Ah, I see it sounds really promising then
>>
>> It's almost enough to entice someone into the service...
>>
>> Almost.
>
> Here's what's going to happen after the Morse Code exam is dropped:
>
> There will be a brief surge of NCT's who upgrade to an HF license.
> There will be a brief (maybe 6 months?) burst of new ops on HF, then it
> will be back to the repeaters.
>
> There will be a brief surge of new Amateurs. Ditto the above,
> minus the migration back to the repeaters.
>
> Then it will be business as usual...Just as it has been for the
> last 5 major changes of Amateur Radio regulations that were supposed to
> bring magnificent numbers of new operators to the fold.
>
> Steve, K4YZ

No, the bands are going to get worse over the long haul. We got people that don't want to be skilled knowledgable hams. If they're too lazy to learn CW they are going to be too lazy to learn other things too. Technical discussions will decline. It will start to sound like CB.

I give ham radio fifteen years after the code requirement is eliminated to totally get there, but it will be noticable that it's going downhill quality wise within the first five years.

Just listen to the no-code ignorance on repeaters, you don't think thats no going to migrate to HF?

SC

5618. Re: James Kim: new vs old tech

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-09 02:22:38 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <457A1DEE.1040004@bloomer.net>
Source record: 9317
Cross-posted to: alt.ham-radio,alt.ham-radio.hf,alt.ham-radio.morse,rec.radio.amateur.homebrew

Roger that! I have a Yaesu FT-857 in my truck so I have HF through 440
and antennas for all bands. I'd be screaming my lungs out on 40M or 20M
or whatever band I could raise somebody on!

Scott
N0EDV

Lois wrote:

> we never travel in that type of area but
> when we do travel by car, got plenty of food,
> several boxes cereal for me not the kids !,
> cooler with drinks and h2o and several
> road flares (makes fires fast) and my 2m/440 mobile kenwood
> and ht.
>
> also have old cb from 1975 and it works.
>
>
> Scott wrote:
>
>>I agree...here in the Northern U.S. where we (usually) get plenty of
>>snow and ice, we were taught to stay with the vehicle (and it's always a
>>good idea to have an emergency supply of food and water in the car,
>>especially in the winter months). In the case of an air search and
>>rescue, it's far easier to spot a car on the ground (which is usually
>>very near to a road) rather than spot a person in the woods...
>>

5619. Re: James Kim: new vs old tech

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-09 04:45:50 UTC
From: Zarky Zork <zorkyzork@bonkaloo.net>
Message-ID: <2creh.27902$wP1.14825@newssvr14.news.prodigy.net>
Source record: 9318
Cross-posted to: alt.ham-radio,alt.ham-radio.hf,alt.ham-radio.morse,rec.radio.amateur.homebrew

keep in mind, he, like most of us, was just a middle class guy who had essentially no experience in rugged, snowy terrain. He lived in SF, in the city. His family was going up to visit relatives. How often do normal middle class folks carry a big-ass survival kit that would help them survive for weeks in the snowy wilderness, even when they're driving through the snowy wilderness between two major metropolitan areas?

It just lets us know what everybody who lives in Alaska, or North Dakota, or Montana, already knows -- far away is closer than you think.

5620. SolderSmoke #43: LP Filters, Titan, Feedback amps, Return Loss Bridges, "Gonzo Gizmos"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-09 14:08:45 UTC
From: bill.meara@gmail.com
Message-ID: <1165673325.215679.235050@73g2000cwn.googlegroups.com>
Source record: 9321
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,sci.electronics.basics,sci.astro.amateur

SolderSmoke!
A SHOW FOR ELECTRONICS HOMEBREWERS!

http://www.soldersmoke.com

Listen at: http://www.soldersmoke.com

SolderSmoke #43 December 9, 2006
-- LP filters.
-- Feedback on feedback (in amps).
-- Return loss calc.
-- Exploring Titan.
-- London tornado.
-- Maxwell's equations.
-- TRS 80 Model 100.
-- Name-that-Noise.
-- Book: "Gonzo Gizmos."
-- MAILBAG: AK9N, N2NLY, NR5A, Ramakrishnan

Tired of listening to Led Zepplin or NPR on your
I-Pod? Wouldn't you like to be able to carry with
you the kinds of ham radio conversations that you
listen to while in your radio shack?
Mike, KL7R, in Juneau, Alaska, and Bill, M0HBR, in
London, England meet regularly on the ECHOLINK system
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If you don't have an MP3 player you can just go to the
site below and listen to the latest program (and
earlier editions) using the audio software on your
computer.

http://www.soldersmoke.com

All our programs are available here.

We hope you enjoy the program. Please send us
feedback.

73 from London
Bill M0HBR N2CQR CU2JL
http://www.gadgeteer.us

5621. Re: What's REALLY Going to Happen When the Code Test Drops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-09 14:23:49 UTC
From: U-Know-Who <no-one@nowhere.com>
Message-ID: <VFzeh.3275$qp1.2623@tornado.texas.rr.com>
Source record: 9322
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Slow Code" <my.mail@no.spam> wrote in message
news:Nfoeh.8470$ql2.7534@newsread3.news.pas.earthlink.net...
> "K4YZ" <k4yz_02@yahoo.com> wrote in
> news:1165407544.057957.176440@n67g2000cwd.googlegroups.com:
>
>>
>> snot-scam-and-sleaze@hotmail.com wrote:
>>> Mark@kb9rqz.aprs wrote:
>>> > On 27 Nov 2006 15:37:54 -0800, hot-ham-and-cheese@hotmail.com wrote:
>>> > >Mark@kb9rqz.aprs wrote:
>>> > >> On Sun, 26 Nov 2006 19:59:00 -0500, ". . . _" <ProCoder@anon>
>>> > >> wrote:
>>> > >>
>>> > >> >This site will help you work on your CW.
>>> > >> >http://www.cq2k.com/
>>> > >> >
>>> > >> well it did not work 6 years ago, why would I expect to work now?
>>> > >>
>>> > >> assuming I was willing to put the time into trying
>>> > >
>>> > >They've repackaged it and are selling it as "New and Improved."
>>> > >
>>> > >All they did was change the timing so that you now have to take the
>>> > >5WPM exam at 13-15WPM.
>>> >
>>> > Ah, I see it sounds really promising then
>>>
>>> It's almost enough to entice someone into the service...
>>>
>>> Almost.
>>
>> Here's what's going to happen after the Morse Code exam is dropped:
>>
>> There will be a brief surge of NCT's who upgrade to an HF license.
>> There will be a brief (maybe 6 months?) burst of new ops on HF, then it
>> will be back to the repeaters.
>>
>> There will be a brief surge of new Amateurs. Ditto the above,
>> minus the migration back to the repeaters.
>>
>> Then it will be business as usual...Just as it has been for the
>> last 5 major changes of Amateur Radio regulations that were supposed to
>> bring magnificent numbers of new operators to the fold.

>>
>> Steve, K4YZ
>
>
> No, the bands are going to get worse over the long haul. We got people
> that don't want to be skilled knowledgable hams. If they're too lazy to
> learn CW they are going to be too lazy to learn other things too.
> Technical discussions will decline. It will start to sound like CB.
>
> I give ham radio fifteen years after the code requirement is eliminated to
> totally get there, but it will be noticable that it's going downhill
> quality wise within the first five years.
>
> Just listen to the no-code ignorance on repeaters, you don't think thats
> no going to migrate to HF?
>
> SC

It would certainly be an improvement over you.

5622. Re: What's REALLY Going to Happen When the Code Test Drops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-09 16:23:16 UTC
From: Mark@kb9rqz.aprs
Message-ID: <tkoln210imq5gm2v0gruc8i942jpgavg3m@4ax.com>
Source record: 9323
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sat, 09 Dec 2006 01:25:01 GMT, Slow Code <my.mail@no.spam> wrote:

>"K4YZ" <k4yz_02@yahoo.com> wrote in
>news:1165407544.057957.176440@n67g2000cwd.googlegroups.com:
>
>>
>> snot-scam-and-sleaze@hotmail.com wrote:
>>> Mark@kb9rqz.aprs wrote:
>>> > On 27 Nov 2006 15:37:54 -0800, hot-ham-and-cheese@hotmail.com wrote:
>>> > >Mark@kb9rqz.aprs wrote:
>>> > >> On Sun, 26 Nov 2006 19:59:00 -0500, ". . . _" <ProCoder@anon>
>>> > >> wrote:
>>> > >>
>>> > >> >This site will help you work on your CW.
>>> > >> >http://www.cq2k.com/
>>> > >> >
>>> > >> well it did not work 6 years ago, why would I expect to work now?
>>> > >>
>>> > >> assuming I was willing to put the time into trying
>>> > >
>>> > >They've repackaged it and are selling it as "New and Improved."
>>> > >
>>> > >All they did was change the timing so that you now have to take the
>>> > >5WPM exam at 13-15WPM.
>>> >
>>> > Ah, I see it sounds really promising then
>>>
>>> It's almost enough to entice someone into the service...
>>>
>>> Almost.
>>
>> Here's what's going to happen after the Morse Code exam is dropped:
>>
>> There will be a brief surge of NCT's who upgrade to an HF license.
>> There will be a brief (maybe 6 months?) burst of new ops on HF, then it
>> will be back to the repeaters.
>>
>> There will be a brief surge of new Amateurs. Ditto the above,
>> minus the migration back to the repeaters.
>>
>> Then it will be business as usual...Just as it has been for the
>> last 5 major changes of Amateur Radio regulations that were supposed to
>> bring magnificent numbers of new operators to the fold.

>>
>> Steve, K4YZ
>
>
>No, the bands are going to get worse over the long haul.

hardly possible
> We got people
>that don't want to be skilled knowledgable hams.

where?
> If they're too lazy to
>learn CW they are going to be too lazy to learn other things too.

bulsshit
>Technical discussions will decline. It will start to sound like CB.

so?
>
>I give ham radio fifteen years after the code requirement is eliminated to
>totally get there, but it will be noticable that it's going downhill
>quality wise within the first five years.

you and steve are on the air I will hardly be noticed
>
>Just listen to the no-code ignorance on repeaters, you don't think thats
>no going to migrate to HF?

what no code ignorance?
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5623. Re: What's REALLY Going to Happen When the Code Test Drops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-09 16:36:30 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <7amln2lf3g7duag15fqco0r0lm26q6lr10@4ax.com>
Source record: 9324
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sat, 09 Dec 2006 01:25:01 GMT, Slow Code <my.mail@no.spam> wrote:

>
>No, the bands are going to get worse over the long haul. We got people
>that don't want to be skilled knowledgable hams. If they're too lazy to
>learn CW they are going to be too lazy to learn other things too.
>Technical discussions will decline. It will start to sound like CB.

From the European perspective, I do not understand this discussion.
Most European countries (except Russia) removed the CW requirement
after a few months of the ITU WRC decision that CW test is not
required at frequencies below 30 MHz.

I haven't observed any problems with persons using the HF bands
without the CW test.

Listen for yourself, can you tell which European operator has passed
the CW test and which one has not passed the test.

Paul OH3LWR

5624. Re: What's REALLY Going to Happen When the Code Test Drops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-09 16:51:06 UTC
From: Mark@kb9rqz.aprs
Message-ID: <r7qln2d30jdrsr5maqi1jfm6jtn8aq82bl@4ax.com>
Source record: 9325
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sat, 09 Dec 2006 18:36:30 +0200, Paul Keinanen <keinanen@sci.fi>
wrote:

>On Sat, 09 Dec 2006 01:25:01 GMT, Slow Code <my.mail@no.spam> wrote:
>
>>
>>No, the bands are going to get worse over the long haul. We got people
>>that don't want to be skilled knowledgable hams. If they're too lazy to
>>learn CW they are going to be too lazy to learn other things too.
>>Technical discussions will decline. It will start to sound like CB.
>
>From the European perspective, I do not understand this discussion.
>Most European countries (except Russia) removed the CW requirement
>after a few months of the ITU WRC decision that CW test is not
>required at frequencies below 30 MHz.
>
>I haven't observed any problems with persons using the HF bands
>without the CW test.
>
>Listen for yourself, can you tell which European operator has passed
>the CW test and which one has not passed the test.
>
>Paul OH3LWR
>
being a tech in USA I am sorry I don't reconize your prefix

US hams are such stick in mud as to opose ANY change ever and claim
the sky is falling

I will corect you

thier is no disscussion going this a merely the last stages of the
long and bitter struge to finsh the task of ending code testing in the
USA

and Id expect this lang to get worse before it gets better
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5625. Re: What's REALLY Going to Happen When the Code Test Drops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-09 17:03:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <eleq91$744$1@aioe.org>
Source record: 9326
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Paul Keinanen wrote:
> On Sat, 09 Dec 2006 01:25:01 GMT, Slow Code <my.mail@no.spam> wrote:
>
>> No, the bands are going to get worse over the long haul. We got people
>> that don't want to be skilled knowledgable hams. If they're too lazy to
>> learn CW they are going to be too lazy to learn other things too.
>> Technical discussions will decline. It will start to sound like CB.
>
> From the European perspective, I do not understand this discussion.
> Most European countries (except Russia) removed the CW requirement
> after a few months of the ITU WRC decision that CW test is not
> required at frequencies below 30 MHz.
>
> I haven't observed any problems with persons using the HF bands
> without the CW test.
>
> Listen for yourself, can you tell which European operator has passed
> the CW test and which one has not passed the test.
>
> Paul OH3LWR
>

Paul:

If before I did not have reason enough to appreciate European logic, I
do now.

Warmest regards,
JS

5626. anyone know?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-09 17:36:31 UTC
From: egg <audioh@volumized.it>
Message-ID: <457af41f$0$2999$9a6e19ea@unlimited.newshosting.com>
Source record: 9327

anyone know or have pictures of what kind of console this came out of ?

http://cgi.ebay.ca/NORDEMENDE-AM-FM-STEREO-SW1-SW2-SHORTWAVE-TUBE-RADIO_W0QQitemZ270064344456QQihZ017QQcategoryZ50596QQssPageNameZWDVWQQrdZ1QQcmdZViewItem

5627. Re: What's REALLY Going to Happen When the Code Test Drops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-09 17:41:21 UTC
From: gsm@mendelson.com
Message-ID: <slrnenlt23.ulu.gsm@cable.mendelson.com>
Source record: 9328
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Paul Keinanen wrote:
> From the European perspective, I do not understand this discussion.
> Most European countries (except Russia) removed the CW requirement
> after a few months of the ITU WRC decision that CW test is not
> required at frequencies below 30 MHz.

I don't know if or when they dropped it), but the Soviet Union had
a no code HF license starting around 1956. Japan also had one
at one time.

From the point of view of the "DX", like you Paul, I'm glad that
the low end of the 40m and 75 meter phone bands was extended. I PREFER
SSB, a 20 meters has been open to the U.S. on "good days" for around
20 minutes.

Due to the influence of the Israel Amateur Radio Club, the code
requirement has been kept. With the IARC's other policies, including
operating events when relgious hams can't operate, pushing for
a five year requirement to convert a foreign license for new immegrants,
etc, they really have become the superfulous old man's CW club,
dragging the hobby down with them.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 Fax ONLY: 972-2-648-1443 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

5628. Re: What's REALLY Going to Happen When the Code Test Drops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-09 17:44:16 UTC
From: Mark@kb9rqz.aprs
Message-ID: <udtln2dsaup5pbd6dc6t8qk6nb7da6q9e2@4ax.com>
Source record: 9329
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sat, 9 Dec 2006 17:41:21 +0000 (UTC), gsm@mendelson.com (Geoffrey
S. Mendelson) wrote:

>Paul Keinanen wrote:
>> From the European perspective, I do not understand this discussion.
>> Most European countries (except Russia) removed the CW requirement
>> after a few months of the ITU WRC decision that CW test is not
>> required at frequencies below 30 MHz.
>
>I don't know if or when they dropped it), but the Soviet Union had
>a no code HF license starting around 1956. Japan also had one
>at one time.
>
>From the point of view of the "DX", like you Paul, I'm glad that
>the low end of the 40m and 75 meter phone bands was extended. I PREFER
>SSB, a 20 meters has been open to the U.S. on "good days" for around
>20 minutes.
>
>Due to the influence of the Israel Amateur Radio Club, the code
>requirement has been kept. With the IARC's other policies, including
>operating events when relgious hams can't operate, pushing for
>a five year requirement to convert a foreign license for new immegrants,
>etc, they really have become the superfulous old man's CW club,
>dragging the hobby down with them.
>
>Geoff.

ah just one more reason for me not to make Aliyah
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5629. Re: What's REALLY Going to Happen When the Code Test Drops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-09 18:54:21 UTC
From: Dee Flint <deeflint01@comcast.net>
Message-ID: <v4udneNaF5P2m-bYnZ2dnUVZ_vipnZ2d@comcast.com>
Source record: 9330
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Paul Keinanen" <keinanen@sci.fi> wrote in message
news:7amln2lf3g7duag15fqco0r0lm26q6lr10@4ax.com...
> On Sat, 09 Dec 2006 01:25:01 GMT, Slow Code <my.mail@no.spam> wrote:
>
>>
>>No, the bands are going to get worse over the long haul. We got people
>>that don't want to be skilled knowledgable hams. If they're too lazy to
>>learn CW they are going to be too lazy to learn other things too.
>>Technical discussions will decline. It will start to sound like CB.
>
> From the European perspective, I do not understand this discussion.
> Most European countries (except Russia) removed the CW requirement
> after a few months of the ITU WRC decision that CW test is not
> required at frequencies below 30 MHz.
>
> I haven't observed any problems with persons using the HF bands
> without the CW test.
>
> Listen for yourself, can you tell which European operator has passed
> the CW test and which one has not passed the test.
>
> Paul OH3LWR
>

Other countries are not a problem. Personally I do not attempt to predict what will happen in the US. However some fear that with easy licensing and the lax enforcement here that there could potentially be serious problems. They fear a repetition of what happened to the Citizens Band here. With little to no enforcement of violations, that band became such a sewer that you don't dare let kids listen to it. Recently two CB operators got into a fight over the radio, sought each other out, and one was killed. It is not the world we fear but ourselves.

Dee, N8UZE

5630. Re: What's REALLY Going to Happen When the Code Test Drops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-09 19:07:56 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <elf1ih$od6$1@aioe.org>
Source record: 9331
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Dee:

England feared granting us independence and the right to govern ourselves,
frankly, they were correct; we have been a problem ever since!

Warmest regards,
JS

"Dee Flint" <deeflint01@comcast.net> wrote in message
news:v4udneNaF5P2m-bYnZ2dnUVZ_vipnZ2d@comcast.com...
>
> "Paul Keinanen" <keinanen@sci.fi> wrote in message
> news:7amln2lf3g7duag15fqco0r0lm26q6lr10@4ax.com...
>> On Sat, 09 Dec 2006 01:25:01 GMT, Slow Code <my.mail@no.spam> wrote:
>>
>>>
>>>No, the bands are going to get worse over the long haul. We got people
>>>that don't want to be skilled knowledgable hams. If they're too lazy to
>>>learn CW they are going to be too lazy to learn other things too.
>>>Technical discussions will decline. It will start to sound like CB.
>>
>> From the European perspective, I do not understand this discussion.
>> Most European countries (except Russia) removed the CW requirement
>> after a few months of the ITU WRC decision that CW test is not
>> required at frequencies below 30 MHz.
>>
>> I haven't observed any problems with persons using the HF bands
>> without the CW test.
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>> Listen for yourself, can you tell which European operator has passed
>> the CW test and which one has not passed the test.
>>
>> Paul OH3LWR
>>
>
> Other countries are not a problem. Personally I do not attempt to predict
> what will happen in the US. However some fear that with easy licensing
> and the lax enforcement here that there could potentially be serious
> problems. They fear a repetition of what happened to the Citizens Band
> here. With little to no enforcement of violations, that band became such
> a sewer that you don't dare let kids listen to it. Recently two CB
> operators got into a fight over the radio, sought each other out, and one
> was killed. It is not the world we fear but ourselves.
>

> Dee, N8UZE
>

5631. Re: James Kim: new vs old tech

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-09 20:23:54 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns98947DC5450F6doldridgsprintca@64.59.135.159>
Source record: 9332
Cross-posted to: alt.ham-radio,alt.ham-radio.hf,alt.ham-radio.morse,rec.radio.amateur.homebrew

notbob <notbob@nothome.com> wrote in
news:RqmdneZhJOJaFeXYnZ2dnUVZ_vCdnZ2d@comcast.com:

> No doubt many are saddened by the senseless loss of James Kim, the
> family man that perished in the mountains of Western Oregon early this
> week. I think what makes it all the more tragic is that here was a
> person who was on the cutting edge of all the latest and greatest high
> tech computer and communications technology. Blackberries, photo
> cellphones, wifi PDA's and laptops, etc. I'm stunned a person in such
> a high tech vector could become so completely isolated in such a short
> distance from the mainstream.
>
> This worries me because it highlights the shortcomings of all this new
> high tech gimcrackery. As I understand it, even satellite cellphones
> require a service provider with a nearby uplink antenna. So, this
> brings up my question, as a non ham:
>
> How long do you think it would have taken James, or anyone in that
> situation, to make contact with outside help and get him and his
> family out of there if he'd had something like a basic QRP tranceiver
> and antenna and knew how to use it?

Actually, in those mountains, a 2 meter hand-held would probably have
given him someone to talk to.

--
Dave Oldridge+
ICQ 1800667

5632. Re: What's REALLY Going to Happen When the Code Test Drops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-09 20:31:42 UTC
From: "LenAnderson@ieee.org" <LenAnderson@ieee.org>
Message-ID: <1165696302.167589.103600@80g2000cwy.googlegroups.com>
Source record: 9333
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

John Smith wrote:
> Dee:
>
> England feared granting us independence and the right to govern ourselves,
> frankly, they were correct; we have been a problem ever since!
>
> Warmest regards,
> JS

I'm of the opinion that the ARRL feared to give US radio amateurs
their independence from morse code testing. :-)

LA

5633. Need help with ailing antenna bridge...

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-09 21:24:01 UTC
From: WA5PSA <briefer@gmail.com>
Message-ID: <1165699441.158648.55760@n67g2000cwd.googlegroups.com>
Source record: 9334

I've got an MFJ204 antenna bridge that's sickly. It has bands A thru D. Bands
A thru C work just fine. However, only the upper portion of Band D works
(usually between 19MHz and 35MHz). But, between 11 MHz and 19 MHz the oscillator is usually dead. I can sometimes get it to spring to life with just
the right setting of an attached antenna tuner (or by dancing around the room
with aluminum foil on my head), but those techniques should not be required for
factory approved operation.

It appears that the only Band D specific component is an inductor. However, I
think the band switch works by placing additional inductors in series...so the
Band D inductor is always in the circuit, even for Bands A-C. Therefore, I
don't think it's the inductor.

Any ideas why the lower portion of Band D might be dead and what I might look
for?

Details of my efforts can be viewed at http://wa5psa.blogspot.com/
(warning...this web page should not be viewed by someone with a low tolerance
for watching someone "learn" by mistakes).

Brad

5634. Re: What's REALLY Going to Happen When the Code Test Drops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-09 22:54:46 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1165704886.690348.306000@f1g2000cwa.googlegroups.com>
Source record: 9335
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Dee Flint wrote:
> "Paul Keinanen" <keinanen@sci.fi> wrote in message
> news:7amln2lf3g7duag15fqco0r0lm26q6lr10@4ax.com...
> > On Sat, 09 Dec 2006 01:25:01 GMT, Slow Code <my.mail@no.spam> wrote:
> >
> >>
> >> >>No, the bands are going to get worse over the long haul. We got people
> >> >>that don't want to be skilled knowledgable hams. If they're too lazy to
> >> >>learn CW they are going to be too lazy to learn other things too.
> >> >>Technical discussions will decline. It will start to sound like CB.
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> > From the European perspective, I do not understand this discussion.
> > Most European countries (except Russia) removed the CW requirement
> > after a few months of the ITU WRC decision that CW test is not
> > required at frequencies below 30 MHz.

We have the ARRL wispering in the FCCs ear.

> > I haven't observed any problems with persons using the HF bands
> > without the CW test.
> >
> > Listen for yourself, can you tell which European operator has passed
> > the CW test and which one has not passed the test.
> >
> > Paul OH3LWR
>
> Other countries are not a problem.

No country should be a problem.

> Personally I do not attempt to predict
> what will happen in the US. However some fear that with easy licensing and
> the lax enforcement here that there could potentially be serious problems.

Riley isn't doing his job?

I think what I wrote before one of the recent restructurings was, "What
I fear most about eliminating the Morse Code Exam is a lack of
enforcement, and what I fear most about maintaining the Status Quo is a
lack of enforcement."

A lack of enforcement is a lack of enforcement, and a Morse Code Exam
CANNOT be used as a substitute.

Be sure to collect evidence of USA violations and turn it in to Riley.
Don't just pass it to your OO.

> They fear a repetition of what happened to the Citizens Band here. With
> little to no enforcement of violations, that band became such a sewer that
> you don't dare let kids listen to it. Recently two CB operators got into
> a fight over the radio, sought each other out, and one was killed. It is
> not the world we fear but ourselves.
>
> Dee, N8UZE

There are loose cannons in Amateur Radio as well.

5635. Re: What's REALLY Going to Happen When the Code Test Drops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-09 23:25:20 UTC
From: Dee Flint <deeflint01@comcast.net>
Message-ID: <D7ednU4bSI1w2ObYnZ2dnUVZ_o6gnZ2d@comcast.com>
Source record: 9336
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

<hot-ham-and-cheese@hotmail.com> wrote in message
news:1165704886.690348.306000@f1g2000cwa.googlegroups.com...
>
> Dee Flint wrote:
>> "Paul Keinanen" <keinanen@sci.fi> wrote in message
>> news:7amln2lf3g7duag15fqco0r0lm26q6lr10@4ax.com...
>> > On Sat, 09 Dec 2006 01:25:01 GMT, Slow Code <my.mail@no.spam> wrote:
>> >
>> >>
>> >>No, the bands are going to get worse over the long haul. We got people
>> >>that don't want to be skilled knowledgable hams. If they're too lazy
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>> >>learn CW they are going to be too lazy to learn other things too.
>> >>Technical discussions will decline. It will start to sound like CB.
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>> > after a few months of the ITU WRC decision that CW test is not
>> > required at frequencies below 30 MHz.
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> We have the ARRL wispering in the FCCs ear.
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>> > I haven't observed any problems with persons using the HF bands
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>> > Listen for yourself, can you tell which European operator has passed
>> > the CW test and which one has not passed the test.
>> >
>> > Paul OH3LWR
>>
>> Other countries are not a problem.
>
> No country should be a problem.
>
>> Personally I do not attempt to predict
>> what will happen in the US. However some fear that with easy licensing
>> and
>> the lax enforcement here that there could potentially be serious
>> problems.
>
> Riley isn't doing his job?
>
> I think what I wrote before one of the recent restructurings was, "What

> I fear most about eliminating the Morse Code Exam is a lack of
> enforcement, and what I fear most about maintaining the Status Quo is a
> lack of enforcement."
>
> A lack of enforcement is a lack of enforcement, and a Morse Code Exam
> CANNOT be used as a substitute.
>

If you recall, I've never been the one to claim it is any type of filter
etc. I simply think it is one of the basics and for that reason believe a
basic requirement is suitable.

> Be sure to collect evidence of USA violations and turn it in to Riley.
> Don't just pass it to your OO.
>
>> They fear a repetition of what happened to the Citizens Band here. With
>> little to no enforcement of violations, that band became such a sewer
>> that
>> you don't dare let kids listen to it. Recently two CB operators got
>> into
>> a fight over the radio, sought each other out, and one was killed. It is
>> not the world we fear but ourselves.
>>
>> Dee, N8UZE
>
> There are loose cannons in Amateur Radio as well.
>

That there are.

Dee, N8UZE

5636. Re: Call for Action-CW Advocacy organization

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 00:52:55 UTC
From: Maxwell Plonk <Maxwell@plonk.me>
Message-ID: <HTIeh.8314$sf5.2493@newsread4.news.pas.earthlink.net>
Source record: 9337
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.swap

Telamon <telamon_spamshield@pacbell.net.is.invalid> wrote in
news:telamon_spamshield-F6A0EB.18540107122006@newsclstr02.news.prodigy.com:

> In article <12ngg4j105cjp01@corp.supernews.com>,
> "FedUP" <fedup@intergate.com> wrote:
>
>> This is not a warm and fuzzy feel good letter like much of the
>> baloney you read in the ham radio press.
>
> < Snip >
>
> Nobody cares.
>
> < Plonk >

You don't care because you're a Lazy ass and don't want to be a skilled
radio hobbiest, but there are a lot of us out here that do care and want
to be skilled. When you need help with anything your sorry ass is going to
be calling on us skilled operators for help.

Max

5637. Do no-code hams wipe their butts?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 00:52:57 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <JTIeh.8316$sf5.5767@newsread4.news.pas.earthlink.net>
Source record: 9338
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner

If they're to lazy to learn CW for good radio skills, they might be too lazy to use toilet paper for good hygiene.

SC

5638. Re: anyone know?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 00:53:14 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <457b5f5f$0$5713$9b4e6d93@newsspool3.arcor-online.net>
Source record: 9340

correct it is: Nordmende
http://de.wikipedia.org/wiki/Nordmende

- Henry

--
www.ehydra.dyndns.info

"egg" <audioh@volumized.it> schrieb im Newsbeitrag
news:457af41f$0$2999$9a6e19ea@unlimited.newshosting.com...
> anyone know or have pictures of what kind of console this came out of ?
>
>
http://cgi.ebay.ca/NORDEMENDE-AM-FM-STEREO-SW1-SW2-SHORTWAVE-TUBE-RADIO_W0QQitemZ270064344
456QQihZ017QQcategoryZ50596QQssPageNameZWDVWQQrdZ1QQcmdZViewItem
>
>

5639. Re: What's REALLY Going to Happen When the Code Test Drops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 00:53:15 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <%TIeh.8330$sf5.7943@newsread4.news.pas.earthlink.net>
Source record: 9339
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"LenAnderson@ieee.org" <LenAnderson@ieee.org> wrote in
news:1165696302.167589.103600@80g2000cwy.googlegroups.com:

>
> John Smith wrote:
>> Dee:
>>
>> England feared granting us independence and the right to govern
>> ourselves, frankly, they were correct; we have been a problem ever
>> since!
>>
>> Warmest regards,
>> JS
>
> I'm of the opinion that the ARRL feared to give US radio amateurs
> their independence from morse code testing. :-)
>
> LA

Secretly, the ARRL would like to see the code requirement go away,
but they can't display that outwardly because it will make them look like
they are against having good skilled hams. Rest assured, when the code
requirement is eliminated, the ARRL (Anti-Radio-Relay-League) with try to
come up with a way to capitalize on the dumbing down of the service so
they can get more money in the corporate bank account.

SC

5640. Re: Do no-code hams wipe their butts?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 01:37:21 UTC
From: brian.burp@yahoo.com
Message-ID: <1165714641.631011.206600@l12g2000cwl.googlegroups.com>
Source record: 9341
Cross-posted to:
rec.radio.amateur.boatanchors,alt.usenet.kooks,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner

Slow Code wrote:
> If they're to lazy to learn CW for good radio skills, they might be too
> lazy to use toilet paper for good hygiene.

unknown sir,unknown.
mork does seem to enjoy the taste of shit smeared on a penis.
hope that helped,
73,
brian

>
> SC

5641. Re: anyone know?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 01:43:02 UTC
From: egg <audioh@volumized.it>
Message-ID: <457b6624$0$11460$9a6e19ea@unlimited.newshosting.com>
Source record: 9342

On 2006-12-09 19:53:14 -0500, "Henry Kiefer" <otc_friend@gmx.net> said:

> correct it is: Nordmende
> http://de.wikipedia.org/wiki/Nordmende
>
> - Henry

Thanks Henry

cheers

egg

5642. Re: What's REALLY Going to Happen When the Code Test Drops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 01:56:38 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1165715798.001319.223070@n67g2000cwd.googlegroups.com>
Source record: 9343
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Dee Flint wrote:
> <hot-ham-and-cheese@hotmail.com> wrote in message
> news:1165704886.690348.306000@f1g2000cwa.googlegroups.com...
> >
> > Dee Flint wrote:
> >> "Paul Keinanen" <keinanen@sci.fi> wrote in message
> >> news:7amln2lf3g7duag15fqco0r0lm26q6lr10@4ax.com...
> >> > On Sat, 09 Dec 2006 01:25:01 GMT, Slow Code <my.mail@no.spam> wrote:
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> >> >>
> >> >>No, the bands are going to get worse over the long haul. We got people
> >> >>that don't want to be skilled knowledgable hams. If they're too lazy
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> >> > required at frequencies below 30 MHz.
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> >> > Paul OH3LWR
> >>
> >> Other countries are not a problem.
> >
> > No country should be a problem.
> >
> >> Personally I do not attempt to predict
> >> what will happen in the US. However some fear that with easy licensing
> >> and
> >> the lax enforcement here that there could potentially be serious
> >> problems.
> >
> > Riley isn't doing his job?
> >

> > I think what I wrote before one of the recent restructurings was, "What
> > I fear most about eliminating the Morse Code Exam is a lack of
> > enforcement, and what I fear most about maintaining the Status Quo is a
> > lack of enforcement."
> >
> > A lack of enforcement is a lack of enforcement, and a Morse Code Exam
> > CANNOT be used as a substitute.
>
> If you recall, I've never been the one to claim it is any type of filter
> etc. I simply think it is one of the basics and for that reason believe a
> basic requirement is suitable.

Dee, you were talking about a lack of enforcement and I was talking
about a lack of enforcement. >We< were talking about a lack of
enforcement...WITH REGARD TO MORSE CODE TESTING. You absolutely were
saying its being used as a filter >in that context<.

You came so, so very close to accepting the truth, then you got scared
and ran away.

5643. Re: What's REALLY Going to Happen When the Code Test Drops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 02:08:13 UTC
From: Dee Flint <deeflint01@comcast.net>
Message-ID: <d7Kdnd8Z2JeE8ebYnZ2dnUVZ_rCsnZ2d@comcast.com>
Source record: 9344
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

<hot-ham-and-cheese@hotmail.com> wrote in message
news:1165715798.001319.223070@n67g2000cwd.googlegroups.com...
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> Dee Flint wrote:
>> <hot-ham-and-cheese@hotmail.com> wrote in message
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>> > Dee Flint wrote:
>> >> "Paul Keinanen" <keinanen@sci.fi> wrote in message
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>> >> > On Sat, 09 Dec 2006 01:25:01 GMT, Slow Code <my.mail@no.spam> wrote:
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>> >> >>
>> >> >>No, the bands are going to get worse over the long haul. We got
>> >> >>people
>> >> >>that don't want to be skilled knowledgable hams. If they're too
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>> >> >>learn CW they are going to be too lazy to learn other things too.
>> >> >>Technical discussions will decline. It will start to sound like CB.
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>> >> > Paul OH3LWR
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>> If you recall, I've never been the one to claim it is any type of filter
>> etc. I simply think it is one of the basics and for that reason believe
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>> basic requirement is suitable.
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> Dee, you were talking about a lack of enforcement and I was talking
> about a lack of enforcement. >We< were talking about a lack of
> enforcement...WITH REGARD TO MORSE CODE TESTING. You absolutely were
> saying its being used as a filter >in that context<.
>
> You came so, so very close to accepting the truth, then you got scared
> and ran away.
>

Not hardly. I was discussing the fact that OTHER people consider it a filter. I have never, ever made any statement to that effect. I was discussing OTHER'S opinions and fears for the enlightenment of the ham from another country who asked why it was such a big deal here.

Just because I chose to discuss the opinions presented by some does NOT mean I subscribe to those opinions.

Dee, N8UZE

5644. Re: Call for Action-CW Advocacy organization

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 04:13:07 UTC
From: Mark@kb9rqz.aprs
Message-ID: <g92nn2l9qmhhcnd7aksb851n0lh8gvvbag@4ax.com>
Source record: 9345
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.swap

On Sun, 10 Dec 2006 00:52:55 GMT, Maxwell Plonk <Maxwell@plonk.me>
wrote:

>Telamon <telamon_spamshield@pacbell.net.is.invalid> wrote in
>news:telamon_spamshield-F6A0EB.18540107122006@newsclstr02.news.prodigy.com:
>
>> In article <12ngg4j105cjp01@corp.supernews.com>,
>> "FedUP" <fedup@intergate.com> wrote:
>>
>>> This is not a warm and fuzzy ï¿½feel goodï¿½ letter like much of the
>>> baloney you read in the ham radio press.
>>
>> < Snip >
>>
>> Nobody cares.
>>
>> < Plonk >
>
>
>You don't care because you're a Lazy ass and don't want to be a skilled
>radio hobbiest, but there are a lot of us out here that do care and want
>to be skilled. When you need help with anything your sorry ass is going to
>be calling on us skilled operators for help.
>
skilled operaotr and code using one do increasing seem to un related
thing and total unrelated outseide the ars
>Max
>
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5645. kookathon

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 04:15:30 UTC
From: Mark@kb9rqz.aprs
Message-ID: <3e2nn2dmsdp7lekbou703pvu0g7n6t84df@4ax.com>
Source record: 9346
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner

On Sun, 10 Dec 2006 00:52:57 GMT, Slow Code <my.mail@no.spam> wrote:

>If they're to lazy to learn CW for good radio skills, they might be too
>lazy to use toilet paper for good hygiene.

do you have to try and convicne us you are robeson with your fetish
for shit sc?
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5646. Antenna in the attic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 15:42:23 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1165765343.577779.158140@f1g2000cwa.googlegroups.com>
Source record: 9347

Andy writes:

I would like to hear some discussion/advice on the feasibility of putting
an antenna for, say, 30m in the attic versus on top of the roof...

Here is the situation :
The roof peak of my house is about 50 feet and is straight. Given the
need for a dipole which is 44 feet wide, it can be mounted in either of two
places:

1) Just above the roof peak, straight along it, about 1 foot above.

2) Just below the roof peak,inside the attic, about 1 foot below .

Let's assume there are no other options...

So it sort of boils down to whether the wood and asphalt barrier , free
of metal except for an occasional nail, actually attenuates the signal enough
to bother about, or affects the antenna impedance enough to bother about.....

Having made dozens of ham antennae over the last 40 years in configurations
that probably violate the laws of physics and having had them work, I, personally,
haven't found that such a difference in the antenna placement makes a hill
of beans worth of REAL difference (no pun). But a lot of guys here have been
doing this for 40 years also, and I'd really like to see what anyone has to say
about it.....

I generally use one rule of thumb on antennae:

" If when I connect the antenna to the receiver, the background noise
of the receiver increases, the antenna is doing a good job".....

Yeah, I know, but it needs some thinking about because if the cosmic noise
level picked up by the antenna is higher than the receiver noise level,

then
it has to be working.....assuming it is cut to the proper frequency
for the
band used.....

So, what about it ? Anybody want to put in their two cents worth ?

Andy W4OAH

5647. Gee I wish they still had Electronic kits to build !

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 16:02:33 UTC
From: Caveat Lector <CL@nowhere.com>
Message-ID: <tcWeh.32268$xM4.6177@newsfe07.phx>
Source record: 9248

Well they do.
Over 76 Electronic Kit Companies
With hundreds of Electronic Kits
All listed and link checked at URL:
http://ac6v.com/kits.htm

Keep that soldering iron tinned
73 From CL

5648. Re: James Kim: new vs old tech

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 16:05:58 UTC
From: maxfoo <maxfoo@punkass.com>
Message-ID: <00con2dk33ogb5jjvggbsnekavfe8odtik@4ax.com>
Source record: 9249
Cross-posted to: alt.ham-radio,alt.ham-radio.hf,alt.ham-radio.morse,rec.radio.amateur.homebrew

On Thu, 07 Dec 2006 15:33:59 -0600, notbob <notbob@nothome.com> wrote:

>No doubt many are saddened by the senseless loss of James Kim, the
>family man that perished in the mountains of Western Oregon early this
>week. I think what makes it all the more tragic is that here was a
>person who was on the cutting edge of all the latest and greatest high
>tech computer and communications technology. Blackberries, photo
>cellphones, wifi PDA's and laptops, etc. I'm stunned a person in such
>a high tech vector could become so completely isolated in such a short
>distance from the mainstream.
>
>This worries me because it highlights the shortcomings of all this new
>high tech gimcrackery. As I understand it, even satellite cellphones
>require a service provider with a nearby uplink antenna. So, this
>brings up my question, as a non ham:
>
>How long do you think it would have taken James, or anyone in that
>situation, to make contact with outside help and get him and his
>family out of there if he'd had something like a basic QRP tranceiver
>and antenna and knew how to use it?
>
>Any thoughts you may have on this issue would be appreciated.
>
>nb

Great idea setting the tires on fire,but they should of started a huge forest
fire in the area. going to prison for starting a forest fire is way better than
dead!

5649. Re: Antenna in the attic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 16:10:37 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <44con2p3ehdtc5lo9uvm11sqf8veemnb6g@4ax.com>
Source record: 9250

ORIGINAL MESSAGE:

On 10 Dec 2006 07:42:23 -0800, "AndyS" <andysharpe@juno.com> wrote:

> Having made dozens of ham antennae over the last 40 years in
>configurations that probably violate the laws of physics and having had them work, I,
>personally, haven't found that such a difference in the antenna placement makes a
>hill of beans worth of REAL difference (no pun). But a lot of guys here
>have been doing this for 40 years also, and I'd really like to see what anyone
>has to say about it.....

---------- REPLY FOLLOWS ----------

If the antennas you're talking about really did work, you did not
violate any laws of physics, I can assure you. :-)

I operated with in-attic antennas for years and they do work
surprisingly well. I earned DXCC with 100 watts and an attic dipole in
a matter of a few months.

Go for it.

Bill, W6WRT

5650. Re: Call for Action-CW Advocacy organization

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 16:11:05 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <eccon2p141l7j6f5e5itt4nvan7rsmoeae@4ax.com>
Source record: 9251
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.swap

Please folks, do not reply to these off topic posts.

If these idiots never get any replies, they will eventually give up
and go away.

Thanks,

Bill, W6WRT

5651. Re: Super Glue doesn't work any more

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 16:12:31 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <gecon2hv9nl00a43gocfvi0s43a9i7aobh@4ax.com>
Source record: 9252

ORIGINAL MESSAGE:

On Fri, 08 Dec 2006 21:43:51 GMT, "west" <restccq2@verizon.net> wrote:

>Now they serve their coffee at a lower temperature.
>Doesn't taste as good.

------------ REPLY FOLLOWS ------------

But you don't have to eat that hospital food either. :-)

Bill, W6WRT

5652. Re: What's REALLY Going to Happen When the Code Test Drops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 16:14:22 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <uhcon2pdpkde9l2r013ud8r3s28kb7a8vg@4ax.com>
Source record: 9253

Please folks, do not reply to these off topic posts.

If these idiots never get any replies, they will eventually give up
and go away.

Thanks,

Bill, W6WRT

5653. Re: What's REALLY Going to Happen When the Code Test Drops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 16:20:31 UTC
From: maxfoo <maxfoo@punkass.com>
Message-ID: <trcon2dm5n67sfsad95ad6k1sj58hlqpim@4ax.com>
Source record: 9254

On Sun, 10 Dec 2006 08:14:22 -0800, Bill Turner <noway@nowhow.com> wrote:

>Please folks, do not reply to these off topic posts.
>
>If these idiots never get any replies, they will eventually give up
>and go away.
>
>Thanks,
>
>Bill, W6WRT

Hmmm, violating your own rule.

5654. Re: Do no-code hams wipe their butts?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 17:02:29 UTC
From: U-Know-Who <no-one@nowhere.com>
Message-ID: <F4Xeh.4564$qp1.2522@tornado.texas.rr.com>
Source record: 9255
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.scanner

"Slow Code" <my.mail@no.spam> wrote in message
news:JTIeh.8316$sf5.5767@newsread4.news.pas.earthlink.net...
> If they're to lazy to learn CW for good radio skills, they might be too
> lazy to use toilet paper for good hygiene.
>
> SC

Well SC, just open the stall next time you're on duty at your job of
restroom attendant at the hamfest. You'll have your answer. And I ain't
tippin you for that damn "Brut" cologne you hawk!

5655. Re: Call for Action-CW Advocacy organization

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 17:45:03 UTC
From: Mark@kb9rqz.aprs
Message-ID: <ishon29dv6lhmab2mvfs00lla9ehoe5oni@4ax.com>
Source record: 9256
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.swap

On Sun, 10 Dec 2006 08:11:05 -0800, Bill Turner <noway@nowhow.com>
wrote:

>Please folks, do not reply to these off topic posts.
>
>If these idiots never get any replies, they will eventually give up
>and go away.
>
>Thanks,
>
>Bill, W6WRT

it is particaaulrly off topic
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5656. Re: Antenna in the attic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 18:18:26 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <xYCdnctEv6Dj0uHYnZ2dnUVZ8qm3nZ2d@pipex.net>
Source record: 9257

> I would like to hear some discussion/advice on the feasibility of
> putting
> an antenna for, say, 30m in the attic versus on top of the roof...
>
> Here is the situation :
> The roof peak of my house is about 50 feet and is straight. Given
> the
> need for a dipole which is 44 feet wide, it can be mounted in either of
> two
> places:
==========

Andy , You didn't provide the shape of your roof space eg width at loft bottom and whether there is any metal around (apart from nails/screws etc). For an HF roof space antenna I would recommend a wire loop as much as possible away from any metal and with total loop length exceeding the the length of the largest wavelenght you wish to operate on. So in your case a loop of > 10m or say 35 ft would be adequate

A square would be the optimum ,but a 'wide rectangular' is acceptable. Feed the loop with any balanced feeder ,twinlead electrical cable'(75 Ohms ?) or 300 -450 Ohms ribbon or 2 wires with insulator spacers.

It would be best to feed the loop somewhere near the middle of a side

You obviously need a balanced tuner/matching unit ,but might get away with a simple current balun

Good luck

Frank KN6WH / GM0CSZ

5657. Re: Antenna in the attic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 19:35:27 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <7kZeh.2677$%z.481@newsfe07.lga>
Source record: 9258

"AndyS" <andysharpe@juno.com> wrote in message
news:1165765343.577779.158140@f1g2000cwa.googlegroups.com...

> 1) Just above the roof peak, straight along it, about 1 foot above.

Is the ridge vent metal? Usually it is covered with shingles, but sometimes it is aluminum, sometimes plastic. I trust any foil backed insulation is in the floor of the attic rather than the roof.

All other things being equal, I would expect the antenna to be noticeably better above the roof, because there will be some attenuation indoors, and greater proximity to noise makers, and things that can get overloaded by your transmitter.. But I doubt it would be a huge difference, although on wet days it may well be sigificant. If the vent is metal, then the attic antenna, because you can get it farther from the vent, may well be better.

But "better" is a relative term. I suspect in 4-land you don't get the snow and ice we get up here on the tundra, but I imagine you have pretty decent storms come by once in a while. It may well be that the slight attentatuon is a small price to pay for not having to re-string the antenna every time hurricane season rolls around.

..

5658. Re: Antenna in the attic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 19:38:13 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1165779493.657019.16730@73g2000cwn.googlegroups.com>
Source record: 9259

Highland Ham wrote:
> ==
> Andy , You didn't provide the shape of your roof space eg width at loft
> bottom and whether there is any metal around (apart from nails/screws
> etc). For an HF roof space antenna I would recommend a wire loop as
> much as possible away from any metal and with total loop length
> exceeding the the length of the largest wavelenght you wish to operate
> on. So in your case a loop of > 10m or say 35 ft would be adequate
>
> A square would be the optimum ,but a 'wide rectangular' is acceptable.
> Feed the loop with any balanced feeder ,twinlead electrical cable'(75
> Ohms ?) or 300 -450 Ohms ribbon or 2 wires with insulator spacers.
>
> It would be best to feed the loop somewhere near the middle of a side
>
> You obviously need a balanced tuner/matching unit ,but might get away
> with a simple current balun
>
> Good luck
>
> Frank KN6WH / GM0CSZ

Andy replies:

Thanks for taking the time to give me your advice. However, do
you have an answer or opinion about the question that I asked ?

Andy W4OAH

5659. Re: James Kim: new vs old tech

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 19:42:29 UTC
From: Kurt <ksaves2@sbcglobal.net>
Message-ID: <FqZeh.4649$Gr2.1150@newssvr21.news.prodigy.net>
Source record: 9260
Cross-posted to: alt.ham-radio,alt.ham-radio.hf,alt.ham-radio.morse,rec.radio.amateur.homebrew

maxfoo wrote:
> On Thu, 07 Dec 2006 15:33:59 -0600, notbob <notbob@nothome.com> wrote:
>
>
>>No doubt many are saddened by the senseless loss of James Kim, the
>>family man that perished in the mountains of Western Oregon early this
>>week. I think what makes it all the more tragic is that here was a
>>person who was on the cutting edge of all the latest and greatest high
>>tech computer and communications technology. Blackberries, photo
>>cellphones, wifi PDA's and laptops, etc. I'm stunned a person in such
>>a high tech vector could become so completely isolated in such a short
>>distance from the mainstream.
>>
>>This worries me because it highlights the shortcomings of all this new
>>high tech gimcrackery. As I understand it, even satellite cellphones
>>require a service provider with a nearby uplink antenna. So, this
>>brings up my question, as a non ham:
>>
>>How long do you think it would have taken James, or anyone in that
>>situation, to make contact with outside help and get him and his
>>family out of there if he'd had something like a basic QRP tranceiver
>>and antenna and knew how to use it?
>>
>>Any thoughts you may have on this issue would be appreciated.
>>
>>nb
>
>
> Great idea setting the tires on fire,but they should of started a huge forest
> fire in the area. going to prison for starting a forest fire is way better than
> dead!
>
>
Starting a forest fire in the middle of the freak'in winter?
Highly unlikely.

5660. Re: Antenna in the attic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 19:45:45 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1165779945.862528.6670@j72g2000cwa.googlegroups.com>
Source record: 9261

xpyttl wrote:
>
> Is the ridge vent metal? Usually it is covered with shingles, but sometimes
> it is aluminum, sometimes plastic. I trust any foil backed insulation is in
> the floor of the attic rather than the roof.
>
**** Correct. All the metal is well removed. Just a wood
sheathing/asphalt
shingle roof..

> All other things being equal, I would expect the antenna to be noticeably
> better above the roof, because there will be some attenuation indoors, and
> greater proximity to noise makers, and things that can get overloaded by
> your transmitter.. But I doubt it would be a huge difference, although on
> wet days it may well be sigificant. If the vent is metal, then the attic
> antenna, because you can get it farther from the vent, may well be better.

**** I didn't think of the "wet days" situation..... I haven't seen
much difference
in antenna performance due to rain or weather tho... However, it
doesn't
snow here much at all.

>
> But "better" is a relative term. I suspect in 4-land you don't get the snow
> and ice we get up here on the tundra, but I imagine you have pretty decent
> storms come by once in a while. It may well be that the slight attentatuon
> is a small price to pay for not having to re-string the antenna every time
> hurricane season rolls around.
>
**** No hurricanes in Eureka, Texas... Just tornadoes... And the
antenna
will usually land somewhere around where the house comes down at .....
:>)))))

*** The main reason for the question is my wife's opinion of acceptable
adornment for the exterior of our new house..... She doesn't share
my fascination with "electronical stuff" as an art form...

:>) Andy W4OAH in Eureka, Texas

5661. Re: What's REALLY Going to Happen When the Code Test Drops

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 20:21:07 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1165782066.970542.169500@80g2000cwy.googlegroups.com>
Source record: 9262
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Dee Flint wrote:
> <hot-ham-and-cheese@hotmail.com> wrote in message
> news:1165704886.690348.306000@f1g2000cwa.googlegroups.com...
> >

> > A lack of enforcement is a lack of enforcement, and a Morse Code Exam
> > CANNOT be used as a substitute.
> >
>
> If you recall, I've never been the one to claim it is any type of filter
> etc. I simply think it is one of the basics and for that reason believe a
> basic requirement is suitable.

and there of course you are plain wrong

Neither Morse code nor cw has been truly basic to Ham radio at any time
in our history in making this statement you spout bogus propaganda

Morse Code has NOTHING whatever to do with radio it just so happens to
exist and was apllied to first spark (which sure isn't CW) as it was
applied to various wired aplication

indeed the Morse Code test know even prove one can use Morse Code (as
can be seen by skimming the threads bashing newbie code users on QRZ)

indeed with you Dee we have a clear case of the dmage done the ARS by
Code testing

we have an extra class our most tested therefore in theory our most
knowledgable class of hma making down right stupid statement about what
Ham radio is

now it isn't entirely her fault of course she is product of th e system
foisted on one by the FCC allowing the ARRL to decide what we needed to
be real hams

it is rather like the case in B5 of Akara 7 where the leader fed
propagnad about what made a real Akaran to leath weapons and turned
them loose during an invasion the result was the they repelled the in
vasion and killed off all of the inhabitants of Akara 7 as well

Dee Flint is a poster child for what went wrong with incentive licensing

5662. Re: Call for Action-CW Advocacy organization

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 21:34:00 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1165786440.798219.73220@73g2000cwn.googlegroups.com>
Source record: 9263
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.swap

Maxwell Plonk wrote:
> Telamon <telamon_spamshield@pacbell.net.is.invalid> wrote in
> news:telamon_spamshield-F6A0EB.18540107122006@newsclstr02.news.prodigy.com:
>
> > In article <12ngg4j105cjp01@corp.supernews.com>,
> > "FedUP" <fedup@intergate.com> wrote:
> >
>> This is not a warm and fuzzy "feel good" letter like much of the
>> baloney you read in the ham radio press.
> >
> > < Snip >
> >
> > Nobody cares.
> >
> > < Plonk >
>
>
> You don't care because you're a Lazy ass and don't want to be a skilled
> radio hobbiest, but there are a lot of us out here that do care and want
> to be skilled. When you need help with anything your sorry ass is going to
> be calling on us skilled operators for help.
>
> Max

Max, max, max, lighten up. Nobody is asking for your help.

5663. Re: Antenna in the attic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 21:59:50 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <vr%eh.1005$VR1.225@newsfe03.lga>
Source record: 9264

"AndyS" <andysharpe@juno.com> wrote in message
news:1165779945.862528.6670@j72g2000cwa.googlegroups.com...

> *** The main reason for the question is my wife's opinion of acceptable
> adornment for the exterior of our new house..... She doesn't share
> my fascination with "electronical stuff" as an art form...

Ahhh, well. That changes things. A wire antenna is practically invisible,
but you wouldn't want it in the attic where it could attract lightning
inside the house.

..

5664. Re: Call for Action-CW Advocacy organization

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 22:03:25 UTC
From: Mark@kb9rqz.aprs
Message-ID: <e01pn2ln6tad6fcuems5c9jr1ik5lkm7os@4ax.com>
Source record: 9265
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.swap

On 10 Dec 2006 13:34:00 -0800, hot-ham-and-cheese@hotmail.com wrote:

>
>Maxwell Plonk wrote:
>> Telamon <telamon_spamshield@pacbell.net.is.invalid> wrote in
>> news:telamon_spamshield-F6A0EB.18540107122006@newsclstr02.news.prodigy.com:
>>
>> > In article <12ngg4j105cjp01@corp.supernews.com>,
>> > "FedUP" <fedup@intergate.com> wrote:
>> >
>> >> This is not a warm and fuzzy "feel good" letter like much of the
>> >> baloney you read in the ham radio press.
>> >
>> > < Snip >
>> >
>> > Nobody cares.
>> >
>> > < Plonk >
>>
>>
>> You don't care because you're a Lazy ass and don't want to be a skilled
>> radio hobbiest, but there are a lot of us out here that do care and want
>> to be skilled. When you need help with anything your sorry ass is going to
>> be calling on us skilled operators for help.
>>
>> Max
>
>Max, max, max, lighten up. Nobody is asking for your help.

he can't anymore than Robeson and Heil and Flint and SC they all MUST
control the livies and hobbies of others
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5665. Re: Antenna in the attic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 22:06:36 UTC
From: Sam Morgan <ka5oai@cox.net>
Message-ID: <vx%eh.20220$nJ1.7128@newsfe17.lga>
Source record: 9266

AndyS wrote:
> *** The main reason for the question is my wife's opinion of acceptable
> adornment for the exterior of our new house..... She doesn't share
> my fascination with "electronical stuff" as an art form...
>
Well that settles it in my mind, do it inside the roof as high as u can get it.
(use rope and pulleys so u can later play with it, when the urge hits)
It should work almost as well as of it were outside and 3 foot higher.
Easy to get the feel line to come away at a 90 degree angle.
(not necessary, but if it does great)

and last but not least
It will save up your exterior adornments play with the xyl for a later project.

5666. Re: Antenna in the attic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 22:15:28 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1165788928.399026.210010@l12g2000cwl.googlegroups.com>
Source record: 9267

xpyttl wrote:>
> Ahhh, well. That changes things. A wire antenna is practically invisible,
> but you wouldn't want it in the attic where it could attract lightning
> inside the house.
>
> ..
Andy comments:
Well, the difference between being "practically invisible" and
being
pre-emminent in grotesqueness to my wife is "practically negligible"
(grin).

I'm not certain that an antenna "attracts" lightning. It probably
makes
little difference between hitting an outside antenna, running in the
feedline, and burning down the house VERSUS going thru a layer
of asphalt shingles and doing the same thing..... but I can see where
you're coming from.....

However, in Eureka we don't usually have problems with lightning
because the tornado usually blows the antenna away before the
lightning strikes......

Andy W4OAH in Eureka, Texas

5667. Re: Antenna in the attic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-10 22:19:08 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1165789148.395244.147390@79g2000cws.googlegroups.com>
Source record: 9268

Sam Morgan wrote:
> It will save up your exterior adornments play with the xyl for a later project.

Andy comments:
Yeah, you would not BELIEVE the size of the television antenna we
need
here to get good reception (grin).....fortunately Moseley makes a
good
one.... :>)))))

Andy W4OAH

5668. Re: Call for Action-CW Advocacy organization

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-11 01:49:48 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <0P2fh.8654$tM1.2010@newsread1.news.pas.earthlink.net>
Source record: 9270
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.swap

Bill Turdner <noway@nowhow.com> wrote in
news:eccon2p141l7j6f5e5itt4nvan7rsmoeae@4ax.com:

> Please folks, do not reply to these off topic posts.
>
> If these idiots never get any replies, they will eventually give up
> and go away.

The only idiots I see are people that don't want to learn CW.

SC

5669. Re: CW is ham history. It's what binds us and makes us unique.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-11 01:49:51 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <3P2fh.8656$tM1.7838@newsread1.news.pas.earthlink.net>
Source record: 9269
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

hot-ham-and-cheese@hotmail.com wrote in
news:1165716241.681106.320510@80g2000cwy.googlegroups.com:

>
> Slow Code wrote:
>
> Yet I am not bound to you.
>
>> Just listen to CB if you want to know what HF will sound like after
>> code is eliminated. The very fact that you can run into people like
>> Markie on HF should give you a clue as to how bad it can get.
>
> How has code kept you and Robesin out of amateur radio and off the air?
> It's not an effective filter.

I'm not the problem. The problem is the people that don't what to be
good skilled hams. They just want a welfare license, they don't think
they should have to learn or by skilled at anything to have one.

SC

5670. Re: Call for Action-CW Advocacy organization

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-11 01:52:32 UTC
From: Mark@kb9rqz.aprs
Message-ID: <beepn29vlpvb3192q7t1hd6rjatpgitfdh@4ax.com>
Source record: 9271
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.swap

On Mon, 11 Dec 2006 01:49:48 GMT, Slow Code <my.mail@no.spam> wrote:

>Bill Turdner <noway@nowhow.com> wrote in
>news:eccon2p141l7j6f5e5itt4nvan7rsmoeae@4ax.com:
>
>> Please folks, do not reply to these off topic posts.
>>
>> If these idiots never get any replies, they will eventually give up
>> and go away.
>
>
>
>The only idiots I see are people that don't want to learn CW.

only becuase you are blind and stupid sc
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5671. Re: CW is history

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-11 01:55:16 UTC
From: Mark@kb9rqz.aprs
Message-ID: <7fepn2tditqss6b51nlk6i28teq11419o9@4ax.com>
Source record: 9272
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

On Mon, 11 Dec 2006 01:49:51 GMT, Slow Code <my.mail@no.spam> wrote:

>hot-ham-and-cheese@hotmail.com wrote in
>news:1165716241.681106.320510@80g2000cwy.googlegroups.com:
>
>>
>> Slow Code wrote:
>>
>> Yet I am not bound to you.
>>
>>> Just listen to CB if you want to know what HF will sound like after
>>> code is eliminated. The very fact that you can run into people like
>>> Markie on HF should give you a clue as to how bad it can get.
>>
>> How has code kept you and Robesin out of amateur radio and off the air?
>> It's not an effective filter.
>
>
>I'm not the problem.

you certainly part of the problem

you dengrate everyone and propose thing you, yourself admit would kill
Ham radio

>the problem is the people that don't what to be
>good skilled hams.

no SC plenty wanted and ARE skilled hams that just don't want to waste
thier

> They just want a welfare license,.....

no YOU have a welfare license welfare for mode that doesn't seem to be
able to stand on its own

>..... they don't think
>they should have to learn or by skilled at anything to have one.

nah they just don't want waste their time on Morse
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5672. Re: Need Help - Harris Filter??

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-11 02:47:32 UTC
From: bcdlr <on30ng@gmail.com>
Message-ID: <1165805252.094730.208300@79g2000cws.googlegroups.com>
Source record: 9273

Ed, that's about right. The three pins at one end and the two pins at
the other.
Size is a little smaller, about 1-3/8" L x 1-1/8" W x 11/16" H (approx.
dimensions).
Again on the top it says - Freq. 10.000 MHZ
No adjusting hole like that diagram.
Hey, we're getting much closer!!

Dan KB9JLO

Eamon Skelton wrote:
> On Thu, 07 Dec 2006 09:19:15 -0800, bcdlr wrote:
>
> A 10MHz oscillator in a sealed metal can could be a TCXO
> or possibly even an OCXO.
>
> Has it a similar pinout to the unit at the bottom of
> this page?
>
> http://www.vectron.com/products/ocxo/co724725.htm
>

5673. Converting AM Car Radio to Shortwave

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-11 02:56:44 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1165805804.508375.266480@f1g2000cwa.googlegroups.com>
Source record: 9274

All right, I think I might have found the proper place to ask about this. Back in the 90's when GEnie was still around, they had plans to convert old AM car radios to shortwave receivers. My old Franklin ACE 500 computer wasn't capable of interpreting the file at the time, so I didn't get to download it. I'm hoping someone here might know where I could get the instructions.

I know, I could just get off my lazy ass, get an ARRL manual and figure it out for myself, but if there's an easier option, I'd like to go for it. All I'm looking for is something that will pick up broadcasts between upper AM and the scanner frequencies.

By the way, my hotmail account isn't working, so emailing me won't do any good. Please post where I can find what I'm looking for here. Thanks.

Ralph Glatt

5674. Re: ARS License Numbers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-11 06:24:09 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <eliti9$n64$1@news.hawaii.edu>
Source record: 9204
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.policy

In article <t6ghn2drji894n7u87dgki0t7j891h2c0p@4ax.com>,
>we do which is why we want to end the dummbing by ending the mode
>welfare that exists in it

And with that, I propose a mandatory test for internet privileges.

No 73 for you,
Jeff KH6O

--
Chief Petty Officer, U.S. Coast Guard, Dept. of Homeland Security
Mathematics Lecturer, University of Hawaii System

5675. Re: Converting AM Car Radio to Shortwave

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-11 12:32:30 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1165840350.029509.309650@79g2000cws.googlegroups.com>
Source record: 9275

julian814 wrote:
> All right, I think I might have found the proper place to ask about
> this. Back in the 90's when GEnie was still around, they had plans to
> convert old AM car radios to shortwave receivers. My old Franklin ACE
> 500 computer wasn't capable of interpreting the file at the time, so I
> didn't get to download it. I'm hoping someone here might know where I
> could get the instructions.
> > Ralph Glatt

Andy writes:
In my opinion, the easiest, most non-destructive way to do this
is to add a converter, using the AM radio as a tuneable IF for
AM transmissions.
A two transistor converter, using a xtal oscillator and a mixer,
can easily do this. Just select the xtal frequency to be about
1000 Khz above or below the middle of the shortwave band you
want.
I am assuming you are only interested in AM shortwave
broadcasts. Any of the other modes would require modification to
the inside of the AM radio....

Anyway, the neat thing about this approach is that no modification
needs to be done to the innards of the AM radio......And you can
still listen to Rush Limbaugh by switching off the converter....

If, on the other hand, you want to modify the AM radio to short
wave without adding anything significant, it depends entirely on
the circuit. In general, you will rewind a bunch of coils, which
means you need equipment for testing and measuring. There are
some AM radio designs that are such that success is extremely
unlikely while others are fairly straightforward ---- it's like asking
"how much does a rock weigh?"
I encourage the CONVERTER approach.... Good luck with your
project. These weekenders can be a lot of fun and very
educational...

Andy W4OAH in Eureka, Texas

5676. A different view of the code test option

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-11 12:53:39 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1165841619.210023.187380@j44g2000cwa.googlegroups.com>
Source record: 9276

Andy writes
Well, I've read the posts here, as well as the vitriol being thrown around,
and it's obvious that a lot of people have strong opinions about the usefulness
of the code test.

As a pragmatist , here is MY two cents worth.

1) No-code operators won't be on the CW bands, so those of us that us CW won't even know they are around.

2) Most, if not damn near ALL equipment being put on the air now are appliances bought in the store what have been type accepted. Consequently, no degradation of technical standards will occur, as MOST of the equipment are designed by professionals anyway, and I doubt that many no-code operators will try to build their own.

3) Those FEW, like myself, who build their own equipment know lthere is NO correlation between knowing Morse Code and the technical design of a radio. We learned Morse because we had to, and either learned to love it or promptly forgot it as we designed our
SSB and FM radios for the next several decades.....

4) Finally, the ONLY concern I have is that portions of the CW bands may eventually be taken away and given to the appliance operators. If interest in the CW bands dwindles, that's probably just an evolutionary step... However, having CW as a requirement will NOT make newbies want to use it when they can just talk into a microphone and jabber away. It's a new breed of internet-savy operators, and already the newsgroups (like THIS ONE) are attracting far more people who like to talk with strangers than an expensive appliance that interferes with the wife's TV programs .... I'm afraid ham radio is dwindling, but it will be around for the rest of my lifetime, and that's OK .....

That's how I see it. Having a code requirement is simply an obstacle to hurdle in getting a license. It may as well be required for a driver's
license for all the "technical" good it does. On the other hand, it does give us Extras a sort of "elite" status for having earned it.... I'm glad to have the ability to have Morse Code, typing, memorization of the
color codes, and good looks on my resume....

Andy W4OAH in Eureka , Texas

5677. Re: Antenna in the attic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-11 13:42:14 UTC
From: Al <no.spam@wanted.com>
Message-ID: <no.spam-AADBF6.08421511122006@news.verizon.net>
Source record: 9277

In article <1165765343.577779.158140@f1g2000cwa.googlegroups.com>,
"AndyS" <andysharpe@juno.com> wrote:

> Andy writes:
>
> I would like to hear some discussion/advice on the feasibility of
> putting
> an antenna for, say, 30m in the attic versus on top of the roof...
>

I'm not a ham, I just enjoy the discussions here.

My two cents worth.

When we got our first TV in the 50's, my father wanted to install an antenna but was leery of going up on the roof. I told him to put it in the attice. He did and it worked just great.

After we moved, we did the same in the second house. No problem.

Maybe the fact that we lived about 10 to 15 miles from the Empire State Building in NYC may have had something to do with it.

I now live about 2 miles from three 1100 ft. TV towers. The rabbit ears in my basement work just fine ;-)

I also get audio on my telephone. Grrr!

Al

5678. Re: Converting AM Car Radio to Shortwave

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-11 14:51:01 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1165848660.983456.12930@j44g2000cwa.googlegroups.com>
Source record: 9278

AndyS wrote:
> In my opinion, the easiest, most non-destructive way to do this
> is to add a converter, using the AM radio as a tuneable IF for
> AM transmissions.
> A two transistor converter, using a xtal oscillator and a mixer,
> can easily do this. Just select the xtal frequency to be about
> 1000 Khz above or below the middle of the shortwave band you
> want.
> I am assuming you are only interested in AM shortwave
> broadcasts. Any of the other modes would require modification to
> the inside of the AM radio....
>
> Anyway, the neat thing about this approach is that no modification
> needs to be done to the innards of the AM radio......And you can
> still listen to Rush Limbaugh by switching off the converter....
>
> If, on the other hand, you want to modify the AM radio to short
> wave without adding anything significant, it depends entirely on
> the circuit. In general, you will rewind a bunch of coils, which
> means you need equipment for testing and measuring. There are
> some AM radio designs that are such that success is extremely
> unlikely while others are fairly straightforward ---- it's like asking
> "how much does a rock weigh?"
> I encourage the CONVERTER approach.... Good luck with your
> project. These weekenders can be a lot of fun and very
> educational...
>
> Andy W4OAH in Eureka, Texas

Thanks, Andy. I think I've managed to find something a little better
than what I had in mind, anyway - Lindsay books sells a series of books
called the Impoverished Radio Experimenter. I've ordered two of them
that seem likely to have the information I need. My only concern now is
being able to run a tube receiver off of battery power, but I'm hoping
I can figure out something on my own.

Ralph Glatt

5679. Re: A different view of the code test option

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-11 14:57:09 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <rdsqn2hdq34l89hksaj8c8nk11orkq7i9h@4ax.com>
Source record: 9279

Please folks, do not reply to these off topic posts.

If these idiots never get any replies, they will eventually give up
and go away.

Thanks,

Bill, W6WRT

5680. Re: Guide Lines for this news group

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-11 14:58:11 UTC
From: Not Cocksucker Lloyd <not_time_turd_lloyd@yahoo.com>
Message-ID: <1165849091.300946.122660@n67g2000cwd.googlegroups.com>
Source record: 9280
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Mark@kb9rqz.aprs wrote:
> On Fri, 08 Dec 2006 00:35:11 GMT, Slow Code <my.mail@no.spam> wrote:
>
> >hot-ham-and-cheese@hotmail.com wrote in
> >news:1165116776.575952.37510@16g2000cwy.googlegroups.com:
> >
> >>
> >> Slow Code wrote:
> >>> Danny Richardson <n_group@k6mhe.com> wrote in
> >>> news:tqh3n2h7gjtdevv66fvnmv0be7clnpf019@4ax.com:
> >>>
> >>> > On Sat, 02 Dec 2006 09:48:44 -0800, Bill Turner <noway@nowhow.com>
> >>> > wrote:
> >>> >
> >>> >>ORIGINAL MESSAGE:
> >>> >>
> >>> >>On Sat, 2 Dec 2006 08:19:07 -0800, "Caveat Lector" <CL@nowhere.com>
> >>> >> wrote:
> >>> >>
> >>> >>>Maybe this will help(a little) to get rid of the off topic posts
> >>> >>>
> >>> >>>For what this News Group is about and applicable guide lines see
> >>> >>>URL:
> >>> >>>
> >>> >>>http://www.faqs.org/faqs/radio/personal-intro/
> >>> >>>
> >>> >>>Thanks for reading
> >>> >>>73 CL
> >>> >>>
> >>> >>
> >>> >>------------ REPLY FOLLOWS ------------
> >>> >>
> >>> >>Dream on, CL. These guys already know that and they don't care. It's
> >>> >>been that way forever. It's the Curse of Usenet.
> >>> >>
> >>> >>Bill, W6WRT
> >>> >
> >>> > After years of resisting I'm ready for a moderated antenna group.
> >>> > I've used my kill filter more times in the last three months than
> >>> > I've ever done in the previous ten years.
> >>> >
> >>> > I, for one, am sick and tired of the foul-mouth off topic postings
> >>> > and, if that requires a moderated group to get rid of them it would

> >>> > be a very small price to pay.
> >>> >
> >>> > Danny,
> >>>
> >>>
> >>> I know what you mean Dan.
> >>
> >> No you don't. You're one of the foul-mouthed off-topic posters that
> >> Dan is complaining about.
> >>
> >>> With the anticipation that ham radio is going
> >>> to get dumbed down again real soon, the dumb-it-downers
> >>
> >> It got "dumbed-down" when a license was issued to you.
> >>
> >> BTW, what is your call?
> >
> >
> >Don't worry about my callsign.
>
> why not we think you don't have one

Just like "an old friend" is yours?

> > Just keep practicing CW.
>
> why? BB fuinds it usles to what he interested in as do I

Making excuses for your laziness, Marqueer?

> > No matter how fast
> >and good you already are at it you can always improve your skills.
>
> so what?

So you want them to just give you the General license instead of
working for it.

> i suspect I am the best Swordmans in RRAP so what

BWHAHAHAHAHA No, Markie, you are a gay blade, not the sharp blade.

5681. Re: A different view of the code test option

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-11 15:36:51 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1165851411.555463.246990@l12g2000cwl.googlegroups.com>
Source record: 9281

Bill Turner wrote:
> Please folks, do not reply to these off topic posts.
>
> If these idiots never get any replies, they will eventually give up
> and go away.
>
> Thanks,
>
> Bill, W6WRT

Andy writes:
I agree with Bill W6WRT.

Since I have seen so many postings about this on this newsgroup, I
just ASSUMED that folks here wanted to talk about it.....

I did a "reply" using "google" to one of the other posts, and found
that it was multiply cross posted to a LOT of groups, meaning that
somebody just wanted to make a fuss..... TROLLING.....

I apologize to Bill, and everyone else here, for not looking more
closely
at the subject before posting to rec.radio.amateur.homebrew

I can't say it won't happen again, ever, but I'll try to watch it in
the future, and would ENCOURAGE anyone who just hits a
"reply" button to check to see if it is being crossposted.... If it is,
please go to the group that is interested in it and don't plague
the newsgroups with spam..... as Bill and I have just done (grin)..

Andy W4OAH

5682. Re: A different view of the code test option

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-11 16:15:48 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <elk07k$op5$1@theodyn.ncf.ca>
Source record: 9282

"AndyS" (andysharpe@juno.com) writes:
> Andy writes
> Well, I've read the posts here, as well as the vitriol being thrown
> around,

No, the posts aren't here, they are cross-posted by idiots who think whatever it is they have to say is so important that they need to spew it across the newsgroups.

If you really wanted to address the issue, then you go elsewhere to post, where such posts belong. At the very least, and you should always think twice about it, you reply to the cross-posted junk rather than start a new thread that is only in rec.radio.amateur.homebrew YOu can even reply to those existing threads and take out the irrelevant newsgroups, such as this one.

For most of a decade (and likely before) we've been relatively isolated, as if the people who do all that cross-posting don't think that building radio equipment is actually part of the hobby. But their need to spread their junk has meant don't keep it in rec.radio.amateur.policy where it belongs, they don't even keep it there and in rec.radio.amateur.misc where it was often kept until relatively, they spew to all kinds of newsgroups as they catch on that there are other ones. So they spew into rec.radio.shortwave, and the spew into the more technical newsgroups like this one and rec.radio.amateur.antenna

LIke Bill Turner said, don't reply to them. But that doesn't mean starting the arguments here in standalone threads, either.

Michael VE2BVW

5683. Re: A different view of the code test option

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-11 17:26:15 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnenr55n.1mvs.bit-bucket@shell.config.com>
Source record: 9283

On 11 Dec 2006 07:36:51 -0800, AndyS wrote:
> Bill Turner wrote:
>> Please folks, do not reply to these off topic posts.
>> If these idiots never get any replies, they will eventually give up
>> and go away.
>>
>> Bill, W6WRT
>
> Andy writes:
> I agree with Bill W6WRT.

If everybody would just take step one: Killfile postings from Google.

The OP:
Message-ID: <1165841619.210023.187380@j44g2000cwa.googlegroups.com>

Each posting that Bill has commented on in the rec.radio.amateur.* ng's
was ooze emanating from Google.

Jonesy -- never seeing Google posts, but forced to wade past the followups.
--
Marvin L Jones | jonz | W3DHJ | linux
38.24N 104.55W | @ config.com | Jonesy | OS/2
*** Killfiling google posts: <http//jonz.net/ng.htm>

5684. Re: Guide Lines for this news group

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-11 17:42:28 UTC
From: Mark@kb9rqz.aprs
Message-ID: <116rn2hktrg8jqafbmrmbra120sv9ei4vi@4ax.com>
Source record: 9284
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On 11 Dec 2006 06:58:11 -0800, "Not Cocksucker Lloyd"
<not_time_turd_lloyd@yahoo.com> wrote:

>
>Mark@kb9rqz.aprs wrote:
>> On Fri, 08 Dec 2006 00:35:11 GMT, Slow Code <my.mail@no.spam> wrote:
>>
>> >hot-ham-and-cheese@hotmail.com wrote in
>> >news:1165116776.575952.37510@16g2000cwy.googlegroups.com:
>> >
>> >>
>> >> Slow Code wrote:
>> >>> Danny Richardson <n_group@k6mhe.com> wrote in
>> >>> news:tqh3n2h7gjtdevv66fvnmv0be7clnpf019@4ax.com:
>> >>>
>> >>> > On Sat, 02 Dec 2006 09:48:44 -0800, Bill Turner <noway@nowhow.com>
>> >>> > wrote:
>> >>> >
>> >>> >>ORIGINAL MESSAGE:
>> >>> >>
>> >>> >>On Sat, 2 Dec 2006 08:19:07 -0800, "Caveat Lector" <CL@nowhere.com>
>> >>> >> wrote:
>> >>> >>
>> >>> >>>Maybe this will help(a little) to get rid of the off topic posts
>> >>> >>>
>> >>> >>>For what this News Group is about and applicable guide lines see
>> >>> >>>URL:
>> >>> >>>
>> >>> >>>http://www.faqs.org/faqs/radio/personal-intro/
>> >>> >>>
>> >>> >>>Thanks for reading
>> >>> >>>73 CL
>> >>> >>>
>> >>> >>
>> >>> >>---------- REPLY FOLLOWS ----------
>> >>> >>
>> >>> >>Dream on, CL. These guys already know that and they don't care. It's
>> >>> >>been that way forever. It's the Curse of Usenet.
>> >>> >>
>> >>> >>Bill, W6WRT
>> >>> >
>> >>> > After years of resisting I'm ready for a moderated antenna group.
>> >>> > I've used my kill filter more times in the last three months than

>> >>> > I've ever done in the previous ten years.
>> >>> >
>> >>> > I, for one, am sick and tired of the foul-mouth off topic postings
>> >>> > and, if that requires a moderated group to get rid of them it would
>> >>> > be a very small price to pay.
>> >>> >
>> >>> > Danny,
>> >>>
>> >>>
>> >>> I know what you mean Dan.
>> >>
>> >> No you don't. You're one of the foul-mouthed off-topic posters that
>> >> Dan is complaining about.
>> >>
>> >>> With the anticipation that ham radio is going
>> >>> to get dumbed down again real soon, the dumb-it-downers
>> >>
>> >> It got "dumbed-down" when a license was issued to you.
>> >>
>> >> BTW, what is your call?
>> >
>> >
>> >Don't worry about my callsign.
>>
>> why not we think you don't have one
>
>Just like "an old friend" is yours?

never said it was

my call is kb9rqz

>
>> > Just keep practicing CW.
>>
>> why? BB fuinds it usles to what he interested in as do I
>
>Making excuses for your laziness, Marqueer?

stating facts woger
>
>> > No matter how fast
>> >and good you already are at it you can always improve your skills.
>>
>> so what?
>
>So you want them to just give you the General license instead of
>working for it.

no I don't I want a test that relates to the prevledges grranted
>
>> i suspect I am the best Swordmans in RRAP so what

>
>BWHAHAHAHAHA No, Markie, you are a gay blade, not the sharp blade.

well woger if you ever decided to comit trespassing and get close
enough you willfind out
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5685. Re: Converting AM Car Radio to Shortwave

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-11 18:35:37 UTC
From: no@pottedmeatproduct.com
Message-ID: <Xns98967ABFDhatchdavidticom@157.170.133.60>
Source record: 9285

"AndyS" <andysharpe@juno.com> wrote in <1165840350.029509.309650@
79g2000cws.googlegroups.com>:

> In my opinion, the easiest, most non-destructive way to do this
>is to add a converter, using the AM radio as a tuneable IF for
>AM transmissions.

Agreed.

>And you can still listen to Rush Limbaugh by switching off the
>converter....

Or when you switch it on...

http://www.techlib.com/files/rushconv.pdf

Pick your 1MHz band, and tune away. You'll need to tweek a bit if
you want to be very far from 15 MHz.

--
David Hatch
KR7DH

5686. Re: Converting AM Car Radio to Shortwave

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-12 00:06:34 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1165881994.568044.91200@16g2000cwy.googlegroups.com>
Source record: 9286

David wrote:
> http://www.techlib.com/files/rushconv.pdf
>
> Pick your 1MHz band, and tune away. You'll need to tweek a bit if
> you want to be very far from 15 MHz.
>
> --
> David Hatch
> KR7DH

Andy comments:

Excellent, David !!! Thanks for the circuit. Note that it can
easily be modified to get WWV also..... I suspect one could
use a CA3028 if one wanted to build it with a single IC, for some
reason...

Yet another simple converter can be made using a NE602.
I don't have a circuit handy, but it can easily be designed from the
data sheet.
Andy W4OAH

PS I'm going to check out 15.42 Mhz --- I hadn't messed with it
before.....

5687. Re: Converting AM Car Radio to Shortwave

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-12 00:08:46 UTC
From: bg998@FreeNet.Carleton.CA
Message-ID: <elkrue$bj6$1@theodyn.ncf.ca>
Source record: 9287

David (no@pottedmeatproduct.com) writes:
>
> Pick your 1MHz band, and tune away. You'll need to tweek a bit if
> you want to be very far from 15 MHz.
>

If you choose the 31 and 25 metre bands you can receive both with one crystal in the oscillator. Many years ago I built a simple converter using a 10.7 MHz crystal and a tunable front end so I could tune 31 m band (osc on the high side) and the 25 m band (osc on the low side). Don't remember now where I got the circuit but it worked very well with a standard (in those days!) car radio antenna.

... Martin VE3OAT

5688. Re: Call for Action-CW Advocacy organization

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-12 00:22:53 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1165882973.657407.139430@16g2000cwy.googlegroups.com>
Source record: 9288
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.swap

Mark@kb9rqz.aprs wrote:
> On 10 Dec 2006 13:34:00 -0800, hot-ham-and-cheese@hotmail.com wrote:
>
> >
> >Maxwell Plonk wrote:
> >> Telamon <telamon_spamshield@pacbell.net.is.invalid> wrote in
> >> news:telamon_spamshield-F6A0EB.18540107122006@newsclstr02.news.prodigy.com:
> >>
> >> > In article <12ngg4j105cjp01@corp.supernews.com>,
> >> > "FedUP" <fedup@intergate.com> wrote:
> >> >
> >> >> This is not a warm and fuzzy "feel good" letter like much of the
> >> >> baloney you read in the ham radio press.
> >> >
> >> > < Snip >
> >> >
> >> > Nobody cares.
> >> >
> >> > < Plonk >
> >>
> >>
> >> You don't care because you're a Lazy ass and don't want to be a skilled
> >> radio hobbiest, but there are a lot of us out here that do care and want
> >> to be skilled. When you need help with anything your sorry ass is going to
> >> be calling on us skilled operators for help.
> >>
> >> Max
> >
> >Max, max, max, lighten up. Nobody is asking for your help.
>
> he can't anymore than Robeson and Heil and Flint and SC they all MUST
> control the livies and hobbies of others

If Kelly can take an ignition coil as a wee little Cubscout and turn it
into a transmitter -all by himself...

5689. Re: Call for Action-CW Advocacy organization

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-12 00:29:59 UTC
From: Mark@kb9rqz.aprs
Message-ID: <0utrn29rl11ljcrchot329gfejm2s7nkjt@4ax.com>
Source record: 9289
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.swap

On 11 Dec 2006 16:22:53 -0800, hot-ham-and-cheese@hotmail.com wrote:

>
>Mark@kb9rqz.aprs wrote:
>> On 10 Dec 2006 13:34:00 -0800, hot-ham-and-cheese@hotmail.com wrote:
>>
>> >
>> >Maxwell Plonk wrote:
>> >> Telamon <telamon_spamshield@pacbell.net.is.invalid> wrote in
>> >> news:telamon_spamshield-F6A0EB.18540107122006@newsclstr02.news.prodigy.com:
>> >>
>> >> > In article <12ngg4j105cjp01@corp.supernews.com>,
>> >> > "FedUP" <fedup@intergate.com> wrote:
>> >> >
>> >> >> This is not a warm and fuzzy "feel good" letter like much of the
>> >> >> baloney you read in the ham radio press.
>> >> >
>> >> > < Snip >
>> >> >
>> >> > Nobody cares.
>> >> >
>> >> > < Plonk >
>> >>
>> >>
>> >> You don't care because you're a Lazy ass and don't want to be a skilled
>> >> radio hobbiest, but there are a lot of us out here that do care and want
>> >> to be skilled. When you need help with anything your sorry ass is going to
>> >> be calling on us skilled operators for help.
>> >>
>> >> Max
>> >
>> >Max, max, max, lighten up. Nobody is asking for your help.
>>
>> he can't anymore than Robeson and Heil and Flint and SC they all MUST
>> control the livies and hobbies of others
>
>If Kelly can take an ignition coil as a wee little Cubscout and turn it
>into a transmitter -all by himself...

well then I can build another copy of 6m am set given I use partsform
a replica type phone made to look like the 50's it was irrestable to
an old timer
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5690. Re: A different view of the code test option

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-12 00:40:16 UTC
From: Slow Code <my.mail@no.spam>
Message-ID: <QTmfh.8544$sf5.4566@newsread4.news.pas.earthlink.net>
Source record: 9290
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"AndyS" <andysharpe@juno.com> wrote in
news:1165851411.555463.246990@l12g2000cwl.googlegroups.com:

>
> Bill Turner wrote:
>> Please folks, do not reply to these off topic posts.
>>
>> If these idiots never get any replies, they will eventually give up
>> and go away.
>>
>> Thanks,
>>
>> Bill, W6WRT
>
> Andy writes:
> I agree with Bill W6WRT.
>
> Since I have seen so many postings about this on this newsgroup, I
> just ASSUMED that folks here wanted to talk about it.....

Andy, Welcome to the group.

A lot of people here want to talk about it and find your point of view on CW interesting reading. Just ignore Bill Turdner. Don't let his insults bother you, he likes to act like an asshole sometimes. If the ship he was on was sinking he wouldn't know about it until he was drowning. As far as your view that CW is just a hurdle to getting a license, I vote for keeping the hurdle. At least when they get licensed they have a skill then. To many of them just want to get a license and talk on a microphone. Any CB'er can to that.

SC

5691. kookathon

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-12 00:48:06 UTC
From: Mark@kb9rqz.aprs
Message-ID: <81vrn21tfaqmuqpq4lu02lnl6fgqge55l9@4ax.com>
Source record: 9291
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Tue, 12 Dec 2006 00:40:16 GMT, Slow Code <my.mail@no.spam> wrote:

>"AndyS" <andysharpe@juno.com> wrote in
>news:1165851411.555463.246990@l12g2000cwl.googlegroups.com:
>
>>
>> Bill Turner wrote:
>>> Please folks, do not reply to these off topic posts.
>>>
>>> If these idiots never get any replies, they will eventually give up
>>> and go away.
>>>
>>> Thanks,
>>>
>>> Bill, W6WRT
>>
>> Andy writes:
>> I agree with Bill W6WRT.
>>
>> Since I have seen so many postings about this on this newsgroup, I
>> just ASSUMED that folks here wanted to talk about it.....
>
>
>Andy, Welcome to the group.
>
>A lot of people here want to talk about it and find your point of view on
>CW interesting reading.

really?
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5692. Re: SolderSmoke #43: LP Filters, Titan, Feedback amps, Return Loss Bridges, "Gonzo Gizmos"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-12 02:44:07 UTC
From: amdx <amdx@knology.net>
Message-ID: <33bf7$457e174e$45011502$15699@KNOLOGY.NET>
Source record: 9292
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,sci.electronics.basics,sci.astro.amateur

<bill.meara@gmail.com> wrote in message
news:1165673325.215679.235050@73g2000cwn.googlegroups.com...
> SolderSmoke!
> A SHOW FOR ELECTRONICS HOMEBREWERS!
>
> http://www.soldersmoke.com
>
> Listen at: http://www.soldersmoke.com
>
> SolderSmoke #43 December 9, 2006
> -- LP filters.
> -- Feedback on feedback (in amps).
> -- Return loss calc.
> -- Exploring Titan.
> -- London tornado.
> -- Maxwell's equations.
> -- TRS 80 Model 100.
> -- Name-that-Noise.
> -- Book: "Gonzo Gizmos."
> -- MAILBAG: AK9N, N2NLY, NR5A, Ramakrishnan
>
> Tired of listening to Led Zepplin or NPR on your
> I-Pod? Wouldn't you like to be able to carry with
> you the kinds of ham radio conversations that you
> listen to while in your radio shack?
> Mike, KL7R, in Juneau, Alaska, and Bill, M0HBR, in
> London, England meet regularly on the ECHOLINK system
> to discuss their homebrew radio projects. We are
> making them available as PODCASTS.
>
> RSS FEED: You can subscribe to the program, have
> them downloaded to your MP-3 player, and listen to
> them at your convenience. To subscribe, just cut and
> paste this URL into your I-poder (or similar)
> software.
> http://www.soldersmoke.com/soldersmoke.rss
>
> If you don't have an MP3 player you can just go to the
> site below and listen to the latest program (and
> earlier editions) using the audio software on your
> computer.

>
> http://www.soldersmoke.com
>
> All our programs are available here.
>
> We hope you enjoy the program. Please send us
> feedback.
>
> 73 from London
> Bill M0HBR N2CQR CU2JL
> http://www.gadgeteer.us
>
Hi Bill,
I can't get this address to display anything.
> http://www.soldersmoke.com/soldersmoke.rss
I want to download to a mp3.
Mike

5693. Communucation concepts eb104

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-12 10:37:11 UTC
From: Newsgroup <ldenker@optusnet.com.au>
Message-ID: <457e8664$0$9776$afc38c87@news.optusnet.com.au>
Source record: 9293

I am currently in the process of building a eb104 kit. has anyone else built one of these kits. What are your thought on this amplifier.

5694. Re: SolderSmoke #43: LP Filters, Titan, Feedback amps, Return Loss Bridges, "Gonzo Gizmos"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-12 11:53:50 UTC
From: Sam Morgan <ndahouse@cox.net>
Message-ID: <hLwfh.5234$a14.1403@newsfe24.lga>
Source record: 9294

amdx wrote:
> I can't get this address to display anything.
>> http://www.soldersmoke.com/soldersmoke.rss
> I want to download to a mp3.
>
Right click on the link on the left side of the page.
(Selecting the specific show you want to download 1 through 43.)
then select save as......

example: the < http://www.soldersmoke.com/soldersmoke43.mp3 > link

Or copy and paste the url into winamp or what ever is your mp3 player.

5695. Re: Communucation concepts eb104

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-12 13:40:46 UTC
From: w9gb <spam_protect@arrl.net>
Message-ID: <WKydnSCHhtr8LOPYnZ2dnUVZ_ompnZ2d@comcast.com>
Source record: 9295

AS with any high powered RF device -- or even Pentium 4 microprocessors --
thermal design and proper thermal construction is CRITICAL,
I would use a copper spreader for building this amplifier due to the close
proximity of the 4 RF transistors.

This is NOT a beginner's project or kit
Here are other web sites with thoughts and construction details, notes.

http://www.eham.net/forums/Amplifiers/2417

K9GDT version
http://www.qsl.net/k9gdt/radio/600w/600w.htm

http://oh8jep.kotinet.com/eb104.html
http://oh8jep.50webs.com/project.html

http://k6if.com/v-web/bulletin/bb/viewtopic.php?p=87&sid=53a9be318ebea999fcbd8c55e69539e4

http://www.amy.hi-ho.ne.jp/h_harada/EB104.htm

gb

"Newsgroup" <ldenker@optusnet.com.au> wrote in message
news:457e8664$0$9776$afc38c87@news.optusnet.com.au...
>I am currently in the process of building a eb104 kit. has anyone else
>built one of these kits. What are your thought on this amplifier.

5696. Re: Converting AM Car Radio to Shortwave

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-12 13:59:14 UTC
From: Yukio YANO <yano@shaw.ca>
Message-ID: <SAyfh.464203$1T2.143592@pd7urf2no>
Source record: 9296

julian814 wrote:
> AndyS wrote:
>
>>
>> Andy W4OAH in Eureka, Texas
>
> Thanks, Andy. I think I've managed to find something a little better
> than what I had in mind, anyway - Lindsay books sells a series of books
> called the Impoverished Radio Experimenter. I've ordered two of them
> that seem likely to have the information I need. My only concern now is
> being able to run a tube receiver off of battery power, but I'm hoping
> I can figure out something on my own.
>
>
> Ralph Glatt
>
TUBES!! Tubes? Off of Battery, 6 Volt?, Vibrator? Inverter? 12 Volt B+
tubes ? Not since the 1950s ?
Am I reading too much between the lines ?

Yukio YANO, VE5YS

Except for the audio output stage, we can now run a radio on the power
used to to light the Dial on a Tubes Era Radio !

5697. Re: Guide Lines for this news group

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-12 14:03:05 UTC
From: Not Cocksucker Lloyd <not_time_turd_lloyd@yahoo.com>
Message-ID: <1165932185.379791.290250@n67g2000cwd.googlegroups.com>
Source record: 9297
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Mark@kb9rqz.aprs wrote:
> On 11 Dec 2006 06:58:11 -0800, "Not Cocksucker Lloyd"
> <not_time_turd_lloyd@yahoo.com> wrote:
>
> >
> >Mark@kb9rqz.aprs wrote:
> >> On Fri, 08 Dec 2006 00:35:11 GMT, Slow Code <my.mail@no.spam> wrote:
> >>
> >> >hot-ham-and-cheese@hotmail.com wrote in
> >> >news:1165116776.575952.37510@16g2000cwy.googlegroups.com:
> >> >
> >> >>
> >> >> Slow Code wrote:
> >> >>> Danny Richardson <n_group@k6mhe.com> wrote in
> >> >>> news:tqh3n2h7gjtdevv66fvnmv0be7clnpf019@4ax.com:
> >> >>>
> >> >>> > On Sat, 02 Dec 2006 09:48:44 -0800, Bill Turner <noway@nowhow.com>
> >> >>> > wrote:
> >> >>> >
> >> >>> >>ORIGINAL MESSAGE:
> >> >>> >>
> >> >>> >>On Sat, 2 Dec 2006 08:19:07 -0800, "Caveat Lector" <CL@nowhere.com>
> >> >>> >> wrote:
> >> >>> >>
> >> >>> >>>Maybe this will help(a little) to get rid of the off topic posts
> >> >>> >>>
> >> >>> >>>For what this News Group is about and applicable guide lines see
> >> >>> >>>URL:
> >> >>> >>>
> >> >>> >>>http://www.faqs.org/faqs/radio/personal-intro/
> >> >>> >>>
> >> >>> >>>Thanks for reading
> >> >>> >>>73 CL
> >> >>> >>>
> >> >>> >>
> >> >>> >>---------- REPLY FOLLOWS ----------
> >> >>> >>
> >> >>> >>Dream on, CL. These guys already know that and they don't care. It's
> >> >>> >>been that way forever. It's the Curse of Usenet.
> >> >>> >>
> >> >>> >>Bill, W6WRT
> >> >>> >
> >> >>> > After years of resisting I'm ready for a moderated antenna group.

> >> >>> > I've used my kill filter more times in the last three months than
> >> >>> > I've ever done in the previous ten years.
> >> >>> >
> >> >>> > I, for one, am sick and tired of the foul-mouth off topic postings
> >> >>> > and, if that requires a moderated group to get rid of them it would
> >> >>> > be a very small price to pay.
> >> >>> >
> >> >>> > Danny,
> >> >>>
> >> >>>
> >> >>> I know what you mean Dan.
> >> >>
> >> >> No you don't. You're one of the foul-mouthed off-topic posters that
> >> >> Dan is complaining about.
> >> >>
> >> >>> With the anticipation that ham radio is going
> >> >>> to get dumbed down again real soon, the dumb-it-downers
> >> >>
> >> >> It got "dumbed-down" when a license was issued to you.
> >> >>
> >> >> BTW, what is your call?
> >> >
> >> >
> >> >Don't worry about my callsign.
> >>
> >> why not we think you don't have one
> >
> >Just like "an old friend" is yours?
>
> never said it was

But you claim to post under your own name.

> my call is kb9rqz

That's still not a name, stupid.

>
> >
> >> > Just keep practicing CW.
> >>
> >> why? BB fuinds it usles to what he interested in as do I
> >
> >Making excuses for your laziness, Marqueer?
>
> stating facts woger

When are you going to start, Marqueer?

> >
> >> > No matter how fast
> >> >and good you already are at it you can always improve your skills.

> >>
> >> so what?
> >
> >So you want them to just give you the General license instead of
> >working for it.
>
> no I don't I want a test that relates to the prevledges grranted

So you admit to being a lazy fat fuck who just wants their HF
privileges handed to them instead of working for it.

> >
> >> i suspect I am the best Swordmans in RRAP so what
> >
> >BWHAHAHAHAHA No, Markie, you are a gay blade, not the sharp blade.
>
> well woger if you ever decided to comit trespassing and get close
> enough you willfind out

Why, Dishonorably discharged felons like you can't own weapons. All
you will do is sit on your fat queer ass and whine, like you do on the
newsgroups.

5698. Re: Converting AM Car Radio to Shortwave

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-12 14:09:33 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1165932573.681858.98750@j44g2000cwa.googlegroups.com>
Source record: 9198

Yukio YANO wrote:> >
> TUBES!! Tubes? Off of Battery, 6 Volt?, Vibrator? Inverter? 12 Volt B+
> tubes ? Not since the 1950s ?
> Am I reading too much between the lines ?
>
> Yukio YANO, VE5YS
>
> Except for the audio output stage, we can now run a radio on the power
> used to to light the Dial on a Tubes Era Radio !

Andy writes:
Well, perhaps the OP is a "retro" hobbyist. I have met a few,
especially
youngsters who weren't born till after the ua709 was developed. Sort
of a
historical fascination.... Personally, I have had the hell shocked out
of me
enough to appreciate the privilege of using 14 volts or less (grin)...

Around here, you can usually pick up a transistorized car radio
for
about a dollar at garage sales and resale barns. I have yet to buy one

that didn't work. If you come to Eureka, Texas, I'll give you one for
free......

Andy W4OAH in Eureka, Texas

(If you've ever taken a beer to a job interview, you might live
in Eureka, Texas)

5699. Command Technologies HF-1250 Documentation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-12 16:54:53 UTC
From: Danny Richardson <n_group@k6mhe.com>
Message-ID: <7lntn25ft8hn2p1gpitjmgdvtrq0t5kjse@4ax.com>
Source record: 9199

Does anyone have documentation for a Command Technologies HF-1250
amplifier? I've searching the web with no luck.

73
Danny, K6MHE

5700. Re: Guide Lines for this news group

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-12 17:49:48 UTC
From: Mark@kb9rqz.aprs
Message-ID: <ksqtn2phj8gdp6gjp7c66saohp9hblmk3c@4ax.com>
Source record: 9200
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

```
On 12 Dec 2006 06:03:05 -0800, "Not Cocksucker Lloyd"
<not_time_turd_lloyd@yahoo.com> wrote:

>
>Mark@kb9rqz.aprs wrote:
>> On 11 Dec 2006 06:58:11 -0800, "Not Cocksucker Lloyd"
>> <not_time_turd_lloyd@yahoo.com> wrote:
>>
>> >
>> >Mark@kb9rqz.aprs wrote:
>> >> On Fri, 08 Dec 2006 00:35:11 GMT, Slow Code <my.mail@no.spam> wrote:
>> >>
>> >> >hot-ham-and-cheese@hotmail.com wrote in
>> >> >news:1165116776.575952.37510@16g2000cwy.googlegroups.com:
>> >> >
>> >> >>
>> >> >> Slow Code wrote:
>> >> >>> Danny Richardson <n_group@k6mhe.com> wrote in
>> >> >>> news:tqh3n2h7gjtdevv66fvnmv0be7clnpf019@4ax.com:
>> >> >>>
>> >> >>> > On Sat, 02 Dec 2006 09:48:44 -0800, Bill Turner <noway@nowhow.com>
>> >> >>> > wrote:
>> >> >>> >
>> >> >>> >>ORIGINAL MESSAGE:
>> >> >>>
>> >> >>> >>On Sat, 2 Dec 2006 08:19:07 -0800, "Caveat Lector" <CL@nowhere.com>
>> >> >>> >> wrote:
>> >> >>> >>
>> >> >>> >>>Maybe this will help(a little) to get rid of the off topic posts
>> >> >>> >>>
>> >> >>> >>>For what this News Group is about and applicable guide lines see
>> >> >>> >>>URL:
>> >> >>> >>>
>> >> >>> >>>http://www.faqs.org/faqs/radio/personal-intro/
>> >> >>> >>>
>> >> >>> >>>Thanks for reading
>> >> >>> >>>73 CL
>> >> >>> >>>
>> >> >>> >>
>> >> >>> >>------------ REPLY FOLLOWS ------------
>> >> >>> >>
>> >> >>> >>Dream on, CL. These guys already know that and they don't care. It's
>> >> >>> >>been that way forever. It's the Curse of Usenet.
```

>> >> >>> >>
>> >> >>> >>Bill, W6WRT
>> >> >>> >
>> >> >>> > After years of resisting I'm ready for a moderated antenna group.
>> >> >>> > I've used my kill filter more times in the last three months than
>> >> >>> > I've ever done in the previous ten years.
>> >> >>> >
>> >> >>> > I, for one, am sick and tired of the foul-mouth off topic postings
>> >> >>> > and, if that requires a moderated group to get rid of them it would
>> >> >>> > be a very small price to pay.
>> >> >>> >
>> >> >>> > Danny,
>> >> >>>
>> >> >>>
>> >> >>> I know what you mean Dan.
>> >> >>
>> >> >> No you don't. You're one of the foul-mouthed off-topic posters that
>> >> >> Dan is complaining about.
>> >> >>
>> >> >>> With the anticipation that ham radio is going
>> >> >>> to get dumbed down again real soon, the dumb-it-downers
>> >> >>
>> >> >> It got "dumbed-down" when a license was issued to you.
>> >> >>
>> >> >> BTW, what is your call?
>> >> >
>> >> >
>> >> >Don't worry about my callsign.
>> >>
>> >> why not we think you don't have one
>> >
>> >Just like "an old friend" is yours?
>>
>> never said it was
>
>But you claim to post under your own name.
no woger I claim to post under my name OR call

you realy need to learn english
>
>> my call is kb9rqz
>
>That's still not a name, stupid.

never said it a name
>
>>
>> >
>> >> > Just keep practicing CW.
>> >>
>> >> why? BB fuinds it usles to what he interested in as do I

>> >
>> >Making excuses for your laziness, Marqueer?
>>
>> stating facts woger
>
>When are you going to start, Marqueer?
>
>> >
>> >> > No matter how fast
>> >> >and good you already are at it you can always improve your skills.
>> >>
>> >> so what?
>> >
>> >So you want them to just give you the General license instead of
>> >working for it.
>>
>> no I don't I want a test that relates to the prevledges grranted
>
>So you admit to being a lazy fat fuck who just wants their HF
>privileges handed to them instead of working for it.
>
>> >
>> >> i suspect I am the best Swordmans in RRAP so what
>> >
>> >BWHAHAHAHAHA No, Markie, you are a gay blade, not the sharp blade.
>>
>> well woger if you ever decided to comit trespassing and get close
>> enough you willfind out
>
>Why, Dishonorably discharged felons like you can't own weapons. All
>you will do is sit on your fat queer ass and whine, like you do on the
>newsgroups.
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5701. Re: Converting AM Car Radio to Shortwave

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-12 17:54:50 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1165946090.272417.284490@80g2000cwy.googlegroups.com>
Source record: 9201

Yukio YANO wrote:
> TUBES!! Tubes? Off of Battery, 6 Volt?, Vibrator? Inverter? 12 Volt B+
> tubes ? Not since the 1950s ?
> Am I reading too much between the lines ?

Yes, tubes. I have some that were pulled from circa 1960's television sets, and I thought I'd use them, hoping that they'd be EMP resistant. Been on kind of a survivalist kick, lately. Doesn't mean I'd be opposed to using more modern equipment, though. One thing I saw that I liked in one of the books I purchased was a loop antenna that uses transistors to amplify the signal. Thought it might be easier than stringing up a lot of wire. ;-)

Ralph Glatt

5702. Re: Converting AM Car Radio to Shortwave

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-12 18:01:48 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1165946508.254413.302020@j72g2000cwa.googlegroups.com>
Source record: 9202

David wrote:
> "AndyS" <andysharpe@juno.com> wrote in <1165840350.029509.309650@
> 79g2000cws.googlegroups.com>:
>
> > In my opinion, the easiest, most non-destructive way to do this
> >is to add a converter, using the AM radio as a tuneable IF for
> >AM transmissions.
>
> Agreed.
>
> >And you can still listen to Rush Limbaugh by switching off the
> >converter....
>
> Or when you switch it on...
>
> http://www.techlib.com/files/rushconv.pdf
>
> Pick your 1MHz band, and tune away. You'll need to tweek a bit if
> you want to be very far from 15 MHz.

I'm not that terribly fond of Rush, but I think I might be able to
adapt this to tune in other frequencies, so it should come in handy.
Thanks!

Ralph Glatt

5703. Re: Converting AM Car Radio to Shortwave

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-12 18:07:03 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <elmr47$l1i$6@puck.litech.org>
Source record: 9203

On 12 Dec 2006 09:54:50 -0800, julian814 <julian814@hotmail.com> wrote in
<1165946090.272417.284490@80g2000cwy.googlegroups.com>:

> Yukio YANO wrote:
>> TUBES!! Tubes? Off of Battery, 6 Volt?, Vibrator? Inverter? 12 Volt B+
>> tubes ? Not since the 1950s ?
>> Am I reading too much between the lines ?

> Yes, tubes. I have some that were pulled from circa 1960's television
> sets, and I thought I'd use them, hoping that they'd be EMP resistant.
> Been on kind of a survivalist kick, lately. Doesn't mean I'd be opposed
> to using more modern equipment, though. One thing I saw that I liked in
> one of the books I purchased was a loop antenna that uses transistors
> to amplify the signal. Thought it might be easier than stringing up a
> lot of wire. ;-)

But the transistors almost certainly will be fried by EMP. If that's
not a concern, then by all means try it -- and share the design and
results with us, please!

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

5704. Re: A QRZ Trivia Question That Smegma Radio May Find Educational

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-12 19:18:10 UTC
From: KC4UAI <kc4uai@gmail.com>
Message-ID: <1165951090.403715.91360@16g2000cwy.googlegroups.com>
Source record: 9205
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Slow Code wrote:
> "KC4UAI" <kc4uai@gmail.com> wrote in
> news:1165422633.729925.259700@79g2000cws.googlegroups.com:
>
> > >
> > > I for one don't want to loose my ticket. Despite what SC says, I
> > > worked for that Extra...
> > >
> > > -= bob =-
>
>
>
> Post restructuring License EXAM
> <Snip>

If that was the test you took it explains a lot.... It sure explains why you are so fearful of the CBers taking over. You never passed a valid exam, so you might want to turn in that ticket and try again. Let me know where you are and we will find you a testing session close.

We still don't have your call there SC. I'm thinking that you may not actually have a call and are just jealous of us folks that passed the tests.. (Grin)

-= KC4UAI =-

5705. Re: Converting AM Car Radio to Shortwave

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-12 23:11:32 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1165965092.159606.83880@73g2000cwn.googlegroups.com>
Source record: 9206

julian814 wrote:>
> Yes, tubes. I have some that were pulled from circa 1960's television
> sets, and I thought I'd use them, hoping that they'd be EMP resistant.
> Been on kind of a survivalist kick, lately. Doesn't mean I'd be opposed
> to using more modern equipment, though. One thing I saw that I liked in
> one of the books I purchased was a loop antenna that uses transistors
> to amplify the signal. Thought it might be easier than stringing up a
> lot of wire. ;-)
>
>
> Ralph Glatt

Andy writes:

If we have an EMP attack, who will you use the radio to listen to
???

Andy W4OAH

5706. Re: Communucation concepts eb104

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-12 23:36:16 UTC
From: jgboyles@aol.com
Message-ID: <1165966576.926880.169910@73g2000cwn.googlegroups.com>
Source record: 9207

Newsgroup wrote:
> I am currently in the process of building a eb104 kit. has anyone else built
> one of these kits. What are your thought on this amplifier.

It is not actually a kit. It is the circuit board plus all the components to populate it. To have an actual working Amplifier that you can get on the HF bands you will need: T/R relays, low pass filters for the bands you want to use the Amp plus a means to switch these filters, 50 VDC 20 amp power supply, copper spreaders+heat sink+cooling fans to get rid of the heat, some kind of enclosure with switches, connectors, metering ect..

Optionally, you may want an ALC circuit, and an SWR protection circuit. The MRF150s are about $80 each, I let the smoke out of 8 before I got mine working. I built two eb104s with a combiner for 1200 watts output, but it was a struggle. Essentially you have to come up with your own kit. It takes about a hour to populate the eb104 circuit board. It took weeks to have a working Amp. Good luck.

Gary N4AST

5707. Test

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-13 13:42:19 UTC
From: William Hightower <william.hightower@earthlink.net>
Message-ID: <%qTfh.8739$sf5.4850@newsread4.news.pas.earthlink.net>
Source record: 9208

Is this news group down?

5708. Re: Test

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-13 14:49:59 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <uqUfh.2$8x4.1@newsfe07.lga>
Source record: 9209

I don't think so

..

"William Hightower" <william.hightower@earthlink.net> wrote in message
news:%qTfh.8739$sf5.4850@newsread4.news.pas.earthlink.net...
> Is this news group down?
>

5709. Re: Test

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-13 15:05:41 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <elp4s5hhb7@puck.litech.org>
Source record: 9210

On Wed, 13 Dec 2006 09:49:59 -0500, xpyttl <xpyttl_NOSPAM@earthling.net> wrote in
<uqUfh.2$8x4.1@newsfe07.lga>:
> I don't think so

> ..

> "William Hightower" <william.hightower@earthlink.net> wrote in message
> news:%qTfh.8739$sf5.4850@newsread4.news.pas.earthlink.net...
>> Is this news group down?

It's fairly active most days.

Maybe you just looked on a slow day.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

5710. WJ-8718 mixer ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-13 16:19:58 UTC
From: Henry Kolesnik <kolesnik@nojunksbcglobal.net>
Message-ID: <OKVfh.23039$9v5.9833@newssvr29.news.prodigy.net>
Source record: 9211

Does anyone have a manual for the Watkins Johnson WJ-8718 and could scan the mixer circuit in the input converter and email it to me? Or better if anyone has a spare input converter that they'd sell, it's A3 791592. Or the mixer module or a mod that allows one tho use a Minicircuits mixer module.
tnx

--

73
Hank WD5JFR

5711. Re: Converting AM Car Radio to Shortwave UPDATE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-13 17:43:14 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1166031794.175793.239780@n67g2000cwd.googlegroups.com>
Source record: 9212

I'll admit that the idea of a tube receiver is partly based on looks
than EMP survivalbility. (I managed to find eight wonderful old
headsets at a school sale. Bakelite earpieces and cloth wrapped wire!)
I thought it might give me more of a 50's era Cold War feel. I'm sure
I'm not the only one who likes using tubes as well! ;-)

As far as using solid state, I wouldn't be opposed to it, especially if
I could figure a way to shield the parts from EMP. The main reasons I
wanted to adapt a car's AM radio was because they're cheap (I know for
a fact there's one at the local resale shop) and have a certain amount
of shielding, plus they run on 12 volt DC. I've discovered they have
plans for a shortwave converter in another of the Impoverished Radio
Experimenter's books, so I might look into that. There is also a bit of
that post-apocalyptic feel of using "junk" to listen to the airwaves.

I'm seriously considering getting a ham license. So far, the only thing
holding me back is learning Morse code for CW.

Thanks to all who have posted with suggestions, advice and comments.

Ralph Glatt

5712. Re: SolderSmoke #43: LP Filters, Titan, Feedback amps, Return Loss Bridges, "Gonzo Gizmos"

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-13 18:42:27 UTC
From: amdx <amdx@knology.net>
Message-ID: <ef36$4580496b$45011502$17305@KNOLOGY.NET>
Source record: 9213
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,sci.electronics.basics,sci.astro.amateur

<bill.meara@gmail.com> wrote in message
news:1165673325.215679.235050@73g2000cwn.googlegroups.com...
> SolderSmoke!
> A SHOW FOR ELECTRONICS HOMEBREWERS!
>
> http://www.soldersmoke.com
>
> Listen at: http://www.soldersmoke.com
>
> SolderSmoke #43 December 9, 2006
> Tired of listening to Led Zepplin or NPR on your
> I-Pod? Wouldn't you like to be able to carry with
> you the kinds of ham radio conversations that you
> listen to while in your radio shack?
> Mike, KL7R, in Juneau, Alaska, and Bill, M0HBR, in
> London, England meet regularly on the ECHOLINK system
> to discuss their homebrew radio projects. We are
> making them available as PODCASTS.
>
> http://www.soldersmoke.com
>
> 73 from London
> Bill M0HBR N2CQR CU2JL
> http://www.gadgeteer.us
>
Hey thanks, Bill
I downloaded a few of your programs and installed them on a MP3 player.
My first attempt at such a thing, it all went smoothly, I listened to the
discusion
while on the treadmill and while working the weight machines this morning, I
enjoyed the conversation. I'll be adding more soon.
I bought a cheapy MP3 player at FYE, hold on now, list price is $29.99, it
is on sale for $19.99 and has a $10.00 rebate. So the final cost is about
$10.00!
Works fine but it is bare bones.
Thanks again for the feed,
Mike

5713. Re: Converting AM Car Radio to Shortwave UPDATE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-13 19:51:28 UTC
From: gsm@mendelson.com
Message-ID: <slrneo0lat.1b3.gsm@cable.mendelson.com>
Source record: 9214

julian814 wrote:
> I'm seriously considering getting a ham license. So far, the only thing
> holding me back is learning Morse code for CW.

Do a search on Code Quick. I think the URL is www.codequick2000.com or something like that. It's a combination audio/visual/tactile system that teaches you how to copy morse code as if it were words and not beeps.

Worked great for me, I tried for 29 years and never was able to get anywhere near 5 wpm. With code quick I was able to pass the 13wpm test and at my peak copy at 35wpm.

Best $50 I ever spent on the hobby.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 Fax ONLY: 972-2-648-1443 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

5714. FA: 19" BLANK RACK PANEL,NOS & Used + stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-13 20:38:36 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <gxZfh.485871$QZ1.316761@bgtnsc04-news.ops.worldnet.att.net>
Source record: 9215

Have several new and used 19 inch blank rack panels + other stuff AND I
will have
a few smaller panels tomorrow that are pre-punched - i.e. used- check
back

Tnx for looking, heytubeguy

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

5715. Re: WJ-8718 mixer ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-14 01:05:33 UTC
From: Phil <pjock@xalltel.net>
Message-ID: <Xns9898CCA114505pjockxxxSpearNetnet@208.49.80.253>
Source record: 9216

Would you like the whole manual? I have one you can have for
shipping.

phil

"Henry Kolesnik" <kolesnik@nojunksbcglobal.net> wrote in
news:OKVfh.23039$9v5.9833@newssvr29.news.prodigy.net:

> Does anyone have a manual for the Watkins Johnson WJ-8718 and could
> scan the mixer circuit in the input converter and email it to me? Or
> better if anyone has a spare input converter that they'd sell, it's A3
> 791592. Or the mixer module or a mod that allows one tho use a
> Minicircuits mixer module. tnx

5716. Re: WJ-8718 mixer ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-14 03:01:08 UTC
From: Henry Kolesnik <kolesnik@nojunksbcglobal.net>
Message-ID: <U73gh.23845$9v5.5152@newssvr29.news.prodigy.net>
Source record: 9217

Phil
I sent you a message, hope you got it. A manual will be very helpful and
I'll take your offer.
tnx
Hank
"Phil" <pjock@xalltel.net> wrote in message
news:Xns9898CCA114505pjockxxxSpearNetnet@208.49.80.253...
> Would you like the whole manual? I have one you can have for
> shipping.
>
> phil
>
>
> "Henry Kolesnik" <kolesnik@nojunksbcglobal.net> wrote in
> news:OKVfh.23039$9v5.9833@newssvr29.news.prodigy.net:
>
>> Does anyone have a manual for the Watkins Johnson WJ-8718 and could
>> scan the mixer circuit in the input converter and email it to me? Or
>> better if anyone has a spare input converter that they'd sell, it's A3
>> 791592. Or the mixer module or a mod that allows one tho use a
>> Minicircuits mixer module. tnx

5717. Re: Test

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-14 03:17:31 UTC
From: Richard Knoppow <dickburk@ix.netcom.com>
Message-ID: <4580b59c$0$15561$88260bb3@free.teranews.com>
Source record: 9218

"William Hightower" <william.hightower@earthlink.net> wrote
in message
news:%qTfh.8739$sf5.4850@newsread4.news.pas.earthlink.net...
> Is this news group down?
He won't see this reply. He is an Earthlink subscriber,
as am I (Netcom is an Earthlink company). For the past
several days Earthlink's news servers have not been updating
messages. Only a very few groups work, the rest have no
messages newer than about 8 December. You can download
existing messages and post but new messages just don't show
up.
I've been using Google groups and am now using a freebee
Teranews account.
Earthlink is a godawful provider but one hears horror
stories about most of the others too.

--

Richard Knoppow
Los Angeles, CA, USA
dickburk@ix.netcom.com

--
Posted via a free Usenet account from http://www.teranews.com

5718. Re: Converting AM Car Radio to Shortwave UPDATE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-14 04:00:45 UTC
From: ray13 <ray_psi@yahoo.com>
Message-ID: <1166068845.588307.154530@f1g2000cwa.googlegroups.com>
Source record: 9219

Geoffrey S. Mendelson wrote:
> julian814 wrote:
> > I'm seriously considering getting a ham license. So far, the only thing
> > holding me back is learning Morse code for CW.
>
> Do a search on Code Quick. I think the URL is www.codequick2000.com or
> something like that. It's a combination audio/visual/tactile system
> that teaches you how to copy morse code as if it were words and not
> beeps.
>
> Worked great for me, I tried for 29 years and never was able to get anywhere
> near 5 wpm. With code quick I was able to pass the 13wpm test and at my
> peak copy at 35wpm.
>
> Best $50 I ever spent on the hobby.
>
> Geoff.
>
> --
> Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
> IL Voice: (07)-7424-1667 Fax ONLY: 972-2-648-1443 U.S. Voice: 1-215-821-1838
> Visit my 'blog at http://geoffstechno.livejournal.com/

Heck your hot mail dont work my links dont work. so try nj7p's tube
data web page I'm sure it has a link to an RCA tube manual. In the back
of the RCA tube manual is many a circuit an the older the manaul the
better the tube circuits are or were. I recall a converter or two back
in the day, all tube radio, on a points/distributor ignition system
car, yeah vibrators those were the days. You know the trick to clean
the contacts on a vibrator 100 watt light bulb in series with the coil
and plug it into the mains

Then just about the time tung sol invented the 12VDC plate voltage
tube, transistors took over.
I even know how to make a tube out of a dual filament car taillight.
Now there's a real tube.

ray
N8ZU/e0

Hey I like to know what country has a code requirement to get your
ticket.

5719. Re: Converting AM Car Radio to Shortwave UPDATE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-14 04:57:56 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <gIqdnWuSo6F8RB3YnZ2dnUVZ8s6qnZ2d@pipex.net>
Source record: 9220

>I'm seriously considering getting a ham license. So far, the only thing
>holding me back is learning Morse code for CW.
==========
You currently only need to do a 5 wpm morse (receive only) for the
highest class of licence ,giving you all the privileges available to a
licenced radio amateur.
So you can start with with getting licences with not all the privileges
and enjoy operating before you go for the Amateur Extra class of licence.

Frank KN6WH / GM0CSZ

5720. Looking for a SL6440 Mixer IC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-14 20:34:22 UTC
From: Sbc News <Andy@Hardy.com>
Message-ID: <izigh.2492$yC5.2427@newssvr27.news.prodigy.net>
Source record: 9221

I know these have out of production for a while. If anyone knows of a source for a dozzen or so, I would be greatful I you would share your information with me.

Thanks,
Emil
W9NM

5721. Re: Looking for a SL6440 Mixer IC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-14 20:47:14 UTC
From: Sbc News <Andy@Hardy.com>
Message-ID: <mLigh.2497$yC5.1735@newssvr27.news.prodigy.net>
Source record: 9222

Always nice to proof-read.

If any kiddies are in the room:

If anyone knows of a source for a dozen or so, I would be grateful I you would share your information with me.

"Sbc News" <Andy@Hardy.com> wrote in message news:izigh.2492$yC5.2427@newssvr27.news.prodigy.net...
>I know these have out of production for a while. If anyone knows of a
>source for a dozzen or so, I would be greatful I you would share your
>information with me.
>
> Thanks,
> Emil
> W9NM
>

5722. Re: Command Technologies HF-1250 Documentation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-14 21:33:40 UTC
From: w9gb <spam_protect@arrl.net>
Message-ID: <oJCdneWGS_elXhzYnZ2dnUVZ_vqpnZ2d@comcast.com>
Source record: 9223

I assume that you have contacted Command Technologies (e-mail or phone) and
they have told you they no longer have this documentation?

First Google.com search hit found their web page:
http://www.command1.com/default.asp

"Danny Richardson" <n_group@k6mhe.com> wrote in message
news:7lntn25ft8hn2p1gpitjmgdvtrq0t5kjse@4ax.com...
> Does anyone have documentation for a Command Technologies HF-1250
> amplifier? I've searching the web with no luck.
>
> 73
> Danny, K6MHE
>

5723. Re: Looking for a SL6440 Mixer IC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-15 06:32:10 UTC
From: sailtamarack@yahoo.ca
Message-ID: <1166164330.813491.198600@79g2000cws.googlegroups.com>
Source record: 9224

You might find them here: http://www.quest-comp.com/

I found them by using this search engine:
http://www.findchips.com/avail

Good luck - Plessey chips are a rare bird now - Roger

Sbc News wrote:
> I know these have out of production for a while. If anyone knows of a
> source for a dozzen or so, I would be greatful I you would share your
> information with me.
>
> Thanks,
> Emil
> W9NM

5724. Re: Command Technologies HF-1250 Documentation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-15 14:43:58 UTC
From: Danny Richardson <n_group@k6mhe.com>
Message-ID: <q4d5o29unnhdc40u4j29ktpmv1rldmiu8u@4ax.com>
Source record: 9225

On Thu, 14 Dec 2006 15:33:40 -0600, "w9gb" <spam_protect@arrl.net>
wrote:

>I assume that you have contacted Command Technologies (e-mail or phone) and
>they have told you they no longer have this documentation?
>
That is correct.

Danny

5725. Re: Command Technologies HF-1250 Documentation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-15 15:14:50 UTC
From: w9gb <spam_protect@arrl.net>
Message-ID: <BpidnUuBsYpyJh_YnZ2dnUVZ_rOqnZ2d@comcast.com>
Source record: 9226

"Danny Richardson" <n_group@k6mhe.com> wrote in message
news:q4d5o29unnhdc40u4j29ktpmv1rldmiu8u@4ax.com...
> On Thu, 14 Dec 2006 15:33:40 -0600, "w9gb" <spam_protect@arrl.net>
> wrote:
>
>>I assume that you have contacted Command Technologies (e-mail or phone)
>>and
>>they have told you they no longer have this documentation?
>>
> That is correct.

Did you also contact QRO Technologies ???
http://www.qrotec.com/

Since the HR-1250 was a Command Amplifier was before Patrick Stein, N8BRA
(Command) and Ray Connin, KB8VU (now QRO) "split of the companies" a few
years ago.

w9gb

5726. impedance/noise match

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-15 15:57:02 UTC
From: jhallen@TheWorld.com
Message-ID: <elugke$b8u$1@pcls4.std.com>
Source record: 9227

What do you do if the input impedance of an LNA does not equal the source impedance which gives the lowest noise?

The source might be an antenna, transmission line or filter which will not work properly if it does not see the correct impedance.

--
/* jhallen@world.std.com AB1GO */ /* Joseph H. Allen */
int a[1817];main(z,p,q,r){for(p=80;q+p-80;p-=2*a[p])for(z=9;z--;)q=3&(r=time(0)
+r*57)/7,q=q?q-1?q-2?1-p%79?-1:0:p%79-77?1:0:p<1659?79:0:p>158?-79:0,q?!a[p+q*2
]?a[p+=a[p+=q]=q]=q:0:0;for(;q++-1817;)printf(q%79?"%c":"%c\n"," #"[!a[q-1]]);}

5727. Re: WJ-8718 mixer ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-15 17:11:33 UTC
From: Phil <pj2006@xalltel.net>
Message-ID: <Xns989A7C470B3E0pjockxxxSpearNetnet@208.49.80.253>
Source record: 9228

Hank,

We appear to be crossing paths or whatever that cliche is...

I did not receive your email because I forgot to change
my old (obscured) email address in my news reader program.
I sent you a note to what I thought your correct email address
should be based on what I saw in your post, but I guess you
did not get it either.

Anyway, send me your mailing address using this email address
for me:

pj2006 at alltel.net

(you know what to do with the "at" part)

I'll fire off the manual via media mail through USPS. You should
have it in 7 to 10 days according to the post office.

73,

phil

"Henry Kolesnik" <kolesnik@nojunksbcglobal.net> wrote in
news:U73gh.23845$9v5.5152@newssvr29.news.prodigy.net:

> Phil
> I sent you a message, hope you got it. A manual will be very helpful
> and I'll take your offer.
> tnx
> Hank
> "Phil" <pjock@xalltel.net> wrote in message
> news:Xns9898CCA114505pjockxxxSpearNetnet@208.49.80.253...
>> Would you like the whole manual? I have one you can have for
>> shipping.
>>
>> phil
>>
>>
>> "Henry Kolesnik" <kolesnik@nojunksbcglobal.net> wrote in
>> news:OKVfh.23039$9v5.9833@newssvr29.news.prodigy.net:
>>
>>> Does anyone have a manual for the Watkins Johnson WJ-8718 and could
>>> scan the mixer circuit in the input converter and email it to me?
>>> Or better if anyone has a spare input converter that they'd sell,
>>> it's A3 791592. Or the mixer module or a mod that allows one tho

>>> use a Minicircuits mixer module. tnx

5728. Re: Looking for a SL6440 Mixer IC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-15 17:44:52 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <oaBgh.16864$j7.336505@news.indigo.ie>
Source record: 9229

On Thu, 14 Dec 2006 20:47:14 +0000, Sbc News wrote:

> Always nice to proof-read.

Nah! This is Usenet.

> If any kiddies are in the room:
>
> If anyone knows of a source for a dozen or so, I would be grateful I you
> would share your information with me.

Some of the UK suppliers might still have some in stock. Try:
http://www.jabdog.com/semi-lin6.htm

73, Ed. EI9GQ.

--
Remove 'X' to reply by e-mail.
linux 2.6.17

5729. Re: Command Technologies HF-1250 Documentation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-15 18:17:28 UTC
From: Danny Richardson <n_group@k6mhe.com>
Message-ID: <s5p5o25vvqdc9aek2p4adrhjotjmjqb1cm@4ax.com>
Source record: 9230

On Fri, 15 Dec 2006 09:14:50 -0600, "w9gb" <spam_protect@arrl.net>
wrote:

>"Danny Richardson" <n_group@k6mhe.com> wrote in message
>news:q4d5o29unnhdc40u4j29ktpmv1rldmiu8u@4ax.com...
>> On Thu, 14 Dec 2006 15:33:40 -0600, "w9gb" <spam_protect@arrl.net>
>> wrote:
>>
>>>I assume that you have contacted Command Technologies (e-mail or phone)
>>>and
>>>they have told you they no longer have this documentation?
>>>
>> That is correct.
>
>Did you also contact QRO Technologies ???
> http://www.qrotec.com/
>
>Since the HR-1250 was a Command Amplifier was before Patrick Stein, N8BRA
>(Command) and Ray Connin, KB8VU (now QRO) "split of the companies" a few
>years ago.
>
No, I had not tried them, but have now sent off an email to them and
will see what their responce might be.

Thanks for the suggestion.

Danny, K6MHE

5730. Re: Command Technologies HF-1250 Documentation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-15 18:31:16 UTC
From: w9gb <spam_protect@arrl.net>
Message-ID: <-Kqdnc9tPZNldB_YnZ2dnUVZ_silnZ2d@comcast.com>
Source record: 9231

"Danny Richardson" <n_group@k6mhe.com> wrote in message
news:s5p5o25vvqdc9aek2p4adrhjotjmjqb1cm@4ax.com...
> On Fri, 15 Dec 2006 09:14:50 -0600, "w9gb" <spam_protect@arrl.net>
> wrote:
>
>>"Danny Richardson" <n_group@k6mhe.com> wrote in message
>>news:q4d5o29unnhdc40u4j29ktpmv1rldmiu8u@4ax.com...
>>> On Thu, 14 Dec 2006 15:33:40 -0600, "w9gb" <spam_protect@arrl.net>
>>> wrote:
>>>
>>>>I assume that you have contacted Command Technologies (e-mail or phone)
>>>>and
>>>>they have told you they no longer have this documentation?
>>>>
>>> That is correct.
>>
>>Did you also contact QRO Technologies ???
>> http://www.qrotec.com/
>>
>>Since the HR-1250 was a Command Amplifier was before Patrick Stein, N8BRA
>>(Command) and Ray Connin, KB8VU (now QRO) "split of the companies" a few
>>years ago.
>>
> No, I had not tried them, but have now sent off an email to them and
> will see what their responce might be.
>
> Thanks for the suggestion.
>
> Danny, K6MHE
>

The HF-1250 used a single 3CPX800A ... so it really is a single tube version
of the HF-2500.

gb

5731. Re: Command Technologies HF-1250 Documentation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-15 19:00:18 UTC
From: Danny Richardson <n_group@k6mhe.com>
Message-ID: <dvr5o256mf6m5jvuqih4s7uqmradlscm85@4ax.com>
Source record: 9232

On Fri, 15 Dec 2006 12:31:16 -0600, "w9gb" <spam_protect@arrl.net>
wrote:

>"Danny Richardson" <n_group@k6mhe.com> wrote in message
>news:s5p5o25vvqdc9aek2p4adrhjotjmjqb1cm@4ax.com...
>> On Fri, 15 Dec 2006 09:14:50 -0600, "w9gb" <spam_protect@arrl.net>
>> wrote:
>>
>>>"Danny Richardson" <n_group@k6mhe.com> wrote in message
>>>news:q4d5o29unnhdc40u4j29ktpmv1rldmiu8u@4ax.com...
>>>> On Thu, 14 Dec 2006 15:33:40 -0600, "w9gb" <spam_protect@arrl.net>
>>>> wrote:
>>>>
>>>>>I assume that you have contacted Command Technologies (e-mail or phone)
>>>>>and
>>>>>they have told you they no longer have this documentation?
>>>>>
>>>> That is correct.
>>>
>>>Did you also contact QRO Technologies ???
>>> http://www.qrotec.com/
>>>
>>>Since the HR-1250 was a Command Amplifier was before Patrick Stein, N8BRA
>>>(Command) and Ray Connin, KB8VU (now QRO) "split of the companies" a few
>>>years ago.
>>>
>> No, I had not tried them, but have now sent off an email to them and
>> will see what their responce might be.
>>
>> Thanks for the suggestion.
>>
>> Danny, K6MHE
>>
>
>The HF-1250 used a single 3CPX800A ... so it really is a single tube version
>of the HF-2500.
>
>gb
>

I have not received a reply from Ray at QRO and, no, he has no
documentation for the HF-1250.

Besides the HF-1250 using only one tube there are other differences
between the HF-2500 and HF-1250.

Thanks for the suggestions.

vry 73,
Danny, K6MHE

5732. Re: Command Technologies HF-1250 Documentation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-15 19:04:59 UTC
From: Danny Richardson <n_group@k6mhe.com>
Message-ID: <2ds5o2lqf7ic1o1tgjv28i1dthtte6ajot@4ax.com>
Source record: 9233

On Fri, 15 Dec 2006 11:00:18 -0800, Danny Richardson
<n_group@k6mhe.com> wrote:

>On Fri, 15 Dec 2006 12:31:16 -0600, "w9gb" <spam_protect@arrl.net>
>wrote:
>
>>"Danny Richardson" <n_group@k6mhe.com> wrote in message
>>news:s5p5o25vvqdc9aek2p4adrhjotjmjqb1cm@4ax.com...
>>> On Fri, 15 Dec 2006 09:14:50 -0600, "w9gb" <spam_protect@arrl.net>
>>> wrote:
>>>
>>>>"Danny Richardson" <n_group@k6mhe.com> wrote in message
>>>>news:q4d5o29unnhdc40u4j29ktpmv1rldmiu8u@4ax.com...
>>>>> On Thu, 14 Dec 2006 15:33:40 -0600, "w9gb" <spam_protect@arrl.net>
>>>>> wrote:
>>>>>
>>>>>>I assume that you have contacted Command Technologies (e-mail or phone)
>>>>>>and
>>>>>>they have told you they no longer have this documentation?
>>>>>>
>>>>> That is correct.
>>>>
>>>>Did you also contact QRO Technologies ???
>>>> http://www.qrotec.com/
>>>>
>>>>Since the HR-1250 was a Command Amplifier was before Patrick Stein, N8BRA
>>>>(Command) and Ray Connin, KB8VU (now QRO) "split of the companies" a few
>>>>years ago.
>>>>
>>> No, I had not tried them, but have now sent off an email to them and
>>> will see what their responce might be.
>>>
>>> Thanks for the suggestion.
>>>
>>> Danny, K6MHE
>>>
>>
>>The HF-1250 used a single 3CPX800A ... so it really is a single tube version
>>of the HF-2500.
>>
>>gb
>>
>
>I have not received a reply from Ray at QRO and, no, he has no

>documentation for the HF-1250.
>
>Besides the HF-1250 using only one tube there are other differences
>between the HF-2500 and HF-1250.
>
>Thanks for the suggestions.
>
>vry 73,
>Danny, K6MHE

I should learn to proof read! That should say "I have now received a
reply from Ray.....

Sheeee

>

5733. Re: Command Technologies HF-1250 Documentation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-15 21:33:03 UTC
From: w9gb <spam_protect@arrl.net>
Message-ID: <UMmdnd-ifcsJiR7YnZ2dnUVZ_ompnZ2d@comcast.com>
Source record: 9234

"Danny Richardson" <n_group@k6mhe.com> wrote in message
news:dvr5o256mf6m5jvuqih4s7uqmradlscm85@4ax.com...
>>
>
> I have not received a reply from Ray at QRO and, no, he has no
> documentation for the HF-1250.
>
> Besides the HF-1250 using only one tube there are other differences
> between the HF-2500 and HF-1250.
>
> Thanks for the suggestions.
>
> vry 73,
> Danny, K6MHE
>

Possible changes to some components for current and power increase.

One tube designs are not always economical -- when the cost to add an additional tube and parts changes is small (on a unit cost basis) -- you already have the case, meters, transformer (possibly a bit higher current ratings) and relays. IF the specific tube used in the amplifier is inexpensive -- that is usually the deciding factor.

5734. Re: Command Technologies HF-1250 Documentation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-15 23:54:25 UTC
From: Danny Richardson <n_group@k6mhe.com>
Message-ID: <s0d6o2l8j6macmta574hudbolp150p188n@4ax.com>
Source record: 9235

On Fri, 15 Dec 2006 15:33:03 -0600, "w9gb" <spam_protect@arrl.net>
wrote:

>"Danny Richardson" <n_group@k6mhe.com> wrote in message
>news:dvr5o256mf6m5jvuqih4s7uqmradlscm85@4ax.com...
>>>
>>
>> I have not received a reply from Ray at QRO and, no, he has no
>> documentation for the HF-1250.
>>
>> Besides the HF-1250 using only one tube there are other differences
>> between the HF-2500 and HF-1250.
>>
>> Thanks for the suggestions.
>>
>> vry 73,
>> Danny, K6MHE
>>
>
>Possible changes to some components for current and power increase.

This is veering off the question, but will make a couple of comments
and then drop it.

I've been able, thus far, to determine that the band switch is
different (the HF 1250's is better!) the tank coils are different and
also is the 4:1 transformer (location and size). Oddly enough, the
power supply is the same! The HF 1250 power supply really loafs along.
>
>One tube designs are not always economical -- when the cost to add an
>additional tube and parts changes is small (on a unit cost basis) -- you
>already have the case, meters, transformer (possibly a bit higher current
>ratings) and relays. IF the specific tube used in the amplifier is
>inexpensive -- that is usually the deciding factor.

Another factor, for me, was I don't want to spend the $$$ to put in a
220VAC service and for amps running 500-750 watts (we're talking key
down here) the single tube amp is a good choice. There's more than
just the cost of the amp itself involved.

Now back to my original question.

73,
Danny, K6MHE

>
>

5735. Re: Converting AM Car Radio to Shortwave UPDATE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-16 06:33:37 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1166250816.986381.162420@n67g2000cwd.googlegroups.com>
Source record: 9236

ray13 wrote:
> Heck your hot mail dont work my links dont work. so try nj7p's tube
> data web page I'm sure it has a link to an RCA tube manual. In the back
> of the RCA tube manual is many a circuit an the older the manaul the
> better the tube circuits are or were. I recall a converter or two back
> in the day, all tube radio, on a points/distributor ignition system
> car, yeah vibrators those were the days. You know the trick to clean
> the contacts on a vibrator 100 watt light bulb in series with the coil
> and plug it into the mains

Sounds good, I'll have to check it out.

>
> Then just about the time tung sol invented the 12VDC plate voltage
> tube, transistors took over.
> I even know how to make a tube out of a dual filament car taillight.
> Now there's a real tube.

I wouldn't mind knowing how to do that myself. One of the really good
radio books from Lindsay tells how to make your own vacuum tubes and
transistors. I'm thinking of picking that up as well.

>
> ray
> N8ZU/e0
>
> Hey I like to know what country has a code requirement to get your
> ticket.

I've been told that "real" hams know code. For now, I'm mainly
interested in listening to news from outside the US and possibly any
Civil Defense frequencies. Would definitely be interested in listening
into any frequency that plays old time radio programs.

Ralph Glatt

5736. Re: Looking for a SL6440 Mixer IC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-16 07:03:00 UTC
From: Pete KE9OA <p.gianako@comcast.net>
Message-ID: <kJudncmXoJ6_Bx7YnZ2dnUVZ_qGjnZ2d@comcast.com>
Source record: 9237

There was a place on the East coast, maybe in New York, that was selling
them for about 90 dollars for a rail of 25 of them.
I don't have the name of them anymore. Some of the other places were selling
them for 225 dollars per rail.

Pete

<sailtamarack@yahoo.ca> wrote in message
news:1166164330.813491.198600@79g2000cws.googlegroups.com...
> You might find them here: http://www.quest-comp.com/
>
> I found them by using this search engine:
> http://www.findchips.com/avail
>
> Good luck - Plessey chips are a rare bird now - Roger
>
>
>
> Sbc News wrote:
>> I know these have out of production for a while. If anyone knows of a
>> source for a dozzen or so, I would be greatful I you would share your
>> information with me.
>>
>> Thanks,
>> Emil
>> W9NM
>

5737. Re: A moment of silence my friends for a silent key.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-16 08:31:34 UTC
From: Ron <anon@anon>
Message-ID: <ht0ea.irb.17.1@news.alt.net>
Source record: 9238
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Vince Fiscus, KB7ADL" <radiation17@bresnan.net> wrote in message
news:gaadnUExUrY-6x7YnZ2dnUVZ_oWdnZ2d@bresnan.com...
> Ham radio died today.
>
> Sorry for all the brow beating, it won't be happening anymore.
>
> 73 de KB7ADL, AKA Slow Code

If this is not a forgery, and if you are indeed Slow Code, you will be
missed.
Carry on, buddy.

5738. Re: A moment of silence my friends for a silent key.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-16 13:20:32 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1166275232.743156.142490@l12g2000cwl.googlegroups.com>
Source record: 9239
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Mr. SC... I agree with your premise that losing the code requirement
will operate to the detriment of ham radio in the long term...
I do not agree with your premise that continuous spamming of multiple
groups with garbage postings did anything except make you feel
important... Good riddance...

denny / k8do

5739. Antennae base

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-16 13:43:02 UTC
From: rcklfrtz <rcklfrtz@socket.net>
Message-ID: <12o7tv8o2hvm2b8@corp.supernews.com>
Source record: 9240

Could use some help please. I have a tip over used tower. I want to install it and don't know what depth and width the hole has to be and do I have to use rebar. Can someone help me? Thanks.

5740. Re: Converting AM Car Radio to Shortwave UPDATE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-16 15:01:41 UTC
From: mcalhoun@ksu.edu
Message-ID: <em11ol$cq2@unix1.cc.ksu.edu>
Source record: 9241

>> I even know how to make a tube out of a dual filament car taillight.
>> Now there's a real tube.

I, too, would like to see a circuit which demonstrates that "tube"
did something useful. Is it just a diode (i.e., rectifier), or
can it also amplify?

--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
NRA Life Member and Rifle, Pistol, & Home Firearm Safety Certified Instructor
Certified Instructor for the Kansas Concealed-Carry Handgun license

5741. Re: Antennae base

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-16 15:18:53 UTC
From: mcalhoun@ksu.edu
Message-ID: <em12ot$d3e@unix1.cc.ksu.edu>
Source record: 9242

"rcklfrtz" <rcklfrtz@socket.net> writes:
>Could use some help please. I have a tip over used tower. I want to install
>it and don't know what depth and width the hole has to be and do I have to
>use rebar. Can someone help me? Thanks.

I am NOT an expert, but I can tell you what I did for the base of
my 20-foot (when lowered) tip-over/crank-up tower: I purchased
an 8-inch diameter 6-foot long pole ("corner fence post") treated
against termites, cut it in half, sank the two halves side by side
until only 3-4 inches showed above ground, placed a five-sided box
made of treated 2-by boards (2x4 around the sides and probably (I
don't remember) a 2x12 on top) over the top, bolted the sides to
the posts, and mounted the base on the top with some long bolts
straight through the 2x12 and down into the posts.

The above base is about a foot away from an outer corner of my front
porch, and above that porch is an upper deck with a 4-foot-high
railing (railing is maybe 14 feet above the tower base). My tower
came with a kinda-Y-shaped gizmo probably made to attach to the side
of a house to hold the tower upright, so I attached that gizmo to
the railing (after reforcing the railing both directions).

I use a spur-geared (? May not be the right word, but it MUST be
cranked to raise AND lower) crank gizmo (my brain must be giving
out - I can't think of the correct words!) and long cable for
lifting and lowering the tower (always when the tower is cranked
to its lowest position, of course).

Installable by one person, no concrete, no rebar, not "engineered"
in the usual sense, but I live in the country with no houses nearby
so I didn't have to follow any "code", and I feel quite comfortable
with it. (If I didn't, I wouldn't have done it that way!)

--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
NRA Life Member and Rifle, Pistol, & Home Firearm Safety Certified Instructor
Certified Instructor for the Kansas Concealed-Carry Handgun license

5742. Re: A moment of silence my friends for a silent key.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-16 17:03:49 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1166288629.682362.273790@j72g2000cwa.googlegroups.com>
Source record: 9243
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Vince Fiscus, KB7ADL wrote:
> Ham radio died today.
>
> Sorry for all the brow beating, it won't be happening anymore.
>
> 73 de KB7ADL, AKA Slow Code

Awww, c'mon Slow!

To use the vernacular of the left, "It was the Exam, stupid." The mode hasn't changed... hell, it hasn't changed since the 1840's! What needs to change is your attitude about how to entice folks into the Morse Code fold. Since the government stick is gone, you'll have to sell Morse Code on its merits. And here's one last hint, you'll attract more folks if you use sugar. Good Luck.

5743. cut out the Bullshit or turn in your license and imporve the service SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-16 17:54:22 UTC
From: Mark@kb9rqz.aprs
Message-ID: <mjc8o21aejleg93ihviietqngd6jqa6003@4ax.com>
Source record: 9244
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Fri, 15 Dec 2006 22:31:31 -0600, "Vince Fiscus, KB7ADL"
<radiation17@bresnan.net> wrote:

>Ham radio died today.
>
>Sorry for all the brow beating, it won't be happening anymore.
>
>73 de KB7ADL, AKA Slow Code

bullshit
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5744. Re: Antennae base

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-16 18:03:30 UTC
From: "Dr. Anton T. Squeegee" <SpammersBlow@dev.null>
Message-ID: <MPG.1fedd4d1f66b27e89896fa@192.168.42.197>
Source record: 9245

In article <12o7tv8o2hvm2b8@corp.supernews.com>, rcklfrtz@socket.net
(known to some as rcklfrtz) scribed...

> Could use some help please. I have a tip over used tower. I want to install
> it and don't know what depth and width the hole has to be and do I have to
> use rebar. Can someone help me? Thanks.

Contact the tower manufacturer (it'll probably be Glenn Martin or
Rohn). They will be happy to give you the specs.

Happy raising.

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute
(Known to some as Bruce Lane, KC7GR)
http://www.bluefeathertech.com -- kyrrin a/t bluefeathertech d-o=t calm
"Salvadore Dali's computer has surreal ports..."

5745. Re: cut out the Bullshit or turn in your license and imporve the service SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-16 20:23:48 UTC
From: Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com>
Message-ID: <458455D4.6070709@coboxincORORATED.com>
Source record: 9246
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Mark@kb9rqz.aprs wrote:
> On Fri, 15 Dec 2006 22:31:31 -0600, "Vince Fiscus, KB7ADL"
> <radiation17@bresnan.net> wrote:
>
>
>>Ham radio died today.
>>
>>Sorry for all the brow beating, it won't be happening anymore.
>>
>>73 de KB7ADL, AKA Slow Code
>
>
> bullshit
> http://kb9rqz.blogspot.com/
>

I am actually surprised to find out it was/is Vince. He's an O.K. guy,
puts in volunteer time and is very knowledgeable. While I firmly believe
this alter personality detracted from Amateur radio (Slow Code), Vince
has done other things to advance it.

Although I know Vince is very pro Morse code, I am having trouble
believing it was him (being Mr. Slow Code)

If it was/is him, turning in his license would only be a detriment to
the community IMHO.

Chris KC8FRJ

5746. Re: cut out the Bullshit or turn in your license and imporve the service SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-16 21:44:51 UTC
From: Mark@kb9rqz.aprs
Message-ID: <h4q8o21qaksmrnjfl979ftpvhkdr08tmr9@4ax.com>
Source record: 9247
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sat, 16 Dec 2006 15:23:48 -0500, Christopher Cox
<chrisTOPHERcOX@coboxincORORATED.com> wrote:

>Mark@kb9rqz.aprs wrote:
>> On Fri, 15 Dec 2006 22:31:31 -0600, "Vince Fiscus, KB7ADL"
>> <radiation17@bresnan.net> wrote:
>>
>>
>>>>Ham radio died today.
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>>>>Sorry for all the brow beating, it won't be happening anymore.
>>>
>>>>73 de KB7ADL, AKA Slow Code
>>
>>
>> bullshit
>> http://kb9rqz.blogspot.com/
>>
>
>I am actually surprised to find out it was/is Vince. He's an O.K. guy,
>puts in volunteer time and is very knowledgeable. While I firmly believe
>this alter personality detracted from Amateur radio (Slow Code), Vince
>has done other things to advance it.

one can only judge by ones experences as far as I am concerned he is
slime
>
>Although I know Vince is very pro Morse code, I am having trouble
>believing it was him (being Mr. Slow Code)
>
>If it was/is him, turning in his license would only be a detriment to
>the community IMHO.

we can do without any ham that behaves as Slow does and without any
ham that would claim to be slow code wether he is or not
>
>Chris KC8FRJ
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5747. Who are you?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-16 22:22:16 UTC
From: Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com>
Message-ID: <45847198.90807@coboxincORORATED.com>
Source record: 9148
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Mark@kb9rqz.aprs wrote:
> On Sat, 16 Dec 2006 15:23:48 -0500, Christopher Cox
> <chrisTOPHERcOX@coboxincORORATED.com> wrote:
>
>
>>Mark@kb9rqz.aprs wrote:
>>
>>>On Fri, 15 Dec 2006 22:31:31 -0600, "Vince Fiscus, KB7ADL"
>>><radiation17@bresnan.net> wrote:
>>>
>>>
>>>
>>>>Ham radio died today.
>>>>
>>>>Sorry for all the brow beating, it won't be happening anymore.
>>>>
>>>>73 de KB7ADL, AKA Slow Code
>>>
>>>
>>>bullshit
>>>http://kb9rqz.blogspot.com/
>>>
>>
>>I am actually surprised to find out it was/is Vince. He's an O.K. guy,
>>puts in volunteer time and is very knowledgeable. While I firmly believe
>>this alter personality detracted from Amateur radio (Slow Code), Vince
>>has done other things to advance it.
>
>
> one can only judge by ones experences as far as I am concerned he is
> slime
>
>>Although I know Vince is very pro Morse code, I am having trouble
>>believing it was him (being Mr. Slow Code)
>>
>>If it was/is him, turning in his license would only be a detriment to
>>the community IMHO.
>
>
> we can do without any ham that behaves as Slow does and without any
> ham that would claim to be slow code wether he is or not
>
>>Chris KC8FRJ

>
> http://kb9rqz.blogspot.com/
>

How do you know Vince, I mean other than a seeming like a, unbalanced at times, Morse code advocate?

Chris KC8FRJ

5748. Re: Who are you?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-16 22:37:49 UTC
From: Mark@kb9rqz.aprs
Message-ID: <b5t8o2tm3cec3104ad1jtn2anhpiou0b2l@4ax.com>
Source record: 9149
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sat, 16 Dec 2006 17:22:16 -0500, Christopher Cox
<chrisTOPHERcOX@coboxincORORATED.com> wrote:

>Mark@kb9rqz.aprs wrote:
>> On Sat, 16 Dec 2006 15:23:48 -0500, Christopher Cox
>> <chrisTOPHERcOX@coboxincORORATED.com> wrote:
>>
>>
>>>Mark@kb9rqz.aprs wrote:
>>>
>>>>On Fri, 15 Dec 2006 22:31:31 -0600, "Vince Fiscus, KB7ADL"
>>>><radiation17@bresnan.net> wrote:
>>>>
>>>>
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>>>>>Ham radio died today.
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>>>>>73 de KB7ADL, AKA Slow Code
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>>>>bullshit
>>>>http://kb9rqz.blogspot.com/
>>>>
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>>>I am actually surprised to find out it was/is Vince. He's an O.K. guy,
>>>puts in volunteer time and is very knowledgeable. While I firmly believe
>>>this alter personality detracted from Amateur radio (Slow Code), Vince
>>>has done other things to advance it.
>>
>>
>> one can only judge by ones experences as far as I am concerned he is
>> slime
>>
>>>Although I know Vince is very pro Morse code, I am having trouble
>>>believing it was him (being Mr. Slow Code)
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>>>If it was/is him, turning in his license would only be a detriment to
>>>the community IMHO.
>>
>>
>> we can do without any ham that behaves as Slow does and without any

>> ham that would claim to be slow code wether he is or not
>>
>>>Chris KC8FRJ
>>
>> http://kb9rqz.blogspot.com/
>>
>
>How do you know Vince, I mean other than a seeming like a, unbalanced at
>times, Morse code advocate?

that is How I know though his insane staement during recent his all
but incessant diatrbe of insult many derected at me by name

the Gay bashing and the bashing of the disable the tech indeed all new
hams of anysort

the person known here as SC is insane and inhumnne nutjob

if Vince in he then vince is not someone I care to know further, Vince
is merely claiming to be SC I still don't want to know him
>
>Chris KC8FRJ
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5749. Re: Converting AM Car Radio to Shortwave UPDATE

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-17 01:06:29 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1166317589.795380.261790@16g2000cwy.googlegroups.com>
Source record: 9150

All right, I think I've found what I'm looking for, but I'll need some help. I found something on textfiles.com that looks to be close to what I need, but there are some things that aren't quite clear.

http://www.textfiles.com/hamradio/convert.txt

If anyone can help me with the schematics and parts list, I'd appreciate it.

Ralph Glatt

5750. Re: Looking for a SL6440 Mixer IC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-17 02:01:21 UTC
From: kb9olm <kb9olm@yahoo.com>
Message-ID: <1166320881.544361.286380@t46g2000cwa.googlegroups.com>
Source record: 9151

Hello,

I do have NOS SL6440 mixers.
Reply to kb9olm AT yahoo DOT com
Vlad, kb9olm

Sbc News wrote:
> I know these have out of production for a while. If anyone knows of a
> source for a dozzen or so, I would be greatful I you would share your
> information with me.
>
> Thanks,
> Emil
> W9NM

5751. Re: Antennae base

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-17 02:51:26 UTC
From: MarQueerMyDear <dear_marqueer_marky@mail2princess.com>
Message-ID: <1166323886.555154.184450@16g2000cwy.googlegroups.com>
Source record: 9152
Cross-posted to: rec.radio.amateur.homebrew,alt.usenet.kooks,rec.radio.amateur.policy,rec.radio.cb

rcklfrtz wrote:
> Could use some help please. I have a tip over used tower. I want to install
> it and don't know what depth and width the hole has to be and do I have to
> use rebar. Can someone help me? Thanks.

bend over as far as your fat ass can and shove the base up your ass.
divide by 69. problem solved.

5752. kookathon

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-17 02:55:19 UTC
From: Mark@kb9rqz.aprs
Message-ID: <9bc9o2ldfbnhnn7sf3heq3i8ctg0n0eelv@4ax.com>
Source record: 9153
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

On 16 Dec 2006 18:51:26 -0800, "MarQueerMyDear"
<dear_marqueer_marky@mail2princess.com> wrote:

>

any reason why you have to drag more and more threads over here woger
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5753. Re: MORKathon

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-17 03:03:19 UTC
From: brian.burp@yahoo.com
Message-ID: <1166324599.850545.81210@l12g2000cwl.googlegroups.com>
Source record: 9154
Cross-posted to: rec.radio.amateur.homebrew,alt.usenet.kooks,rec.radio.amateur.policy,rec.radio.cb,alt.home.repair

M...@kb9rqz.aprs wrote:
> On 16 Dec 2006 18:51:26 -0800, "MarQueerMyDear"
> <dear_marqueer_marky@mail2princess.com> wrote:
>
> >
>
> any reason why you have to drag more and more threads over here woger
> http://kb9rqz.blogspot.com/
>
> --
> Posted via a free Usenet account from http://www.teranews.com

STFU mork, you silly cocksucker!

5754. Re: MORKathon

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-17 03:06:23 UTC
From: Mark@kb9rqz.aprs
Message-ID: <v0d9o2l3jhkkm30ca55ude783iif61fpkk@4ax.com>
Source record: 9155
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb,alt.home.repair

On 16 Dec 2006 19:03:19 -0800, brian.burp@yahoo.com wrote:

>
any reason why you have to drag more and more threads over here woger

http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5755. Re: Who are you?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-17 03:42:11 UTC
From: Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com>
Message-ID: <4584bc6b$0$7657$4c368faf@roadrunner.com>
Source record: 9156
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

```
Mark@kb9rqz.aprs wrote:
> On Sat, 16 Dec 2006 17:22:16 -0500, Christopher Cox
> <chrisTOPHERcOX@coboxincORORATED.com> wrote:
>
>
>>Mark@kb9rqz.aprs wrote:
>>
>>>On Sat, 16 Dec 2006 15:23:48 -0500, Christopher Cox
>>><chrisTOPHERcOX@coboxincORORATED.com> wrote:
>>>
>>>
>>>
>>>>Mark@kb9rqz.aprs wrote:
>>>>
>>>>
>>>>>On Fri, 15 Dec 2006 22:31:31 -0600, "Vince Fiscus, KB7ADL"
>>>>><radiation17@bresnan.net> wrote:
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>>>>>>Ham radio died today.
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>>>>>>Sorry for all the brow beating, it won't be happening anymore.
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>>>>>>73 de KB7ADL, AKA Slow Code
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>>>>>bullshit
>>>>>http://kb9rqz.blogspot.com/
>>>>>
>>>>
>>>>I am actually surprised to find out it was/is Vince. He's an O.K. guy,
>>>>puts in volunteer time and is very knowledgeable. While I firmly believe
>>>>this alter personality detracted from Amateur radio (Slow Code), Vince
>>>>has done other things to advance it.
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>>>one can only judge by ones experences as far as I am concerned he is
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>>>
>>>Although I know Vince is very pro Morse code, I am having trouble
```

>>>>believing it was him (being Mr. Slow Code)
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>>>>If it was/is him, turning in his license would only be a detriment to
>>>>the community IMHO.
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>>>
>>>we can do without any ham that behaves as Slow does and without any
>>>ham that would claim to be slow code wether he is or not
>>>
>>>
>>>>Chris KC8FRJ
>>>
>>>http://kb9rqz.blogspot.com/
>>>
>>
>>How do you know Vince, I mean other than a seeming like a, unbalanced at
>>times, Morse code advocate?
>
>
> that is How I know though his insane staement during recent his all
> but incessant diatrbe of insult many derected at me by name
>
> the Gay bashing and the bashing of the disable the tech indeed all new
> hams of anysort
>
> the person known here as SC is insane and inhumnne nutjob
>
> if Vince in he then vince is not someone I care to know further, Vince
> is merely claiming to be SC I still don't want to know him
>
>>Chris KC8FRJ
>
> http://kb9rqz.blogspot.com/
>

Wow, read through some of your blog and other pages your blog refers to.
You are quite the lighting rod. You should not be surprised to receive
much attention any many areas.

Best of luck to you.

Chris KC8FRJ

5756. Re: Converting AM Car Radio to Shortwave

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-17 04:05:17 UTC
From: "wrcromwell@gmail.com" <wrcromwell@gmail.com>
Message-ID: <1166328317.436931.234390@l12g2000cwl.googlegroups.com>
Source record: 9157

julian814 wrote:
> Yukio YANO wrote:
> > TUBES!! Tubes? Off of Battery, 6 Volt?, Vibrator? Inverter? 12 Volt B+
> > > tubes ? Not since the 1950s ?
> > > Am I reading too much between the lines ?
>
> Yes, tubes. I have some that were pulled from circa 1960's television
> sets, and I thought I'd use them, hoping that they'd be EMP resistant.
> Been on kind of a survivalist kick, lately. Doesn't mean I'd be opposed
> to using more modern equipment, though. One thing I saw that I liked in
> one of the books I purchased was a loop antenna that uses transistors
> to amplify the signal. Thought it might be easier than stringing up a
> lot of wire. ;-)
>
>
> Ralph Glatt

Tubes can be fun. Just be careful not to get zapped by the high voltage
power supplies..that isn't fun.

EMP? If your radio is subjected to one of those you won't be needing a
radio.

Have fun with the tubes and 73,

Bill KU8H

5757. Re: Who are you?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-17 04:11:24 UTC
From: Mark@kb9rqz.aprs
Message-ID: <6mg9o2h681veus5p3aeotcq7tipdtffv4a@4ax.com>
Source record: 9158
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sat, 16 Dec 2006 22:42:11 -0500, Christopher Cox
<chrisTOPHERcOX@coboxincORORATED.com> wrote:

>Mark@kb9rqz.aprs wrote:
>> On Sat, 16 Dec 2006 17:22:16 -0500, Christopher Cox
>> <chrisTOPHERcOX@coboxincORORATED.com> wrote:
>>
>>
>>>Mark@kb9rqz.aprs wrote:
>>>
>>>>On Sat, 16 Dec 2006 15:23:48 -0500, Christopher Cox
>>>><chrisTOPHERcOX@coboxincORORATED.com> wrote:
>>>>
>>>>
>>>>
>>>>>Mark@kb9rqz.aprs wrote:
>>>>>
>>>>>
>>>>>>On Fri, 15 Dec 2006 22:31:31 -0600, "Vince Fiscus, KB7ADL"
>>>>>><radiation17@bresnan.net> wrote:
>>>>>>
>>>>>>
>>>>>>
>>>>>>
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>>>>>>>Sorry for all the brow beating, it won't be happening anymore.
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>>>>>>bullshit
>>>>>>http://kb9rqz.blogspot.com/
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>>>>>I am actually surprised to find out it was/is Vince. He's an O.K. guy,
>>>>>puts in volunteer time and is very knowledgeable. While I firmly believe
>>>>>this alter personality detracted from Amateur radio (Slow Code), Vince
>>>>>has done other things to advance it.
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>>>>one can only judge by ones experences as far as I am concerned he is
>>>>slime

>>>>
>>>>
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>>>>>
>>>>>If it was/is him, turning in his license would only be a detriment to
>>>>>the community IMHO.
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>>>>
>>>>>Chris KC8FRJ
>>>>
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>>>>
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>>>How do you know Vince, I mean other than a seeming like a, unbalanced at
>>>times, Morse code advocate?
>>
>>
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>> but incessant diatrbe of insult many derected at me by name
>>
>> the Gay bashing and the bashing of the disable the tech indeed all new
>> hams of anysort
>>
>> the person known here as SC is insane and inhumnne nutjob
>>
>> if Vince in he then vince is not someone I care to know further, Vince
>> is merely claiming to be SC I still don't want to know him
>>
>>>Chris KC8FRJ
>>
>> http://kb9rqz.blogspot.com/
>>
>
>
>Wow, read through some of your blog and other pages your blog refers to.
>You are quite the lighting rod. You should not be surprised to receive
>much attention any many areas.

attention is one thing

but your "friend" (or the person you are speaking well of) has in the
last few managed to insult over 300,000 of your fellow hams and likely
the future of Ham radio

sadly in America it is acceptable to blame the target of the attack
your "friend" is one those people he has stated he would rather not be

a Ham than Me allowed to use HF I sugesst he consider following
thorough on his words
>
>Best of luck to you.

luck I don't need

I can if needed make all the luck I need
>
>Chris KC8FRJ
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5758. Re: Looking for a SL6440 Mixer IC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-17 04:22:58 UTC
From: Hello
Message-ID: <CD3hh.504$x67.151@newssvr17.news.prodigy.net>
Source record: 9159

Thanks to everyone that that answered.
Merry Christmas
Emil
W9NM

5759. Re: PUNCEathon

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-17 06:38:53 UTC
From: I PUNCE <markpunce@yahoo.com>
Message-ID: <1166337533.710940.83820@16g2000cwy.googlegroups.com>
Source record: 9160
Cross-posted to: alt.usenet.kooks,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb,alt.home.repair

Mark@kb9rqz.aprs wrote:
> On 16 Dec 2006 19:03:19 -0800, brian.burp@yahoo.com wrote:
>
> >
> any reason why you have to drag more and more threads over here woger
>
> http://kb9rqz.blogspot.com/
>
> --
> Posted via a free Usenet account from http://www.teranews.com

I PUNCE

5760. kookathon

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-17 06:52:15 UTC
From: Mark@kb9rqz.aprs
Message-ID: <u4q9o21lot3m2tqome1d3fgjkj3bd5cgle@4ax.com>
Source record: 9161
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb,alt.home.repair

On 16 Dec 2006 22:38:53 -0800, "I PUNCE" <markpunce@yahoo.com> wrote:

>
any reason why you have to drag more and more threads over here
woger

stil waiting woger I know I wait in vain of course becuase you are
just an attention seeking loser but since this what you need without
doing the damage that gets done if I try and ignore you woger, enjoy

if you were a man you might even express some gratitude for feeding
your trolling, even I only do out of fear of what you willdo if I
don't
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5761. Re: Looking for a SL6440 Mixer IC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-17 12:27:23 UTC
From: JIMMIEDEE123@YAHOO.COM
Message-ID: <1166358443.229047.85300@80g2000cwy.googlegroups.com>
Source record: 9162

Hello wrote:
> Thanks to everyone that that answered.
> Merry Christmas
> Emil
> W9NM

I know a guy down in Ga that made a replacemnet for these. I tused a couple of FETS i think and the whoile cicuit could be built on a DIP header. The limitation of the circuit was that it was not as flexible as the origional, In other words it was not directly plug in compatable all the time but he could always get it to work with a little modification. He is retired now but I usally see him whenever I am down there for Xmas. I doubt if he would want to build any but he would probably share how to build and tweak them with anyone who wanted the info.

Jimmie

5762. No Code Required Issue

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-17 15:53:02 UTC
From: Al <no.spam@wanted.com>
Message-ID: <no.spam-D502CD.10530317122006@news.verizon.net>
Source record: 9163

Ever since I was a kid, I wanted to be a ham. I could never learn the code. It seems I have a very difficult time memorizing. I didn't know my multipication table until 8th grade. But somehow I managed to get a master's degree in EE and worked as a consultant on a satellite at MIT. Yes, it's still working after 10 years.

Now that all the bands will be available to me, I can finally become a ham.

Oh, and to those who think the waves will be flooded with idiots. Don't worry. After all this never happened to the tech band as far as I know.

Al

5763. Re: No Code Required Issue

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-17 16:06:35 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <em3pubos1@theodyn.ncf.ca>
Source record: 9164

Al (no.spam@wanted.com) writes:
> Ever since I was a kid, I wanted to be a ham. I could never learn the
> code. It seems I have a very difficult time memorizing. I didn't know my
> multipication table until 8th grade. But somehow I managed to get a
> master's degree in EE and worked as a consultant on a satellite at MIT.
> Yes, it's still working after 10 years.
>
But of course, your problem was in thinking you needed to memorize
the code. What you should have been doing is listening to the code
sent at high speed, actually the characters at high speed with lots of
spacing betweent he characters so the overall speed is slow, so you hear
the sounds of each individual character, rather than a set of dots
and dashes. You never go near a code key until you can receive properly,
and you basically toss out all those alphabet to code charts.

Just think of all the time you could have had if you'd stuck with it
as a kid, rather than thinking it was a matter of memorizing the code,
and then thinking you had problems memorizing things.

Learning morse code when I was 12 was one of the easiest things I
ever did, and the only reason I waited till 12 was that before that
there was a rule in Canada that said you had to be over 15 to get
a ham license.

I should also point out that rec.radio.shortwave is not about amateur
radio. It's about reception, and only when someone is talking about
listening to the amateur bands does amateur radio really become on-topic
here. The fact that some decide to spew their junk out of the
rec.radio.amateur.* hierarchy here does not make amateur radio on topic.

Michael

5764. BAMA Notice

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-17 17:13:02 UTC
From: Kenneth Grimm <kgrimm@adelphia.net>
Message-ID: <jkuao2584kn2c5h3c1rthnl9hgdddhbvlg@4ax.com>
Source record: 9165

Notice: Effective January 1, 2007, BAMA will add only manuals with a direct connection to the tube era of ham radio. Only manuals for amateur radio transmitters, receivers, antenna tuners, antennas, keyers, etc. will be added to the collection. The only test equipment that will be added will be those items already listed on the "Needed" list and those items created especially for the amateur radio market.

While I appreciate all the contributions of those whose interest is in test equipment and military equipment, I simply cannot continue to expand the BAMA collection in these areas at this time. I will not be removing the test gear and military manuals currently on BAMA. The BAMA collection will remain intact. I just won't be adding to these areas for the time being.

I want to thank any and all of you who are reading this and have contributed to the BAMA collection. Without your time and effort, BAMA would not have been possible. Thanks again and best wishes to all for the holidays.

73,

Ken K4XL
k4xl@arrl.net

*** BoatAnchor Manual Archive ***
On the web at http://bama.sbc.edu and http://bama.edebris.com
FTP site info: bama.sbc.edu login: anonymous p/w: youremailadr

5765. Re: No Code Required Issue

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-17 19:08:45 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <VAghh.1064$%e7.861@bignews2.bellsouth.net>
Source record: 9166

Michael Black wrote:
> Al (no.spam@wanted.com) writes:
>> Ever since I was a kid, I wanted to be a ham. I could never learn the
>> code. It seems I have a very difficult time memorizing. I didn't know my
>> multipication table until 8th grade. But somehow I managed to get a
>> master's degree in EE and worked as a consultant on a satellite at MIT.
>> Yes, it's still working after 10 years.
>>
> But of course, your problem was in thinking you needed to memorize
> the code. What you should have been doing is listening to the code
> sent at high speed, actually the characters at high speed with lots of
> spacing betweent he characters so the overall speed is slow, so you hear
> the sounds of each individual character, rather than a set of dots
> and dashes. You never go near a code key until you can receive properly,
> and you basically toss out all those alphabet to code charts.
>
> Just think of all the time you could have had if you'd stuck with it
> as a kid, rather than thinking it was a matter of memorizing the code,
> and then thinking you had problems memorizing things.
>
> Learning morse code when I was 12 was one of the easiest things I
> ever did, and the only reason I waited till 12 was that before that
> there was a rule in Canada that said you had to be over 15 to get
> a ham license.
>
> I should also point out that rec.radio.shortwave is not about amateur
> radio. It's about reception, and only when someone is talking about
> listening to the amateur bands does amateur radio really become on-topic
> here. The fact that some decide to spew their junk out of the
> rec.radio.amateur.* hierarchy here does not make amateur radio on topic.
>
> Michael
>
Some people never learned the code because they are lazy. Some were
afraid of the very idea of learning the code and never tried. And there
were some who really DID try to learn the code, but for some reason were
not able to. It is a fact that some people just CAN'T learn another
language. (I for one barely got through French in High School). I DID
manage to learn to copy code up to about 15 wpm though. I jealous of
those people that make 45 wpm copy look easy! Maybe it's easier if you
start real young (just as with piano lessons).

I have a good friend that I meet though a mutual interest in model
railroading. He also attends most hamfests. He was a CB type, wanted

to get a ham ticket, but the code was a roadblock. He eventually got a code-free tech license. (he also eventually, learned the code, just enough to gain Novice privileges).

So don't downgrade people for not being able to learn the code. It CAN be a real roadblock for some people.

5766. Re: A moment of silence my friends for a silent key.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-17 20:55:25 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <blbbo25epdssnp6sk1g1ss5sc3dmuc0007@4ax.com>
Source record: 9167
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Please folks, do not reply to these off topic posts.

If these idiots never get any replies, they will eventually give up
and go away.

Thanks,

Bill, W6WRT

5767. Re: No Code Required Issue

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-17 20:56:42 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <1obbo25f3r3oh03qsuinki0hsdprmqluq4@4ax.com>
Source record: 9168

Please folks, do not reply to these off topic posts.

If these idiots never get any replies, they will eventually give up
and go away.

Thanks,

Bill, W6WRT

5768. Re: No Code Required Issue

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-17 21:31:31 UTC
From: Al <no.spam@wanted.com>
Message-ID: <no.spam-C7FA00.16313217122006@news.verizon.net>
Source record: 9169

In article <em3pubos1@theodyn.ncf.ca>,
et472@FreeNet.Carleton.CA (Michael Black) wrote:

> Al (no.spam@wanted.com) writes:
> > Ever since I was a kid, I wanted to be a ham. I could never learn the
> > code. It seems I have a very difficult time memorizing. I didn't know my
> > multipication table until 8th grade. But somehow I managed to get a
> > master's degree in EE and worked as a consultant on a satellite at MIT.
> > Yes, it's still working after 10 years.
> >
> But of course, your problem was in thinking you needed to memorize
> the code. What you should have been doing is listening to the code
> sent at high speed, actually the characters at high speed with lots of
> spacing betweent he characters so the overall speed is slow, so you hear
> the sounds of each individual character, rather than a set of dots
> and dashes. You never go near a code key until you can receive properly,
> and you basically toss out all those alphabet to code charts.
>
> Just think of all the time you could have had if you'd stuck with it
> as a kid, rather than thinking it was a matter of memorizing the code,
> and then thinking you had problems memorizing things.
>
> Learning morse code when I was 12 was one of the easiest things I
> ever did, and the only reason I waited till 12 was that before that
> there was a rule in Canada that said you had to be over 15 to get
> a ham license.
>
> I should also point out that rec.radio.shortwave is not about amateur
> radio. It's about reception, and only when someone is talking about
> listening to the amateur bands does amateur radio really become on-topic
> here. The fact that some decide to spew their junk out of the
> rec.radio.amateur.* hierarchy here does not make amateur radio on topic.
>
> Michael
>

I thought rec was short for "recreation."

Al

5769. Re: impedance/noise match

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-18 03:55:43 UTC
From: Bas Viel <sjouk@home.nl>
Message-ID: <em53g2$4o5$1@news2.zwoll1.ov.home.nl>
Source record: 9170

Lowest noise does not equal highest gain.
Highest gain equals source impedance equals system impedance.
So, LNA equals source impedance gives not necessarely lowest noise.
Tune LNA for lowest noise, the gain will be somewhat lower.
Its the S/N ratio that counts especially important for an LNA.

"Joseph H Allen" <jhallen@TheWorld.com> schreef in bericht
news:elugke$b8u$1@pcls4.std.com...
>
> What do you do if the input impedance of an LNA does not equal the source
> impedance which gives the lowest noise?
>
> The source might be an antenna, transmission line or filter which will not
> work properly if it does not see the correct impedance.
>
> --
> /* jhallen@world.std.com AB1GO */ /* Joseph H.
> Allen */
> int
> a[1817];main(z,p,q,r){for(p=80;q+p-80;p-=2*a[p])for(z=9;z--;)q=3&(r=time(0)
> +r*57)/7,q=q?q-1?q-2?1-p%79?-1:0:p%79-77?1:0:p<1659?79:0:p>158?-79:0,q?!a[p+q*2
>]?a[p+=a[p+=q]=q]=q:0:0;for(;q++-1817;)printf(q%79?"%c":"%c\n","
> #"[!a[q-1]]);}

5770. Re: impedance/noise match

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-18 04:13:28 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1166415208.792559.265390@l12g2000cwl.googlegroups.com>
Source record: 9171

On Dec 15, 7:57 am, jhal...@TheWorld.com (Joseph H Allen) wrote:
> What do you do if the input impedance of an LNA does not equal the source
> impedance which gives the lowest noise?
>
> The source might be an antenna, transmission line or filter which will not
> work properly if it does not see the correct impedance.

What exactly do you mean by "will not work properly"? There are a lot of effects possible; reflections on a transmission line may cause "ghosts" in an analog video image, or an improperly terminated filter may not give the needed frequency response. But there are ways around those problems: put the LNA at the antenna, or design the filter to work into the load impedance it will actually "see." Or maybe the lowest possible noise is not a requirement, and you can optimize system performance with a tradeoff between noise and some other parameter.

Lucky indeed is the designer who is able to optimize all parameters at the same time. A big part of design is often selecting the tradeoffs so the overall system goals can be met with enough margin to let the system operate reliably.

Also, you may be surprised to find out just how little gain is sacrificed by using an optimal noise match instead of an optimal power match, or how little a filter's performance is altered by tuning for minimum noise figure.

Finally, can you think of a way to alter the amplifier's input impedance in a way that does not degrade noise, so that you come closer to an impedance match while maintaining a match for optimal noise?

Cheers,
Tom

5771. Power Supply Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-18 04:59:13 UTC
From: west <restccq2@verizon.net>
Message-ID: <Bephh.212$pr5.108@trnddc01>
Source record: 9172

I have a 40 amp, 13.8v supply and would like to add a voltage (0-15v) meter and an amp (0-50amp) meter. The meters look frail and I can't imagine running all that current through those flimsy connectors and tiny meter coil. I have no paperwork on the meters and was wondering if I need a shunt resistor or something to take all that current. Any ideas? Thank you.

Cordially,
west

5772. Re: Power Supply Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-18 05:17:19 UTC
From: William Pence <billpence@bellsouth.net>
Message-ID: <billpence-EAFC78.00171918122006@h216-170-153-147.216-170.unk.tds.net>
Source record: 9173

In article <Bephh.212$pr5.108@trnddc01>, "west" <restccq2@verizon.net>
wrote:

> I have a 40 amp, 13.8v supply and would like to add a voltage (0-15v) meter
> and an amp (0-50amp) meter. The meters look frail and I can't imagine
> running all that current through those flimsy connectors and tiny meter
> coil. I have no paperwork on the meters and was wondering if I need a shunt
> resistor or something to take all that current. Any ideas? Thank you.
>
> Cordially,
> west

yep. the amp meter will definitely need a shunt. that value is dependent
on the actual coil current for full scale.

the voltmeter can just wire directly across the output voltage
terminals, but the ammeter will require a shunt.

if the full scale is 50 amp, and the meter is a 1 ma movement, then
49.999 amps must be taken care of in the shunt. the value of the shunt
can be found like this:
you need to apply enough current to the ammeter to get full scale. this
will require a very careful setup.
then measure the voltage across the meter terminals.
now you know V and I.
then you can calculate R for the shunt sine it will be V on the meter,
and 50.000 - the current required to get a full scale reading on the
ammeter.

5773. Re: Power Supply Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-18 07:03:19 UTC
From: Ken chattenton <k.chattenton@btopenworld.com>
Message-ID: <drqdnTJ1DOrVoBvYRVnygAA@bt.com>
Source record: 9174

Hi from Ken,

"William Pence" <billpence@bellsouth.net> wrote in message
news:billpence-EAFC78.00171918122006@h216-170-153-147.216-170.unk.tds.net...
> In article <Bephh.212$pr5.108@trnddc01>, "west" <restccq2@verizon.net>
> wrote:
>
>> I have a 40 amp, 13.8v supply and would like to add a voltage (0-15v)
>> meter
>> and an amp (0-50amp) meter. >> Cordially,
>> west
>
> yep. the amp meter will definitely need a shunt. that value is dependent
> on the actual coil current for full scale.
>
> the voltmeter can just wire directly across the output voltage
> terminals, but the ammeter will require a shunt.
>
If the volt meter is not already calibrated it will require a resistor in
series with the positive lead.
Depending on the movement of the meter the resistor could be around say,
49Kohm.

Good luck, Ken, G4KIR.

5774. Re: Power Supply Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-18 08:18:07 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <0ljco21cs8d42q81818fdg53s48b32pau3@4ax.com>
Source record: 9175

On Mon, 18 Dec 2006 04:59:13 GMT, "west" <restccq2@verizon.net> wrote:

>I have a 40 amp, 13.8v supply and would like to add a voltage (0-15v) meter
>and an amp (0-50amp) meter. The meters look frail and I can't imagine
>running all that current through those flimsy connectors and tiny meter
>coil. I have no paperwork on the meters and was wondering if I need a shunt
>resistor or something to take all that current. Any ideas? Thank you.

In many cases you should already have a suitable shunt resistor
installed. In power supplies built around the 723 voltage regulator
IC, there are is usually a low resistance (but high power handling)
resistor for the short circuit protection (usually between the power
transistor emitter and power supply output). When the voltage drop
across this resistor exceeds about 0.7 V, the short circuit protection
will kick in, limiting the current.

By measuring the voltage drop across this resistor, the output current
can be determined. By using a moving coil instrument and a suitable
series resistor, the meter can be easily calibrated.

Since you have a 40 A power supply, there are most likely several
power transistors in parallel, each having a low resistance resistor
at the emitter to balance unequal currents through the power
transistors.

The voltage drop across one of these resistors could be used to give
an estimate of the total current. This is just a rough estimate, since
the currents through the transistors varies e.g. with temperature (the
transistors at the end of the array may have a lower temperature than
those in the middle of the heatsink), the currents are not exactly
equal, so multiplying the measurement with the number of transistors
is not very accurate, but may be sufficient in most cases.

Paul OH3LWR

5775. Re: Power Supply Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-18 12:00:52 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <ZJqdnZtUffVrHxvYnZ2dnUVZ_h-3nZ2d@bright.net>
Source record: 9177

Ummm...it's early here so maybe I missed something. The meter CAN'T
just be placed across the output terminals to measure output voltage.
It will need a series resistor in one of the leads. It's value will
need to be calculated as well.

Scott

William Pence wrote:

> In article <Bephh.212$pr5.108@trnddc01>, "west" <restccq2@verizon.net>
> wrote:
>
>
>>I have a 40 amp, 13.8v supply and would like to add a voltage (0-15v) meter
>>and an amp (0-50amp) meter. The meters look frail and I can't imagine
>>running all that current through those flimsy connectors and tiny meter
>>coil. I have no paperwork on the meters and was wondering if I need a shunt
>>resistor or something to take all that current. Any ideas? Thank you.
>>
>>Cordially,
>>west
>
>
> yep. the amp meter will definitely need a shunt. that value is dependent
> on the actual coil current for full scale.
>
> the voltmeter can just wire directly across the output voltage
> terminals, but the ammeter will require a shunt.
>
> if the full scale is 50 amp, and the meter is a 1 ma movement, then
> 49.999 amps must be taken care of in the shunt. the value of the shunt
> can be found like this:
> you need to apply enough current to the ammeter to get full scale. this
> will require a very careful setup.
> then measure the voltage across the meter terminals.
> now you know V and I.
> then you can calculate R for the shunt sine it will be V on the meter,
> and 50.000 - the current required to get a full scale reading on the
> ammeter.

5776. Re: Power Supply Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-18 12:07:18 UTC
From: budgie <me@privacy.net>
Message-ID: <q21do2prmdbgkkv25aoib8irapulu81vng@4ax.com>
Source record: 9176

On Mon, 18 Dec 2006 07:03:19 -0000, "Ken chattenton"
<k.chattenton@btopenworld.com> wrote:

>Hi from Ken,
>
>"William Pence" <billpence@bellsouth.net> wrote in message
>news:billpence-EAFC78.00171918122006@h216-170-153-147.216-170.unk.tds.net...
>> In article <Bephh.212$pr5.108@trnddc01>, "west" <restccq2@verizon.net>
>> wrote:
>>
>>> I have a 40 amp, 13.8v supply and would like to add a voltage (0-15v)
>>> meter
>>> and an amp (0-50amp) meter. >> Cordially,
>>> west
>>
>> yep. the amp meter will definitely need a shunt. that value is dependent
>> on the actual coil current for full scale.
>>
>> the voltmeter can just wire directly across the output voltage
>> terminals, but the ammeter will require a shunt.
>>
>If the volt meter is not already calibrated it will require a resistor in
>series with the positive lead.

or the negative lead

5777. SWR and resonance measurements without an MFJ269 or equiv.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-18 15:08:17 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <em6at1$f9i$1@puck.litech.org>
Source record: 9178

Some friends and I have been looking into making antennas for 70 cm.
and higher frequencies, but we don't have an MFJ-269; my MFJ-259 tops
out at 175 MHz. I _do_, however, have an SWR meter that supposedly
works up to 500 MHz(and maybe higher), and an HP 8640B that is good
to about 1.2 GHz.

If the SWR meter is sensitive enough, could I get at least ballpark
SWR values using the 8640B as a source, running the signal through
the SWR meter to the antenna? Or am I way off in left field?

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

5778. Re: Looking for a SL6440 Mixer IC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-18 18:00:28 UTC
From: Sbc News <Andy@Hardy.com>
Message-ID: <0HAhh.154$sR.20@newssvr29.news.prodigy.net>
Source record: 9179

Thanks very much for the info Jimmie. The mixer is for a home brew project, so I wouldn't mind building-up one.

If you could have him emial a brief description of his circuit, I would appreciate it. email at: w9nm at sbcglobal dot com

73, Emil

<JIMMIEDEE123@YAHOO.COM> wrote in message news:1166358443.229047.85300@80g2000cwy.googlegroups.com...
>
> Hello wrote:
>> Thanks to everyone that that answered.
>> Merry Christmas
>> Emil
>> W9NM
>
> I know a guy down in Ga that made a replacemnet for these. I tused a
> couple of FETS i think and the whoile cicuit could be built on a DIP
> header. The limitation of the circuit was that it was not as flexible
> as the origional, In other words it was not directly plug in compatable
> all the time but he could always get it to work with a little
> modification. He is retired now but I usally see him whenever I am down
> there for Xmas. I doubt if he would want to build any but he would
> probably share how to build and tweak them with anyone who wanted the
> info.
>
> Jimmie
>

5779. Re: Power Supply Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-18 18:14:48 UTC
From: William Pence <billpence@bellsouth.net>
Message-ID: <billpence-74E220.13144818122006@h216-170-153-147.216-170.unk.tds.net>
Source record: 9180

In article <q21do2prmdbgkkv25aoib8irapulu81vng@4ax.com>,
budgie <me@privacy.net> wrote:

> On Mon, 18 Dec 2006 07:03:19 -0000, "Ken chattenton"
> <k.chattenton@btopenworld.com> wrote:
>
> >Hi from Ken,
> >
> >"William Pence" <billpence@bellsouth.net> wrote in message
> >news:billpence-EAFC78.00171918122006@h216-170-153-147.216-170.unk.tds.net...
> >> In article <Bephh.212$pr5.108@trnddc01>, "west" <restccq2@verizon.net>
> >> wrote:
> >>
> >>> I have a 40 amp, 13.8v supply and would like to add a voltage (0-15v)
> >>> meter
> >>> and an amp (0-50amp) meter. >> Cordially,
> >>> west
> >>
> >> yep. the amp meter will definitely need a shunt. that value is dependent
> >> on the actual coil current for full scale.
> >>
> >> the voltmeter can just wire directly across the output voltage
> >> terminals, but the ammeter will require a shunt.
> >>
> >If the volt meter is not already calibrated it will require a resistor in
> >series with the positive lead.
>
> or the negative lead

that is entirely possible. in general, I have seen voltmeters that are
already cal'd with this resistor internal...
this might have been special case (s). it has been a while.

5780. Re: SWR and resonance measurements without an MFJ269 or equiv.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-18 18:39:54 UTC
From: Wes <n7ws@yahoo.com>
Message-ID: <1166467194.040860.125540@l12g2000cwl.googlegroups.com>
Source record: 9181

Mike Andrews wrote:
> Some friends and I have been looking into making antennas for 70 cm.
> and higher frequencies, but we don't have an MFJ-269; my MFJ-259 tops
> out at 175 MHz. I _do_, however, have an SWR meter that supposedly
> works up to 500 MHz(and maybe higher), and an HP 8640B that is good
> to about 1.2 GHz.
>
> If the SWR meter is sensitive enough, could I get at least ballpark
> SWR values using the 8640B as a source, running the signal through
> the SWR meter to the antenna? Or am I way off in left field?

What kind of "SWR meter" are you talking about? The '8640 may or may
not have enough power to be suitable.

5781. Re: SWR and resonance measurements without an MFJ269 or equiv.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-18 19:16:51 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <em6pf3slf1@puck.litech.org>
Source record: 9182

On 18 Dec 2006 10:39:54 -0800, Wes <n7ws@yahoo.com> wrote in
<1166467194.040860.125540@l12g2000cwl.googlegroups.com>:

> Mike Andrews wrote:
>> Some friends and I have been looking into making antennas for 70 cm.
>> and higher frequencies, but we don't have an MFJ-269; my MFJ-259 tops
>> out at 175 MHz. I _do_, however, have an SWR meter that supposedly
>> works up to 500 MHz(and maybe higher), and an HP 8640B that is good
>> to about 1.2 GHz.
>>
>> If the SWR meter is sensitive enough, could I get at least ballpark
>> SWR values using the 8640B as a source, running the signal through
>> the SWR meter to the antenna? Or am I way off in left field?

> What kind of "SWR meter" are you talking about? The '8640 may or may
> not have enough power to be suitable.

A fairly el-cheapo no-name, but appearently good-enough on 2m and from
420 to 450 MHz. I haven't fiddled with it to see how much drive power
is required.

I suppose I can get a couple of RF amplitude measuring chips and make
the critter active instead of passive, if necessary. The 8640, IIRC,
is good for +20 dBm (3V) into 50 Ohms, or a lusty 180 mW flat-out, but
the finals on the 8640 are unobtainium and so I'm minded to stay well
below that -- and even lower outside the ham bands.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

5782. Re: No Code Required Issue

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-18 20:02:33 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1166472153.136644.236380@t46g2000cwa.googlegroups.com>
Source record: 9184

Bill Turner wrote:
> Please folks, do not reply to these off topic posts.
>
> If these idiots never get any replies, they will eventually give up
> and go away.
>
> Thanks,
>
> Bill, W6WRT

Andy writes:
Does that include the reply which is presented above ? :>)))))

No matter. All these idiots, including myself, and you, are
having fun and we post here because none of us, including
myself, and you, have anything more important in our lives
to do....

73s
Andy W4OAH

5783. Re: SWR and resonance measurements without an MFJ269 or equiv.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-18 20:02:43 UTC
From: Fred McKenzie <fmmck@aol.com>
Message-ID: <fmmck-504DBE.15024218122006@nntp.aioe.org>
Source record: 9183

In article <em6at1$f9i$1@puck.litech.org>,
"Mike Andrews" <mikea@mikea.ath.cx> wrote:

> Some friends and I have been looking into making antennas for 70 cm.
> and higher frequencies, but we don't have an MFJ-269; my MFJ-259 tops
> out at 175 MHz. I _do_, however, have an SWR meter that supposedly
> works up to 500 MHz(and maybe higher), and an HP 8640B that is good
> to about 1.2 GHz.
>
> If the SWR meter is sensitive enough, could I get at least ballpark
> SWR values using the 8640B as a source, running the signal through
> the SWR meter to the antenna? Or am I way off in left field?

Mike-

You have to try it to find out.

One problem is that your SWR meter's diode output is non-linear for very
low voltages, resulting in SWR being higher than indicated for low
values of SWR. You may be able to get around this with a
hand-calibrated dial on the meter, or a calibration correction chart.

Fred
K4DII

5784. Re: SWR and resonance measurements without an MFJ269 or equiv.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-18 20:04:16 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1166472256.042946.150970@l12g2000cwl.googlegroups.com>
Source record: 9185

Mike Andrews wrote:
> Some friends and I have been looking into making antennas for 70 cm.
> and higher frequencies, but we don't have an MFJ-269; my MFJ-259 tops
> out at 175 MHz. I _do_, however, have an SWR meter that supposedly
> works up to 500 MHz(and maybe higher), and an HP 8640B that is good
> to about 1.2 GHz.
>
> If the SWR meter is sensitive enough, could I get at least ballpark
> SWR values using the 8640B as a source, running the signal through
> the SWR meter to the antenna? Or am I way off in left field?
>
> --
> Mike Andrews, W5EGO
> mikea@mikea.ath.cx
> Tired old sysadmin

5785. Re: impedance/noise match

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-18 20:13:25 UTC
From: jhallen@TheWorld.com
Message-ID: <em6sp5omd1@pcls6.std.com>
Source record: 9186

In article <1166415208.792559.265390@l12g2000cwl.googlegroups.com>,
K7ITM <k7itm@msn.com> wrote:

>Finally, can you think of a way to alter the amplifier's input
>impedance in a way that does not degrade noise, so that you come closer
>to an impedance match while maintaining a match for optimal noise?

Negative feedback increased input impedance. It looks like lossless
negative feedback will do this without also increasing the noise. Perhaps
use this to make the input impedance equal the noise-opt impedance- then you
can match the two together to the source (using a transformer or a tuned
circuit).

Here is a nice reference:

http://rfdesign.com/mag/radio_unique_inductive_feedback/

The lossless feedback can be as simple as an inductor in the emitter or
source lead.

I've found lots of other references (mostly for-pay IEEE papers), it looks
like stability can be a big issue- no big surprise in a feedback network.

--
/* jhallen@world.std.com AB1GO */ /* Joseph H. Allen */
int a[1817];main(z,p,q,r){for(p=80;q+p-80;p-=2*a[p])for(z=9;z--;)q=3&(r=time(0)
+r*57)/7,q=q?q-1?q-2?1-p%79?-1:0:p%79-77?1:0:p<1659?79:0:p>158?-79:0,q?!a[p+q*2
]?a[p+=a[p+=q]=q]=q:0:0;for(;q++-1817;)printf(q%79?"%c":"%c\n"," #"[!a[q-1]]);}

5786. Re: SWR and resonance measurements without an MFJ269 or equiv.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-18 20:19:01 UTC
From: jhallen@TheWorld.com
Message-ID: <em6t3l$s3$1@pcls4.std.com>
Source record: 9187

In article <fmmck-504DBE.15024218122006@nntp.aioe.org>,
Fred McKenzie <fmmck@aol.com> wrote:
>In article <em6at1$f9i$1@puck.litech.org>,
> "Mike Andrews" <mikea@mikea.ath.cx> wrote:
>
>> Some friends and I have been looking into making antennas for 70 cm.
>> and higher frequencies, but we don't have an MFJ-269; my MFJ-259 tops
>> out at 175 MHz. I _do_, however, have an SWR meter that supposedly
>> works up to 500 MHz(and maybe higher), and an HP 8640B that is good
>> to about 1.2 GHz.
>>
>> If the SWR meter is sensitive enough, could I get at least ballpark
>> SWR values using the 8640B as a source, running the signal through
>> the SWR meter to the antenna? Or am I way off in left field?
>
>Mike-
>
>You have to try it to find out.
>
>One problem is that your SWR meter's diode output is non-linear for very
>low voltages, resulting in SWR being higher than indicated for low
>values of SWR. You may be able to get around this with a
>hand-calibrated dial on the meter, or a calibration correction chart.
>
>Fred
>K4DII

Analog devices makes RF-log amp/detector chips which are good to microwave
frequencies (basically RF in, 10mv per dBm out, from -80dBm to 0dBm).
Replace the SWR meter's detector with one of these.

--
/* jhallen@world.std.com AB1GO */ /* Joseph H. Allen */
int a[1817];main(z,p,q,r){for(p=80;q+p-80;p-=2*a[p])for(z=9;z--;)q=3&(r=time(0)
+r*57)/7,q=q?q-1?q-2?1-p%79?-1:0:p%79-77?1:0:p<1659?79:0:p>158?-79:0,q?!a[p+q*2
]?a[p+=a[p+=q]=q]=q:0:0;for(;q++-1817;)printf(q%79?"%c":"%c\n"," #"[!a[q-1]]);}

5787. Re: impedance/noise match

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-18 20:57:16 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1166475435.869541.20790@l12g2000cwl.googlegroups.com>
Source record: 9188

Joseph H Allen wrote:
> In article <1166415208.792559.265390@l12g2000cwl.googlegroups.com>,
> K7ITM <k7itm@msn.com> wrote:
>
> >Finally, can you think of a way to alter the amplifier's input
> >impedance in a way that does not degrade noise, so that you come closer
> >to an impedance match while maintaining a match for optimal noise?
>
> Negative feedback increased input impedance. It looks like lossless
> negative feedback will do this without also increasing the noise. Perhaps
> use this to make the input impedance equal the noise-opt impedance- then you
> can match the two together to the source (using a transformer or a tuned
> circuit).
...

Right. Well, actually, you can use negative feedback to either increase or decrease the input impedance, and to either increase or decrease the output impedance. Negative feedback applied as a current into a summing junction (as in an inverting op amp circuit) decreases the input impedance. Negative feedback applied as a voltage in series with the input signal (as in a non-inverting op amp circuit, or by using a source/emitter impedance) increases the input impedance. Feedback derived from the output voltage decreases the output impedance (tries to hold the output voltage constant, for a constant input signal). Feedback derived from the output current increases the output impedance (tries to hold the output current constant, for a constant input signal).

Just as you say, though, feedback can be difficult to apply at RF, and especially so at the very high frequencies where noise figure is typically the most critical.

Cheers,
Tom

5788. Re: SWR and resonance measurements without an MFJ269 or equiv.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-18 23:58:33 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1166486313.728502.48640@n67g2000cwd.googlegroups.com>
Source record: 9189

Joseph H Allen wrote:>
> Analog devices makes RF-log amp/detector chips which are good to microwave
> frequencies (basically RF in, 10mv per dBm out, from -80dBm to 0dBm).
> Replace the SWR meter's detector with one of these.
>
> --
Andy writes:
I built one of those up -- the version that goes to 500 Mhz -- and
I use
it with a Mini-Ckts Fwd/Ref bridge and a Measurements 202, which only
puts out around 0 dbm. It works like a charm. I use the 202 to get
reference
measurements and use that system to tune antennae and transmission
lines.
It's a very very sensitive RF power meter and, while the absolute
accuracy may not be the best, it's very good for using low power signal

sources and taking relative measurement.

Andy W4OAH

5789. Re: Power Supply Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-19 00:45:00 UTC
From: w9gb <spam_protect@arrl.net>
Message-ID: <KZudnUInw6SQqxrYnZ2dnUVZ_rylnZ2d@comcast.com>
Source record: 9190

"west" <restccq2@verizon.net> wrote in message
news:Bephh.212$pr5.108@trnddc01...
>I have a 40 amp, 13.8v supply and would like to add a voltage (0-15v) meter
> and an amp (0-50amp) meter. The meters look frail and I can't imagine
> running all that current through those flimsy connectors and tiny meter
> coil. I have no paperwork on the meters and was wondering if I need a
> shunt
> resistor or something to take all that current. Any ideas? Thank you.
>
> Cordially,
> west
>
Regulated Linear Power Supply Construction
What's inside your Astron?
David Metz, WA0AUQ

I have often referenced David Metz's (WA0AUQ) article on Linear Power Supply Construction. David wrote this article for the SouthEast Iowa Technical Society (SEITS) newsletter in November 1996. Sadly, SEITS and its web site are no longer on the Internet.

Kevin Custer, K3KKC has agreed to add this article to the Astron folder in the Repeater Builders Technical Information Page (RBTIP). Hobbyists can again access this informational and educational article on linear power supply construction (Adobe Acrobat format) here:
http://www.repeater-builder.com/astron/seits-astron-article.pdf

w9gb

BTW Meter labeling is also quite easy

5790. Re: Power Supply Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-19 01:38:52 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <Mt-dnVeX1aMj3xrYnZ2dnUVZ8tChnZ2d@pipex.net>
Source record: 9191

> I have a 40 amp, 13.8v supply and would like to add a voltage (0-15v) meter
> and an amp (0-50amp) meter. The meters look frail and I can't imagine
> running all that current through those flimsy connectors and tiny meter
> coil. I have no paperwork on the meters and was wondering if I need a shunt
> resistor or something to take all that current. Any ideas? Thank you.
==========
The measurements derived from PSU fitted operational meters do not need
to be very accurate.
To make the correct series resistor for the voltmeter and the shunt for
the current meter you need a digital volt/mA meter ,preferably with a
10 Ampere- DC range included.

For both measurements a moving coil meter in the 0.1 -1 mA range will be
fine . For the current meter a say 10 mA full scale meter will be OK.

Try to find moving coil meters with a 0-15/0-20 and 0-50 scale.

You probably will find these at a fleamarket/junksale.

To find the respective full scale current of the respective (mystery)
meters ,take a 1.5 V battery and put the DVM and the meter in series
with a 22 KOhm linear potmeter , adjust potm. until mystery meter reads
full scale and read current on DVM.
Remove DVM from circuit and adjust current again to full scale.
Measure voltage (probably in mV range) across meter.
You now know everything of meter you need incl the meter resistance.

Voltmeter: Calculate series resistor (probably odd value) and use a
fixed resistor or resistors or 1 resistor in series with a suitable
(10 turn) trim pot.
Apply say 10 Volts across system (measured with DVM) and check meter
deflection . If not to your satisfaction ,change fixed resistor or in
case of using a trim pot ,adjust the trimpot.

Ampere meter:
Take approx 1 metre of thick copper wire capable of carrying 50 Ampere
, meaning that at that current its temperature does not get noticeably
above ambient .

Make a current of say 5 Amperes to flow through the wire .
With the DVM determine the length of the wire over which a voltage
developes which is 20-30 % (not critical) higher than 10% of the full
scale voltage across the designated Ampere meter ,assuming its scale is
0-50.
You can now reduce the overall length of the wire shunt accordingly.
Connect the designated meter in series with a (preferably 10 turn) trim

pot ,with a value of the same order of magnitude as the meter resistance, across the shunt and adjust the trimpot such that with a current of 5 Amperes (as measured by the DVM) the now Ampere meter reads 10% of its scale.
Increase the current to say 20 Amperes (as shown by the DVM or any other Ampere meter) The now Ampere meter should read 40% of scale.

I have applied the above with 'junk box' meters to measure voltage and current from 2 solar panels (0-10 A) and a wind generator (0-20 A). Voltmeter reads 0-15V.
The method described is adequate for 'operational' meters . Their uncertainty (accuracy)is better than 3%.

If the meters you have don't have the wanted scale ,you can change the scale by (carefully)glueing a paper scale on top of the existing one . There are a number of free meter scale programs available from the www

Frank KN6WH / GM0CSZ

5791. Re: SWR and resonance measurements without an MFJ269 or equiv.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-19 02:53:42 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <qtkeo2pna6at50vnc9to3dfkn7gqv5im9b@4ax.com>
Source record: 9192

On Mon, 18 Dec 2006 15:08:17 +0000 (UTC), "Mike Andrews"
<mikea@mikea.ath.cx> wrote:

>Some friends and I have been looking into making antennas for 70 cm.
>and higher frequencies, but we don't have an MFJ-269; my MFJ-259 tops
>out at 175 MHz. I _do_, however, have an SWR meter that supposedly
>works up to 500 MHz(and maybe higher), and an HP 8640B that is good
>to about 1.2 GHz.
>
>If the SWR meter is sensitive enough, could I get at least ballpark
>SWR values using the 8640B as a source, running the signal through
>the SWR meter to the antenna? Or am I way off in left field?

You can achieve a lot on 70cm with an HT and a simple field strength
meter. Think matching stubs & shorting bars...
John Ferrell W8CCW

5792. Need Toko RWRS-T1018Z 180uH 10K coils

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-19 03:21:34 UTC
From: "Bob G. Mahrenholz" <bobm@edge.net>
Message-ID: <45875A71.5EA663D5@edge.net>
Source record: 9193

Hi:
Does anyone know where I can get two or preferably four Toko RWRS-T1018Z coils? These are 180uH adjustable coils in a 10K shield can. I want to build the BC band preselector by Joe Carr in the April 1995 issue of Popular Electronics.

Thanks,
Bob
K4QQK
bobmatedgedotnet

5793. Re: Need Toko RWRS-T1018Z 180uH 10K coils

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-19 03:34:41 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <R4-dna8T9uR6wBrYnZ2dnUVZ8tK3nZ2d@pipex.net>
Source record: 9194

> Does anyone know where I can get two or preferably four Toko RWRS-T1018Z
> coils? These are 180uH adjustable coils in a 10K shield can. I want to
> build the BC band preselector by Joe Carr in the April 1995 issue of
> Popular Electronics.
==========
Google ------> DigiKey.com

Frank KN6WH / GM0CSZ

5794. SA605 or SA615 source

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-19 03:37:49 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <em7mqdmcg3@puck.litech.org>
Source record: 9195

Anyone got a source for SA605 or SA615? I want to build the 1-chip receiver that Steve Hageman describes in EDN Access of 25 September 1997, but am having problems finding the chips. Maybe I'm looking past them.

--
Fu^WForget Turing, USENET wouldn't pass a roadside DWI test
-- Chris Hacking, in the Monastery

5795. Re: SA605 or SA615 source

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-19 04:01:05 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <4-OdnVsClbqc-RrYnZ2dnUVZ_urinZ2d@web-ster.com>
Source record: 9196

Mike Andrews wrote:
> Anyone got a source for SA605 or SA615? I want to build the 1-chip
> receiver that Steve Hageman describes in EDN Access of 25 September
> 1997, but am having problems finding the chips. Maybe I'm looking
> past them.
>
Nominally these are Phillips parts (now NXE or whatever). They use the
'SA' 'NE' etc., for indicating temperature ranges -- I know I've had
trouble finding '602s with one prefix, and no problem with the other.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

5796. Re: A different view of the code test option

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-19 04:06:32 UTC
From: Mike Coslo <mcoslo@comcast.net>
Message-ID: <Xns989DEB15BC4EAmcoslocomcastnet@216.196.97.136>
Source record: 9197

Bill Turner <noway@nowhow.com> wrote in
news:rdsqn2hdq34l89hksaj8c8nk11orkq7i9h@4ax.com:

> Please folks, do not reply to these off topic posts.
>
> If these idiots never get any replies, they will eventually give up
> and go away.

Good heavens, Bill! I appreciate the sentiment, but you do realize that you've become just another disruptive poster on the newsgroups. I don't see the jerks, but I do see your posts to them. Someone is always trying to "Clean up Dodge City", and they always fail. Give it a break, and excercise your filters!

- 73 de Mike KB3EIA -

5797. Re: No Code Required Issue

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-19 04:10:04 UTC
From: Mike Coslo <mcoslo@comcast.net>
Message-ID: <Xns989DEBAF4AC20mcoslocomcastnet@216.196.97.136>
Source record: 9098

Bill Turner <noway@nowhow.com> wrote in
news:1obbo25f3r3oh03qsuinki0hsdprmqluq4@4ax.com:

> Please folks, do not reply to these off topic posts.
>
> If these idiots never get any replies, they will eventually give up
> and go away.

There you go again!

buh-bye!

- 73 de Mike KB3EIA -

5798. Re: SWR and resonance measurements without an MFJ269 or equiv.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-19 14:58:41 UTC
From: Straydog <asd@panix.com>
Message-ID: <Pine.NEB.4.64.0612190952030.12003@panix2.panix.com>
Source record: 9099

On Mon, 18 Dec 2006, Mike Andrews wrote:

> Some friends and I have been looking into making antennas for 70 cm.
> and higher frequencies, but we don't have an MFJ-269; my MFJ-259 tops
> out at 175 MHz. I _do_, however, have an SWR meter that supposedly
> works up to 500 MHz(and maybe higher), and an HP 8640B that is good
> to about 1.2 GHz.
>
> If the SWR meter is sensitive enough, could I get at least ballpark
> SWR values using the 8640B as a source,

You did not say what an 8640B is. Signal generator? Transmitter? Power out?

Main thing is to get the "forward" power to read something on the meter (preferably full scale, but even if you get half or quarter scale, then you are able to get a rough idea of usabiltiy of the meter). Then see what it shows on the "reflected" scale. Figure ver roughly if the reflected power is half the forward (regardless of the actual location on the meter scale), then you have about 3:1 SWR. Turn the meter around to get an idea if the diodes (and associated circuitry) are well matched for forward and reflected.

I have used a number of el-cheapo CB SWR meters even up on two meters and they work surprisingly well, even more sensitive than ham SWR meters for VHF-UHF, and not that far off of what the ham SWR meters report, and so are good for handie-talkie measurements. So, yes, you should get useful ball park figures.

running the signal through
> the SWR meter to the antenna? Or am I way off in left field?
>
> --
> Mike Andrews, W5EGO
> mikea@mikea.ath.cx
> Tired old sysadmin
>

5799. Re: SWR and resonance measurements without an MFJ269 or equiv.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-19 15:27:38 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <em90da$7qc$1@puck.litech.org>
Source record: 9100

On Tue, 19 Dec 2006 09:58:41 -0500, Straydog <asd@panix.com> wrote in
<Pine.NEB.4.64.0612190952030.12003@panix2.panix.com>:

> On Mon, 18 Dec 2006, Mike Andrews wrote:

>> Some friends and I have been looking into making antennas for 70 cm.
>> and higher frequencies, but we don't have an MFJ-269; my MFJ-259 tops
>> out at 175 MHz. I _do_, however, have an SWR meter that supposedly
>> works up to 500 MHz(and maybe higher), and an HP 8640B that is good
>> to about 1.2 GHz.
>>
>> If the SWR meter is sensitive enough, could I get at least ballpark
>> SWR values using the 8640B as a source,

> You did not say what an 8640B is. Signal generator? Transmitter? Power
> out?

Lab-grade RF signal generator, official range from 500 KHz to 1.024
MHz. In practice it's good from 455 KHz up to about 1.2 GHz. Includes
FM, AM, and pulse modulation, with either internal modulation at variable
frequencies and amplitude (AM) or deviation (FM) or external modulation.
Has a very nice 6 1/2 digit counter good up to 1.2 GHz. Output range
is from -130 dBm (100 nanoVolts) to +20 dBm (3 Volts) into 50 Ohms.

It's a _very_ nice piece of gear indeed. You can see a picture of mine
(and other stuff on the workbench) at

<http://mikea.ath.cx/testgear/index.html>.

> Main thing is to get the "forward" power to read something on the meter
> (preferably full scale, but even if you get half or quarter scale, then
> you are able to get a rough idea of usabiltiy of the meter). Then see what
> it shows on the "reflected" scale. Figure ver roughly if the reflected
> power is half the forward (regardless of the actual location on the meter
> scale), then you have about 3:1 SWR. Turn the meter around to get an idea
> if the diodes (and associated circuitry) are well matched for forward and
> reflected.

> I have used a number of el-cheapo CB SWR meters even up on two meters and
> they work surprisingly well, even more sensitive than ham SWR meters for
> VHF-UHF, and not that far off of what the ham SWR meters report, and so
> are good for handie-talkie measurements. So, yes, you should get useful
> ball park figures.

That's good to hear. I got to thinking about what an MFJ-259 or -269
does, and decided that I only needed a sensitive-enough SWR meter that
would give reasonably accurate readings from 100 MHz to 1.2 GHz, since

I already had the signal source. Of course, the HP 8640B weighs about
40 pounds, and is a good deal less portable than the MFJ products, but
if I can get this working, I'll be able to do things it won't.

>> running the signal through
>> the SWR meter to the antenna? Or am I way off in left field?

Looks like I'm well inside the ballpark and that I have some design
and construction to do. This should be fun.

Thanks!

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

5800. Re: SWR and resonance measurements without an MFJ269 or equiv.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-19 18:36:43 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <RY2dnV1vvKygrBXYnZ2dnUVZ_vipnZ2d@bright.net>
Source record: 9101

I don't think using your 8640B as a signal source to read on a wattmeter
is going to cut it. +20 dBm is only 100 mW. Unless you have a
wattmeter that has a 100 mW or so range, you aren't going to get much
needle deflection. The lowest range on my Telewave wattmeter is 5 Watts.

Scott
N0EDV

Mike Andrews wrote:

> On Tue, 19 Dec 2006 09:58:41 -0500, Straydog <asd@panix.com> wrote in
<Pine.NEB.4.64.0612190952030.12003@panix2.panix.com>:
>
>
>
>>On Mon, 18 Dec 2006, Mike Andrews wrote:
>
>
>>>Some friends and I have been looking into making antennas for 70 cm.
>>>and higher frequencies, but we don't have an MFJ-269; my MFJ-259 tops
>>>out at 175 MHz. I _do_, however, have an SWR meter that supposedly
>>>works up to 500 MHz(and maybe higher), and an HP 8640B that is good
>>>to about 1.2 GHz.
>>>
>>>If the SWR meter is sensitive enough, could I get at least ballpark
>>>SWR values using the 8640B as a source,
>
>
>>You did not say what an 8640B is. Signal generator? Transmitter? Power
>>out?
>
>
> Lab-grade RF signal generator, official range from 500 KHz to 1.024
> MHz. In practice it's good from 455 KHz up to about 1.2 GHz. Includes
> FM, AM, and pulse modulation, with either internal modulation at variable
> frequencies and amplitude (AM) or deviation (FM) or external modulation.
> Has a very nice 6 1/2 digit counter good up to 1.2 GHz. Output range
> is from -130 dBm (100 nanoVolts) to +20 dBm (3 Volts) into 50 Ohms.
>
> It's a _very_ nice piece of gear indeed. You can see a picture of mine
> (and other stuff on the workbench) at
>
> <http://mikea.ath.cx/testgear/index.html>.
>
>

>>Main thing is to get the "forward" power to read something on the meter
>>(preferably full scale, but even if you get half or quarter scale, then
>>you are able to get a rough idea of usabiltiy of the meter). Then see what
>>it shows on the "reflected" scale. Figure ver roughly if the reflected
>>power is half the forward (regardless of the actual location on the meter
>>scale), then you have about 3:1 SWR. Turn the meter around to get an idea
>>if the diodes (and associated circuitry) are well matched for forward and
>>reflected.
>
>
>>I have used a number of el-cheapo CB SWR meters even up on two meters and
>>they work surprisingly well, even more sensitive than ham SWR meters for
>>VHF-UHF, and not that far off of what the ham SWR meters report, and so
>>are good for handie-talkie measurements. So, yes, you should get useful
>>ball park figures.
>
>
> That's good to hear. I got to thinking about what an MFJ-259 or -269
> does, and decided that I only needed a sensitive-enough SWR meter that
> would give reasonably accurate readings from 100 MHz to 1.2 GHz, since
> I already had the signal source. Of course, the HP 8640B weighs about
> 40 pounds, and is a good deal less portable than the MFJ products, but
> if I can get this working, I'll be able to do things it won't.
>
>
>>> running the signal through
>>>the SWR meter to the antenna? Or am I way off in left field?
>
>
> Looks like I'm well inside the ballpark and that I have some design
> and construction to do. This should be fun.
>
> Thanks!
>

5801. Re: SWR and resonance measurements without an MFJ269 or equiv.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-19 18:45:49 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <em9c0tiug1@puck.litech.org>
Source record: 9102

On Tue, 19 Dec 2006 18:36:43 +0000, Scott <acepilot@bloomer.net> wrote in
<RY2dnV1vvKygrBXYnZ2dnUVZ_vipnZ2d@bright.net>:
> I don't think using your 8640B as a signal source to read on a wattmeter
> is going to cut it. +20 dBm is only 100 mW. Unless you have a
> wattmeter that has a 100 mW or so range, you aren't going to get much
> needle deflection. The lowest range on my Telewave wattmeter is 5 Watts.

Agreed. I'm looking at some RF log-amp chips from various places and
some RF sensor chips I saw in a construction article I can't locate
right now, so that I can get something useful with signal levels in
the Part-15 range.

I don't know what I'll wind up with, but it'll be interesting. I'll
share when it's soup.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

5802. Re: SWR and resonance measurements without an MFJ269 or equiv.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-19 20:04:58 UTC
From: Fred McKenzie <fmmck@aol.com>
Message-ID: <fmmck-25FC97.15045819122006@nntp.aioe.org>
Source record: 9103

In article <em6at1$f9i$1@puck.litech.org>,
"Mike Andrews" <mikea@mikea.ath.cx> wrote:

> Some friends and I have been looking into making antennas for 70 cm.
> and higher frequencies, but we don't have an MFJ-269; my MFJ-259 tops
> out at 175 MHz. I _do_, however, have an SWR meter that supposedly
> works up to 500 MHz(and maybe higher), and an HP 8640B that is good
> to about 1.2 GHz.
>
> If the SWR meter is sensitive enough, could I get at least ballpark
> SWR values using the 8640B as a source, running the signal through
> the SWR meter to the antenna? Or am I way off in left field?

Mike-

I think you are on the right track with the RF log-amps.

Another idea - I understand the MFJ-259 has a standard SWR configuration with a built-in signal source that uses an ALC to keep forward power at the equivalent of full scale. Why not replace the 259 signal source with the HP 8640B?

Fred
K4DII

5803. Re: SWR and resonance measurements without an MFJ269 or equiv.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-19 20:12:37 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <em9h3l$l4f$2@puck.litech.org>
Source record: 9104

On Tue, 19 Dec 2006 15:04:58 -0500, Fred McKenzie <fmmck@aol.com> wrote in
<fmmck-25FC97.15045819122006@nntp.aioe.org>:
> In article <em6at1$f9i$1@puck.litech.org>,
> "Mike Andrews" <mikea@mikea.ath.cx> wrote:

>> Some friends and I have been looking into making antennas for 70 cm.
>> and higher frequencies, but we don't have an MFJ-269; my MFJ-259 tops
>> out at 175 MHz. I _do_, however, have an SWR meter that supposedly
>> works up to 500 MHz(and maybe higher), and an HP 8640B that is good
>> to about 1.2 GHz.
>>
>> If the SWR meter is sensitive enough, could I get at least ballpark
>> SWR values using the 8640B as a source, running the signal through
>> the SWR meter to the antenna? Or am I way off in left field?

> Mike-

> I think you are on the right track with the RF log-amps.

> Another idea - I understand the MFJ-259 has a standard SWR configuration
> with a built-in signal source that uses an ALC to keep forward power at
> the equivalent of full scale. Why not replace the 259 signal source
> with the HP 8640B?

I hadn't thought of that. I suppose I could put a jack on the 259's
case, and a switch to select the 8640B, which has _marvelous_ ALC all
its own. The switch, and some RG-174, ought to be good enough for what
I'll be asking them to do. But that changes the question to "Is the
259's SWR sensor good enough above 175 MHz, and especially around 33
cm to 25 cm, to give real-world answers?"

I'll never know if I don't try.

I may have to buy a factory UHF-and-above antenna analyzer to validate
my answers, of course. I'm sure W5DNA will understand why we're eating
potato soup for two or three months.

Thanks!

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

5804. Re: SA605 or SA615 source

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-19 20:22:06 UTC
From: "John Miles, KE5FX" <jmiles@gmail.com>
Message-ID: <1166559726.337136.17610@a3g2000cwd.googlegroups.com>
Source record: 9105

Mike Andrews wrote:
> Anyone got a source for SA605 or SA615? I want to build the 1-chip
> receiver that Steve Hageman describes in EDN Access of 25 September
> 1997, but am having problems finding the chips. Maybe I'm looking
> past them.
>

They can be ordered directly from Philips -- as of a couple of years
ago anyway. Also, www.findchips.com shows a few vendors that sell them.

5805. Re: SA605 or SA615 source

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-19 21:08:56 UTC
From: ricknj10@hotmail.com
Message-ID: <4588549b.625156@news.optonline.net>
Source record: 9106

Item #190063731505 on eBay has them right now. $16.50 for 2 pieces

5806. Re: SWR and resonance measurements without an MFJ269 or equiv.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-20 00:42:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12oh1o9jr0n8i27@corp.supernews.com>
Source record: 9107

I'd start by measuring a standard or two. You can get pretty decent termination resistors on eBay for a modest cost. If your system measures close to 1:1 when terminated with one of those, you're off to a good start. Next I'd make up a 50 ohm microstrip line terminated with a 50 ohm chip resistor. If that reads close to what the 50 ohm termination did, then I'd measure the SWR with some different load values, say 25 and 100 ohms. These of course could be made from two 50 ohm chip resistors. You could get more elaborate with the calibration by introducing reactive loads, but just the three data points should be enough to give you some confidence in your SWR measurements, at least near 1:1 where your primary interest is.

Roy Lewallen, W7EL

5807. A Christmas Present Everyone Can Afford

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 01:26:49 UTC
From: K4YZ <stevenrobeson@yahoo.com>
Message-ID: <1166664409.759771.68300@80g2000cwy.googlegroups.com>
Source record: 9108
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

As the Christmas season draws closer, many of us who have watched
the war in Iraq have wondered how we could help or "make a difference"
to the lives of some of our Soldiers, Sailors, Airmen and Marines who
have been wounded in combat.

Although there are several military hospitals that take in the
wounded, most find their way into Walter Reed Army Hospital.

Please take a minute to fill out a Christmas card and address it as
follows:

A Recovering American Service Member
c/o Walter Reed Army Medical Center
6900 Georgia Avenue, NW
Washington, DC 20307-5001

Perhaps a personal note of thanks and gratitude for the sacrifice
they've made would be appropriate.

73

Steve Robeson, LPN
Winchester, TN
K4YZ

5808. Re: A Christmas Present Everyone Can Afford

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 01:33:45 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1166664825.458969.90380@80g2000cwy.googlegroups.com>
Source record: 9109
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

K4YZ wrote:
> As the Christmas season draws closer,

why not begin your efforts closer to home and do something nice and
apologize to victums of your years of harrassment

> Steve Robeson, LPN

so much for your claim you do not sign yourself as LPN from time to
time

> Winchester, TN
> K4YZ

5809. Re: A Christmas Present Everyone Can Afford

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 01:38:57 UTC
From: K4YZ <stevenrobeson@yahoo.com>
Message-ID: <1166665136.932220.62410@73g2000cwn.googlegroups.com>
Source record: 9110
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

nobodys_old_friend wrote:
> K4YZ wrote:
> > As the Christmas season draws closer,
>
> why not begin your efforts closer to home and do something nice and
> apologize to victums of your years of harrassment
>
> > Steve Robeson, LPN
>
> so much for your claim you do not sign yourself as LPN from time to
> time

So much for YOUR claim that you don't go off-topic on "legitimate"
posts.

And considering you keep insisting you're a "legitimate" Veteran, I
would have thought that the topic of this ONE thread would have been
immune to your babblings.

Silly me.

Steve, K4YZ

5810. does steve have a job

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 01:43:05 UTC
From: Mark@kb9rqz.aprs
Message-ID: <5ipjo2pugki7dqrr4smbk69umb7hdniaop@4ax.com>
Source record: 9111
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

On 20 Dec 2006 17:38:57 -0800, "K4YZ" <stevenrobeson@yahoo.com> wrote:

>
>nobodys_old_friend wrote:
cyber vandalism
> And considering you keep insisting you're a "legitimate" Veteran, I
>would have thought that the topic of this ONE thread would have been
>immune to your babblings.

steve you are just trying to divert from your years of trashing the NG

you want to do something for christmas apologize for your words and
Stopp trying to use veterans to make yourself look good steve
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5811. Re: A Christmas Present Everyone Can Afford

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 01:44:19 UTC
From: K4YZ <stevenrobeson@yahoo.com>
Message-ID: <1166665459.314305.303410@79g2000cws.googlegroups.com>
Source record: 9112
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

K4YZ wrote::
> As the Christmas season draws closer, many of us who have watched
> the war in Iraq have wondered how we could help or "make a difference"
> to the lives of some of our Soldiers, Sailors, Airmen and Marines who
> have been wounded in combat.
>
> Although there are several military hospitals that take in the
> wounded, most find their way into Walter Reed Army Hospital.
>
> Please take a minute to fill out a Christmas card and address it as
> follows:
>
> A Recovering American Service Member
> c/o Walter Reed Army Medical Center
> 6900 Georgia Avenue, NW
> Washington, DC 20307-5001
>
> Perhaps a personal note of thanks and gratitude for the sacrifice
> they've made would be appropriate.
>
> 73
>
> Steve Robeson, LPN
> Winchester, TN
> K4YZ

5812. stop pretending you are vet or that you care about vet

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 01:46:21 UTC
From: Mark@kb9rqz.aprs
Message-ID: <tppjo2lc1o1e8an0f8ka3gptng2p8efjhc@4ax.com>
Source record: 9113
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

On 20 Dec 2006 17:44:19 -0800, "K4YZ" <stevenrobeson@yahoo.com> wrote:

>
stop the lying steve you have been busted as a fraud and not a marine
and that your harrass any vet you like
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5813. Re: A Christmas Present Everyone Can Afford

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 01:51:33 UTC
From: K4YZ <stevenrobeson@yahoo.com>
Message-ID: <1166665892.962817.325440@n67g2000cwd.googlegroups.com>
Source record: 9114
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

K4YZ wrote:
> As the Christmas season draws closer, many of us who have watched
> the war in Iraq have wondered how we could help or "make a difference"
> to the lives of some of our Soldiers, Sailors, Airmen and Marines who
> have been wounded in combat.
>
> Although there are several military hospitals that take in the
> wounded, most find their way into Walter Reed Army Hospital.
>
> Please take a minute to fill out a Christmas card and address it as
> follows:
>
> A Recovering American Service Member
> c/o Walter Reed Army Medical Center
> 6900 Georgia Avenue, NW
> Washington, DC 20307-5001
>
> Perhaps a personal note of thanks and gratitude for the sacrifice
> they've made would be appropriate.
>
> 73
>
> Steve Robeson, LPN
> Winchester, TN
> K4YZ

5814. does steve have a job?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 01:54:05 UTC
From: Mark@kb9rqz.aprs
Message-ID: <38qjo21603ouep8mr158q3ue1s6ncb5l6a@4ax.com>
Source record: 9115
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

On 20 Dec 2006 17:51:33 -0800, "K4YZ" <stevenrobeson@yahoo.com> wrote:

>
>K4YZ wrote:
fraud remains a crime steve you are not a vet and you harrass vet at
any other occassion stop trying to us them to divert attention from
record of fraud
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5815. Re: A Christmas Present Everyone Can Afford

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 02:00:35 UTC
From: K4YZ <stevenrobeson@yahoo.com>
Message-ID: <1166666435.825436.180490@80g2000cwy.googlegroups.com>
Source record: 9116
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

K4YZ wrote.:
> As the Christmas season draws closer, many of us who have watched
> the war in Iraq have wondered how we could help or "make a difference"
> to the lives of some of our Soldiers, Sailors, Airmen and Marines who
> have been wounded in combat.
>
> Although there are several military hospitals that take in the
> wounded, most find their way into Walter Reed Army Hospital.
>
> Please take a minute to fill out a Christmas card and address it as
> follows:
>
> A Recovering American Service Member
> c/o Walter Reed Army Medical Center
> 6900 Georgia Avenue, NW
> Washington, DC 20307-5001
>
> Perhaps a personal note of thanks and gratitude for the sacrifice
> they've made would be appropriate.
>
> 73
>
> Steve Robeson, LPN
> Winchester, TN
> K4YZ

5816. stop trying to use vets to imporve your befoulded name

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 02:02:18 UTC
From: Mark@kb9rqz.aprs
Message-ID: <4oqjo29c8mcujcmn422tia7dii6lc76c3c@4ax.com>
Source record: 9117
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

On 20 Dec 2006 18:00:35 -0800, "K4YZ" <stevenrobeson@yahoo.com> wrote:

>
>K4YZ wrote.:
shame on you for trying to use the vet to push YOU steve
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5817. Re: A Christmas Present Everyone Can Afford

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 02:12:19 UTC
From: K4YZ <stevenrobeson@yahoo.com>
Message-ID: <1166667139.865017.131010@48g2000cwx.googlegroups.com>
Source record: 9118
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

As the Christmas season draws closer, many of us who have watched
the war in Iraq have wondered how we could help or "make a difference"
to the lives of some of our Soldiers, Sailors, Airmen and Marines who
have been wounded in combat.

Although there are several military hospitals that take in the
wounded, most find their way into Walter Reed Army Hospital.

Please take a minute to fill out a Christmas card and address it
as
follows:

A Recovering American Service Member
c/o Walter Reed Army Medical Center
6900 Georgia Avenue, NW
Washington, DC 20307-5001

Perhaps a personal note of thanks and gratitude for the sacrifice
they've made would be appropriate.

73

Steve Robeson, LPN
Winchester, TN
K4YZ

5818. Re: A Christmas Present Everyone Can Afford

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 02:20:24 UTC
From: K4YZ <stevenrobeson@aol.com>
Message-ID: <1166667624.601431.159250@t46g2000cwa.googlegroups.com>
Source record: 9119
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

As the Christmas season draws closer, many of us who have watched
the war in Iraq have wondered how we could help or "make a difference"
to the lives of some of our Soldiers, Sailors, Airmen and Marines who
have been wounded in combat.

Although there are several military hospitals that take in the
wounded, most find their way into Walter Reed Army Hospital.

Please take a minute to fill out a Christmas card and address it
as
follows:

A Recovering American Service Member
c/o Walter Reed Army Medical Center
6900 Georgia Avenue, NW
Washington, DC 20307-5001

Perhaps a personal note of thanks and gratitude for the sacrifice
they've made would be appropriate.

73

Steve Robeson, LPN
Winchester, TN
K4YZ

5819. Re: A Christmas Present Everyone Can Afford

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 02:26:34 UTC
From: K4YZ <stevenrobeson@aol.com>
Message-ID: <1166667993.989520.122820@79g2000cws.googlegroups.com>
Source record: 9120
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

As the Christmas season draws closer, many of us who have watched
the war in Iraq have wondered how we could help or "make a difference"
to the lives of some of our Soldiers, Sailors, Airmen and Marines who
have been wounded in combat.

Although there are several military hospitals that take in the
wounded, most find their way into Walter Reed Army Hospital.

Please take a minute to fill out a Christmas card and address it as

follows:

A Recovering American Service Member
c/o Walter Reed Army Medical Center
6900 Georgia Avenue, NW
Washington, DC 20307-5001

Perhaps a personal note of thanks and gratitude for the sacrifice
they've made would be appropriate.

73

Steve Robeson, LPN
Winchester, TN
K4YZ

5820. why does steve try to use veterans to imporve his befoulded name

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 02:44:43 UTC
From: Mark@kb9rqz.aprs
Message-ID: <68tjo2dk78pckdc2p7aqjs61r6sqee91a1@4ax.com>
Source record: 9121
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

On 20 Dec 2006 17:26:49 -0800, "K4YZ" <stevenrobeson@yahoo.com> wrote:

>
why does steve try to use veterans to imporve his befoulded name
>Steve Robeson, LPN
>Winchester, TN
>K4YZ
stop the self promotion steve
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5821. why does steve try to use veterans to imporve his befoulded name

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 02:47:17 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1166669237.534378.319060@80g2000cwy.googlegroups.com>
Source record: 9122
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

K4YZ wrote:
>
>
why does steve try to use veterans to imporve his befoulded name
> Steve Robeson, LPN
> Winchester, TN
> K4YZ
stop the self promotion till you mend your fences with the real
veterans of RRAP

5822. Re: SWR and resonance measurements without an MFJ269 or equiv.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 03:37:37 UTC
From: Straydog <asd@panix.com>
Message-ID: <Pine.NEB.4.64.0612202229160.16258@panix2.panix.com>
Source record: 9123

Just one comment, about halfway down....

On Tue, 19 Dec 2006, Mike Andrews wrote:

> On Tue, 19 Dec 2006 09:58:41 -0500, Straydog <asd@panix.com> wrote in
<Pine.NEB.4.64.0612190952030.12003@panix2.panix.com>:
>
>
>> On Mon, 18 Dec 2006, Mike Andrews wrote:
>
>>> Some friends and I have been looking into making antennas for 70 cm.
>>> and higher frequencies, but we don't have an MFJ-269; my MFJ-259 tops
>>> out at 175 MHz. I _do_, however, have an SWR meter that supposedly
>>> works up to 500 MHz(and maybe higher), and an HP 8640B that is good
>>> to about 1.2 GHz.
>>>
>>> If the SWR meter is sensitive enough, could I get at least ballpark
>>> SWR values using the 8640B as a source,
>
>> You did not say what an 8640B is. Signal generator? Transmitter? Power
>> out?
>
> Lab-grade RF signal generator, official range from 500 KHz to 1.024
> MHz. In practice it's good from 455 KHz up to about 1.2 GHz. Includes
> FM, AM, and pulse modulation, with either internal modulation at variable
> frequencies and amplitude (AM) or deviation (FM) or external modulation.
> Has a very nice 6 1/2 digit counter good up to 1.2 GHz. Output range
> is from -130 dBm (100 nanoVolts) to +20 dBm (3 Volts) into 50 Ohms.

3 volts into 50 ohms isn't much power. ~3/50 of an amp, means about 180
milliwatts. The most sensitive calibrated SWR meters will read zero to 5
watts full scale, so 180 milliwatts might move your needle for forward power
about 5-10 degrees of arc away from the leftmost peg towards the rightmost
peg on the dial. That doesn't give you much indication of reflected power
since a 3:1 ratio would then mean movement of the needle about 2.5 to 5
degrees of arc, respectively. The elcheapo CB SWR meters _might_ be more
sensitive since more power _should_ transfer to the measuring bars because
2 meters is some 5 times higher in frequency and the CB SWR meters are
meant to operate at max 3-4 watts of RF output from the CB rigs. But,
you'll have to try it.

===== no change to below, included for reference and context =====

> It's a _very_ nice piece of gear indeed. You can see a picture of mine
> (and other stuff on the workbench) at
>

> <http://mikea.ath.cx/testgear/index.html>.
>
>> Main thing is to get the "forward" power to read something on the meter
>> (preferably full scale, but even if you get half or quarter scale, then
>> you are able to get a rough idea of usabiltiy of the meter). Then see what
>> it shows on the "reflected" scale. Figure ver roughly if the reflected
>> power is half the forward (regardless of the actual location on the meter
>> scale), then you have about 3:1 SWR. Turn the meter around to get an idea
>> if the diodes (and associated circuitry) are well matched for forward and
>> reflected.
>
>> I have used a number of el-cheapo CB SWR meters even up on two meters and
>> they work surprisingly well, even more sensitive than ham SWR meters for
>> VHF-UHF, and not that far off of what the ham SWR meters report, and so
>> are good for handie-talkie measurements. So, yes, you should get useful
>> ball park figures.
>
> That's good to hear. I got to thinking about what an MFJ-259 or -269
> does, and decided that I only needed a sensitive-enough SWR meter that
> would give reasonably accurate readings from 100 MHz to 1.2 GHz, since
> I already had the signal source. Of course, the HP 8640B weighs about
> 40 pounds, and is a good deal less portable than the MFJ products, but
> if I can get this working, I'll be able to do things it won't.
>
>>> running the signal through
>>> the SWR meter to the antenna? Or am I way off in left field?
>
> Looks like I'm well inside the ballpark and that I have some design
> and construction to do. This should be fun.
>
> Thanks!
>
> --
> Mike Andrews, W5EGO
> mikea@mikea.ath.cx
> Tired old sysadmin
>

5823. Re: why does steve try to use veterans to imporve his befoulded name

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 03:55:23 UTC
From: U-Know-Who <no-one@nowhere.com>
Message-ID: <458a05a9$0$5261$4c368faf@roadrunner.com>
Source record: 9124
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

<Mark@kb9rqz.aprs> wrote in message
news:68tjo2dk78pckdc2p7aqjs61r6sqee91a1@4ax.com...
> On 20 Dec 2006 17:26:49 -0800, "K4YZ" <stevenrobeson@yahoo.com> wrote:
>
>>
> why does steve try to use veterans to imporve his befoulded name

Befoulded? Is that some kind of Jewish thing?

>>Steve Robeson, LPN
>>Winchester, TN
>>K4YZ
> stop the self promotion steve
> http://kb9rqz.blogspot.com/
>
> --
> Posted via a free Usenet account from http://www.teranews.com
>

5824. Re: why does steve try to use veterans to imporve his befoulded name

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 03:57:02 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1166673422.274657.130230@t46g2000cwa.googlegroups.com>
Source record: 9125
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

U-Know-Who wrote:
> <Mark@kb9rqz.aprs> wrote in message
> news:68tjo2dk78pckdc2p7aqjs61r6sqee91a1@4ax.com...
> > On 20 Dec 2006 17:26:49 -0800, "K4YZ" <stevenrobeson@yahoo.com> wrote:
> >
> >>
> > why does steve try to use veterans to imporve his befoulded name
>
>
>
> Befoulded? Is that some kind of Jewish thing?

sad you are an antisemtic too Tom

5825. Re: why does steve try to use veterans to imporve his befoulded name

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 04:22:21 UTC
From: U-Know-Who <no-one@nowhere.com>
Message-ID: <458a0bfa$0$5228$4c368faf@roadrunner.com>
Source record: 9126
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

"an_old_friend" <konstans@hotmail.com> wrote in message
news:1166673422.274657.130230@t46g2000cwa.googlegroups.com...
>
> U-Know-Who wrote:
>> <Mark@kb9rqz.aprs> wrote in message
>> news:68tjo2dk78pckdc2p7aqjs61r6sqee91a1@4ax.com...
>> > On 20 Dec 2006 17:26:49 -0800, "K4YZ" <stevenrobeson@yahoo.com> wrote:
>> >
>> >>
>> > why does steve try to use veterans to imporve his befoulded name
>>
>>
>>
>> Befoulded? Is that some kind of Jewish thing?
>
> sad you are an antisemtic too Tom
>

Sad that you are too fucking stupid to know otherwise. I don't have anything against anyone's religion. I asked a question. As far as I can tell the word does not exist in your context.

5826. Re: why does steve try to use veterans to imporve his befoulded name

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 04:27:29 UTC
From: Mark@kb9rqz.aprs
Message-ID: <q83ko2lcg4a9v081khibijhifsr3lqc8am@4ax.com>
Source record: 9127
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

On Wed, 20 Dec 2006 22:22:21 -0600, "U-Know-Who" <no-one@nowhere.com>
wrote:

>
>"an_old_friend" <konstans@hotmail.com> wrote in message
>news:1166673422.274657.130230@t46g2000cwa.googlegroups.com...
>>
>> U-Know-Who wrote:
>>> <Mark@kb9rqz.aprs> wrote in message
>>> news:68tjo2dk78pckdc2p7aqjs61r6sqee91a1@4ax.com...
>>> > On 20 Dec 2006 17:26:49 -0800, "K4YZ" <stevenrobeson@yahoo.com> wrote:
>>> >
>>> >>
>>> > why does steve try to use veterans to imporve his befoulded name
>>>
>>>
>>>
>>> Befoulded? Is that some kind of Jewish thing?
>>
>> sad you are an antisemtic too Tom
>>
>
>Sad that you are too fucking stupid to know otherwise
nah Tom you are making an antisemtic remark
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5827. Re: A Christmas Present Everyone Can Afford

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 05:04:53 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1166677493.343119.68440@80g2000cwy.googlegroups.com>
Source record: 9128
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

K4YZ wrote:
> nobodys_old_friend wrote:
> > K4YZ wrote:
> > > As the Christmas season draws closer,
> >
> > why not begin your efforts closer to home and do something nice and
> > apologize to victums of your years of harrassment
> >
> > > Steve Robeson, LPN
> >
> > so much for your claim you do not sign yourself as LPN from time to
> > time
>
> So much for YOUR claim that you don't go off-topic on "legitimate"
> posts.
the post is is NOT legit here it is spam and you have posted it what 50
tiemes?

5828. Re: why does steve try to use veterans to imporve his befoulded name

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 05:07:29 UTC
From: U-Know-Who <no-one@nowhere.com>
Message-ID: <458a1692$0$5218$4c368faf@roadrunner.com>
Source record: 9129
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

<Mark@kb9rqz.aprs> wrote in message
news:q83ko2lcg4a9v081khibijhifsr3lqc8am@4ax.com...
> On Wed, 20 Dec 2006 22:22:21 -0600, "U-Know-Who" <no-one@nowhere.com>
> wrote:
>
>>
>>"an_old_friend" <konstans@hotmail.com> wrote in message
>>news:1166673422.274657.130230@t46g2000cwa.googlegroups.com...
>>>
>>> U-Know-Who wrote:
>>>> <Mark@kb9rqz.aprs> wrote in message
>>>> news:68tjo2dk78pckdc2p7aqjs61r6sqee91a1@4ax.com...
>>>> > On 20 Dec 2006 17:26:49 -0800, "K4YZ" <stevenrobeson@yahoo.com>
>>>> > wrote:
>>>> >
>>>> >>
>>>> > why does steve try to use veterans to imporve his befoulded name
>>>>
>>>>
>>>>
>>>> Befoulded? Is that some kind of Jewish thing?
>>>
>>> sad you are an antisemtic too Tom
>>>
>>
>>Sad that you are too fucking stupid to know otherwise
> nah Tom you are making an antisemtic remark
> http://kb9rqz.blogspot.com/

An Anti-Semitic remark would have a derogatory nature to it. Mine didn't,
Moron. I've met many Jews I like. You just love to be a victim, pussy.

5829. Parts with FREE shipping

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 14:57:44 UTC
From: Brian <kb9bvn@earthlink.net>
Message-ID: <lhxih.2059$X72.1109@newsread3.news.pas.earthlink.net>
Source record: 9130
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hey all,

I'm trying to clean out the parts cabinet. So free shipping on all orders until I say otherwise.

My parts are new, but old stock spurplus. They are not pulls, and they have never been used. Most are gathered at hamfests, and some are gathered from eBay, some from surplus auctions, some just show up.

See the website below for details.

http://www.hamradparts.com

73 de KB9BVN

5830. Re: why does steve try to use veterans to imporve his befoulded name

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 17:15:08 UTC
From: NoMoreSpam <Disgustedham@qrparci.org>
Message-ID: <2_udnWEWtf2DXBfYnZ2dnUVZ_ufinZ2d@comcast.com>
Source record: 9131
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

```
U-Know-Who wrote:
> "an_old_friend" <konstans@hotmail.com> wrote in message
> news:1166673422.274657.130230@t46g2000cwa.googlegroups.com...
>> U-Know-Who wrote:
>>> <Mark@kb9rqz.aprs> wrote in message
>>> news:68tjo2dk78pckdc2p7aqjs61r6sqee91a1@4ax.com...
>>>> On 20 Dec 2006 17:26:49 -0800, "K4YZ" <stevenrobeson@yahoo.com> wrote:
>>>>
>>>> why does steve try to use veterans to imporve his befoulded name
>>>
>>>
>>> Befoulded? Is that some kind of Jewish thing?
>> sad you are an antisemtic too Tom
>>
>
> Sad that you are too fucking stupid to know otherwise. I don't have anything
> against anyone's religion.

Except for those fucking ragheads, that is. Then that's not a religion, it's an
excuse for being a psychotic terrorist.
```

5831. Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 17:20:34 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1166721634.845525.113870@80g2000cwy.googlegroups.com>
Source record: 9132

All right, I'm hoping someone here can clue me into finding the one(s) I want. What I need is a handbook that has schematics for tube equipment circa the 1960's. I have a boxful of tubes from television sets from that era, and I was hoping I could put together a receiver from some of them. I do have the first volume of Impoverished Radio Experimenter, which talks about using "newer" tubes in older schematics, but the scant few Lindsay talks about aren't among the tubes in my box.

I've found a very good used book search engine, but unless I have a better idea of what to look for, It's going to be hit and miss. Any help would be greatly appreciated.

Ralph

5832. Re: SA605 or SA615 source

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 18:03:01 UTC
From: Pete KE9OA <p.gianako@comcast.net>
Message-ID: <-O2dnW0Zzt_SURfYnZ2dnUVZ_v63nZ2d@comcast.com>
Source record: 9133

http://www.futurecb.com/Boutique/SearchResult.aspx?PartNumber=sa605&SearchType=ByID&CategoryName=41212110000&MSCSProfile=3C79F0C7EA3162B289A6F3317CC124D899EC5BAEEBD2525753306056558EA34EF04F82E39DA7B6EA7DB754EF303E41C0C0F90F0362A3E6E5AC06FA315B5175238B81A5B2477534B38ED78394270D10184BBB394C7B5033CD7DD632CC0CCEDF23C3040335AE7F33C58BE98DAC9FE32C2B7FC43D637CAFF0D157EDBDD12D78B7071EC991C0010C0067

The above link should prove helpful. Future Electronics has a pretty good
selection of Philips components. The only catch is that you have to buy a
rail of 25 at a time. At the price of $2.65 cach, that isn't too bad. When I
buy SA602s, I usually buy 100 at a time. I've got around 100 of the 605s,
but who knows where they are. I put them in a safe place, along with the two
evaluation boards. Unfortunately, it was too safe of a place!
Give Future Electronics a call.....they will be able to help you. If
you can find some friends to split the cost with, that always helps.

Pete

"Rick" <ricknj10@hotmail.com> wrote in message
news:4588549b.625156@news.optonline.net...
> Item #190063731505 on eBay has them right now. $16.50 for 2 pieces
>

5833. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 18:07:55 UTC
From: "M.M." <nobody@nowhere.com>
Message-ID: <%3Aih.31712$B42.2983@newsfe12.phx>
Source record: 9134

julian814 wrote:
> All right, I'm hoping someone here can clue me into finding the one(s)
> I want. What I need is a handbook that has schematics for tube
> equipment circa the 1960's. ...

Just about any year's Handbook from the 60's would have what you're
looking for. They really didn't change that much from year to year.

5834. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 18:13:50 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <emeisu$s0p$1@theodyn.ncf.ca>
Source record: 9135

"julian814" (julian814@hotmail.com) writes:
> All right, I'm hoping someone here can clue me into finding the one(s)
> I want. What I need is a handbook that has schematics for tube
> equipment circa the 1960's. I have a boxful of tubes from television
> sets from that era, and I was hoping I could put together a receiver
> from some of them. I do have the first volume of Impoverished Radio
> Experimenter, which talks about using "newer" tubes in older
> schematics, but the scant few Lindsay talks about aren't among the
> tubes in my box.
>
> I've found a very good used book search engine, but unless I have a
> better idea of what to look for, It's going to be hit and miss. Any
> help would be greatly appreciated.
>
>
> Ralph
>
But if you're just looking for projects, any of the magazines would
have had plenty, and it's just a matter of picking them from the
right years so they not only use tubes, but of the right vintage
tubes.

And if you can't find old magazines, you can get QST on CDROM, so
a volume of that from the right time period would supply plenty of
projects. Of course, most of the projects in the Handbook came
from QST to begin with, so it's not like you miss much in the project
department.

Of course, a lot of TV sets were AC/DC, so the filament voltages are
all over the map since you'd put them in series to run directly off
the AC line. Unless they start with "6" or "12" the tubes
may not be so useful.

Michael VE2BVW

5835. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 19:03:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <12olmk8h20f5udc@corp.supernews.com>
Source record: 9136

Depending on the vintage of the tubes, you might trouble finding data on them.

In the '60s, TV manufacturers made a lot of extra money by changing the tube lineup every year. This required service shops to buy several sets of new tubes every year as replacements. Typically, the innards of the tubes were virtually identical to older ones, but with different pinouts, filament voltages, and combinations of tubes within the envelopes. If your tubes are from this era, you probably won't find them in the Handbook. You might have to get one of the later RCA tube manuals for tube information, then compare specs with various tube types used in Handbook projects to find projects you can build with the tubes you have.

Good luck!

Roy Lewallen, W7EL

5836. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 19:13:04 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <oa2dnb8k87NIQRfYnZ2dnUVZ8tSdnZ2d@pipex.net>
Source record: 9137

> Of course, a lot of TV sets were AC/DC, so the filament voltages are
> all over the map since you'd put them in series to run directly off
> the AC line. Unless they start with "6" or "12" the tubes
> may not be so useful.
==========
Being in series means they would all be used with the same filament
current which can be easily implemented with a circuit employing a 78xx
device in constant current mode (obviously in a DC environment)

Frank KN6WH / GM0CSZ

5837. Re: No Code Required Issue

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 21:33:41 UTC
From: JOHN D <jawnd393one@yahoo.com>
Message-ID: <V4Dih.6920$Pq4.5781@trndny08>
Source record: 9138

"Al" <no.spam@wanted.com> wrote in message
news:no.spam-D502CD.10530317122006@news.verizon.net...
> Ever since I was a kid, I wanted to be a ham. I could never learn the
> code. It seems I have a very difficult time memorizing. I didn't know my
> multipication table until 8th grade. But somehow I managed to get a
> master's degree in EE and worked as a consultant on a satellite at MIT.
> Yes, it's still working after 10 years.
>
> Now that all the bands will be available to me, I can finally become a
> ham.
>
> Oh, and to those who think the waves will be flooded with idiots. Don't
> worry. After all this never happened to the tech band as far as I know.
>
> Al

I know exactly how you feel. I was interested in ham radio since my early teens. I tried learning the code severel times over the years. There are always those who will say you didn't try hard enough, or you used the wrong method, or you didn't care, or you wern't dedicated enough. There is more to life than studying CW. I'm not a EE but I made a living as a electronic tech for 36 years. In retirement I finally learned enough code to barely pass the test. I went to the testing session prepared to pass the tech test. I got a general class licence from that session. 5 more correct answers and I would have been a extra. Three weeks later I passed the extra test. The elmer who introduced me to amateur radio 40 years ago is probable long dead. It would be nice to tell him I finally made it. I still don't know the multipication tables. The end of CW testing is long overdue. You will be an asset to amateur radio.
John

5838. Cal. kit for a 4195A & 41951A

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 21:36:09 UTC
From: Fred Bartoli <fred._canxxxel_this_bartoli@RemoveThatAlso_free.fr_AndThisToo>
Message-ID: <458afe3e$0$25911$426a34cc@news.free.fr>
Source record: 9139
Cross-posted to: sci.electronics.equipment,rec.radio.amateur.homebrew

Hi,

Probably a question for Tom, but others are welcomed to answer too :-)

I've finally got my hands on an HP4195A (0-500MHz and freshly caled) and also the 41951A impedance set + 16092A fixture. Unfortunately the 41951A has been badly tempered and the calibration kit (short and 50R load) is missing.
After some time spent I've fixed the 41951A, and seem to have a fully functional unit (checked through calibrating it *with* the 16092A fixture and a pair of selected 100R-0805 as the reference load).
At least the measurements I could do make sense, so far.

Now I'd just like to have all the possible accuracy from this and thus want to rebuild an APC7 cal kit I can trust.

The original parts aren't available anymore, just 2 50R load left at agilent at a (cough) $1350 price! and no more short.

I've found agilent has the 909C load which should be OK (given for SWR=1.005 @ 2GHz).
I've also found an Amphenol short which should be OK since, AIUI, the short is made by compressing a flat piece against the ref plane of the mating connector.

I also want to add to this an APC7-SMA adapter for some on board impedance measurement.

I believe all this would be perfectly OK but since I have not much hands on experience with VNAs I'd just want to make sure.

Oh, last point, for those knowing it: I don't know if the open load (04191-85302)is complete or not (it has an opened threading at the opposite of the mating end) and could I find any picture/doc of it.

Any comment much appreciated.

--
Thanks,
Fred.

5839. Coax Cable, Connectors & Adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-21 22:39:01 UTC
From: AAA Rf Products <sales@aaarfproducts.com>
Message-ID: <72Eih.1416$sp7.221@newsfe14.phx>
Source record: 9140
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Please see www.aaarfproducts.com or call (San Clemente, CA, USA)
949 481 3154 or email sales@aaarfproducts.com

Low Prices

Quality Products

No Minimum Order

No Handling Charges

5840. VHF-UHF noise bridge

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 01:24:49 UTC
From: marc <amarcpassy@gmail.com>
Message-ID: <1166750689.929253.313830@f1g2000cwa.googlegroups.com>
Source record: 9141

I'm looking for a circuit for a noise bridge that covers 30 - 500 MHZ
at a minimum, and preferably 5 MHZ - 500 MHZ.

Thnaks in advance

5841. Re: A Christmas Present Everyone Can Afford

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 01:26:47 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <72dmo2hluhihnugnb9q72nijp1atbb5vnj@4ax.com>
Source record: 9142
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

Please folks, do not reply to these off topic posts.

If these idiots never get any replies, they will eventually give up
and go away.

Thanks,

Bill, W6WRT

5842. Re: A Christmas Present Everyone Can Afford

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 02:11:58 UTC
From: Mark@kb9rqz.aprs
Message-ID: <emfmo2pt5thtvhlt0g05chucc5sosb9tg7@4ax.com>
Source record: 9143
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

On Thu, 21 Dec 2006 17:26:47 -0800, Bill Turner <noway@nowhow.com>
wrote:

>Please folks, do not reply to these off topic posts.
>
>If these idiots never get any replies, they will eventually give up
>and go away.
>
>Thanks,
>
>Bill, W6WRT
hmm I tried that with Steve for 4 fours he just started following me
around
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5843. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 02:19:19 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <Ld-dnfc8S_Mw3RbYnZ2dnUVZ_oytnZ2d@web-ster.com>
Source record: 9144

julian814 wrote:
> All right, I'm hoping someone here can clue me into finding the one(s)
> I want. What I need is a handbook that has schematics for tube
> equipment circa the 1960's. I have a boxful of tubes from television
> sets from that era, and I was hoping I could put together a receiver
> from some of them. I do have the first volume of Impoverished Radio
> Experimenter, which talks about using "newer" tubes in older
> schematics, but the scant few Lindsay talks about aren't among the
> tubes in my box.
>
> I've found a very good used book search engine, but unless I have a
> better idea of what to look for, It's going to be hit and miss. Any
> help would be greatly appreciated.
>
>
> Ralph
>
I was in Powell's Technical Books the other day, they had several from
the '50s and '60s.

This link will get you several listings (and I'll get a kickback if you
buy one!). I already grabbed the 1944 issue (thank you thank you thank
you for making me look!).

http://www.powells.com/partner/30696/s?kw=ARRL%20Handbook

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Posting from Google? See http://cfaj.freeshell.org/google/

"Applied Control Theory for Embedded Systems" came out in April.
See details at http://www.wescottdesign.com/actfes/actfes.html

5844. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 03:20:34 UTC
From: sailtamarack@yahoo.ca
Message-ID: <1166757634.034776.33060@f1g2000cwa.googlegroups.com>
Source record: 9145

Here is a site with lots of FREE books dealing with tube design. There are old ARRL and Orr radio handbooks as well.

http://www.pmillett.com/tecnical_books_online.htm

The files are huge so you better have a high-speed (not dial-up) internet connection.

Have fun - Roger

5845. Re: SA605 or SA615 source

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 03:31:12 UTC
From: sailtamarack@yahoo.ca
Message-ID: <1166758272.886507.194260@48g2000cwx.googlegroups.com>
Source record: 9146

Mike Andrews wrote:
> Anyone got a source for SA605 or SA615? I want to build the 1-chip
> receiver that Steve Hageman describes in EDN Access of 25 September
> 1997, but am having problems finding the chips. Maybe I'm looking
> past them.
>

DigiKey (www.digikey.com) has both parts for about $5 each. No minimum
and fast shipping

Roger

5846. WTD: Flat mica capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 03:38:44 UTC
From: KC0EH <cvest@cox.net>
Message-ID: <4nlih.25832$Rj.18210@newsfe19.lga>
Source record: 9147
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I am in need of some capacitors (600 vdc) for a homebrew 20's vintage project and am looking for period correct parts. If you have some to sell or know of a source , please let me know the price.

(2) .002
(2) .005
(1) .00025

Thanks ,

Charlie

5847. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 06:15:24 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <458B77FB.20409@invalid.invalid>
Source record: 8998

julian814 wrote:
> All right, I'm hoping someone here can clue me into finding the one(s)
> I want. What I need is a handbook that has schematics for tube
> equipment circa the 1960's. I have a boxful of tubes from television
> sets from that era, and I was hoping I could put together a receiver
> from some of them. I do have the first volume of Impoverished Radio
> Experimenter, which talks about using "newer" tubes in older
> schematics, but the scant few Lindsay talks about aren't among the
> tubes in my box.

Not sure whether this is what you're looking for but I found two sites
that seem to contain most of the tube data that was in the ARRL Handbook:

http://www.nj7p.org/Tube4.php
http://tdsl.duncanamps.com/tubesearch.php

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

5848. Re: A Christmas Present Everyone Can Afford

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 11:52:39 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1166788359.491358.56780@a3g2000cwd.googlegroups.com>
Source record: 8999
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

Bill Turner wrote:
> Please folks, do not reply to these off topic posts.
>
> If these idiots never get any replies, they will eventually give up
> and go away.
>
> Thanks,
>
> Bill, W6WRT

Bill, I respectfully disagree. Your strategy works with normal people.
Robesin isn't normal, and he'll only go away when his ISP is shut off.
He's the originator of the infamous "MARS >>>IS<<< Amareur Radio"
declaration and the excrement eating thread. At the moment, he's got
himself wrapped up in the flag, so he's untouchable even if off-topic.

5849. Re: A Christmas Present Everyone Can Afford

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 12:52:33 UTC
From: "Dr.Ace" <Ace@WH2T.com>
Message-ID: <53ca8$458bd4d7$4fc6777$11345@DIALUPUSA.NET>
Source record: 9000
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

"Bill Turner" <noway@nowhow.com> wrote in message
news:72dmo2hluhihnugnb9q72nijp1atbb5vnj@4ax.com...
> Please folks, do not reply to these off topic posts.
>
> If these idiots never get any replies, they will eventually give up
> and go away.
>
> Thanks,
>
> Bill, W6WRT

Non illigitamus carborundum
Merry Christmas
Ace - WH2T

5850. Two-Faced Brain (N0IMD) Strikes Again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 12:59:44 UTC
From: K4YZ <stevenrobeson@yahoo.com>
Message-ID: <1166792384.673664.20000@80g2000cwy.googlegroups.com>
Source record: 9001
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

hot-ham-and-cheese@hotmail.com wrote (N0IMD):
> Bill Turner wrote:
> > Please folks, do not reply to these off topic posts.
> >
> > If these idiots never get any replies, they will eventually give up
> > and go away.
> >
> > Thanks,
> >
> > Bill, W6WRT
>
> Bill, I respectfully disagree. Your strategy works with normal people.
> Robesin isn't normal, and he'll only go away when his ISP is shut off.
> He's the originator of the infamous "MARS >>>IS<<< Amareur Radio"
> declaration and the excrement eating thread. At the moment, he's got
> himself wrapped up in the flag, so he's untouchable even if off-topic.

Bill...Welcome to the "logic" of Brian P Burke, N0IMD, hiding
behind one of his "anonymous" screen names as "hot--ham-and-cheese"

Brian has participated, along with Leonard H Anderson (unlicensed)
and Mark Morgan (KB9RQZ) in an anti-Amateur Radio tirades and has
fallen flat on his face in one prognostication about Amateur Radio
after another. He doesn't like it that I've been right.

One of Brain's favorite tactics is to take comments out-of-context
and then try to represent them as the entire "gist" of the comments.

My "MARS >>>IS<<< AMATEUR RADIO" comment refered to the fact that
the MARS program was staffed almost entirely by Amateur Radio licensees
and was in the very spirit of what it means to be an Amateur Radio
licensee...He doesn't want to repeat THAT part since it wouldn't serve
his purposes. (to try and embarrass me)

He also claims that I am repsonsible for the "excrement eating"
thread. That's a blatant lie. His "friend", Mark Morgan, KB9RQZ, is
SOLELY RESPONSIBLE for the authorship of those subject lines and use of
profanity. You won't see my subject lines repeating it..

Brain, of course, has NEVER owned up to any one of his own
misrepresentatiuons of Amateur Radio. He has made ludicrous claims
that have failed to meet any statndard of proof or substance, including
any one of several claims of having been a DX station,
misrepresentations about MARS, RACES, ARES, and other poorly
conceptualized opinions that have fallen by the wayside as failing the

test of evidence.

Everyone's entitled to their opinions. Brain's opinions of me are obviously low as he, despite having allegedly been a veteran himself, are anti-veteran and anti-volunteer. I've rubbed his nose in one failed opinion after another.

So...There's my $0.02. Do with it as you will, but I'd take a BIG grain of salt with any traffic coming from "hot-ham-and-cheese", as you are welcome to do with mine.

73

Steve, K4YZ

5851. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 13:15:21 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1166793321.369417.55040@48g2000cwx.googlegroups.com>
Source record: 9002

Highland Ham wrote:
> Being in series means they would all be used with the same filament
> current which can be easily implemented with a circuit employing a 78xx
> device in constant current mode (obviously in a DC environment)
>
> Frank KN6WH / GM0CSZ

Andy adds:

That's true as long as the current requirements were the same. For instance, putting a 12V/1amp filament in series with a 12 V/200ma filament will not do well on 24 volts.... Just like putting a 100 watt
and a 7 watt light bulb in series across 220 volts....., (guess which one will be the brightest, and for how long :>)))) ??)

The currents were matched in the 5 tube AC/DC radios, but generally you have to check the filament current rating as well as the filament voltage rating in order to do this..... It ain't rocket surgery, but you can't put tube filaments in series indiscriminately.

Andy W4OAH

5852. Steve spends his vacation time to type lies, steve switch to captial one

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 13:17:49 UTC
From: Mark@kb9rqz.aprs
Message-ID: <ddmno2d4b1ad9t7mp7c7irhqd3csjag8um@4ax.com>
Source record: 9003
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

On 22 Dec 2006 04:59:44 -0800, "K4YZ" <stevenrobeson@yahoo.com> wrote:

>
>hot-ham-and-cheese@hotmail.com wrote (N0IMD):
>> Bill Turner wrote:
>> > Please folks, do not reply to these off topic posts.
>> >
>> > If these idiots never get any replies, they will eventually give up
>> > and go away.
>> >
>> > Thanks,
>> >
>> > Bill, W6WRT
>>
>> Bill, I respectfully disagree. Your strategy works with normal people.
>> Robesin isn't normal, and he'll only go away when his ISP is shut off.
>> He's the originator of the infamous "MARS >>>IS<<< Amareur Radio"
>> declaration and the excrement eating thread. At the moment, he's got
>> himself wrapped up in the flag, so he's untouchable even if off-topic.
>
> Bill...Welcome to the "logic" of Brian P Burke, N0IMD, hiding
>behind one of his "anonymous" screen names as "hot--ham-and-cheese"

hiding how does he hide
>
> Brian has participated, along with Leonard H Anderson (unlicensed)
>and Mark Morgan (KB9RQZ) in an anti-Amateur Radio tirades ..

no steve not ant ARS triades but anti you triades

>..and has
>fallen flat on his face in one prognostication about Amateur Radio
>after another. He doesn't like it that I've been right.

you aree right (and a legend) in your own demetented mind
>
> One of Brain's favorite tactics is to take comments out-of-context
>and then try to represent them as the entire "gist" of the comments.
>
> My "MARS >>>IS<<< AMATEUR RADIO".....
it was a lie when you first typed it reamins a lie everytime you
repeat it

>
> He also claims that I am repsonsible for the "excrement eating"

>thread.

becuase you are
> That's a blatant lie.
simple truth
> His "friend", Mark Morgan, KB9RQZ, is
>SOLELY RESPONSIBLE for the authorship of those subject lines and use of
>profanity.

no I am only respoblie for rubbing your nose in your own shit

> You won't see my subject lines repeating it..

becuase you are afraid to address it and only interested in lying
about
.
>
> Everyone's entitled to their opinions. Brain's opinions of me are
>obviously low as he, despite having allegedly been a veteran himself,
>are anti-veteran and anti-volunteer. I've rubbed his nose in one
>failed opinion after another.

steve being anti YOU is not anti veteran unless simply speaking ill of
veterans is being anti veteran in which case YOU are antivet

Steve spends his vacation time to type lies, steve switch to captial
one
steve what is in your wallet ? nothing or youd take your vacationtime
for real vacation
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5853. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 16:21:39 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1166804499.787274.5010@42g2000cwt.googlegroups.com>
Source record: 9004

Michael Black wrote:
> But if you're just looking for projects, any of the magazines would
> have had plenty, and it's just a matter of picking them from the
> right years so they not only use tubes, but of the right vintage
> tubes.

That's the real trick, isn't it? ;-)

>
> And if you can't find old magazines, you can get QST on CDROM, so
> a volume of that from the right time period would supply plenty of
> projects. Of course, most of the projects in the Handbook came
> from QST to begin with, so it's not like you miss much in the project
> department.

Cool, I'll have to look into it.

>
> Of course, a lot of TV sets were AC/DC, so the filament voltages are
> all over the map since you'd put them in series to run directly off
> the AC line. Unless they start with "6" or "12" the tubes
> may not be so useful.

You're right, the voltages range anywhere from 3 to 33 volts. Two of
them are 6V6 tubes, so I have some hope there. Most of them are
miniatures, and some of them have the numbers missing, which makes
things really interesting.

Ralph

5854. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 16:27:45 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1166804864.951127.150290@f1g2000cwa.googlegroups.com>
Source record: 9005

sailtamarack@yahoo.ca wrote:
> Here is a site with lots of FREE books dealing with tube design. There
> are old ARRL and Orr radio handbooks as well.
>
> http://www.pmillett.com/tecnical_books_online.htm
>
> The files are huge so you better have a high-speed (not dial-up)
> internet connection.

Thanks, but I have two problems - I'm stuck using dialup, and most of
these books seem over my head. Interesting, nonetheless.

Ralph

5855. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 16:29:45 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1166804985.383239.94280@i12g2000cwa.googlegroups.com>
Source record: 9006

Doug Smith W9WI wrote:
> julian814 wrote:
> > All right, I'm hoping someone here can clue me into finding the one(s)
> > I want. What I need is a handbook that has schematics for tube
> > equipment circa the 1960's. I have a boxful of tubes from television
> > sets from that era, and I was hoping I could put together a receiver
> > from some of them. I do have the first volume of Impoverished Radio
> > Experimenter, which talks about using "newer" tubes in older
> > schematics, but the scant few Lindsay talks about aren't among the
> > tubes in my box.
>
> Not sure whether this is what you're looking for but I found two sites
> that seem to contain most of the tube data that was in the ARRL Handbook:
>
> http://www.nj7p.org/Tube4.php
> http://tdsl.duncanamps.com/tubesearch.php

Well, these should definitely help me identify which tubes are the most
useful, especially the first link. It's a start. I could use some
schematics, though.

Ralph

5856. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 16:35:52 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <0QTih.7$4n6.69701@news.sisna.com>
Source record: 9008

6V6 was the quintessential beam power audio output tube of the 1940s through the 1960s. You can generally "read" the missing numbers if there is anything left of the imprint by gently rubbing the tube on your hair. THe oil from your hair will stick to what is left of the printing and make it readable for a short time. You might take a permanent marker if and when you finally read the number and mark the tube.

As has been alluded to in several posts, you are not limited to the exact tube that the original project had in it. For example, the 6U8 was the VHF/UHF RF oscillator/mixer of choice in thousands of designs. However, a 6J6 oscillator with a 6BE6 mixer will work every bit as good if you aren't fussy about VHF reception. There are dozens of tricks you can play with mix & match tube lineups, some better than others.

Jim

> You're right, the voltages range anywhere from 3 to 33 volts. Two of
> them are 6V6 tubes, so I have some hope there. Most of them are
> miniatures, and some of them have the numbers missing, which makes
> things really interesting.

5857. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 17:06:00 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <emh39opru1@theodyn.ncf.ca>
Source record: 9007

"julian814" (julian814@hotmail.com) writes:
> sailtamarack@yahoo.ca wrote:
>> Here is a site with lots of FREE books dealing with tube design. There
>> are old ARRL and Orr radio handbooks as well.
>>
>> http://www.pmillett.com/tecnical_books_online.htm
>>
>> The files are huge so you better have a high-speed (not dial-up)
>> internet connection.
>
> Thanks, but I have two problems - I'm stuck using dialup, and most of
> these books seem over my head. Interesting, nonetheless.
>
Unless you pay by the hour, it's doable with dialup. Do it late at
night so there's no disturbances, and hopefully less traffic. Be
selective, figuring out what you might find useful before downloading.

I have dialup, and I grabbed some of those books last year, using
this same method. It took time, but if you plan it right, it doesn't
get in the way. Just don't plan to be able to do much else at the
same time as the download.

Unfortunately, while I did record the times it took to download those
books I did download, I have no idea where I put that list.

Of those books, the 15th edition of THe Radio Handbook is likely
the best choice, since it's the most recent of the handbooks they
have there. Most of the books are more text books, and the 1941 ARRL
Handbook is likely going to use older tubes than you have, same with
the 1940 Radio Handbook.

Michael VE2BVW

5858. Re: Flat mica capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 17:51:09 UTC
From: William Noble <nobody@nowhere.con>
Message-ID: <458c0e4f$0$15536$88260bb3@free.teranews.com>
Source record: 9009
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

do you want the flat mica caps that are "bare" or the ones covered with dark
brown plastic with the little dots on them?

"KC0EH" <cvest@cox.net> wrote in message
news:4nIih.25832$Rj.18210@newsfe19.lga...
>I am in need of some capacitors (600 vdc) for a homebrew 20's vintage
>project and am looking for period correct parts. If you have some to sell
>or know of a source , please let me know the price.
>
> (2) .002
> (2) .005
> (1) .00025
>
> Thanks ,
>
> Charlie
>

--
Posted via a free Usenet account from http://www.teranews.com

5859. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 18:10:08 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <458C1F7F.4060505@invalid.invalid>
Source record: 9010

RST Engineering wrote:
> 6V6 was the quintessential beam power audio output tube of the 1940s through
> the 1960s. You can generally "read" the missing numbers if there is
> anything left of the imprint by gently rubbing the tube on your hair. THe
> oil from your hair will stick to what is left of the printing and make it
> readable for a short time. You might take a permanent marker if and when
> you finally read the number and mark the tube.

Another thing that has worked for me is to put the tube in the freezer
for a few hours. Frost forms in a different pattern around where the
number was than on the rest of the envelope. Sometimes.

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

5860. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 19:00:54 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1166814054.863464.113760@48g2000cwx.googlegroups.com>
Source record: 9011

Michael Black wrote:
> "julian814" (julian814@hotmail.com) writes:
> > sailtamarack@yahoo.ca wrote:
> >> Here is a site with lots of FREE books dealing with tube design. There
> >> are old ARRL and Orr radio handbooks as well.
> >>
> >> http://www.pmillett.com/tecnical_books_online.htm
> >>
> >> The files are huge so you better have a high-speed (not dial-up)
> >> internet connection.
> >
> > Thanks, but I have two problems - I'm stuck using dialup, and most of
> > these books seem over my head. Interesting, nonetheless.
> >
> Unless you pay by the hour, it's doable with dialup. Do it late at
> night so there's no disturbances, and hopefully less traffic. Be
> selective, figuring out what you might find useful before downloading.
>
> I have dialup, and I grabbed some of those books last year, using
> this same method. It took time, but if you plan it right, it doesn't
> get in the way. Just don't plan to be able to do much else at the
> same time as the download.
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> Unfortunately, while I did record the times it took to download those
> books I did download, I have no idea where I put that list.
>
> Of those books, the 15th edition of THe Radio Handbook is likely
> the best choice, since it's the most recent of the handbooks they
> have there. Most of the books are more text books, and the 1941 ARRL
> Handbook is likely going to use older tubes than you have, same with
> the 1940 Radio Handbook.

Thanks, I'll give it a go. I work from 4 pm to midnight weekdays, so I
think I'll try this again tonight after work.

Ralph

5861. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 19:05:34 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1166814334.369586.93560@a3g2000cwd.googlegroups.com>
Source record: 9012

RST Engineering wrote:
> 6V6 was the quintessential beam power audio output tube of the 1940s through
> the 1960s. You can generally "read" the missing numbers if there is
> anything left of the imprint by gently rubbing the tube on your hair. THe
> oil from your hair will stick to what is left of the printing and make it
> readable for a short time. You might take a permanent marker if and when
> you finally read the number and mark the tube.

Thanks, I'll give it a try.

> As has been alluded to in several posts, you are not limited to the exact
> tube that the original project had in it. For example, the 6U8 was the
> VHF/UHF RF oscillator/mixer of choice in thousands of designs. However, a
> 6J6 oscillator with a 6BE6 mixer will work every bit as good if you aren't
> fussy about VHF reception. There are dozens of tricks you can play with mix
> & match tube lineups, some better than others.

TJ Linday says as much in the Impoverished Radio Experimenter. Thing
is, he was scant on details. I wrote them about my project, and I'm
hoping they'll have some ideas.

Ralph

5862. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 19:30:38 UTC
From: mcalhoun@ksu.edu
Message-ID: <emhbou$ie2@unix1.cc.ksu.edu>
Source record: 9013

>Another thing that has worked for me is to put the tube in the freezer
>for a few hours. Frost forms in a different pattern around where the
>number was than on the rest of the envelope. Sometimes.

And after you take it out of the cooler, "huff" on it once or twice
(just as people "huff" on their eyeglasses before wiping them with
a cloth) and the moisture from your breath may outline the tube
identification.

--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
NRA Life Member and Rifle, Pistol, & Home Firearm Safety Certified Instructor
Certified Instructor for the Kansas Concealed-Carry Handgun license

5863. K4YZ TARD

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 21:18:26 UTC
From: Steveo <moparholic@hotmail.com>
Message-ID: <20061222162443.943$CS_-_@newsreader.com>
Source record: 9014
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

"K4YZ" <stevenrobeson@yahoo.com> wrote:
>>
Steve, K4YZ//SLAP

Why don't you and your homo ham buddy owner get a fucking room already,
Steve? Or at least keep your lame breeding ritual out of rrcb.

Thanks.

5864. Re: K4YZ TARD

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 21:53:34 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1166824414.400402.57350@48g2000cwx.googlegroups.com>
Source record: 9015
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

Steveo wrote:
> "K4YZ" <stevenrobeson@yahoo.com> wrote:
> >>
> Steve, K4YZ//SLAP
>
> Why don't you and your homo ham buddy owner get a fucking room already,
> Steve? Or at least keep your lame breeding ritual out of rrcb.

The prob;lem is K4YZ's sexaul obession with ME man he is obessed with
being the sex police
>
> Thanks.

5865. Re: A Christmas Present Everyone Can Afford

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-22 23:23:27 UTC
From: HH <harryharms@hotmail.com>
Message-ID: <PNZih.11922$HU.7200@news-server.bigpond.net.au>
Source record: 9016
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

You can add "decendo" to the phrase!

"Non illegitimus carborundum decendo"!

Merry Christmas
VK2KCE

"Dr.Ace" <Ace@WH2T.com> wrote in message
news:53ca8$458bd4d7$4fc6777$11345@DIALUPUSA.NET...
:
: "Bill Turner" <noway@nowhow.com> wrote in message
: news:72dmo2hluhihnugnb9q72nijp1atbb5vnj@4ax.com...
: > Please folks, do not reply to these off topic posts.
: >
: > If these idiots never get any replies, they will eventually give up
: > and go away.
: >
: > Thanks,
: >
: > Bill, W6WRT
:
: Non illigitamus carborundum
: Merry Christmas
: Ace - WH2T
:
:
:

5866. Re: Flat mica capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-23 03:42:07 UTC
From: sdeyoreo@hotmail.com
Message-ID: <ua9po21to8lfdai48tib1slvad9u0amfe2@4ax.com>
Source record: 9017
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

On Fri, 22 Dec 2006 09:51:09 -0800, "William Noble"
<nobody@nowhere.con> wrote:

>do you want the flat mica caps that are "bare" or the ones covered with dark
>brown plastic with the little dots on them?
Be still my heart, I haven't seen those since I was a kid! I even knew
how to read em.
>
>"KC0EH" <cvest@cox.net> wrote in message
>news:4nIih.25832$Rj.18210@newsfe19.lga...
>>I am in need of some capacitors (600 vdc) for a homebrew 20's vintage
>>project and am looking for period correct parts. If you have some to sell
>>or know of a source , please let me know the price.
>>
>> (2) .002
>> (2) .005
>> (1) .00025
>>
>> Thanks ,
>>
>> Charlie
>>

5867. Re: Tri-Faced Robesin Strikes Out Again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-23 03:51:43 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1166845903.893439.54470@80g2000cwy.googlegroups.com>
Source record: 9018
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

K4YZ wrote:
> hot-ham-and-cheese@hotmail.com wrote (N0IMD):
> > Bill Turner wrote:
> > > Please folks, do not reply to these off topic posts.
> > >
> > > If these idiots never get any replies, they will eventually give up
> > > and go away.
> > >
> > > Thanks,
> > >
> > > Bill, W6WRT
> >
> > Bill, I respectfully disagree. Your strategy works with normal people.
> > Robesin isn't normal, and he'll only go away when his ISP is shut off.
> > He's the originator of the infamous "MARS >>>IS<<< Amareur Radio"
> > declaration and the excrement eating thread. At the moment, he's got
> > himself wrapped up in the flag, so he's untouchable even if off-topic.
>
> Bill...Welcome to the "logic" of Brian P Burke, N0IMD, hiding
> behind one of his "anonymous" screen names as "hot--ham-and-cheese"

Bill, this is the first Robesin reply in years where he did not forge
the attributes to read "snot-scam-and sleaze..." Robesin is trying to
win you over by playing nice this time. Unfortunately, the rest of us
know his game.

> Brian has participated, along with Leonard H Anderson (unlicensed)
> and Mark Morgan (KB9RQZ) in an anti-Amateur Radio tirades and has
> fallen flat on his face in one prognostication about Amateur Radio
> after another. He doesn't like it that I've been right.

Robesin is right? When???

Robesin attacks when I reposted an article taken directly from the ARRL
web site quoting an ARRL Vice President >in its entirety< stating that
amateurs have an overblown sense of self-importance.

> One of Brain's favorite tactics is to take comments out-of-context
> and then try to represent them as the entire "gist" of the comments.

One of Robesin's favorite tactics is to make homosexual inuendo or
claims of pedophilia when he encounters someone who disagrees with him.

> My "MARS >>>IS<<< AMATEUR RADIO" comment refered to the fact that
> the MARS program was staffed almost entirely by Amateur Radio licensees

> and was in the very spirit of what it means to be an Amateur Radio
> licensee...

I pointed out that MARS absolutely has non-amateur leadership, non-amateur participants, and an entirely non-amateur mission. Hell, Robesin claims to have been chopped to an NMC MARS slot on Okinawa - as an active duty, non-amateur participant. Yet he continues with his "Sorry Hans, MARS >>>IS<<< Amateur Radio" nonsense. Didn't even know what the MOD was. He tried pulling this stunt before he realized that I had MARS experience.

> He doesn't want to repeat THAT part since it wouldn't serve
> his purposes. (to try and embarrass me)

Except that I was an actual MARS affiliate and knew what I was talking about. You didn't. Still don't.

> He also claims that I am repsonsible for the "excrement eating"
> thread. That's a blatant lie. His "friend", Mark Morgan, KB9RQZ, is
> SOLELY RESPONSIBLE for the authorship of those subject lines and use of
> profanity. You won't see my subject lines repeating it..

Sorry Robesin, but you are the one who posted the "excrement eating" filth, and keep reposting your quote. Unbelievable, but Google provides.

> Brain, of course, has NEVER owned up to any one of his own
> misrepresentatiuons of Amateur Radio.

I have opinions but Robesin doesn't allow dissenting opinions. Opinions that differ from his are "LIES."

> He has made ludicrous claims
> that have failed to meet any statndard of proof or substance, including
> any one of several claims of having been a DX station,

David Heil/K8MN has me confirmed at least twice. Robesin knows this, therefore Robesin lies.

> misrepresentations about MARS, RACES, ARES, and other poorly
> conceptualized opinions that have fallen by the wayside as failing the
> test of evidence.

After it was obvious from one regular on RRAP that his ARES group was unable to fully support an upcoming American Red Cross exercise, Robesin was asked to write a duty schedule for the exercise. The stated requirements were three 3 operators on duty per shift. He shorted the 1st eight hours of the exercise by all three personnel. He claims it was covered, but the supported agency was not supported at all. The subsequent shifts were shorted from one to two operators per shift. Robesin claims that ARES can support all agency needs even when they lack enough volunteers. Amateur Operators can perform Super-Human feats, OR the ARC is just an 8AM - 5PM agency.

> Everyone's entitled to their opinions.

Not true. Hot-ham is not entitled to an opinion, if Robesin has
anything to say about it.

> Brain's opinions of me are
> obviously low as he, despite having allegedly been a veteran himself,
> are anti-veteran and anti-volunteer.

My opinions of Robesin are spot on.

In addition to slinging accusations of homosexual and pedophilia at
those who disagree with him, I am now a veteran-hater and a
volunteer-hater. Nevermind that I am a veteran and a volunteer.

Robesin has claimed that he can have me picked up on his say so as an
LPN with a simple phone call from Tennessee. To another poster on
RRAP, he claimed that "People who shoot off their mouths can have their
tires slashed, rocks thrown through windows, and wives terrorized," but
later clarified that all those bad things would be at someone else's
hands.

A well known Amateur Radio store advertising in QST, whose ham daughter
was featured in the ad photo, was said to be "selling something" but
not amateur equipment.

Robesin, whose father was a Sailor Army Recruiter (I swear thats not a
typo), lays claim to seven hostile actions in the USMC, but who's only
overseas assignment was Okinawa.

There's more, much more, but if I went on and on and on you'd probably
think I was making it up. I'm not. Google provides.

> I've rubbed his nose in one
> failed opinion after another.

Yet it is your excrement on another man's genitals, according to your
own original claims and subsequent quotes. Google provides, and you've
requoted yourself numerous times.

> So...There's my $0.02. Do with it as you will, but I'd take a BIG
> grain of salt with any traffic coming from "hot-ham-and-cheese", as you
> are welcome to do with mine.
>
> 73
>
> Steve, K4YZ

Your $0.02 isn't worth two cents. Google provides.

5868. Re: Tri-Faced Robesin Strikes Out Again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-23 04:39:56 UTC
From: Roger <anon@anon>
Message-ID: <if1g5.fhf.19.1@news.alt.net>
Source record: 9019
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

<hot-ham-and-cheese@hotmail.com> wrote in message
news:1166845903.893439.54470@80g2000cwy.googlegroups.com...
>
> K4YZ wrote:
> > hot-ham-and-cheese@hotmail.com wrote (N0IMD):
> > > Bill Turner wrote:
> > > > Please folks, do not reply to these off topic posts.
> > > >
> > > > If these idiots never get any replies, they will eventually give up
> > > > and go away.
> > > >
> > > > Thanks,
> > > >
> > > > Bill, W6WRT
> > >
> > > Bill, I respectfully disagree. Your strategy works with normal
people.
> > > Robesin isn't normal, and he'll only go away when his ISP is shut
off.
> > > He's the originator of the infamous "MARS >>>IS<<< Amareur Radio"
> > > declaration and the excrement eating thread. At the moment, he's got
> > > himself wrapped up in the flag, so he's untouchable even if off-topic.
> >

Of course let us not leave Mark out of the insanity. Mark will continue to
crap upon as many posts as he can, whether he is asked to join or not.

Mark is far from "normal", too. Billy Smith already knows that....

5869. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-23 05:30:48 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <458CBF06.6010500@invalid.invalid>
Source record: 9020

julian814 wrote:
> All right, I'm hoping someone here can clue me into finding the one(s)
> I want. What I need is a handbook that has schematics for tube
> equipment circa the 1960's. I have a boxful of tubes from television
> sets from that era, and I was hoping I could put together a receiver
> from some of them. I do have the first volume of Impoverished Radio
> Experimenter, which talks about using "newer" tubes in older
> schematics, but the scant few Lindsay talks about aren't among the
> tubes in my box.

How complex of a receiver are you looking to build?

There are a PILE of simple tube circuits on
http://www.intio.or.jp/jf10zl/index.html .

Most of them use Japanese tubes (the site is in Japan, after all<g>) but
I would suggest in many cases you can figure out what U.S. tubes are
similar.

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

5870. Re: Flat mica capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-23 07:00:16 UTC
From: Tom Adkins <nospam@centurytel.net>
Message-ID: <x9udnc5rRv5rTxHYnZ2dnUVZ_tunnZ2d@centurytel.net>
Source record: 9021
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

William Noble wrote:
> do you want the flat mica caps that are "bare" or the ones covered with dark
> brown plastic with the little dots on them?
>
> "KC0EH" <cvest@cox.net> wrote in message
> news:4nIih.25832$Rj.18210@newsfe19.lga...
>> I am in need of some capacitors (600 vdc) for a homebrew 20's vintage
>> project and am looking for period correct parts. If you have some to sell
>> or know of a source , please let me know the price.
>>
>> (2) .002
>> (2) .005
>> (1) .00025
>>
>> Thanks ,
>>
>> Charlie
>>
>
>
>
William,
He's probably looking for the "bare" ones from that era. They look like a flat block of phenolic with contacts riveted to each end.

Playthings of Past has boxes of them, used. (I drooled over many of the chassis that they came from). There may even be some NOS ones available. Many of those caps were punch stamped with the value on the metal ends, sadly many were stamped in ink on the phenolic that faded completely over the years. You might try contacting Gary Schneider (PTOP) to get the sizes you need. Check the website first to see if they are listed. www.oldradioparts.com.

This is not to be confused with Mark Oppats site, www.oldradioparts.net. Both are very valuable resources for vintage radio parts. Gary has always leaned toward battery set parts, power transformers, and other hard to find OEM items. Mark is, of course, The King of Kontrols,... and capacitors, ...and dials, and... Bookmark both links and you'll have many of your radio parts needs right there at hand.

Best of luck on your project.

5871. More Brainless Rantings from N0IMD

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-23 12:51:09 UTC
From: K4YZ <stevenrobeson@yahoo.com>
Message-ID: <1166878269.179058.143750@42g2000cwt.googlegroups.com>
Source record: 9022
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

```
snot-scam-and-sleaze@hotmail.com wrote:
> K4YZ wrote:
> > hot-ham-and-cheese@hotmail.com wrote (N0IMD):
> > > Bill Turner wrote:
> > > > Please folks, do not reply to these off topic posts.
> > > >
> > > > If these idiots never get any replies, they will eventually give up
> > > > and go away.
> > > >
> > > > Thanks,
> > > >
> > > > Bill, W6WRT
> > >
> > > Bill, I respectfully disagree. Your strategy works with normal people.
> > > Robesin isn't normal, and he'll only go away when his ISP is shut off.
> > > He's the originator of the infamous "MARS >>>IS<<< Amareur Radio"
> > > declaration and the excrement eating thread. At the moment, he's got
> > > himself wrapped up in the flag, so he's untouchable even if off-topic.
> >
> > Bill...Welcome to the "logic" of Brian P Burke, N0IMD, hiding
> > behind one of his "anonymous" screen names as "hot--ham-and-cheese"
>
> Bill, this is the first Robesin reply in years where he did not forge
> the attributes to read "snot-scam-and sleaze..."

Not true, Brain...Not true. However you go right on ahead with
your tale of woe.

> Robesin is trying to
> win you over by playing nice this time. Unfortunately, the rest of us
> know his game.

Robeson DOES "play nice"...Unless you blatantly lie to me or get
caught lying about something that you should know better than to lie
about.

For example: Brian P Burke promising to keep certain information
"private" via e-mail, but then running right on back to the NG and
divulging that which he promised to not divulge.

Hence the complete lack of respect for Brian P Burke.
>
> > Brian has participated, along with Leonard H Anderson (unlicensed)
> > and Mark Morgan (KB9RQZ) in an anti-Amateur Radio tirades and has
> > fallen flat on his face in one prognostication about Amateur Radio
```

> > after another. He doesn't like it that I've been right.
>
> Robesin is right? When???

Let's start off with YOUR assertions that ARES.RACES, etc couldn't
/ wouldn't respond to any major disaster in any meaningful numbrs or
for a sustained period.

I said you were wrong.

You said several nasty things about "uniforms", "patriotic
bunting", "ARRL sockpuppet", etc [words, by the way, straight out of
the Leonard H Anderson playbook].

Then came a series of hurricaines and tornaos to the south and
southwest. All of them supported at length by ARES and RACES (among
others, of course)

Then came September 11th...Then came Hurricane Katrina...Then came
Hurricaine Rita...Again, all agencies YOU claimed couldn't / wouldn't
respond did exactly that.

We can then dig up your "unlicensed devices" rants, among others.

> Robesin attacks when I reposted an article taken directly from the ARRL
> web site quoting an ARRL Vice President >in its entirety< stating that
> amateurs have an overblown sense of self-importance.

And it wasn't true then, it's not true now.

The ARRL vice president's sentiments are NOT shared by the
Department of Homeleand Security, the Department of Defense, Salvation
Army, The American Red Cross, the Department of State and other
agencies.

> > One of Brain's favorite tactics is to take comments out-of-context
> > and then try to represent them as the entire "gist" of the comments.
>
> One of Robesin's favorite tactics is to make homosexual inuendo or
> claims of pedophilia when he encounters someone who disagrees with him.

Only true when there is such evidence of that sort of behaviour,
Brain.

So far it's hit the mark (pradon the pun) with Mark and Toiddie.
The jury's out on you, but you cleaned up your act.

> > My "MARS >>>IS<<< AMATEUR RADIO" comment refered to the fact that
> > the MARS program was staffed almost entirely by Amateur Radio licensees
> > and was in the very spirit of what it means to be an Amateur Radio
> > licensee...
>
> I pointed out that MARS absolutely has non-amateur leadership,
> non-amateur participants, and an entirely non-amateur mission.

Uhn huh.

And over 95% of Amateur Radio >>>IS<<< staffed by licensed Amateur
Radio operators.

> Hell,
> Robesin claims to have been chopped to an NMC MARS slot on Okinawa - as
> an active duty, non-amateur participant. Yet he continues with his
> "Sorry Hans, MARS >>>IS<<< Amateur Radio" nonsense. Didn't even know
> what the MOD was. He tried pulling this stunt before he realized that
> I had MARS experience.

Yes, Brain, I know what the MOD is. You've allowed yourself to be
hypontized by Lennie's incessant repeating of that claim.

It was wrong then. It's wrong now.

> > He doesn't want to repeat THAT part since it wouldn't serve
> > his purposes. (to try and embarrass me)
>
> Except that I was an actual MARS affiliate and knew what I was talking
> about. You didn't. Still don't.

Brian P Burke uttering yet again more mistruthful statements in a
public forum.

> > He also claims that I am repsonsible for the "excrement eating"
> > thread. That's a blatant lie. His "friend", Mark Morgan, KB9RQZ, is
> > SOLELY RESPONSIBLE for the authorship of those subject lines and use of
> > profanity. You won't see my subject lines repeating it..
>
> Sorry Robesin, but you are the one who posted the "excrement eating"
> filth, and keep reposting your quote. Unbelievable, but Google
> provides.

Sorry, brain, but one again YOU are lying.

The "excrement eating" posts belong to your "buddy", KB9RQZ. And
the recent onslaught of re-tasked subject lines with exactly those
words are HIS doings...Not mine.

Stop lying, Mr Burke.

> > Brain, of course, has NEVER owned up to any one of his own
> > misrepresentatiuons of Amateur Radio.
>
> I have opinions but Robesin doesn't allow dissenting opinions.
> Opinions that differ from his are "LIES."

Again with the deceit.

> > He has made ludicrous claims
> > that have failed to meet any statndard of proof or substance, including
> > any one of several claims of having been a DX station,
>

> David Heil/K8MN has me confirmed at least twice. Robesin knows this,
> therefore Robesin lies.

No I don't know this.

I don't have Dave's logs.

However we are STILL awating some evidence of the validity of your
claims of having operated legally from Somalia.

> > misrepresentations about MARS, RACES, ARES, and other poorly
> > conceptualized opinions that have fallen by the wayside as failing the
> > test of evidence.
>
> After it was obvious from one regular on RRAP that his ARES group was
> unable to fully support an upcoming American Red Cross exercise,
> Robesin was asked to write a duty schedule for the exercise. The
> stated requirements were three 3 operators on duty per shift. He
> shorted the 1st eight hours of the exercise by all three personnel. He
> claims it was covered, but the supported agency was not supported at
> all. The subsequent shifts were shorted from one to two operators per
> shift. Robesin claims that ARES can support all agency needs even when
> they lack enough volunteers. Amateur Operators can perform Super-Human
> feats, OR the ARC is just an 8AM - 5PM agency.

Sigh.

I guess we can only watch Brain continue to make a fool out of
himself.

> > Everyone's entitled to their opinions.
>
> Not true. Hot-ham is not entitled to an opinion, if Robesin has
> anything to say about it.

Sure. Have an opinion.

But when you express it as "fact" and the "facts" don't bear up
under the scrutiny of 3rd party reports to the contrary, don't get
upset when you get "called" for your errors, Brain.

> > Brain's opinions of me are
> > obviously low as he, despite having allegedly been a veteran himself,
> > are anti-veteran and anti-volunteer.
>
> My opinions of Robesin are spot on.

Uhhhhhh...YOUR spots are usually little yellow rings on the carpet,
Brain.

> In addition to slinging accusations of homosexual and pedophilia at
> those who disagree with him, I am now a veteran-hater and a
> volunteer-hater. Nevermind that I am a veteran and a volunteer.

You hated them before, Brain...I am sure I am only the focus of
your disdain in THIS forum.

You've not had a single constructive, complimentary thing to say
about ANY volunteer group save your Scouting troop.

> Robesin has claimed that he can have me picked up on his say so as an
> LPN with a simple phone call from Tennessee. To another poster on
> RRAP, he claimed that "People who shoot off their mouths can have their
> tires slashed, rocks thrown through windows, and wives terrorized," but
> later clarified that all those bad things would be at someone else's
> hands.

Bigger sigh.

More of Brian P Burke's misquoting. I cited a news item some
years ago where exactly that thing occcured.

Now for having mentioned it, Brain insists that I have made thinly
veiled threats of a same nature.

An act of cowardice.

> A well known Amateur Radio store advertising in QST, whose ham daughter
> was featured in the ad photo, was said to be "selling something" but
> not amateur equipment.

More deceit.

Brain...WHY do you lie so readily?

> Robesin, whose father was a Sailor Army Recruiter (I swear thats not a
> typo), lays claim to seven hostile actions in the USMC, but who's only
> overseas assignment was Okinawa.

"Sailor Army Recruiter"...?!?!?

No Brain...let's get the FACTS right. My father served on Active
Duty in the Untied States Navy during the Korean Conflict.

He was later an Active Duty recuriter for the US Army Reserve.
Yes, Brain, SOME people DO serve in more than one branch of the Armed
Forces than one...

And no, Brain, Okinawa was NOT my "only overseas assignment".

> There's more, much more, but if I went on and on and on you'd probably
> think I was making it up. I'm not. Google provides.

Much of what you say is not "made up"...Just quoted out of context
or misattributed.

But mostly quoted out of context.

> > I've rubbed his nose in one
> > failed opinion after another.
>

> Yet it is your excrement on another man's genitals, according to your
> own original claims and subsequent quotes. Google provides, and you've
> requoted yourself numerous times.

I guess your English comprehension skills are as incompetent as
Morkie's.

That's not what I said. But you go right on ahead pretending it
is as long s you think no one else can see it....

> > So...There's my $0.02. Do with it as you will, but I'd take a BIG
> > grain of salt with any traffic coming from "hot-ham-and-cheese", as you
> > are welcome to do with mine.
>
> Your $0.02 isn't worth two cents. Google provides.

Google provides evidence that any "opinions" uttered by you under
any one of your "anonymous" names needs to be taken with a grin of salt
the size of the Rock of Gibralter.

As usual.....

Steve, K4YZ

5872. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-23 13:38:46 UTC
From: jimspeer@jimspeer.org
Message-ID: <1166881126.250231.324840@80g2000cwy.googlegroups.com>
Source record: 9023

You can download free a long list of archaic technical books, including
a number of ARRL Handbooks, at the following URL:

http://www.pmillett.com/tecnical_books_online.htm

julian814 wrote:
> All right, I'm hoping someone here can clue me into finding the one(s)
> I want. What I need is a handbook that has schematics for tube
> equipment circa the 1960's. I have a boxful of tubes from television
> sets from that era, and I was hoping I could put together a receiver
> from some of them. I do have the first volume of Impoverished Radio
> Experimenter, which talks about using "newer" tubes in older
> schematics, but the scant few Lindsay talks about aren't among the
> tubes in my box.
>
> I've found a very good used book search engine, but unless I have a
> better idea of what to look for, It's going to be hit and miss. Any
> help would be greatly appreciated.
>
>
> Ralph

5873. Re: More Guy Nurse Rantings

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-23 15:08:24 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1166886504.288228.177350@f1g2000cwa.googlegroups.com>
Source record: 9024
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

K4YZ wrote:
> hot-ham-and-cheese@hotmail.com wrote:
> > K4YZ wrote:
> > > hot-ham-and-cheese@hotmail.com wrote:
> > > > Bill Turner wrote:
> > > > > Please folks, do not reply to these off topic posts.
> > > > >
> > > > > If these idiots never get any replies, they will eventually give up
> > > > > and go away.
> > > > >
> > > > > Thanks,
> > > > >
> > > > > Bill, W6WRT
> > > >
> > > > Bill, I respectfully disagree. Your strategy works with normal people.
> > > >
> > > > Robesin isn't normal, and he'll only go away when his ISP is shut off.
> > > > He's the originator of the infamous "MARS >>>IS<<< Amareur Radio"
> > > > declaration and the excrement eating thread. At the moment, he's got
> > > > himself wrapped up in the flag, so he's untouchable even if off-topic.
> > >
> > > Bill...Welcome to the "logic" of Brian, hiding
> > > behind one of his "anonymous" screen names as "hot--ham-and-cheese"
> >
> > Bill, this is the first Robesin reply in years where he did not forge
> > the attributes to read "snot-scam-and sleaze..."
>
> Not true, Brain...Not true. However you go right on ahead with
> your tale of woe.

Does Robesin always start off with a lie? Apparently so.

In any event, I changed his forgings back to the original content.

> > Robesin is trying to
> > win you over by playing nice this time. Unfortunately, the rest of us
> > know his game.
>
> Robeson DOES "play nice"...

Do I have to start another tally of your lies such as I had to do a few
years back? What was it? An average of 10 new lies a day for a week
before I gave up?

> Unless you blatantly lie to me or get
> caught lying about something that you should know better than to lie
> about.

No lies, Robesin. You just don't like my opinions.

> For example: Brian P Burke promising to keep certain information
> "private" via e-mail, but then running right on back to the NG and
> divulging that which he promised to not divulge.

There was no promise, and what you claim was a hostile action was
nonsense.

> Hence the complete lack of respect for Brian.

Robesin has six other hostile actions. He says.

> > > Brian has participated, along with Leonard H Anderson (unlicensed)
> > > and Mark Morgan (KB9RQZ) in an anti-Amateur Radio tirades and has
> > > fallen flat on his face in one prognostication about Amateur Radio
> > > after another. He doesn't like it that I've been right.
> >
> > Robesin is right? When???
>
> Let's start off with YOUR assertions that ARES.RACES, etc couldn't
> / wouldn't respond to any major disaster in any meaningful numbrs or
> for a sustained period.
>
> I said you were wrong.

But that's not what I said. It's what you said I said.

> You said several nasty things about "uniforms", "patriotic
> bunting", "ARRL sockpuppet", etc [words, by the way, straight out of
> the Leonard H Anderson playbook].

I don't use the phrase "sock puppet" or "ARRL sock puppet." I don't
think I've ever used the phrase "patriotic bunting," either. I do use
the word "uniforms" as in Robesin will do anything to get into a
uniform since his USMC career was cut short by some unmentionable
mystery.

Perhaps why Robesin claims that my statements are straight out of the
Anderson playbook is because Robesin is unable to distinguish a Hot-Ham
posting from an Anderson posting. His stupidity is not my problem, but
he tries to make it so.

> Then came a series of hurricaines and tornaos to the south and
> southwest. All of them supported at length by ARES and RACES (among
> others, of course)

Do all amateurs have super-human abilities in Robesin-world?

ARES is a volunteer organization. It suffers from shortages of
manpower and equipment just as do non-volunteer response organizations

during an emergency.

> Then came September 11th...Then came Hurricane Katrina...Then came
> Hurricaine Rita...Again, all agencies YOU claimed couldn't / wouldn't
> respond did exactly that.

Only Amateur Radio responded with exactly enough of everything?

Lots of agencies responded. Lots of News Reports about too little, too late. Lots of Government Officials claiming too little, too late. Lots of Citizen Victims claiming too little, too late. I don't know how Robesin missed it, unless he was busy with that 1,000 yard stare.

> We can then dig up your "unlicensed devices" rants, among others.

No rant. Unlicensed devices and cell phones handle most day to day emergencies.

> > Robesin attacks when I reposted an article taken directly from the ARRL
> > web site quoting an ARRL Vice President >in its entirety< stating that
> > amateurs have an overblown sense of self-importance.
>
> And it wasn't true then, it's not true now.

Then inform our ARRL Officials that you don't like their opinions (lies) instead of calling me a liar.

> The ARRL vice president's sentiments are NOT shared by the
> Department of Homeleand Security, the Department of Defense, Salvation
> Army, The American Red Cross, the Department of State and other
> agencies.

So why attack Hot-Ham?

> > > One of Brain's favorite tactics is to take comments out-of-context
> > > and then try to represent them as the entire "gist" of the comments.
> >
> > One of Robesin's favorite tactics is to make homosexual inuendo or
> > claims of pedophilia when he encounters someone who disagrees with him.
>
> Only true when there is such evidence of that sort of behaviour,
> Brain.

Where is your evidence for making those attacks on me?

> So far it's hit the mark (pradon the pun) with Mark and Toiddie.

Are you taking spelling lessons from Mark?

> The jury's out on you, but you cleaned up your act.

There is no jury. There's only Robesin and he is subject to the laws of our nation.

> > > My "MARS >>>IS<<< AMATEUR RADIO" comment refered to the fact that
> > > the MARS program was staffed almost entirely by Amateur Radio licensees
> > > and was in the very spirit of what it means to be an Amateur Radio
> > > licensee...
> >
> > I pointed out that MARS absolutely has non-amateur leadership,
> > non-amateur participants, and an entirely non-amateur mission.
>
> Uhn huh.
>
> And over 95% of Amateur Radio >>>IS<<< staffed by licensed Amateur
> Radio operators.

Had Robesin said, "Sorry Hans, Amateur Radio >>>IS<<< Amateur Radio"
there would be no disagreement. But that's not what he said.

Let's keep the focus on MARS, shall we?

> > Hell,
> > Robesin claims to have been chopped to an NMC MARS slot on Okinawa - as
> > an active duty, non-amateur participant. Yet he continues with his
> > "Sorry Hans, MARS >>>IS<<< Amateur Radio" nonsense. Didn't even know
> > what the MOD was. He tried pulling this stunt before he realized that
> > I had MARS experience.
>
> Yes, Brain, I know what the MOD is.

You do now, thanks to me.

> You've allowed yourself to be
> hypontized by Lennie's incessant repeating of that claim.

Unfortunately you find it difficult to distinguish my posts from
Anderson's. Here's a hint, try reading the headers instead of forging
them.

> I was wrong then. I's wrong now.

Your grammar stinks. ;^)

> > > He doesn't want to repeat THAT part since it wouldn't serve
> > > his purposes. (to try and embarrass me)
> >
> > Except that I was an actual MARS affiliate and knew what I was talking
> > about. You didn't. Still don't.
>
> Brian uttering yet again more mistruthful statements in a
> public forum.

Facts, Robesin, facts! Stick to them and you'll do OK.

> > > He also claims that I am repsonsible for the "excrement eating"
> > > thread. That's a blatant lie. His "friend", Mark Morgan, KB9RQZ, is
> > > SOLELY RESPONSIBLE for the authorship of those subject lines and use of
> > > profanity. You won't see my subject lines repeating it..

> >
> > Sorry Robesin, but you are the one who posted the "excrement eating"
> > filth, and keep reposting your quote. Unbelievable, but Google
> > provides.
>
> Sorry, brain, but one again YOU are lying.
>
> The "excrement eating" posts belong to your "buddy", KB9RQZ. And
> the recent onslaught of re-tasked subject lines with exactly those
> words are HIS doings...Not mine.

Gee, you sure hate it when someone out-assholes you using your own sick
tactics.

> Stop lying, Mr.

You originated the excrement eating posting, and you have since
requoted yourself for the sake of clarity, however, what you said was
far from clear. If you'd like to restate what it was that you said,
hopefully in a clearer way...

No, nevermind. It was sick enough the first time it came around.

> > > Brain, of course, has NEVER owned up to any one of his own
> > > misrepresentatiuons of Amateur Radio.
> >
> > I have opinions but Robesin doesn't allow dissenting opinions.
> > Opinions that differ from his are "LIES."
>
> Again with the deceit.

Again with your lies.

> > > He has made ludicrous claims
> > > that have failed to meet any statndard of proof or substance, including
> > > any one of several claims of having been a DX station,
> >
> > David Heil/K8MN has me confirmed at least twice. Robesin knows this,
> > therefore Robesin lies.
>
> No I don't know this.
>
> I don't have Dave's logs.

So now Dave is lying?

> However we are STILL awating some evidence of the validity of your
> claims of having operated legally from Somalia.

You'll just have to accept or reject my say so. Kind of like your
claims to seven hostile actions.

> > > misrepresentations about MARS, RACES, ARES, and other poorly
> > > conceptualized opinions that have fallen by the wayside as failing the

> > > test of evidence.
> >
> > After it was obvious from one regular on RRAP that his ARES group was
> > unable to fully support an upcoming American Red Cross exercise,
> > Robesin was asked to write a duty schedule for the exercise. The
> > stated requirements were three 3 operators on duty per shift. He
> > shorted the 1st eight hours of the exercise by all three personnel. He
> > claims it was covered, but the supported agency was not supported at
> > all. The subsequent shifts were shorted from one to two operators per
> > shift. Robesin claims that ARES can support all agency needs even when
> > they lack enough volunteers. Amateur Operators can perform Super-Human
> > feats, OR the ARC is just an 8AM - 5PM agency.
>
> Sigh.

Indeed. Your shenanigans are archived in Google.

> I guess we can only watch Brain continue to make a fool out of
> himself.

No fooling. It's all archived in Google.

> > > Everyone's entitled to their opinions.
> >
> > Not true. Hot-ham is not entitled to an opinion, if Robesin has
> > anything to say about it.
>
> Sure. Have an opinion.
>
> But when you express it as "fact" and the "facts" don't bear up
> under the scrutiny of 3rd party reports to the contrary, don't get
> upset when you get "called" for your errors, Brain.

You post in absolutes..., for example, "Sorry Hans, MARS >>>IS<<<
Amateur Radio."

I pointed out that the Chief of Air Force MARS, at the time, was not an
amateur radio operator.

That single fact sunk your whole position on MARS as an amateur
organization, unless you want to argue the definition of "is."

> > > Brain's opinions of me are
> > > obviously low as he, despite having allegedly been a veteran himself,
> > > are anti-veteran and anti-volunteer.
> >
> > My opinions of Robesin are spot on.
>
> Uhhhhhh...YOUR spots are usually little yellow rings on the carpet,
> Brain.

??? More Robesin lies? Stick to the facts, Robesin.

> > In addition to slinging accusations of homosexual and pedophilia at
> > those who disagree with him, I am now a veteran-hater and a
> > volunteer-hater. Nevermind that I am a veteran and a volunteer.
>
> You hated them before, Brain...I am sure I am only the focus of
> your disdain in THIS forum.

Nope. You bring disdain upon yourself in your behavio[u]r toward
others.

> You've not had a single constructive, complimentary thing to say
> about ANY volunteer group save your Scouting troop.

My comments were about people who are volunteers of multiple volunteer
agencies, and when a crisis occurs, have to support one agency and not
all. For example, you are a "professional" volunteer, committing to
the Tennessee State Militia, the Civil Air Patrol, ARES, MARS, and who
knows what else. And your professional position as an ER LPN should be
a high priority in your community. So when the claxon goes off, which
way do you run? Which volunteer organization(s) are left holding the
bag because Robesin overcommitted himself and really isn't super-human?

> > Robesin has claimed that he can have me picked up on his say so as an
> > LPN with a simple phone call from Tennessee. To another poster on
> > RRAP, he claimed that "People who shoot off their mouths can have their
> > tires slashed, rocks thrown through windows, and wives terrorized," but
> > later clarified that all those bad things would be at someone else's
> > hands.
>
> Bigger sigh.

Yeh. Big, big sigh. Maybe if you just quit posting such nonsense....

> More of Brian's misquoting. I cited a news item some
> years ago where exactly that thing occcured.

Here's a hint, next time you cite a news item, present it as a cited
news item and not as a threat. It's called "clarity," and you lack it.

> Now for having mentioned it, Brain insists that I have made thinly
> veiled threats of a same nature.
>
> An act of cowardice.

I perceived a threat. In Robesin's own words, one has only to perceive
a threat for there to be a threat.

> > A well known Amateur Radio store advertising in QST, whose ham daughter
> > was featured in the ad photo, was said to be "selling something" but
> > not amateur equipment.
>
> More deceit.
>
> Brain...WHY do you lie so readily?

Google provides.

> > Robesin, whose father was a Sailor Army Recruiter (I swear thats not a
> > typo), lays claim to seven hostile actions in the USMC, but who's only
> > overseas assignment was Okinawa.
>
> "Sailor Army Recruiter"...?!?!?
>
> No Brain...let's get the FACTS right.

Yes, yes, finally!!!

> My father served on Active
> Duty in the Untied States Navy during the Korean Conflict.

> He was later an Active Duty recuriter for the US Army Reserve.
> Yes, Brain, SOME people DO serve in more than one branch of the Armed
> Forces than one...

than one...

OK.

> And no, Brain, Okinawa was NOT my "only overseas assignment".

Then the only thing remaining is a small matter... PROOF.

> > There's more, much more, but if I went on and on and on you'd probably
> > think I was making it up. I'm not. Google provides.
>
> Much of what you say is not "made up"...Just quoted out of context
> or misattributed.
>
> But mostly quoted out of context.

Dig it up, "fatboy."

> > > I've rubbed his nose in one
> > > failed opinion after another.
> >
> > Yet it is your excrement on another man's genitals, according to your
> > own original claims and subsequent quotes. Google provides, and you've
> > requoted yourself numerous times.
>
> I guess your English comprehension skills are as incompetent as
> Morkie's.
>
> That's not what I said. But you go right on ahead pretending it
> is as long s you think no one else can see it....

What scares me most isn't that you made a mistake in your grammar when
posting that sick nonsense, it's that you posted the sick nonsense at
all.

It is grossly off topic and has no place in an amateur radio discussion
newsgroup.

I certainly hope that Paul Schleck agrees.

> > > So...There's my $0.02. Do with it as you will, but I'd take a BIG
> > > grain of salt with any traffic coming from "hot-ham-and-cheese", as you
> > > are welcome to do with mine.
> >
> > Your $0.02 isn't worth two cents. Google provides.
>
> Google provides evidence that any "opinions" uttered by you under
> any one of your "anonymous" names needs to be taken with a grin of salt
> the size of the Rock of Gibralter.

>>>GRIN<<<

> As usual.....
>
> Steve, K4YZ

Heil says that people who cannot spell aren't worthy of leadership...

5874. Ideal ham receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-23 15:40:52 UTC
From: jimspeer@jimspeer.org
Message-ID: <1166888452.256055.166010@48g2000cwx.googlegroups.com>
Source record: 9025

I don't much like the receivers I've used in contemporary tranceivers -- the general coverage synthisized open front end ones. (I hasten to add I haven't used any of the $4000 rigs; can't afford them). But the ones I have used seem plagued with near-signal desensitization, front end overload, etc., and I suppose all that comes from putting the selectivity so far downstream.

I'm almost tempted to get an old 75s4 and shut up, but I really don't need another room heater, so, instead, I'm thinking of building my own receiver along the lines laid down by the late Doug DeMaw in his _QRP Notebook_. Single conversion 160m superhet with Collins mechanical filters in the IF and a series of down-converters for the other bands. Anybody got any experience with the DeMaw Design?

Jim, K5YUT

5875. Re: Ideal ham receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-23 16:12:31 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <Szcjh.24$Cy1.15@newsfe02.lga>
Source record: 9026

I think the main issue with the contemporary transceivers is covering DC to daylight and trying to make the thing work. A single band design seems to be a lot easier to make bulletproof.

Modern QRP design has advanced a lot since the DeMaw days, even over the venerable 75s4. Take a look at designs by K8IQY or AD6A or N7VE and you will find receivers that will be head and shoulders beyond anything that W1FB ever dreamed of.

The front end overload issues on simple receivers seems to be largely related to the use of the 602/612 mixer. The passive mixer, or Tayloe mixer, designs seem to fare much better. The Elecraft K1 is the exception that proves the rule; I suspect careful gain management may have something to do with that.

KK7B has also written a LOT on receiver design, and his designs have a good rep, but I've never used them so I can't comment from experience.

Doug's designs are fun, and sort of nostalgic, but if you are looking for 21st century performance, it isn't the place to look.

..

<jimspeer@jimspeer.org> wrote in message
news:1166888452.256055.166010@48g2000cwx.googlegroups.com...
>I don't much like the receivers I've used in contemporary tranceivers
> -- the general coverage synthisized open front end ones. (I hasten to
> add I haven't used any of the $4000 rigs; can't afford them). But the
> ones I have used seem plagued with near-signal desensitization, front
> end overload, etc., and I suppose all that comes from putting the
> selectivity so far downstream.
>
> I'm almost tempted to get an old 75s4 and shut up, but I really don't
> need another room heater, so, instead, I'm thinking of building my own
> receiver along the lines laid down by the late Doug DeMaw in his _QRP
> Notebook_. Single conversion 160m superhet with Collins mechanical
> filters in the IF and a series of down-converters for the other bands.
> Anybody got any experience with the DeMaw Design?
>
> Jim, K5YUT
>

5876. Re: Ideal ham receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-23 16:32:04 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <ZRcjh.5330$AY1.1183@bignews5.bellsouth.net>
Source record: 9027

jimspeer@jimspeer.org wrote:
> I don't much like the receivers I've used in contemporary tranceivers
> -- the general coverage synthisized open front end ones. (I hasten to
> add I haven't used any of the $4000 rigs; can't afford them). But the
> ones I have used seem plagued with near-signal desensitization, front
> end overload, etc., and I suppose all that comes from putting the
> selectivity so far downstream.
>
> I'm almost tempted to get an old 75s4 and shut up, but I really don't
> need another room heater, so, instead, I'm thinking of building my own
> receiver along the lines laid down by the late Doug DeMaw in his _QRP
> Notebook_. Single conversion 160m superhet with Collins mechanical
> filters in the IF and a series of down-converters for the other bands.
> Anybody got any experience with the DeMaw Design?
>
> Jim, K5YUT
>
There are many variations on this theme. There are two camps here,
the Collins version was a 160 meter first IF with a 455 khz second if.
The Drake version was an 80 meter first IF with a second if of 455 khz,
and a third if of 50 khz. So you have the 75S series vs the 2B series.

Lafayette radio's famous HA350 used the 2B method as did a home brew rig
in the '67 handbook (both without the 50 khz if, they used a Collins
filter.)

I've been thinking of building something along these lines to make use
of some 85 khz ARC-5 IF cans in the junk box. You'll get somewhat
better image rejection above 20 meters if you use an 80 meter IF instead
of 160, but otherwise either IF scheme is ok.

Yet another idea is a single conversion with a 9mhz IF. Since I have a
bunch of surplus 9mhz filters (they are 8 pole units with 3.2 khz
bandwidth) I was also thinking of a rig with these. True the filters
are a bit wider than common today, but if I put THREE of them in cascade
(between IF stages) they should do a good job. I would use a DDS VFO,
but would also used a tuned (not broadband) front end. I have enough
toroids and multi section variable caps in the junk box for that. I
also have some old tv turret tuners that would make a good band switch
for the front end (put the toroids on the tuner strips). I have lots of
J310 fets, so I'd use them in the front end as well.

5877. Re: Tri-Faced Robesin Strikes Out Again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-23 18:28:44 UTC
From: Mark@kb9rqz.aprs
Message-ID: <hqsqo2958ebb4vik4oaksr427og6lefthd@4ax.com>
Source record: 9028
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

On 22 Dec 2006 19:51:43 -0800, hot-ham-and-cheese@hotmail.com wrote:

>
>K4YZ wrote:
>> hot-ham-and-cheese@hotmail.com wrote (N0IMD):
>> > Bill Turner wrote:
>> > > Please folks, do not reply to these off topic posts.
>> > >
>> > > If these idiots never get any replies, they will eventually give up
>> > > and go away.
>> > >
>> > > Thanks,
>> > >
>> > > Bill, W6WRT
>> >
>> > Bill, I respectfully disagree. Your strategy works with normal people.
>> > Robesin isn't normal, and he'll only go away when his ISP is shut off.
>> > He's the originator of the infamous "MARS >>>IS<<< Amareur Radio"
>> > declaration and the excrement eating thread. At the moment, he's got
>> > himself wrapped up in the flag, so he's untouchable even if off-topic.
>>
>> Bill...Welcome to the "logic" of Brian P Burke, N0IMD, hiding
>> behind one of his "anonymous" screen names as "hot--ham-and-cheese"
>
>Bill, this is the first Robesin reply in years where he did not forge
>the attributes to read "snot-scam-and sleaze..." Robesin is trying to
>win you over by playing nice this time. Unfortunately, the rest of us
>know his game.

ineed I had missed that

although in fair when he conducting a MASS vandalism of my post he
sometimes misses doing that
>
>> Brian has participated, along with Leonard H Anderson (unlicensed)
>> and Mark Morgan (KB9RQZ) in an anti-Amateur Radio tirades and has
>> fallen flat on his face in one prognostication about Amateur Radio
>> after another. He doesn't like it that I've been right.
>
>Robesin is right? When???
>
>Robesin attacks when I reposted an article taken directly from the ARRL
>web site quoting an ARRL Vice President >in its entirety< stating that
>amateurs have an overblown sense of self-importance.

you leave that according to steve being anti steve in the slightest
way is being anti Ham
>
>> One of Brain's favorite tactics is to take comments out-of-context
>> and then try to represent them as the entire "gist" of the comments.
>
>One of Robesin's favorite tactics is to make homosexual inuendo or
>claims of pedophilia when he encounters someone who disagrees with him.
>

or tax evsasion welfare fraud or that one defrauded the govt of one
rightfull salery (that was his constant attack on Frank)
>> My "MARS >>>IS<<< AMATEUR RADIO" comment refered to the fact that
>> the MARS program was staffed almost entirely by Amateur Radio licensees
>> and was in the very spirit of what it means to be an Amateur Radio
>> licensee...
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>I pointed out that MARS absolutely has non-amateur leadership,
>non-amateur participants, and an entirely non-amateur mission. Hell,
>Robesin claims to have been chopped to an NMC MARS slot on Okinawa - as
>an active duty, non-amateur participant. Yet he continues with his
>"Sorry Hans, MARS >>>IS<<< Amateur Radio" nonsense. Didn't even know
>what the MOD was. He tried pulling this stunt before he realized that
>I had MARS experience.

he tries lots of stunts still no sign he jknows anything about the the
uquipmwnt he would have in Marine Stint
>
>> He doesn't want to repeat THAT part since it wouldn't serve
>> his purposes. (to try and embarrass me)
>
>Except that I was an actual MARS affiliate and knew what I was talking
>about. You didn't. Still don't.
>

h might have been in MARS , which does not mean he understood anything
about though

>> He also claims that I am repsonsible for the "excrement eating"
>> thread. That's a blatant lie. His "friend", Mark Morgan, KB9RQZ, is
>> SOLELY RESPONSIBLE for the authorship of those subject lines and use of
>> profanity. You won't see my subject lines repeating it..
>
>Sorry Robesin, but you are the one who posted the "excrement eating"
>filth, and keep reposting your quote. Unbelievable, but Google
>provides.

I believe any sickness is possible from robeson

>
>> Brain, of course, has NEVER owned up to any one of his own
>> misrepresentatiuons of Amateur Radio.
>

>I have opinions but Robesin doesn't allow dissenting opinions.
>Opinions that differ from his are "LIES."

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>
>> He has made ludicrous claims
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>David Heil/K8MN has me confirmed at least twice. Robesin knows this,
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I guess there still musst specail rule for the MMM
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>> misrepresentations about MARS, RACES, ARES, and other poorly
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>unable to fully support an upcoming American Red Cross exercise,
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>stated requirements were three 3 operators on duty per shift. He
>shorted the 1st eight hours of the exercise by all three personnel. He
>claims it was covered, but the supported agency was not supported at
>all. The subsequent shifts were shorted from one to two operators per
>shift. Robesin claims that ARES can support all agency needs even when
>they lack enough volunteers. Amateur Operators can perform Super-Human
>feats, OR the ARC is just an 8AM - 5PM agency.
>
>> Everyone's entitled to their opinions.
>
>Not true. Hot-ham is not entitled to an opinion, if Robesin has
>anything to say about it.

nor I am Mark Morgan nor is Len Anderson or Todd or Frank or anyone
that dares oppose him
>
>> Brain's opinions of me are
>> obviously low as he, despite having allegedly been a veteran himself,
>> are anti-veteran and anti-volunteer.
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>My opinions of Robesin are spot on.
>
>In addition to slinging accusations of homosexual and pedophilia at
>those who disagree with him, I am now a veteran-hater and a
>volunteer-hater. Nevermind that I am a veteran and a volunteer.

the same apply to me a Vetern although I do not volonoteer outseide
the Home (taking care of my Father who is terminal ill come first of
course this makes of all thing to stev an elder abuser) I do support
them

>
>Robesin has claimed that he can have me picked up on his say so as an
>LPN with a simple phone call from Tennessee. To another poster on
>RRAP, he claimed that "People who shoot off their mouths can have their
>tires slashed, rocks thrown through windows, and wives terrorized," but
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>A well known Amateur Radio store advertising in QST, whose ham daughter
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>not amateur equipment.
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>Robesin, whose father was a Sailor Army Recruiter (I swear thats not a
>typo), lays claim to seven hostile actions in the USMC, but who's only
>overseas assignment was Okinawa.

check bio qrz N8DOS I believe on the sailor army recruter

>
>There's more, much more, but if I went on and on and on you'd probably
>think I was making it up. I'm not. Google provides.
>
>> I've rubbed his nose in one
>> failed opinion after another.
>
>Yet it is your excrement on another man's genitals, according to your
>own original claims and subsequent quotes. Google provides, and you've
>requoted yourself numerous times.

he can't face any fact
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>> So...There's my $0.02. Do with it as you will, but I'd take a BIG
>> grain of salt with any traffic coming from "hot-ham-and-cheese", as you
>> are welcome to do with mine.
>>
>> 73
>>
>> Steve, K4YZ
>
>Your $0.02 isn't worth two cents. Google provides.
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5878. Re: Ideal ham receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-23 18:53:53 UTC
From: Yuri Blanarovich <K3BU@optonline.net>
Message-ID: <emju07nur1@aioe.org>
Source record: 9029

Try Drake R4B and Softrock tuned to the first IF 5645 (?) you will get best
of both worlds. Switching before and after filters gives more options.

Yuri, K3BU

<jimspeer@jimspeer.org> wrote in message
news:1166888452.256055.166010@48g2000cwx.googlegroups.com...
>I don't much like the receivers I've used in contemporary tranceivers
> -- the general coverage synthisized open front end ones. (I hasten to
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> Notebook_. Single conversion 160m superhet with Collins mechanical
> filters in the IF and a series of down-converters for the other bands.
> Anybody got any experience with the DeMaw Design?
>
> Jim, K5YUT
>

5879. Re: More Guy Nurse Rantings

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-23 18:56:01 UTC
From: Mark@kb9rqz.aprs
Message-ID: <shtqo2h701pf0oad36qriucileda6sj9ij@4ax.com>
Source record: 9030
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

On 23 Dec 2006 07:08:24 -0800, hot-ham-and-cheese@hotmail.com wrote:

>K4YZ wrote:
>> hot-ham-and-cheese@hotmail.com wrote:
>> > K4YZ wrote:
>> > > hot-ham-and-cheese@hotmail.com wrote:
>> > > > Bill Turner wrote:
>> > > > > Please folks, do not reply to these off topic posts.
>> > > > >
>> > > > > If these idiots never get any replies, they will eventually give up
>> > > > > and go away.
>> > > > >
>> > > > > Thanks,
>> > > > >
>> > > > > Bill, W6WRT
>> > > >
>> > > > Bill, I respectfully disagree. Your strategy works with normal people.
>> > > >
>> > > > Robesin isn't normal, and he'll only go away when his ISP is shut off.
>> > > > He's the originator of the infamous "MARS >>>IS<<< Amareur Radio"
>> > > > declaration and the excrement eating thread. At the moment, he's got
>> > > > himself wrapped up in the flag, so he's untouchable even if off-topic.
>> > >
>> > > Bill...Welcome to the "logic" of Brian, hiding
>> > > behind one of his "anonymous" screen names as "hot--ham-and-cheese"
>> >
>> > Bill, this is the first Robesin reply in years where he did not forge
>> > the attributes to read "snot-scam-and sleaze..."
>>
>> Not true, Brain...Not true. However you go right on ahead with
>> your tale of woe.
>
>Does Robesin always start off with a lie? Apparently so.

almost sometimes he does make a statement that just makes no sense
>
>In any event, I changed his forgings back to the original content.
>
>> > Robesin is trying to
>> > win you over by playing nice this time. Unfortunately, the rest of us
>> > know his game.
>>
>> Robeson DOES "play nice"...
>

>Do I have to start another tally of your lies such as I had to do a few
>years back? What was it? An average of 10 new lies a day for a week
>before I gave up?

with the ways he was gne down hill you would have trouble counting
them

>
>> Unless you blatantly lie to me or get
>> caught lying about something that you should know better than to lie
>> about.
>
>No lies, Robesin. You just don't like my opinions.

or mine or len or franks or todd or...

>
>> For example: Brian P Burke promising to keep certain information
>> "private" via e-mail, but then running right on back to the NG and
>> divulging that which he promised to not divulge.
>
>There was no promise, and what you claim was a hostile action was
>nonsense.

like steve sending me with Demand I keep it private when it was steve
effort to balckmail into leaving RRAP in 1999

>
>> Hence the complete lack of respect for Brian.
>
>Robesin has six other hostile actions. He says.

Robeson has plenty of hostile just known authorized by the US Govt

>
>> > > Brian has participated, along with Leonard H Anderson (unlicensed)
>> > > and Mark Morgan (KB9RQZ) in an anti-Amateur Radio tirades and has
>> > > fallen flat on his face in one prognostication about Amateur Radio
>> > > after another. He doesn't like it that I've been right.
>> >
>> > Robesin is right? When???
>>
>> Let's start off with YOUR assertions that ARES.RACES, etc couldn't
>> / wouldn't respond to any major disaster in any meaningful numbrs or
>> for a sustained period.
>>
>> I said you were wrong.
>
>But that's not what I said. It's what you said I said.

indeed

to be iar is the problem that steve can't read or write or can't tell
the truth

>
>> You said several nasty things about "uniforms", "patriotic
>> bunting", "ARRL sockpuppet", etc [words, by the way, straight out of
>> the Leonard H Anderson playbook].
>
>I don't use the phrase "sock puppet" or "ARRL sock puppet." I don't
>think I've ever used the phrase "patriotic bunting," either. I do use
>the word "uniforms" as in Robesin will do anything to get into a
>uniform since his USMC career was cut short by some unmentionable
>mystery.

which according to him wasn't physical or mental in nature and that is
the limit of choices as far as the Marine COrps

wait I have it was both at once making any statement is mental or
phycal inaccurate technicaly

>
>Perhaps why Robesin claims that my statements are straight out of the
>Anderson playbook is because Robesin is unable to distinguish a Hot-Ham
>posting from an Anderson posting. His stupidity is not my problem, but
>he tries to make it so.

it is you problem but only in trying to deal with the resulking mess

>
>> Then came a series of hurricaines and tornaos to the south and
>> southwest. All of them supported at length by ARES and RACES (among
>> others, of course)
>
>Do all amateurs have super-human abilities in Robesin-world?

it seems so I guess I am not a ham I am merely Human
>
>ARES is a volunteer organization. It suffers from shortages of
>manpower and equipment just as do non-volunteer response organizations
>during an emergency.
>
>> Then came September 11th...Then came Hurricane Katrina...Then came
>> Hurricaine Rita...Again, all agencies YOU claimed couldn't / wouldn't
>> respond did exactly that.
>
>Only Amateur Radio responded with exactly enough of everything?
>
>Lots of agencies responded. Lots of News Reports about too little, too
>late. Lots of Government Officials claiming too little, too late.
>Lots of Citizen Victims claiming too little, too late. I don't know
>how Robesin missed it, unless he was busy with that 1,000 yard stare.

what caused that stare his mental disorder or something else?
>

>> We can then dig up your "unlicensed devices" rants, among others.
>
>No rant. Unlicensed devices and cell phones handle most day to day
>emergencies.

and assit even in katrina where a fair amount of text traffic did work
its ways through according to the Media

>
>> > Robesin attacks when I reposted an article taken directly from the ARRL
>> > web site quoting an ARRL Vice President >in its entirety< stating that
>> > amateurs have an overblown sense of self-importance.
>>
>> And it wasn't true then, it's not true now.
>
>Then inform our ARRL Officials that you don't like their opinions
>(lies) instead of calling me a liar.

he can't
>
>> The ARRL vice president's sentiments are NOT shared by the
>> Department of Homeleand Security, the Department of Defense, Salvation
>> Army, The American Red Cross, the Department of State and other
>> agencies.
>
>So why attack Hot-Ham?

becuase he hates YOU for some reason and worship the ARRL you should
never have posted anything expousing a lapse of the ARRL

unless as is the case of the 80 m petion recently he already opposes
the atction

indeed he grew pissed at for Daring to agree with him seting off
another round of diatribe
>
>> > > One of Brain's favorite tactics is to take comments out-of-context
>> > > and then try to represent them as the entire "gist" of the comments.
>> >
>> > One of Robesin's favorite tactics is to make homosexual inuendo or
>> > claims of pedophilia when he encounters someone who disagrees with him.
>>
>> Only true when there is such evidence of that sort of behaviour,
>> Brain.
>
>Where is your evidence for making those attacks on me?

or your evidence regarding me and your lies about pedophia?
>
>> So far it's hit the mark (pradon the pun) with Mark and Toiddie.
>
>Are you taking spelling lessons from Mark?

while not noting the my speeling is gooing thorugh a better phrase
(since I can final stop taking alergy pills)

>
>> The jury's out on you, but you cleaned up your act.
>
>There is no jury. There's only Robesin and he is subject to the laws
>of our nation.

he thinks not which makes him a Soiciopath

>
>> > > My "MARS >>>IS<<< AMATEUR RADIO" comment refered to the fact that
>> > > the MARS program was staffed almost entirely by Amateur Radio licensees
>> > > and was in the very spirit of what it means to be an Amateur Radio
>> > > licensee...
>> >
>> > I pointed out that MARS absolutely has non-amateur leadership,
>> > non-amateur participants, and an entirely non-amateur mission.
>>
>> Uhn huh.
>>
>> And over 95% of Amateur Radio >>>IS<<< staffed by licensed Amateur
>> Radio operators.
>
>Had Robesin said, "Sorry Hans, Amateur Radio >>>IS<<< Amateur Radio"
>there would be no disagreement. But that's not what he said.
>
>Let's keep the focus on MARS, shall we?

steve can't focus on anything
>
>> > Hell,
>> > Robesin claims to have been chopped to an NMC MARS slot on Okinawa - as
>> > an active duty, non-amateur participant. Yet he continues with his
>> > "Sorry Hans, MARS >>>IS<<< Amateur Radio" nonsense. Didn't even know
>> > what the MOD was. He tried pulling this stunt before he realized that
>> > I had MARS experience.
>>
>> Yes, Brain, I know what the MOD is.
>
>You do now, thanks to me.

steve has a problem with tense and timelines too
>
>> You've allowed yourself to be
>> hypontized by Lennie's incessant repeating of that claim.
>
>Unfortunately you find it difficult to distinguish my posts from
>Anderson's. Here's a hint, try reading the headers instead of forging
>them.

he can't
>
>> I was wrong then. I's wrong now.
>
>Your grammar stinks. ;^)
>
>> > > He doesn't want to repeat THAT part since it wouldn't serve
>> > > his purposes. (to try and embarrass me)
>> >
>> > Except that I was an actual MARS affiliate and knew what I was talking
>> > about. You didn't. Still don't.
>>
>> Brian uttering yet again more mistruthful statements in a
>> public forum.
>
>Facts, Robesin, facts! Stick to them and you'll do OK.

steve does not know what the word means
>
>> > > He also claims that I am repsonsible for the "excrement eating"
>> > > thread. That's a blatant lie. His "friend", Mark Morgan, KB9RQZ, is
>> > > SOLELY RESPONSIBLE for the authorship of those subject lines and use of
>> > > profanity. You won't see my subject lines repeating it..
>> >
>> > Sorry Robesin, but you are the one who posted the "excrement eating"
>> > filth, and keep reposting your quote. Unbelievable, but Google
>> > provides.
>>
>> Sorry, brain, but one again YOU are lying.
>>
>> The "excrement eating" posts belong to your "buddy", KB9RQZ. And
>> the recent onslaught of re-tasked subject lines with exactly those
>> words are HIS doings...Not mine.
>
>Gee, you sure hate it when someone out-assholes you using your own sick
>tactics.

there I take exception BB I was being unpleasent yes but truth sick
and unture are steve choosen tactics

>
>> Stop lying, Mr.
>
>You originated the excrement eating posting, and you have since
>requoted yourself for the sake of clarity, however, what you said was
>far from clear. If you'd like to restate what it was that you said,
>hopefully in a clearer way...

he is still stuck with days and week weeks of lies resulting from his
efforts to claim it ia all our fualt

>
>No, nevermind. It was sick enough the first time it came around.

>
>> > > Brain, of course, has NEVER owned up to any one of his own
>> > > misrepresentatiuons of Amateur Radio.
>> >
>> > I have opinions but Robesin doesn't allow dissenting opinions.
>> > Opinions that differ from his are "LIES."
>>
>> Again with the deceit.
>
>Again with your lies.
>
>> > > He has made ludicrous claims
>> > > that have failed to meet any statndard of proof or substance, including
>> > > any one of several claims of having been a DX station,
>> >
>> > David Heil/K8MN has me confirmed at least twice. Robesin knows this,
>> > therefore Robesin lies.
>>
>> No I don't know this.
>>
>> I don't have Dave's logs.
>
>So now Dave is lying?

of course everyone but Steve is conpsiring aginast Steve

I thought they called that Paranoia

>
>> However we are STILL awating some evidence of the validity of your
>> claims of having operated legally from Somalia.
>
>You'll just have to accept or reject my say so. Kind of like your
>claims to seven hostile actions.
>
>> > > misrepresentations about MARS, RACES, ARES, and other poorly
>> > > conceptualized opinions that have fallen by the wayside as failing the
>> > > test of evidence.
>> >
>> > After it was obvious from one regular on RRAP that his ARES group was
>> > unable to fully support an upcoming American Red Cross exercise,
>> > Robesin was asked to write a duty schedule for the exercise. The
>> > stated requirements were three 3 operators on duty per shift. He
>> > shorted the 1st eight hours of the exercise by all three personnel. He
>> > claims it was covered, but the supported agency was not supported at
>> > all. The subsequent shifts were shorted from one to two operators per
>> > shift. Robesin claims that ARES can support all agency needs even when
>> > they lack enough volunteers. Amateur Operators can perform Super-Human
>> > feats, OR the ARC is just an 8AM - 5PM agency.
>>
>> Sigh.

>
>Indeed. Your shenanigans are archived in Google.
>
>> I guess we can only watch Brain continue to make a fool out of
>> himself.
>
>No fooling. It's all archived in Google.

google prvides
>
>> > > Everyone's entitled to their opinions.
>> >
>> > Not true. Hot-ham is not entitled to an opinion, if Robesin has
>> > anything to say about it.
>>
>> Sure. Have an opinion.
>>
>> But when you express it as "fact" and the "facts" don't bear up
>> under the scrutiny of 3rd party reports to the contrary, don't get
>> upset when you get "called" for your errors, Brain.
>
>You post in absolutes..., for example, "Sorry Hans, MARS >>>IS<<<
>Amateur Radio."

which generaly means he must absolutely be wrong
>
>I pointed out that the Chief of Air Force MARS, at the time, was not an
>amateur radio operator.
>
>That single fact sunk your whole position on MARS as an amateur
>organization, unless you want to argue the definition of "is."

nah he wilsteal it from Clinton
>
>> > > Brain's opinions of me are
>> > > obviously low as he, despite having allegedly been a veteran himself,
>> > > are anti-veteran and anti-volunteer.
>> >
>> > My opinions of Robesin are spot on.
>>
>> Uhhhhhh...YOUR spots are usually little yellow rings on the carpet,
>> Brain.
>
>??? More Robesin lies? Stick to the facts, Robesin.
>
>> > In addition to slinging accusations of homosexual and pedophilia at
>> > those who disagree with him, I am now a veteran-hater and a
>> > volunteer-hater. Nevermind that I am a veteran and a volunteer.
>>
>> You hated them before, Brain...I am sure I am only the focus of
>> your disdain in THIS forum.

>
>Nope. You bring disdain upon yourself in your behavio[u]r toward
>others.
>
>> You've not had a single constructive, complimentary thing to say
>> about ANY volunteer group save your Scouting troop.
>
>My comments were about people who are volunteers of multiple volunteer
>agencies, and when a crisis occurs, have to support one agency and not
>all. For example, you are a "professional" volunteer, committing to
>the Tennessee State Militia, the Civil Air Patrol, ARES, MARS, and who
>knows what else. And your professional position as an ER LPN should be
>a high priority in your community. So when the claxon goes off, which
>way do you run? Which volunteer organization(s) are left holding the
>bag because Robesin overcommitted himself and really isn't super-human?
>
>
>> > Robesin has claimed that he can have me picked up on his say so as an
>> > LPN with a simple phone call from Tennessee. To another poster on
>> > RRAP, he claimed that "People who shoot off their mouths can have their
>> > tires slashed, rocks thrown through windows, and wives terrorized," but
>> > later clarified that all those bad things would be at someone else's
>> > hands.
>>
>> Bigger sigh.
>
>Yeh. Big, big sigh. Maybe if you just quit posting such nonsense....

or admiting that you "exagerate"
>
>> More of Brian's misquoting. I cited a news item some
>> years ago where exactly that thing occcured.
>
>Here's a hint, next time you cite a news item, present it as a cited
>news item and not as a threat. It's called "clarity," and you lack it.
>
>> Now for having mentioned it, Brain insists that I have made thinly
>> veiled threats of a same nature.
>>
>> An act of cowardice.
>
>I perceived a threat. In Robesin's own words, one has only to perceive
>a threat for there to be a threat.

that only applies to Robeson not his victums

Icertinaly precieved a threat when in 1998 he finished a long about
guns and marksmenship with "one shot one Kill even in illiopolis"
where I lived at the time. and ofcourse my father picking up the phone
and hearing someone say I am going to kil you mark" roudn the same was
in way threatening and calls to local postal office and police station

asking where I lived wasn't threatening

you were lucky steve that Illiopis was so poorly served by the Phone
service that you calls could only be traced to AC
>
>> > A well known Amateur Radio store advertising in QST, whose ham daughter
>> > was featured in the ad photo, was said to be "selling something" but
>> > not amateur equipment.
>>
>> More deceit.
>>
>> Brain...WHY do you lie so readily?
>
>Google provides.
>
>> > Robesin, whose father was a Sailor Army Recruiter (I swear thats not a
>> > typo), lays claim to seven hostile actions in the USMC, but who's only
>> > overseas assignment was Okinawa.
>>
>> "Sailor Army Recruiter"...?!?!?
>>
>> No Brain...let's get the FACTS right.
>
>Yes, yes, finally!!!
>
>> My father served on Active
>> Duty in the Untied States Navy during the Korean Conflict.
>
>> He was later an Active Duty recuriter for the US Army Reserve.
>> Yes, Brain, SOME people DO serve in more than one branch of the Armed
>> Forces than one...
>
>than one...
>
>OK.

still looks looks sailor army requiter to me
>
>> And no, Brain, Okinawa was NOT my "only overseas assignment".
>
>Then the only thing remaining is a small matter... PROOF.
>
>> > There's more, much more, but if I went on and on and on you'd probably
>> > think I was making it up. I'm not. Google provides.
>>
>> Much of what you say is not "made up"...Just quoted out of context
>> or misattributed.
>>
>> But mostly quoted out of context.
>
>Dig it up, "fatboy."

>
>> > > I've rubbed his nose in one
>> > > failed opinion after another.
>> >
>> > Yet it is your excrement on another man's genitals, according to your
>> > own original claims and subsequent quotes. Google provides, and you've
>> > requoted yourself numerous times.
>>
>> I guess your English comprehension skills are as incompetent as
>> Morkie's.
>>
>> That's not what I said. But you go right on ahead pretending it
>> is as long s you think no one else can see it....
>
>What scares me most isn't that you made a mistake in your grammar when
>posting that sick nonsense, it's that you posted the sick nonsense at
>all.
>

indeed he is frightening which is likely why people see him as
threatening

>It is grossly off topic and has no place in an amateur radio discussion
>newsgroup.

indeed grossly
>
>I certainly hope that Paul Schleck agrees.
>
>> > > So...There's my $0.02. Do with it as you will, but I'd take a BIG
>> > > grain of salt with any traffic coming from "hot-ham-and-cheese", as you
>> > > are welcome to do with mine.
>> >
>> > Your $0.02 isn't worth two cents. Google provides.
>>
>> Google provides evidence that any "opinions" uttered by you under
>> any one of your "anonymous" names needs to be taken with a grin of salt
>> the size of the Rock of Gibralter.
>
>>>>GRIN<<<

steve stop your wild boasts
>
>> As usual.....
>>
>> Steve, K4YZ
>
>Heil says that people who cannot spell aren't worthy of leadership...
well that would be merely one reason not to elcet steve
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5880. Re: Ideal ham receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-23 20:53:13 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <emk4vpjsp1@theodyn.ncf.ca>
Source record: 9031

(jimspeer@jimspeer.org) writes:
> I don't much like the receivers I've used in contemporary tranceivers
> -- the general coverage synthisized open front end ones. (I hasten to
> add I haven't used any of the $4000 rigs; can't afford them). But the
> ones I have used seem plagued with near-signal desensitization, front
> end overload, etc., and I suppose all that comes from putting the
> selectivity so far downstream.
>
> I'm almost tempted to get an old 75s4 and shut up, but I really don't
> need another room heater, so, instead, I'm thinking of building my own
> receiver along the lines laid down by the late Doug DeMaw in his _QRP
> Notebook_. Single conversion 160m superhet with Collins mechanical
> filters in the IF and a series of down-converters for the other bands.
> Anybody got any experience with the DeMaw Design?
>
> Jim, K5YUT
>
But then you're just recreating something that is open to problems.

That sort of scheme was used to get a constant tuning range over each band,
and because synthesis wasn't easily applied.

But on anything other than the core band, you've got double conversion that
moves the selectiving past two mixers. And unlike current up-conversion
schemes, there is not even a crystal filter of some sort at the output of
the first mixer.

Switch to an IF in the HF range, and you immediately eliminate most image
problems. No fussing over the front end about that, and of course, you
won't have to have the front end tracking the tuning oscillator.

Remember, a whole wave of amateur transceivers and receivers went
to that sort of scheme. And unlike general coverage receivers, you
don't have to worry about any problems due to the IF being in the tuning
range, and you can think up various schemes to do the tuning since you
don't have to cover the 30MHz.

YOu can stick with the modular theme, and thus build only for the
bands you want or even build a band at a time. But instead of a whole
converter, you'd have the preselector circuitry (and maybe an RF stage) and
the variable oscillator for each band. Or build a good receiver up till
the input of the mixer, and then figure out what comes next.

IN the sixties, that wave of single conversion to IFs in the MHz range
used various schemes to deal with the local oscillator. Obviously some
bands needed a frequency range that could easily be supplied by a variable

oscillator without drift (and some of the rigs took that to the extreme and used the variable oscillator directly on 10metres). The problem with bandswitching the oscillator would of course be the issue of getting it to tune only 500KHz or so on each band (and any stability issues caused by the switching of the LC circuits).

Other rigs used pre-mixing, so the variable oscillator would always tune a fixed range, but it would be converted to the needed frequency with a mixer and crystal oscillator. One does have to watch out for spurs on the output, but it gets the extra mixer out of the signal path, and given a relative handful of 500KHz ham bands in the shortwave region, the cost of the crystals wasn't out of range (though maybe today..).

Then later, some rigs used PLLs. I can't remember if the Signal One used one, but certainly in the seventies they came along. Same basic idea as the premixer, but the PLL was the filter so the VCO directly fed the receiver's first mixer.

Rigs like the TS830S used a PLL for that same purpose, though they came up with a pretty fancy scheme to limit the number of crystals needed.

One of the things about receiver design is that the trends have often reflected limitations of the times. There may be a good reasons for doing things a certain way (such as adding a third conversion to a receiver so the BFO is on a different frequency from the one where the main gain is), but it may also mean they couldn't do anything better at the time.

Michael VE2BVW

5881. Re: Ideal ham receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-23 22:12:22 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <aRhjh.189990$aJ.19731@attbi_s21>
Source record: 9032

> Then later, some rigs used PLLs. I can't remember if the Signal One
> used one, but certainly in the seventies they came along. Same basic
> idea as the premixer, but the PLL was the filter so the VCO directly
> fed the receiver's first mixer.

Michael VE2BVW

Well the CX-7 didn't use a PLL, but the CX-11 did. It was however only for generating a comb frequency to be used with premixing. The analog PTO's still tuned 3.1 to 4.1 MHz.

The main problem with up conversion is the hit you take on oscillator phase noise. These days, with the advent of the "H" mode mixer, oscillator phase noise and birdies are THE limiting factor in receiver compromise.

W4ZCB

5882. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-23 22:51:47 UTC
From: Mike Monett <No@email.adr>
Message-ID: <Xns98A2B57EE13E8Noemailadr@208.49.80.251>
Source record: 9033

jimspeer@jimspeer.org wrote:

> You can download free a long list of archaic technical books, including
> a number of ARRL Handbooks, at the following URL:
>
> http://www.pmillett.com/tecnical_books_online.htm

Some more here, plus some QEX

http://info.awmn.net/users/images/stories/Library/RadioTheory/

Regards,

Mike Monett

5883. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-23 23:27:01 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1166916421.565457.62980@48g2000cwx.googlegroups.com>
Source record: 9034

Well, after much hair pulling and gnashing of teeth, I managed to download the 15th edition of Radio Handbook last night. No straight receivers that use tubes, though. Going to have to look at the math section to see if there's some way I can work up a schematic of my own. Thing is, math isn't my strong suit.

Also going to have a look at some of the older books. If worse comes to worst, I know of a few places online where I can buy the tube that are in the schematics I do have.

Ralph

5884. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-23 23:42:13 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1166917333.449616.288050@80g2000cwy.googlegroups.com>
Source record: 9035

Doug Smith W9WI wrote:
> julian814 wrote:
> > All right, I'm hoping someone here can clue me into finding the one(s)
> > I want. What I need is a handbook that has schematics for tube
> > equipment circa the 1960's. I have a boxful of tubes from television
> > sets from that era, and I was hoping I could put together a receiver
> > from some of them. I do have the first volume of Impoverished Radio
> > Experimenter, which talks about using "newer" tubes in older
> > schematics, but the scant few Lindsay talks about aren't among the
> > tubes in my box.
>
> How complex of a receiver are you looking to build?

Nothing too complex, two tubes or so. What I want to build is something
that looks like it's from a 1950's Cold War era post apocalyptic story.
I definitely want to use tubes, and I have some headphones from that
era as well. The receiver has to be able to drive the headphones. They
are NOT crystal headphones.

>
> There are a PILE of simple tube circuits on
> http://www.intio.or.jp/jf10zl/index.html .
>
> Most of them use Japanese tubes (the site is in Japan, after all<g>) but
> I would suggest in many cases you can figure out what U.S. tubes are
> similar.

Fascinating, but I didn't see anything close to what I'm looking for.
Thanks anyway.

Ralph

5885. Re: Ideal ham receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-24 00:00:51 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <lqjjh.5070$_X.2844@bigfe9>
Source record: 9036

Harold E. Johnson wrote:
>> Then later, some rigs used PLLs. I can't remember if the Signal One
>> used one, but certainly in the seventies they came along. Same basic
>> idea as the premixer, but the PLL was the filter so the VCO directly
>> fed the receiver's first mixer.
>
> Michael VE2BVW
>
>
> Well the CX-7 didn't use a PLL, but the CX-11 did. It was however only for
> generating a comb frequency to be used with premixing. The analog PTO's
> still tuned 3.1 to 4.1 MHz.
>
> The main problem with up conversion is the hit you take on oscillator phase
> noise. These days, with the advent of the "H" mode mixer, oscillator phase
> noise and birdies are THE limiting factor in receiver compromise.
>
> W4ZCB
>
>
I've heard that DDS units do NOT have the phase noise problem that
conventional oscillators do. DDS does generate spurs, but if you can
find a DDS that will allow for a clock rate many times the desired
output frequency the spurs a far out of band. The Analog devices AD9954
family of DDS chips have a max clock rate of 400 mhz. If you do NOT use
the on board PLL multiplier and clock it externally from a good low
noise clock, you can overclock these chips to as much as 600 mhz!
So if you up convert to 70mhz you'd need a 100 mhz local oscillator at
10 meters. Thats 1/4 the clock (or 1/6 if over clocked).
With a 45 mhz first IF even better.

BTW I had an idea for a rig up converting to 6 meters as the first IF.
This would be dual conversion on the HF bands, though a crystal filter
at 6 meters for a fixed first IF would not be impossible here.

5886. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-24 00:35:42 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <nXjjh.5073$_X.3608@bigfe9>
Source record: 9037

julian814 wrote:
> Doug Smith W9WI wrote:
>> julian814 wrote:
>>> All right, I'm hoping someone here can clue me into finding the one(s)
>>> I want. What I need is a handbook that has schematics for tube
>>> equipment circa the 1960's. I have a boxful of tubes from television
>>> sets from that era, and I was hoping I could put together a receiver
>>> from some of them. I do have the first volume of Impoverished Radio
>>> Experimenter, which talks about using "newer" tubes in older
>>> schematics, but the scant few Lindsay talks about aren't among the
>>> tubes in my box.
>> How complex of a receiver are you looking to build?
>
> Nothing too complex, two tubes or so. What I want to build is something
> that looks like it's from a 1950's Cold War era post apocalyptic story.
> I definitely want to use tubes, and I have some headphones from that
> era as well. The receiver has to be able to drive the headphones. They
> are NOT crystal headphones.
>
>> There are a PILE of simple tube circuits on
>> http://www.intio.or.jp/jf10zl/index.html .
>>
>> Most of them use Japanese tubes (the site is in Japan, after all<g>) but
>> I would suggest in many cases you can figure out what U.S. tubes are
>> similar.
>
> Fascinating, but I didn't see anything close to what I'm looking for.
> Thanks anyway.
>
>
> Ralph
>
I don't recall the url but I remember a 2-3 tube receiver from the 40's
that might be what you want. It was a simple superhet with a
regenerative detector. Used a 6k8 as the converter and a 6c8g as the
detector / audio. It drove a pair of magnetic phones. The set used two
plugin coils, one for the antenna circuit and one for the oscillator.
Each antenna coil served double duty as the oscillator coil on the next
higher band (moved the antenna coil from the antenna coil socket to the
oscillator coil socket and put a new coil in the antenna coil socket to
change bands). There is a variation that added a 6sj7 as the detector
and the other half of the 6c8 became a bfo.

This first appeared in Feb 1941 QST. The details are on the web someplace, google for it.

5887. Re: SA605 or SA615 source

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-24 00:41:44 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <01kjh.5074$_X.4572@bigfe9>
Source record: 9038

Tim Wescott wrote:
> Mike Andrews wrote:
>> Anyone got a source for SA605 or SA615? I want to build the 1-chip
>> receiver that Steve Hageman describes in EDN Access of 25 September
>> 1997, but am having problems finding the chips. Maybe I'm looking past
>> them.
> Nominally these are Phillips parts (now NXE or whatever). They use the
> 'SA' 'NE' etc., for indicating temperature ranges -- I know I've had
> trouble finding '602s with one prefix, and no problem with the other.
>
I recall reading that the SA602/605's were discontinued and replaced by
the '612/'615. Because of demand some of these were relabeled and sold
as 602/605's to satisfy customers who didn't believe that the parts were
interchangeable. They are.

5888. Re: Parts with FREE shipping

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-24 00:49:00 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <Q7kjh.5075$_X.2028@bigfe9>
Source record: 9039
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Brian wrote:
> Hey all,
>
> I'm trying to clean out the parts cabinet. So free shipping on all orders
> until I say otherwise.
>
> My parts are new, but old stock spurplus. They are not pulls, and they have
> never been used. Most are gathered at hamfests, and some are gathered from
> eBay, some from surplus auctions, some just show up.
>
> See the website below for details.
>
> http://www.hamradparts.com
>
> 73 de KB9BVN
>
>
>
Don't need anything right now, but I'm bookmarking your web site for
future reference. Even with shipping your seem reasonable.

5889. Re: Tri-Faced Robesin Strikes Out Again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-24 00:57:31 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1166921851.172786.324130@a3g2000cwd.googlegroups.com>
Source record: 9040
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

Roger wrote:
> <hot-ham-and-cheese@hotmail.com> wrote in message
> news:1166845903.893439.54470@80g2000cwy.googlegroups.com...
> >
> > K4YZ wrote:
> > > hot-ham-and-cheese@hotmail.com wrote (N0IMD):
> > > > Bill Turner wrote:
> > > > > Please folks, do not reply to these off topic posts.
> > > > >
> > > > > If these idiots never get any replies, they will eventually give up
> > > > > and go away.
> > > > >
> > > > > Thanks,
> > > > >
> > > > > Bill, W6WRT
> > > >
> > > > Bill, I respectfully disagree. Your strategy works with normal
> people.
> > > > Robesin isn't normal, and he'll only go away when his ISP is shut
> off.
> > > > He's the originator of the infamous "MARS >>>IS<<< Amareur Radio"
> > > > declaration and the excrement eating thread. At the moment, he's got
> > > > himself wrapped up in the flag, so he's untouchable even if off-topic.
> > >
> >
> > Of course let us not leave Mark out of the insanity. Mark will continue to
> > crap upon as many posts as he can, whether he is asked to join or not.

If you hadn't noticed, Mark is "Out-Assholing" Robesin. He's doing a
damned fine job of it, too.

> Mark is far from "normal", too. Billy Smith already knows that....

Everyone has issues, but there's no need for Robesin to scour the
internet and bring stuff back to RRAP that has no place on RRAP. But
thanks for asking.

5890. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-24 01:30:49 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <458DD846.9010102@invalid.invalid>
Source record: 9041

julian814 wrote:
>>How complex of a receiver are you looking to build?
>
> Nothing too complex, two tubes or so. What I want to build is something
> that looks like it's from a 1950's Cold War era post apocalyptic story.
> I definitely want to use tubes, and I have some headphones from that
> era as well. The receiver has to be able to drive the headphones. They
> are NOT crystal headphones.
>
>>There are a PILE of simple tube circuits on
>>http://www.intio.or.jp/jf10zl/index.html .
>>
>>Most of them use Japanese tubes (the site is in Japan, after all<g>) but
>>I would suggest in many cases you can figure out what U.S. tubes are
>>similar.
>
> Fascinating, but I didn't see anything close to what I'm looking for.
> Thanks anyway.

I would suggest this one (http://www.intio.or.jp/jf10zl/17ew8.htm)
would be a good starting point. It should work with most standard
double-triodes (12AX7, 12AT7, 12AU7, 12SN7, etc.) or two single triodes.
(6C4, 6J5, etc.).

This one (http://www.intio.or.jp/jf10zl/12au70v1.htm) could also be
adapted - use more than 12 volts on the plates and put a ~5k:8-ohm
transformer in the plate of the second tube (instead of the R-C network)
and it should do what you're trying to do.

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

5891. Re: Tri-Faced Robesin Strikes Out Again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-24 01:38:03 UTC
From: Mark@kb9rqz.aprs
Message-ID: <udmro2hcabmpd58n7tpkb4t7o32f04ubkv@4ax.com>
Source record: 9042
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

On 23 Dec 2006 16:57:31 -0800, hot-ham-and-cheese@hotmail.com wrote:

>
>Roger wrote:
>> <hot-ham-and-cheese@hotmail.com> wrote in message
>> news:1166845903.893439.54470@80g2000cwy.googlegroups.com...
>> >
>> > K4YZ wrote:
>> > > hot-ham-and-cheese@hotmail.com wrote (N0IMD):
>> > > > Bill Turner wrote:
>> > > > > Please folks, do not reply to these off topic posts.
>> > > > >
>> > > > > If these idiots never get any replies, they will eventually give up
>> > > > > and go away.
>> > > > >
>> > > > > Thanks,
>> > > > >
>> > > > > Bill, W6WRT
>> > > >
>> > > > Bill, I respectfully disagree. Your strategy works with normal
>> people.
>> > > > Robesin isn't normal, and he'll only go away when his ISP is shut
>> off.
>> > > > He's the originator of the infamous "MARS >>>IS<<< Amareur Radio"
>> > > > declaration and the excrement eating thread. At the moment, he's got
>> > > > himself wrapped up in the flag, so he's untouchable even if off-topic.
>> > >
>>
>> Of course let us not leave Mark out of the insanity. Mark will continue to
>> crap upon as many posts as he can, whether he is asked to join or not.
>
>If you hadn't noticed, Mark is "Out-Assholing" Robesin. He's doing a
>damned fine job of it, too.

thank you I am only sorry that Robeson decided to provide the
motivation
>
>> Mark is far from "normal", too. Billy Smith already knows that....
>
>Everyone has issues, but there's no need for Robesin to scour the
>internet and bring stuff back to RRAP that has no place on RRAP. But
>thanks for asking.

indeed the last person to accuse me of being normal I chenlanged to
deul
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5892. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-24 01:41:42 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <emklsm$s6q$1@theodyn.ncf.ca>
Source record: 9043

ken scharf (wa2mzeNOSPAMBOTS@bellsouth.net) writes:
> julian814 wrote:
>> Doug Smith W9WI wrote:
>>> julian814 wrote:
>>>> All right, I'm hoping someone here can clue me into finding the one(s)
>>>> I want. What I need is a handbook that has schematics for tube
>>>> equipment circa the 1960's. I have a boxful of tubes from television
>>>> sets from that era, and I was hoping I could put together a receiver
>>>> from some of them. I do have the first volume of Impoverished Radio
>>>> Experimenter, which talks about using "newer" tubes in older
>>>> schematics, but the scant few Lindsay talks about aren't among the
>>>> tubes in my box.
>>> How complex of a receiver are you looking to build?
>>
>> Nothing too complex, two tubes or so. What I want to build is something
>> that looks like it's from a 1950's Cold War era post apocalyptic story.
>> I definitely want to use tubes, and I have some headphones from that
>> era as well. The receiver has to be able to drive the headphones. They
>> are NOT crystal headphones.
>>
>>> There are a PILE of simple tube circuits on
>>> http://www.intio.or.jp/jf10zl/index.html .
>>>
>>> Most of them use Japanese tubes (the site is in Japan, after all<g>) but
>>> I would suggest in many cases you can figure out what U.S. tubes are
>>> similar.
>>
>> Fascinating, but I didn't see anything close to what I'm looking for.
>> Thanks anyway.
>>
>>
>> Ralph
>>
> I don't recall the url but I remember a 2-3 tube receiver from the 40's
> that might be what you want. It was a simple superhet with a
> regenerative detector. Used a 6k8 as the converter and a 6c8g as the
> detector / audio.

They were called "supergainers" and apparently Frank Jones, of later
VHF fame, was a big proponent of them in the thirties.

The earlier Radio Handbook on that webpage someone posted about would
have them, the 1936 version or whatever. I didn't suggest downloading
that one since I had the impression the tubes available to the original
poster were miniature, and the book predates those.

Michael VE2BVW
k

5893. Re: Tri-Faced Robesin Strikes Out Again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-24 02:10:04 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1166926204.161816.141930@79g2000cws.googlegroups.com>
Source record: 9044
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

Mark@kb9rqz.aprs wrote:
> On 22 Dec 2006 19:51:43 -0800, hot-ham-and-cheese@hotmail.com wrote:
> >K4YZ wrote:
> >> hot-ham-and-cheese@hotmail.com wrote (N0IMD):
> >> > Bill Turner wrote:
> >> > > Please folks, do not reply to these off topic posts.
> >> > >
> >> > > If these idiots never get any replies, they will eventually give up
> >> > > and go away.
> >> > >
> >> > > Thanks,
> >> > >
> >> > > Bill, W6WRT
> >> >
> >> > Bill, I respectfully disagree. Your strategy works with normal people.
> >> > Robesin isn't normal, and he'll only go away when his ISP is shut off.
> >> > He's the originator of the infamous "MARS >>>IS<<< Amareur Radio"
> >> > declaration and the excrement eating thread. At the moment, he's got
> >> > himself wrapped up in the flag, so he's untouchable even if off-topic.
> >>
> >> Bill...Welcome to the "logic" of Brian P Burke, N0IMD, hiding
> >> behind one of his "anonymous" screen names as "hot--ham-and-cheese"
> >
> >Bill, this is the first Robesin reply in years where he did not forge
> >the attributes to read "snot-scam-and sleaze..." Robesin is trying to
> >win you over by playing nice this time. Unfortunately, the rest of us
> >know his game.
>
> ineed I had missed that

I do my best to change the attributes back to original.

> although in fair when he conducting a MASS vandalism of my post he
> sometimes misses doing that

He's just lazy.

> >> Brian has participated, along with Leonard H Anderson (unlicensed)
> >> and Mark Morgan (KB9RQZ) in an anti-Amateur Radio tirades and has
> >> fallen flat on his face in one prognostication about Amateur Radio
> >> after another. He doesn't like it that I've been right.
> >
> >Robesin is right? When???
> >

> >Robesin attacks when I reposted an article taken directly from the ARRL
> >web site quoting an ARRL Vice President >in its entirety< stating that
> >amateurs have an overblown sense of self-importance.
>
> you leave that according to steve being anti steve in the slightest
> way is being anti Ham

And anti-veteran and anti-ARRL and anti-Red Cross and anti-Morse Code
Test...

> >> One of Brain's favorite tactics is to take comments out-of-context
> >> and then try to represent them as the entire "gist" of the comments.
> >
> >One of Robesin's favorite tactics is to make homosexual inuendo or
> >claims of pedophilia when he encounters someone who disagrees with him.
> >
>
> or tax evsasion welfare fraud or that one defrauded the govt of one
> rightfull salery (that was his constant attack on Frank)

Robesin draws a disability pension, yet he is an ER nurse. How can an
ER Nurse be disabled?

> >> My "MARS >>>IS<<< AMATEUR RADIO" comment refered to the fact that
> >> the MARS program was staffed almost entirely by Amateur Radio licensees
> >> and was in the very spirit of what it means to be an Amateur Radio
> >> licensee...
> >
> >I pointed out that MARS absolutely has non-amateur leadership,
> >non-amateur participants, and an entirely non-amateur mission. Hell,
> >Robesin claims to have been chopped to an NMC MARS slot on Okinawa - as
> >an active duty, non-amateur participant. Yet he continues with his
> >"Sorry Hans, MARS >>>IS<<< Amateur Radio" nonsense. Didn't even know
> >what the MOD was. He tried pulling this stunt before he realized that
> >I had MARS experience.
>
> he tries lots of stunts still no sign he knows anything about the the
> uquipmwnt he would have in Marine Stint

Plug and play avionics. He couldn't even name that equipment, and it
was his job.

> >> He doesn't want to repeat THAT part since it wouldn't serve
> >> his purposes. (to try and embarrass me)
> >
> >Except that I was an actual MARS affiliate and knew what I was talking
> >about. You didn't. Still don't.
>
> he might have been in MARS , which does not mean he understood anything
> about though

He probably just liked listening to the wives on the MARS phone
patches...

Anytime anything starts to go wrong for Robesin, he has to get to the
wives...

He started in with Len's wife, then your wife, then my wife, then his
gratis UP attorney's wife...

> >> He also claims that I am repsonsible for the "excrement eating"
> >> thread. That's a blatant lie. His "friend", Mark Morgan, KB9RQZ, is
> >> SOLELY RESPONSIBLE for the authorship of those subject lines and use of
> >> profanity. You won't see my subject lines repeating it..
> >
> >Sorry Robesin, but you are the one who posted the "excrement eating"
> >filth, and keep reposting your quote. Unbelievable, but Google
> >provides.
>
> I believe any sickness is possible from robeson

Something's wrong with him.

> >> Brain, of course, has NEVER owned up to any one of his own
> >> misrepresentatiuons of Amateur Radio.
> >
> >I have opinions but Robesin doesn't allow dissenting opinions.
> >Opinions that differ from his are "LIES."
>
> and proof that the hold ing is ANTI Ham

AntiChrist.

> >> He has made ludicrous claims
> >> that have failed to meet any statndard of proof or substance, including
> >> any one of several claims of having been a DX station,
> >
> >David Heil/K8MN has me confirmed at least twice. Robesin knows this,
> >therefore Robesin lies.
>
> I guess there still musst specail rule for the MMM

I'll bust them every time when they try to play it.

> >> misrepresentations about MARS, RACES, ARES, and other poorly
> >> conceptualized opinions that have fallen by the wayside as failing the
> >> test of evidence.
> >
> >After it was obvious from one regular on RRAP that his ARES group was
> >unable to fully support an upcoming American Red Cross exercise,
> >Robesin was asked to write a duty schedule for the exercise. The
> >stated requirements were three 3 operators on duty per shift. He
> >shorted the 1st eight hours of the exercise by all three personnel. He
> >claims it was covered, but the supported agency was not supported at
> >all. The subsequent shifts were shorted from one to two operators per

> >shift. Robesin claims that ARES can support all agency needs even when
> >they lack enough volunteers. Amateur Operators can perform Super-Human
> >feats, OR the ARC is just an 8AM - 5PM agency.
> >
> >> Everyone's entitled to their opinions.
> >
> >Not true. Hot-ham is not entitled to an opinion, if Robesin has
> >anything to say about it.
>
> nor I am Mark Morgan nor is Len Anderson or Todd or Frank or anyone
> that dares oppose him

True enough.

> >> Brain's opinions of me are
> >> obviously low as he, despite having allegedly been a veteran himself,
> >> are anti-veteran and anti-volunteer.
> >
> >My opinions of Robesin are spot on.
> >
> >In addition to slinging accusations of homosexual and pedophilia at
> >those who disagree with him, I am now a veteran-hater and a
> >volunteer-hater. Nevermind that I am a veteran and a volunteer.
>
> the same apply to me a Veteran although I do not volunteer outside
> the Home (taking care of my Father who is terminal ill come first of
> course this makes of all thing to steve an elder abuser) I do support
> them

Robesin may have been out playing CAP Commando when he should have been
home taking care of his own.

> >Robesin has claimed that he can have me picked up on his say so as an
> >LPN with a simple phone call from Tennessee. To another poster on
> >RRAP, he claimed that "People who shoot off their mouths can have their
> >tires slashed, rocks thrown through windows, and wives terrorized," but
> >later clarified that all those bad things would be at someone else's
> >hands.
> >
> >A well known Amateur Radio store advertising in QST, whose ham daughter
> >was featured in the ad photo, was said to be "selling something" but
> >not amateur equipment.
> >
> >Robesin, whose father was a Sailor Army Recruiter (I swear thats not a
> >typo), lays claim to seven hostile actions in the USMC, but who's only
> >overseas assignment was Okinawa.
>
> check bio qrz N8DOS I believe on the sailor army recruter

Will do.

> >There's more, much more, but if I went on and on and on you'd probably
> >think I was making it up. I'm not. Google provides.
> >
> >> I've rubbed his nose in one
> >> failed opinion after another.
> >
> >Yet it is your excrement on another man's genitals, according to your
> >own original claims and subsequent quotes. Google provides, and you've
> >requoted yourself numerous times.
>
> he can't face any fact

He must face his own excrement.

> >> So...There's my $0.02. Do with it as you will, but I'd take a BIG
> >> grain of salt with any traffic coming from "hot-ham-and-cheese", as you
> >> are welcome to do with mine.
> >>
> >> 73
> >>
> >> Steve, K4YZ
> >
> >Your $0.02 isn't worth two cents. Google provides.

5894. Re: Tri-Faced Robesin Strikes Out Again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-24 03:37:06 UTC
From: Mark@kb9rqz.aprs
Message-ID: <l5tro29ip4ja8rq6t6mvf8gr490h5vogab@4ax.com>
Source record: 9045
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

On 23 Dec 2006 18:10:04 -0800, hot-ham-and-cheese@hotmail.com wrote:

>
>Mark@kb9rqz.aprs wrote:
>> On 22 Dec 2006 19:51:43 -0800, hot-ham-and-cheese@hotmail.com wrote:
>> >K4YZ wrote:
>> >> hot-ham-and-cheese@hotmail.com wrote (N0IMD):
>> >> > Bill Turner wrote:
>> >> > > Please folks, do not reply to these off topic posts.
>> >> > >
>> >> > > If these idiots never get any replies, they will eventually give up
>> >> > > and go away.
>> >> > >
>> >> > > Thanks,
>> >> > >
>> >> > > Bill, W6WRT
>> >> >
>> >> > Bill, I respectfully disagree. Your strategy works with normal people.
>> >> > Robesin isn't normal, and he'll only go away when his ISP is shut off.
>> >> > He's the originator of the infamous "MARS >>>IS<<< Amareur Radio"
>> >> > declaration and the excrement eating thread. At the moment, he's got
>> >> > himself wrapped up in the flag, so he's untouchable even if off-topic.
>> >>
>> >> Bill...Welcome to the "logic" of Brian P Burke, N0IMD, hiding
>> >> behind one of his "anonymous" screen names as "hot--ham-and-cheese"
>> >
>> >Bill, this is the first Robesin reply in years where he did not forge
>> >the attributes to read "snot-scam-and sleaze..." Robesin is trying to
>> >win you over by playing nice this time. Unfortunately, the rest of us
>> >know his game.
>>
>> ineed I had missed that
>
>I do my best to change the attributes back to original.
>
>> although in fair when he conducting a MASS vandalism of my post he
>> sometimes misses doing that
>
>He's just lazy.

lazy and determined not to allow facts to get in the way of his raving
>
>> >> Brian has participated, along with Leonard H Anderson (unlicensed)
>> >> and Mark Morgan (KB9RQZ) in an anti-Amateur Radio tirades and has

>> >> fallen flat on his face in one prognostication about Amateur Radio
>> >> after another. He doesn't like it that I've been right.
>> >
>> >Robesin is right? When???
>> >
>> >Robesin attacks when I reposted an article taken directly from the ARRL
>> >web site quoting an ARRL Vice President >in its entirety< stating that
>> >amateurs have an overblown sense of self-importance.
>>
>> you leave that according to steve being anti steve in the slightest
>> way is being anti Ham
>
>And anti-veteran and anti-ARRL and anti-Red Cross and anti-Morse Code
>Test...

steve is a very negitive person
>
>
>
>> >> One of Brain's favorite tactics is to take comments out-of-context
>> >> and then try to represent them as the entire "gist" of the comments.
>> >
>> >One of Robesin's favorite tactics is to make homosexual inuendo or
>> >claims of pedophilia when he encounters someone who disagrees with him.
>> >
>>
>> or tax evsasion welfare fraud or that one defrauded the govt of one
>> rightfull salery (that was his constant attack on Frank)
>
>Robesin draws a disability pension, yet he is an ER nurse. How can an
>ER Nurse be disabled?

It seems as unlikely as his sailor army requuiter story
>
>> >> My "MARS >>>IS<<< AMATEUR RADIO" comment refered to the fact that
>> >> the MARS program was staffed almost entirely by Amateur Radio licensees
>> >> and was in the very spirit of what it means to be an Amateur Radio
>> >> licensee...
>> >
>> >I pointed out that MARS absolutely has non-amateur leadership,
>> >non-amateur participants, and an entirely non-amateur mission. Hell,
>> >Robesin claims to have been chopped to an NMC MARS slot on Okinawa - as
>> >an active duty, non-amateur participant. Yet he continues with his
>> >"Sorry Hans, MARS >>>IS<<< Amateur Radio" nonsense. Didn't even know
>> >what the MOD was. He tried pulling this stunt before he realized that
>> >I had MARS experience.
>>
>> he tries lots of stunts still no sign he knows anything about the the
>> uquipmwnt he would have in Marine Stint
>
>Plug and play avionics. He couldn't even name that equipment, and it

>was his job.

of course can h e name much in Ham radio as well

>
>> >> He doesn't want to repeat THAT part since it wouldn't serve
>> >> his purposes. (to try and embarrass me)
>> >
>> >Except that I was an actual MARS affiliate and knew what I was talking
>> >about. You didn't. Still don't.
>>
>> he might have been in MARS , which does not mean he understood anything
>> about though
>
>He probably just liked listening to the wives on the MARS phone
>patches...
>
>Anytime anything starts to go wrong for Robesin, he has to get to the
>wives...
>
>He started in with Len's wife, then your wife, then my wife, then his
>gratis UP attorney's wife...

and he is married man that claims to straight and momogmous which
seesm to be another of his lies

>
>> >> He also claims that I am repsonsible for the "excrement eating"
>> >> thread. That's a blatant lie. His "friend", Mark Morgan, KB9RQZ, is
>> >> SOLELY RESPONSIBLE for the authorship of those subject lines and use of
>> >> profanity. You won't see my subject lines repeating it..
>> >
>> >Sorry Robesin, but you are the one who posted the "excrement eating"
>> >filth, and keep reposting your quote. Unbelievable, but Google
>> >provides.
>>
>> I believe any sickness is possible from robeson
>
>Something's wrong with him.

lots of things I suspect
>
>> >> Brain, of course, has NEVER owned up to any one of his own
>> >> misrepresentatiuons of Amateur Radio.
>> >
>> >I have opinions but Robesin doesn't allow dissenting opinions.
>> >Opinions that differ from his are "LIES."
>>
>> and proof that the hold ing is ANTI Ham
>
>AntiChrist.

yep aintichrist anti american .....
>
>> >> He has made ludicrous claims
>> >> that have failed to meet any statndard of proof or substance, including
>> >> any one of several claims of having been a DX station,
>> >
>> >David Heil/K8MN has me confirmed at least twice. Robesin knows this,
>> >therefore Robesin lies.
>>
>> I guess there still musst specail rule for the MMM
>
>I'll bust them every time when they try to play it.

indeed which will keep us busy awhile
>
>> >> misrepresentations about MARS, RACES, ARES, and other poorly
>> >> conceptualized opinions that have fallen by the wayside as failing the
>> >> test of evidence.
>> >
>> >After it was obvious from one regular on RRAP that his ARES group was
>> >unable to fully support an upcoming American Red Cross exercise,
>> >Robesin was asked to write a duty schedule for the exercise. The
>> >stated requirements were three 3 operators on duty per shift. He
>> >shorted the 1st eight hours of the exercise by all three personnel. He
>> >claims it was covered, but the supported agency was not supported at
>> >all. The subsequent shifts were shorted from one to two operators per
>> >shift. Robesin claims that ARES can support all agency needs even when
>> >they lack enough volunteers. Amateur Operators can perform Super-Human
>> >feats, OR the ARC is just an 8AM - 5PM agency.
>> >
>> >> Everyone's entitled to their opinions.
>> >
>> >Not true. Hot-ham is not entitled to an opinion, if Robesin has
>> >anything to say about it.
>>
>> nor I am Mark Morgan nor is Len Anderson or Todd or Frank or anyone
>> that dares oppose him
>
>True enough.
>
>> >> Brain's opinions of me are
>> >> obviously low as he, despite having allegedly been a veteran himself,
>> >> are anti-veteran and anti-volunteer.
>> >
>> >My opinions of Robesin are spot on.
>> >
>> >In addition to slinging accusations of homosexual and pedophilia at
>> >those who disagree with him, I am now a veteran-hater and a
>> >volunteer-hater. Nevermind that I am a veteran and a volunteer.
>>
>> the same apply to me a Veteran although I do not volunteer outside

>> the Home (taking care of my Father who is terminal ill come first of
>> course this makes of all thing to steve an elder abuser) I do support
>> them
>
>Robesin may have been out playing CAP Commando when he should have been
>home taking care of his own.

indeed although given his attitudes that may the most mercifull he
does for his family :neglect them
>
>> >Robesin has claimed that he can have me picked up on his say so as an
>> >LPN with a simple phone call from Tennessee. To another poster on
>> >RRAP, he claimed that "People who shoot off their mouths can have their
>> >tires slashed, rocks thrown through windows, and wives terrorized," but
>> >later clarified that all those bad things would be at someone else's
>> >hands.
>> >
>> >A well known Amateur Radio store advertising in QST, whose ham daughter
>> >was featured in the ad photo, was said to be "selling something" but
>> >not amateur equipment.
>> >
>> >Robesin, whose father was a Sailor Army Recruiter (I swear thats not a
>> >typo), lays claim to seven hostile actions in the USMC, but who's only
>> >overseas assignment was Okinawa.
>>
>> check bio qrz N8DOS I believe on the sailor army recruter
>
>Will do.
>
>> >There's more, much more, but if I went on and on and on you'd probably
>> >think I was making it up. I'm not. Google provides.
>> >
>> >> I've rubbed his nose in one
>> >> failed opinion after another.
>> >
>> >Yet it is your excrement on another man's genitals, according to your
>> >own original claims and subsequent quotes. Google provides, and you've
>> >requoted yourself numerous times.
>>
>> he can't face any fact
>
>He must face his own excrement.

I think he is deterermend to avoid it
>
>> >> So...There's my $0.02. Do with it as you will, but I'd take a BIG
>> >> grain of salt with any traffic coming from "hot-ham-and-cheese", as you
>> >> are welcome to do with mine.
>> >>
>> >> 73
>> >>

>> >> Steve, K4YZ
>> >
>> >Your $0.02 isn't worth two cents. Google provides.
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5895. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-24 15:01:52 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1166972512.870892.49690@79g2000cws.googlegroups.com>
Source record: 9046

Michael Black wrote:
> ken scharf (wa2mzeNOSPAMBOTS@bellsouth.net) writes:
> > I don't recall the url but I remember a 2-3 tube receiver from the 40's
> > that might be what you want. It was a simple superhet with a
> > regenerative detector. Used a 6k8 as the converter and a 6c8g as the
> > detector / audio.
>
> They were called "supergainers" and apparently Frank Jones, of later
> VHF fame, was a big proponent of them in the thirties.
>
> The earlier Radio Handbook on that webpage someone posted about would
> have them, the 1936 version or whatever. I didn't suggest downloading
> that one since I had the impression the tubes available to the original
> poster were miniature, and the book predates those.

Thanks, Mike, Ken. I'll have to take a look. I did manage to download
some of the files on designing circuits with tubes, and with the online
tube manuals I might be able to figure out something on my own. Still,
if anyone can think of where I can find something already made up that
I can use, I'd appreciate it.

Ralph

5896. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-24 16:17:43 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <vKxjh.10272$h_1.2851@bignews6.bellsouth.net>
Source record: 9047

julian814 wrote:
> Michael Black wrote:
>> ken scharf (wa2mzeNOSPAMBOTS@bellsouth.net) writes:
>>> I don't recall the url but I remember a 2-3 tube receiver from the 40's
>>> that might be what you want. It was a simple superhet with a
>>> regenerative detector. Used a 6k8 as the converter and a 6c8g as the
>>> detector / audio.
>> They were called "supergainers" and apparently Frank Jones, of later
>> VHF fame, was a big proponent of them in the thirties.
>>
>> The earlier Radio Handbook on that webpage someone posted about would
>> have them, the 1936 version or whatever. I didn't suggest downloading
>> that one since I had the impression the tubes available to the original
>> poster were miniature, and the book predates those.
>
> Thanks, Mike, Ken. I'll have to take a look. I did manage to download
> some of the files on designing circuits with tubes, and with the online
> tube manuals I might be able to figure out something on my own. Still,
> if anyone can think of where I can find something already made up that
> I can use, I'd appreciate it.
>
>
> Ralph
>
HERE'S the link http://www.io.com/~nielw/3tubrcvr/3tubrcvr.htm

5897. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-24 16:22:40 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <8Pxjh.10274$h_1.7108@bignews6.bellsouth.net>
Source record: 9048

ken scharf wrote:
> julian814 wrote:
>> Michael Black wrote:
>>> ken scharf (wa2mzeNOSPAMBOTS@bellsouth.net) writes:
>>>> I don't recall the url but I remember a 2-3 tube receiver from the 40's
>>>> that might be what you want. It was a simple superhet with a
>>>> regenerative detector. Used a 6k8 as the converter and a 6c8g as the
>>>> detector / audio.
>>> They were called "supergainers" and apparently Frank Jones, of later
>>> VHF fame, was a big proponent of them in the thirties.
>>>
>>> The earlier Radio Handbook on that webpage someone posted about would
>>> have them, the 1936 version or whatever. I didn't suggest downloading
>>> that one since I had the impression the tubes available to the original
>>> poster were miniature, and the book predates those.
>> Thanks, Mike, Ken. I'll have to take a look. I did manage to download
>> some of the files on designing circuits with tubes, and with the online
>> tube manuals I might be able to figure out something on my own. Still,
>> if anyone can think of where I can find something already made up that
>> I can use, I'd appreciate it.
>>
>>
>> Ralph
>>
> HERE'S the link http://www.io.com/~nielw/3tubrcvr/3tubrcvr.htm
Oh, nearly forgot....
With a little head scratching, you can replace the 6K8 with a 6u8, 6ea8,
6x8 (etc) triode/pentode. Use the pentode as the mixer and the triode
as the oscillator. In many cases the inter-electrode capacitance inside
the tube will provide enough coupling from the oscillator to the mixer,
but you might need to use a gimick capacitor (twisted wires) from the
pentode grid to the oscillator plate. Other tricks are to connect the
pentode screen to the oscillator plate, or in the case of the 6x8, the
pentode grid 3 to the oscillator grid.

The 6c8 may be replaced by ANY dual triode (such as 12au7, 12at7, 12ax7,
6sn7,6sl7, etc....)

5898. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-24 16:23:49 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <dQxjh.10275$h_1.4301@bignews6.bellsouth.net>
Source record: 9049

ken scharf wrote:
> julian814 wrote:
>> Michael Black wrote:
>>> ken scharf (wa2mzeNOSPAMBOTS@bellsouth.net) writes:
>>>> I don't recall the url but I remember a 2-3 tube receiver from the 40's
>>>> that might be what you want. It was a simple superhet with a
>>>> regenerative detector. Used a 6k8 as the converter and a 6c8g as the
>>>> detector / audio.
>>> They were called "supergainers" and apparently Frank Jones, of later
>>> VHF fame, was a big proponent of them in the thirties.
>>>
>>> The earlier Radio Handbook on that webpage someone posted about would
>>> have them, the 1936 version or whatever. I didn't suggest downloading
>>> that one since I had the impression the tubes available to the original
>>> poster were miniature, and the book predates those.
>> Thanks, Mike, Ken. I'll have to take a look. I did manage to download
>> some of the files on designing circuits with tubes, and with the online
>> tube manuals I might be able to figure out something on my own. Still,
>> if anyone can think of where I can find something already made up that
>> I can use, I'd appreciate it.
>>
>>
>> Ralph
>>
> HERE'S the link http://www.io.com/~nielw/3tubrcvr/3tubrcvr.htm
Link to follow up... http://www.io.com/~nielw/3tube_xtal/3tube_xtal.htm

5899. Re: Ideal ham receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-24 21:04:51 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1166994291.701666.303680@48g2000cwx.googlegroups.com>
Source record: 9050

jimspeer@jimspeer.org wrote:
> But the
> ones I have used seem plagued with near-signal desensitization, front
> end overload, etc., and I suppose all that comes from putting the
> selectivity so far downstream.
>
> I'm almost tempted to get an old 75s4 and shut up, but I really don't
> need another room heater, so, instead, I'm thinking of building my own
> receiver along the lines laid down by the late Doug DeMaw in his _QRP
> Notebook_. Single conversion 160m superhet with Collins mechanical
> filters in the IF and a series of down-converters for the other bands.
> Anybody got any experience with the DeMaw Design?

The DeMaw designs are very nice but with their band-wide converters they also suffer from having selectivity downstream rather than at the front. Preselection at the front helps with any of these.

The modern choice of a 45MHz or so first IF is really pretty nifty for a general coverage receiver from the past couple of decades. Lack of preselection can be largely cleared up by bolting something before the front end, and indeed many of the receivers you see that cost as much as a car have tracking preselectors.

But if you don't want to upconvert, as I see it you have two choices:

1. Don't even try bandswitching. Coil sets for each band. You end up with the HBR-16, a very elegant and homebrewable receiver.

2. Do bandswitching but with elaborate tracking front end (and if necessary a tracking IF, but with modern synthesizers you probably wouldn't), probably with many switching sections to handle the required octaves. You end up with a R-390A.

Tim.

5900. Re: Tri-Faced Robesin Strikes Out Again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-24 23:33:59 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1167003239.808806.105780@a3g2000cwd.googlegroups.com>
Source record: 9051
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

Mark@kb9rqz.aprs wrote:
> On 23 Dec 2006 16:57:31 -0800, hot-ham-and-cheese@hotmail.com wrote:
> >Roger wrote:
> >> <hot-ham-and-cheese@hotmail.com> wrote in message
> >> news:1166845903.893439.54470@80g2000cwy.googlegroups.com...
> >> > K4YZ wrote:
> >> > > hot-ham-and-cheese@hotmail.com wrote (N0IMD):
> >> > > > Bill Turner wrote:
> >> > > > > Please folks, do not reply to these off topic posts.
> >> > > > >
> >> > > > > If these idiots never get any replies, they will eventually give up
> >> > > > > and go away.
> >> > > > >
> >> > > > > Thanks,
> >> > > > >
> >> > > > > Bill, W6WRT
> >> > > > >
> >> > > > Bill, I respectfully disagree. Your strategy works with normal
> >> people.
> >> > > > Robesin isn't normal, and he'll only go away when his ISP is shut
> >> off.
> >> > > > He's the originator of the infamous "MARS >>>IS<<< Amareur Radio"
> >> > > > declaration and the excrement eating thread. At the moment, he's got
> >> > > > himself wrapped up in the flag, so he's untouchable even if off-topic.
> >> > > >
> >> >
> >> Of course let us not leave Mark out of the insanity. Mark will continue to
> >> crap upon as many posts as he can, whether he is asked to join or not.
> >>
> >If you hadn't noticed, Mark is "Out-Assholing" Robesin. He's doing a
> >damned fine job of it, too.
>
> thank you I am only sorry that Robeson decided to provide the
> motivation

He should get some gigs as a motivational speaker.

> >> Mark is far from "normal", too. Billy Smith already knows that....
> >>
> >Everyone has issues, but there's no need for Robesin to scour the
> >internet and bring stuff back to RRAP that has no place on RRAP. But
> >thanks for asking.
>
> indeed the last person to accuse me of being normal I chenlanged to

> deul

Ha!

5901. Re: Ideal ham receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-24 23:47:37 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <emn3ip$7oi$1@theodyn.ncf.ca>
Source record: 9052

"Tim Shoppa" (shoppa@trailing-edge.com) writes:

> 1. Don't even try bandswitching. Coil sets for each band. You end up
> with the HBR-16, a very elegant and homebrewable receiver.
>
One reason there was that phase with a separate converter per band ahead of a receiver tuning a fixed band was to avoid switching tuned circuits. By that time, the semiconductors cost so little that it was easier to duplicate them for each band, and then the bandswitching becomes so much easier. No fussing about getting close to the tuned circuits, you simply switch the "B+" and the input and/or outputs. Or, make those converters plug in, and then no switches required at all.

I sort of alluded to this in an earlier post. Make a good receiver, minus the variable oscillator and the front end tuning. Maybe even put the mixer in the "plugins". Then you end up with a good receiver that is quite flexible, because the things that you may want to play with and may give trouble are in a separate box or plugins.

YOu can even play with things like tuneable frontends versus something that is broadband across a ham band. Some bands might interest the builder more than others, so they could build a really good plugin front end for that band, and lesser front ends for other bands, or leave off the bands they aren't interested in (but those bands can easily be added later, unlike a bandswitched rig).

IN the sixties, there was a guy who had a whole slew of receivers described in CQ. Virtually all of them were single bands, and he made the point that it left off bandswitching, and of course he could choose an IF that better matches the tuning range. Good points, but an awful lot of duplication. Build a good receiver first, and then play with the frontends endlessly.

Michael VE2BVW

5902. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-25 04:13:53 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1167020032.919742.114850@h40g2000cwb.googlegroups.com>
Source record: 9053

ken scharf wrote:
> > HERE'S the link http://www.io.com/~nielw/3tubrcvr/3tubrcvr.htm
> Oh, nearly forgot....
> With a little head scratching, you can replace the 6K8 with a 6u8, 6ea8,
> 6x8 (etc) triode/pentode. Use the pentode as the mixer and the triode
> as the oscillator. In many cases the inter-electrode capacitance inside
> the tube will provide enough coupling from the oscillator to the mixer,
> but you might need to use a gimick capacitor (twisted wires) from the
> pentode grid to the oscillator plate. Other tricks are to connect the
> pentode screen to the oscillator plate, or in the case of the 6x8, the
> pentode grid 3 to the oscillator grid.
>
> The 6c8 may be replaced by ANY dual triode (such as 12au7, 12at7, 12ax7,
> 6sn7,6sl7, etc....)

I think we may be in business, here. Went through my selection of tubes, and there's a 6X8 and a 12AX7A among them. Three other tubes looked like they had promise - two 12AV6 and a 6BU6.

After I'm done with this post, I'm going to Google Images to see if I do indeed have 2000 ohm headphones. I want to make sure, because elsewhere I found a crystal shortwave radio that uses them as well. That might serve my needs better, although it won't have those cool glow in the dark tubes.

Ralph

5903. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-25 14:49:46 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1167058186.021195.76110@48g2000cwx.googlegroups.com>
Source record: 9054

After using Google images to track down pictures of 2000 ohm headphones, I am satisfied that those are what I have. (Eight sets, in fact.) Found out the one tube is a 6BJ6, not a 6BU6, but it does still seem usable. Going to ask if I can make some trades with tubesandmore, so I can find a good home for some of the headphones and possibly get the tube sockets and transformers I need for my project.

Thanks again to everyone who has helped. Time for me to go do some math. (Ugh!)

Ralph

5904. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-25 18:50:42 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1167072642.300139.127140@f1g2000cwa.googlegroups.com>
Source record: 9055

Today, I am reminded that Google is my friend. After much digging and prodding, I found what I was looking for. It seems the National SW-54 receiver is as close to what I want as possible without me having to do math. It dates back to the 50's, uses tubes, (in fact, I already have three of the five in it) covers a good amount of the SW band, and will drive either my 2000 ohm headphones or a 4" speaker. BAMA had the manual, but it wouldn't give it up, so I had to go to the mirror site to get it. Everything I need is in it - schematics, parts list, pictures of the assembled receiver. Not exactly the ideal radio for a first try, but nothing good ever came easy, did it? ;-)

Thanks again to everyone who offered advice and suggestions. I'll be sure to post when I have it together and let everyone know how I made out.

Time to scrounge for parts.

Ralph

5905. Re: Ideal ham receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-25 19:18:51 UTC
From: laura halliday <marsgal42@hotmail.com>
Message-ID: <1167074331.446124.196880@f1g2000cwa.googlegroups.com>
Source record: 9056

jimspeer@jimspeer.org wrote:
> I don't much like the receivers I've used in contemporary tranceivers
> -- the general coverage synthisized open front end ones. (I hasten to
> add I haven't used any of the $4000 rigs; can't afford them). But the
> ones I have used seem plagued with near-signal desensitization, front
> end overload, etc., and I suppose all that comes from putting the
> selectivity so far downstream.
>
> I'm almost tempted to get an old 75s4 and shut up, but I really don't
> need another room heater, so, instead, I'm thinking of building my own
> receiver along the lines laid down by the late Doug DeMaw in his _QRP
> Notebook_. Single conversion 160m superhet with Collins mechanical
> filters in the IF and a series of down-converters for the other bands.
> Anybody got any experience with the DeMaw Design?

I'm partial to KK7B's stuff, since the less you mess with the
signal turning it from RF to audio, the better it sounds.
And if you *want* to mess with it, you've got a better
place to start.

My best shack receiver is a Harris RF-590. A genuine
professional military/industrial/spook radio, rack mounted,
weighs a ton, megabucks new, but reasonable if you can
get one surplus. If you can't hear it on this radio, you don't
need to hear it.

Laura Halliday VE7LDH "Que les nuages soient notre
Grid: CN89mg pied a terre..."
ICBM: 49 16.05 N 122 56.92 W - Hospital/Shafte

5906. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-25 22:27:12 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <TeYjh.9003$U12.8097@bignews1.bellsouth.net>
Source record: 9057

julian814 wrote:
> After using Google images to track down pictures of 2000 ohm
> headphones, I am satisfied that those are what I have. (Eight sets, in
> fact.) Found out the one tube is a 6BJ6, not a 6BU6, but it does still
> seem usable. Going to ask if I can make some trades with tubesandmore,
> so I can find a good home for some of the headphones and possibly get
> the tube sockets and transformers I need for my project.
>
> Thanks again to everyone who has helped. Time for me to go do some
> math. (Ugh!)
>
>
> Ralph
>
You can just measure the resistance of the phones with an ohm meter.
The result will be close enough to the impedance (I think in the era
they were made they didn't even measure impedance, just the resistance).

Also, I have a lot's used 12au7's. If you need a few you can have some
for the cost of postage.

5907. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-25 22:29:52 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <nhYjh.9004$U12.2493@bignews1.bellsouth.net>
Source record: 9058

julian814 wrote:
> Today, I am reminded that Google is my friend. After much digging and
> prodding, I found what I was looking for. It seems the National SW-54
> receiver is as close to what I want as possible without me having to do
> math. It dates back to the 50's, uses tubes, (in fact, I already have
> three of the five in it) covers a good amount of the SW band, and will
> drive either my 2000 ohm headphones or a 4" speaker. BAMA had the
> manual, but it wouldn't give it up, so I had to go to the mirror site
> to get it. Everything I need is in it - schematics, parts list,
> pictures of the assembled receiver. Not exactly the ideal radio for a
> first try, but nothing good ever came easy, did it? ;-)
>
> Thanks again to everyone who offered advice and suggestions. I'll be
> sure to post when I have it together and let everyone know how I made
> out.
>
> Time to scrounge for parts.
>
>
> Ralph
>
Ocean State electronics has EXACT replacement coil forms for the beast.
(sockets are another story!) They have NORMAL socket type plug in coil
forms too. (the national coil forms have different pin spacing than
standard tube socket type coils).

5908. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-25 22:41:03 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <SrYjh.9009$U12.4101@bignews1.bellsouth.net>
Source record: 9059

julian814 wrote:
> Today, I am reminded that Google is my friend. After much digging and
> prodding, I found what I was looking for. It seems the National SW-54
> receiver is as close to what I want as possible without me having to do
> math. It dates back to the 50's, uses tubes, (in fact, I already have
> three of the five in it) covers a good amount of the SW band, and will
> drive either my 2000 ohm headphones or a 4" speaker. BAMA had the
> manual, but it wouldn't give it up, so I had to go to the mirror site
> to get it. Everything I need is in it - schematics, parts list,
> pictures of the assembled receiver. Not exactly the ideal radio for a
> first try, but nothing good ever came easy, did it? ;-)
>
> Thanks again to everyone who offered advice and suggestions. I'll be
> sure to post when I have it together and let everyone know how I made
> out.
>
> Time to scrounge for parts.
>
>
> Ralph
>
OPPS, I confused the sw-54 with the sw3-5 series.
This one is a "modern" superhet. Do you have the IF transformers, band
switch and coils?

I have a complete band switch and coil assembly from an old Lafayette
short wave receiver. It is a 4 band assembly with rf, osc, and mixer
coils intended for use with a 3 gang 365pf/section tuning capacitor.
I was thinking of using this in some project (that never happened), but
it sounds like just what you want. The coils have slug tuned tracking
adjustments, and the oscillator and mixer coils also have trimmer
capacitor tracking too.

If you can use this let me know.

5909. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-25 22:54:42 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <GEYjh.9012$U12.3314@bignews1.bellsouth.net>
Source record: 9060

ken scharf wrote:
> julian814 wrote:
>> Today, I am reminded that Google is my friend. After much digging and
>> prodding, I found what I was looking for. It seems the National SW-54
>> receiver is as close to what I want as possible without me having to do
>> math. It dates back to the 50's, uses tubes, (in fact, I already have
>> three of the five in it) covers a good amount of the SW band, and will
>> drive either my 2000 ohm headphones or a 4" speaker. BAMA had the
>> manual, but it wouldn't give it up, so I had to go to the mirror site
>> to get it. Everything I need is in it - schematics, parts list,
>> pictures of the assembled receiver. Not exactly the ideal radio for a
>> first try, but nothing good ever came easy, did it? ;-)
>>
>> Thanks again to everyone who offered advice and suggestions. I'll be
>> sure to post when I have it together and let everyone know how I made
>> out.
>>
>> Time to scrounge for parts.
>>
>>
>> Ralph
>>
> OPPS, I confused the sw-54 with the sw3-5 series.
> This one is a "modern" superhet. Do you have the IF transformers, band
> switch and coils?
>
> I have a complete band switch and coil assembly from an old Lafayette
> short wave receiver. It is a 4 band assembly with rf, osc, and mixer
> coils intended for use with a 3 gang 365pf/section tuning capacitor.
> I was thinking of using this in some project (that never happened), but
> it sounds like just what you want. The coils have slug tuned tracking
> adjustments, and the oscillator and mixer coils also have trimmer
> capacitor tracking too.
>
> If you can use this let me know.
>
PS, if you use this you'll have to change the tube lineup to take full
advantage of all the coils. Replace the 50c5 with a 35c5 and add
another 12ba6 for an rf amplifier. Actually you should use all 6v tubes
and a power transformer. Those AC/DC sets are "undertakers labs"
approved shock hazards. An "isolation transformer will fix that of course."

The schematic of the receiver the coil switch assembly came from is here
http://bama.edebris.com/manuals/lafayett/ha700/

5910. WTD:MSR-2000 VHF XMTR

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-26 02:04:29 UTC
From: KC0EH <cvest@cox.net>
Message-ID: <Dm%jh.32705$923.28123@newsfe17.lga>
Source record: 9061
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Our club is looking for a spare transmitter board for our Motorola
MSR-2000 VHF repeater.
Please state price and condition.

Charlie (KC0EH) Club Call (WR0CV)

5911. Re: WTD:MSR-2000 VHF XMTR

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-26 02:12:33 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <4111p2lqflevm8hbttth4ia9m2v3lvnlt3@4ax.com>
Source record: 9062

Please folks, do not reply to these posts which have nothing to do
with the purpose of this newsgroup.

If these clueless fools never get any replies, they will eventually
learn to post to the correct newsgroup.

Thanks,

Bill, W6WRT

5912. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-26 04:08:31 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1167106110.951129.298910@73g2000cwn.googlegroups.com>
Source record: 9063

I'm starting to think I should just settle for that crystal shortwave set I found on the Antique Radio website. Less headaches.

No idea where to get the coils for the SW-54, so I guess that's out. Besides, since this is my first real attempt at making a radio, I should probably go for something simpler.

Going back to Google to see if I can find more on some of the tubes I have. I keep thinking I should be able to make a regenerative receiver with some amplification with the two 12AV6 tubes I have.

Ralph

5913. Re: WTD:MSR-2000 VHF XMTR

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-26 14:21:10 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <IJ6dncSBZrFFsgzYnZ2dnUVZ_oernZ2d@bright.net>
Source record: 9064

Huh?

I've seen this exact reply to many posts on many ham newsgroups. If you disagree with the post, aren't you providing a "reply" to these "supposed" spammers? I think you're being a bit anal here. Most people with repeaters (even commercially made ones) have to do a bit of homebrewing to get them on the ham bands (controllers, id'ers, etc.). It sounds like what you want is more specific newsgroups such as rec.radio.amateur.homebrew.vhf.2M.repeaters.motorola.msr2000.boards.replacement.PA.version B

Lighten up. You don't HAVE to read these posts and this one had a very clear subject right in the subject line.

Scott
N0EDV

Bill Turner wrote:

> Please folks, do not reply to these posts which have nothing to do
> with the purpose of this newsgroup.
>
> If these clueless fools never get any replies, they will eventually
> learn to post to the correct newsgroup.
>
> Thanks,
>
> Bill, W6WRT

5914. Re: WTD:MSR-2000 VHF XMTR

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-26 14:25:54 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <wqCdnYpJeKFprQzYnZ2dnUVZ_u2mnZ2d@bright.net>
Source record: 9065

As a side note, which amateur newsgroup do YOU think they should post this to...rec.radio.amateur.swap ??? I haven't read that newsgroup in many months (and I'm still subscribed to it) because there have been no posts there. If I was looking for a replacement part, I'd want to post somewhere where it had a good chance of being seen.

Scott
N0EDV

Bill Turner wrote:

> Please folks, do not reply to these posts which have nothing to do
> with the purpose of this newsgroup.
>
> If these clueless fools never get any replies, they will eventually
> learn to post to the correct newsgroup.
>
> Thanks,
>
> Bill, W6WRT

5915. Re: Ideal ham receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-26 14:50:23 UTC
From: ab0wr <tgorman2@cox.net>
Message-ID: <frcrme.o8h.ln@fe06.highwinds-media.phx>
Source record: 9066

jimspeer@jimspeer.org wrote:

>
>
> I don't much like the receivers I've used in contemporary tranceivers
> -- the general coverage synthisized open front end ones. (I hasten to
> add I haven't used any of the $4000 rigs; can't afford them). But the
> ones I have used seem plagued with near-signal desensitization, front
> end overload, etc., and I suppose all that comes from putting the
> selectivity so far downstream.
>
> I'm almost tempted to get an old 75s4 and shut up, but I really don't
> need another room heater, so, instead, I'm thinking of building my own
> receiver along the lines laid down by the late Doug DeMaw in his _QRP
> Notebook_. Single conversion 160m superhet with Collins mechanical
> filters in the IF and a series of down-converters for the other bands.
> Anybody got any experience with the DeMaw Design?
>
> Jim, K5YUT

Jim,

I recently went through what you are now doing. Get a copy of EMRFD and read through it.

I built up a DDS vfo that I could use from a few khz up to about 20mhz. I put it in a well shielded enclosure to minimize spur pickup. The one I built also has an lcd readout and keeping that in the shielded enclosure keeps noise down in the rest of the receiver.

I then built up front end bandpass filters for just the ham bands and worked with them till I was happy with their performance.

I then picked up surplus crystals off of ebay. Get 100 of the same kind if you can. The hc49 units I got seem to work well. Then build up the crystal filters you need and get them working.

I then built up an IF using a 1496 ic and the crystal filter.

Then I built up a mini-circuit sbl1 mixer and started hooking things together. The mixer needs a good diplexer arrangement to do its best. I spent some time getting that built up. I learned quite a bit about interstage impedance matching. I used iron core toroid transformers to do most of that (e.g. btwn the mixer and filter and btwn the filter and the IF amp.

Add in a simple product detector and a *good* audio stage and you are all set.

The receiver hears at least as well as my icom 751a. It doesn't have passband tuning (and likely won't) or a notch filter (I have plans to add an audio notch filter) so it isn't quite as good in a crowded situation.

But it *is* simple and easy to work on.

Oh, I almost forgot. I wound up building up an RF amplifier to enhance the receivers sensitivity and added a switchable 20db pad to help with overload situations. I also used a set of latch relays to control everything with a whole bunch of pushbutton switches on the front panel. The relays were expensive but work really well.

Anyway, I think you can build a single conversion receiver that will be quite adequate even compared to todays equipment. Give it a try!

tim ab0wr

5916. Re: WTD:MSR-2000 VHF XMTR

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-26 16:58:32 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <emrkborrk1@theodyn.ncf.ca>
Source record: 9067

Scott (acepilot@bloomer.net) writes:
> As a side note, which amateur newsgroup do YOU think they should post
> this to...rec.radio.amateur.swap ??? I haven't read that newsgroup in
> many months (and I'm still subscribed to it) because there have been no
> posts there. If I was looking for a replacement part, I'd want to post
> somewhere where it had a good chance of being seen.
>
> Scott
> N0EDV
>
There is no "rec.radio.amateur.swap" It's rec.radio.swap

The original post went to:
alt.ham-radio.marketplace
rec.radio.amateur.boatanchors
rec.radio.amateur.equipment
rec.radio.amateur.homebrew
The first is the only one where it really belongs. Maybe .boatanchors,
since when they created it they allowed for ad, though the intent was
not a general buy and sell newsgroup and neither was it truly meant
as simply a buy and sell newsgroup for boatanchors. It was meant
as incidental to the discussion of boatanchors, so people having
discussion might post ads, as opposed to people who merely use
the newsgroup to buy things.

rec.radio.amateur.equipment is for the discussion of amateur radio
equipment, and was never intended as a buy and sell newsgroup. The
fact that bozos post their ads is not relevant to what the newsgroup
is about.

Same with rec.radio.amateur.homebrew If anything, ads are even
way further off topic, given this newsgroup is about building.

And you're notion that "If I was looking for a replacement part, I'd want
to post somewhere where it had a good chance of being seen." is precisely
why we see so much cross-posting. People who can't figure out where
their post belongs hits all kinds of newsgroups in the hopes
that someone will see it and they'll get a reply. It make no
difference whether someone is buying or selling something, or it's
those silly feud posts; they've all decided that what they want is
more important than what others want. That's the very notion of spam,
hitting lots of newsgroups (or email) in the hopes of getting a response.

People too often are misled by commercial advertising. We see it
on broadcast radio, in the newspapers, and on tv, so it becomes
acceptable. But what's missing is that advertisers in old media

pay for their bandwidth, that they help to deliver the content. That is never the case when someone hits the newsgroups or email. All they pay is for their internet access, and the newsgroups and email would survive without them. So the acceptance of advertising in old media is no excuse for advertising/spam where it doesn't belong in the newsgroups.

Michael VE2BVW

> Bill Turner wrote:
>> Please folks, do not reply to these posts which have nothing to do
>> with the purpose of this newsgroup.
>>
>> If these clueless fools never get any replies, they will eventually
>> learn to post to the correct newsgroup.
>>
>> Thanks,
>>
>> Bill, W6WRT

5917. Re: WTD:MSR-2000 VHF XMTR

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-26 17:49:34 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <bvn2p2tq1jasopip7bj7gggocd8omtl9ks@4ax.com>
Source record: 9068

ORIGINAL MESSAGE:

On Tue, 26 Dec 2006 14:21:10 +0000, Scott <acepilot@bloomer.net>
wrote:

>Most people
>with repeaters (even commercially made ones) have to do a bit of
>homebrewing to get them on the ham bands (controllers, id'ers, etc.).

------------ REPLY FOLLOWS ------------

Wanting to buy a spare circuit board has to do with repairing, not
homebrewing. Homebrewing means building a new piece of equipment
essentially from scratch.

Bill, W6WRT

5918. Re: WTD:MSR-2000 VHF XMTR

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-26 17:50:28 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <fon2p2tpqp8g4k29rfumbg9p54ic3fkqj6@4ax.com>
Source record: 9069

ORIGINAL MESSAGE:

On Tue, 26 Dec 2006 14:25:54 +0000, Scott <acepilot@bloomer.net>
wrote:

>As a side note, which amateur newsgroup do YOU think they should post
>this to...rec.radio.amateur.swap ??? I haven't read that newsgroup in
>many months (and I'm still subscribed to it) because there have been no
>posts there. If I was looking for a replacement part, I'd want to post
>somewhere where it had a good chance of being seen.
>
>Scott
>N0EDV

------------ REPLY FOLLOWS ------------

Rec.radio.amateur.swap is very lightly used. I'd recommend
rec.radio.swap.

Bill, W6WRT

5919. Re: K4YZ TARD

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-26 17:56:37 UTC
From: Paul Johnson <baloo@ursine.ca>
Message-ID: <lb4864xnhc.ln2@ursa-major.ursine.ca>
Source record: 9070
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

Steveo wrote:

> "K4YZ" <stevenrobeson@yahoo.com> wrote:
>>>
> Steve, K4YZ//SLAP
>
> Why don't you and your homo ham buddy owner get a fucking room already,
> Steve? Or at least keep your lame breeding ritual out of rrcb.

Please don't feed the trolls. It's best to aggressively killfile pretty
much any time you're reading rec.radio.* or rec.scouting.* it seems.

--
Posted via a free Usenet account from http://www.teranews.com

5920. QSL Cards

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-26 19:15:03 UTC
From: "qslcanadagroups@gmail.com" <qslcanadagroups@gmail.com>
Message-ID: <1167160503.530317.204030@f1g2000cwa.googlegroups.com>
Source record: 9071

Name: Kirill
Call: VE3AXC

Merry Christmas and Happy New Year everyone! I will be a subscriber of this forum from now on, so nice meeting everybody!

On this note, please allow me to stray a bit off this forum's topic but my info might still be relevant for some. I myself have been a ham for 8 years; also run a small QSL card printing business (my printishop is located in Toronto, Canada) and have a web site specifically dedicated to that www.qslcanada.com

Reason I would like to post this message on this forum is to let your group know that I have a pretty good group referral discount program.

The idea is quite simple and there is no catch.... For each HAM who is referred by you and who wishes to place an minimum order of 500 cards, you would receive 100 (custom designed) cards of the same type free of charge. The offer is transferable, so if for example you let me know that you don't need any more cards, I will be happy to print additional 100 cards for your friend free of charge (or charge for 100 cards less)

This offer may be ideal for your group or a club you belong to. For example, if you
refer say 3 HAMs who would like to print a minimum 500 cards for themselves, you would receive 300 cards as appreciation for spreading the word about qslcanada
; you could transfer it to someone as a gift ; or each of 3 Hams would only pay
for 400 cards, since each one will get 100 cards free. To sum it up, each of the referral counts as 100 free cards in any shape or form. Pse let me know if you have any questions.

So if bunch of Hams in this group who are into QSLing might be interested to giving someone a free gift or getting a good deal on the next batch, pse let me know. The offer is valid any time in future. www.qslcanada.com has quite a bit of samples, more info and e-ham reviews

PS Have got to mention this, since it did happen before, where some folks took this posting too personally. I just wanted to get this info out there ONE TIME ONLY! Please don't call me any spammer names or hate mail me. I believe this to be a fair group offer any hams by hams enterprise deserves a little exposure to start out with.

I will try to participate in this group from now on; best 73 to everyone and Happy New Year!

5921. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-26 19:44:44 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1167162284.567143.213250@i12g2000cwa.googlegroups.com>
Source record: 9072

Managed to find a regenerative receiver based on the 12AT7 tube. I've been told I can substitute one of my 12AV6 tubes without a problem, so that looks promising.

I have some twin triode tubes, as well. (6FQ7, 6BZ7 and 4BC8) I've been wondering if I couldn't make some one tube receivers with them. (Use one triode for regeneration, the other an amplifier.) As for the rest of the tubes I have, I'd be willing to sell or swap for parts I'll need.

Ralph

5922. Re: K4YZ TARD

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-26 20:56:36 UTC
From: Steveo <moparholic@hotmail.com>
Message-ID: <20061226160340.369$Ec@newsreader.com>
Source record: 9073
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

Paul Johnson <baloo@ursine.ca> wrote:
> Please don't feed the trolls. It's best to aggressively killfile pretty
> much any time you're reading rec.radio.* or rec.scouting.* it seems.
>
And yet you cross-post to them.

fu set

5923. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-26 21:05:55 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <F8gkh.12138$3v6.6332@bignews8.bellsouth.net>
Source record: 9074

julian814 wrote:
> Managed to find a regenerative receiver based on the 12AT7 tube. I've
> been told I can substitute one of my 12AV6 tubes without a problem, so
> that looks promising.
>
> I have some twin triode tubes, as well. (6FQ7, 6BZ7 and 4BC8) I've been
> wondering if I couldn't make some one tube receivers with them. (Use
> one triode for regeneration, the other an amplifier.) As for the rest
> of the tubes I have, I'd be willing to sell or swap for parts I'll
> need.
>
> Ralph
>
http://www.lindsaybks.com/bks/twin/index.html

5924. Re: Ideal ham receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-26 23:09:00 UTC
From: Jim <kill-spam@no-spam.org>
Message-ID: <Ufudnas0JJgQNgzYnZ2dnUVZ_vipnZ2d@comcast.com>
Source record: 9075

jimspeer@jimspeer.org wrote:

>
>
> I don't much like the receivers I've used in contemporary tranceivers
> -- the general coverage synthisized open front end ones. (I hasten to
> add I haven't used any of the $4000 rigs; can't afford them). But the
> ones I have used seem plagued with near-signal desensitization, front
> end overload, etc., and I suppose all that comes from putting the
> selectivity so far downstream.
>
> I'm almost tempted to get an old 75s4 and shut up, but I really don't
> need another room heater, so, instead, I'm thinking of building my own
> receiver along the lines laid down by the late Doug DeMaw in his _QRP
> Notebook_. Single conversion 160m superhet with Collins mechanical
> filters in the IF and a series of down-converters for the other bands.
> Anybody got any experience with the DeMaw Design?
>
> Jim, K5YUT

There was a project to design a REALLY good sigle conversion ham radio and
here is the website:

http://www.warc.org.uk/cdg2000/The%20CDG2000%20Transceiver.htm

It was designed to have a fantastic dynamic range and, after seeing some
of the schematics, it has quite a few good ideas. The mixers and crystal
filters are worth studying.

One of the designers made a helical coil VCO with really good phase noise,
although the mechanical details were complex. These days, I'd want to look
into the AD9954 DDS design.

Probably still have to do something about DDS spurs, but they are fairly
low as is.

==========

So, it seems to me that there are a lot of designs for homebrew gear.
You need to look at your specific requirements to see what will suit you.

In my case, I live in a very RF HOT location, with quite a few powerful
signals. I might take the extra effort to go for maximum dynamic range.
Probably ovekill for most ham locations, but necessary for me.

Jim N6BIU

--

15:10 Pacific Time Zone
Dec 26 2006

International Time
23:10 UTC
26.12.2006

5925. Re: Ideal ham receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-27 03:20:41 UTC
From: bcdlr <on30ng@gmail.com>
Message-ID: <1167189641.150792.293730@a3g2000cwd.googlegroups.com>
Source record: 9076

Guys, this is has been an interesting discussion. I wish I was more knowledgeable - I would venture out building like that but I just don't know enough.

I'm kind of starting over. Long story...
What would be a good receiver - or good enough to listen for VFOs, test and build, etc.
Or better yet what should I avoid?
What about something like the Ten-Tec 1056 kit and some way to band switch - maybe modules...
It's kind of a catch 22 - I have to have a receiver to build one (or transmitter).

Dan KB9JLO

5926. Re: A Christmas Present Everyone Can Afford

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-27 03:44:23 UTC
From: cmdr buzz corey <cmdr-buzz-corey@mailcity.com>
Message-ID: <1167191063.531097.116280@79g2000cws.googlegroups.com>
Source record: 9077
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

an old idiot wrote:

> the post is is NOT legit here it is spam and you have posted it what 50
> tiemes?

What the hell is "tiemes"?

5927. Re: Tri-Faced Robesin Strikes Out Again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-27 03:47:45 UTC
From: cmdr buzz corey <cmdr-buzz-corey@mailcity.com>
Message-ID: <1167191264.971441.148160@42g2000cwt.googlegroups.com>
Source record: 9078
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

hot-ham-and-cheese@hotmail.com wrote:

> I pointed out that MARS absolutely has non-amateur leadership,
> non-amateur participants, and an entirely non-amateur mission.

Well, that certainly shows your ignorance.

5928. Re: A Christmas Present Everyone Can Afford

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-27 03:48:33 UTC
From: Mark@kb9rqz.aprs
Message-ID: <s7r3p2tvo7h59ri4a0ft9l8fv1nq5osq5a@4ax.com>
Source record: 9079
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

On 26 Dec 2006 19:44:23 -0800, "cmdr buzz corey"
<cmdr-buzz-corey@mailcity.com> wrote:

>
>an old idiot wrote:
>
>> the post is is NOT legit here it is spam and you have posted it what 50
>> tiemes?
>
>What the hell is "tiemes"?

poor cartoon chartacter can't figure anything out
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5929. Re: Tri-Faced Robesin Strikes Out Again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-27 03:50:35 UTC
From: Mark@kb9rqz.aprs
Message-ID: <rbr3p29gm2q0tb6n5rk4u122vho1d5hod8@4ax.com>
Source record: 9080
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

On 26 Dec 2006 19:47:45 -0800, "cmdr buzz corey"
<cmdr-buzz-corey@mailcity.com> wrote:

>
>hot-ham-and-cheese@hotmail.com wrote:
>
>> I pointed out that MARS absolutely has non-amateur leadership,
>> non-amateur participants, and an entirely non-amateur mission.
>
>Well, that certainly shows your ignorance.

no oh foolish cartoon chartacter
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5930. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-27 04:22:57 UTC
From: julian814 <julian814@hotmail.com>
Message-ID: <1167193377.913685.18540@48g2000cwx.googlegroups.com>
Source record: 9081

ken scharf wrote:
> julian814 wrote:
> > Managed to find a regenerative receiver based on the 12AT7 tube. I've
> > been told I can substitute one of my 12AV6 tubes without a problem, so
> > that looks promising.
> >
> > I have some twin triode tubes, as well. (6FQ7, 6BZ7 and 4BC8) I've been
> > wondering if I couldn't make some one tube receivers with them. (Use
> > one triode for regeneration, the other an amplifier.) As for the rest
> > of the tubes I have, I'd be willing to sell or swap for parts I'll
> > need.
> >
> > Ralph
> >
> http://www.lindsaybks.com/bks/twin/index.html

I think this link might be more helpful and cheaper.

http://dzabcik.home.texas.net/doerle.html

Of course, it doesn't have Lindsay's notes on using newer tubes.

Ralph

5931. Re: Ideal ham receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-27 06:27:11 UTC
From: Jim <kill-spam@no-spam.org>
Message-ID: <04GdncbAH9rdjw_YnZ2dnUVZ_qunnZ2d@comcast.com>
Source record: 9082

Well, for a reasonable starting point, the KK7B line of direct conversion radios has a lot going for it. Good performance in a small package, and it can be set up for most frequencies by providing an LO nad a 90' shift for the LO in the band you want to play with.

A kit can be purchased from Kanga which has all the parts needed. They also offer the microR2 which was in the recent QST article.

http://www.kangaus.com/micror2_receiver.htm

That particular kit is set up for 40 meters, but it'd serve as an excellent starting point.

Kanga also has the slightly more general purpose miniR2 the does not ave an onboard VFO, so it is easier to use on other frequencies.

The R2 series have good dynamic ranges, and make pretty good rigs. No AGC, which takes some getting used to, but fun to use.

Jim N6BIU

--

22:25 Pacific Time Zone
Dec 26 2006

International Time
06:25 UTC
27.12.2006

5932. Re: WTD:MSR-2000 VHF XMTR

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-27 12:53:07 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <_JOdnUcX0Nwu8Q_YnZ2dnUVZ_uKknZ2d@bright.net>
Source record: 9083

There is according to my newsreader. I am subscribed to it. Maybe there really is no such group, but I am able to subscribe and unsubscribe from it with my service provider.

Scott
N0EDV

Michael Black wrote:

> Scott (acepilot@bloomer.net) writes:
>

>>
>
> There is no "rec.radio.amateur.swap" It's rec.radio.swap
>

5933. Re: Tri-Faced Robesin Strikes Out Again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-27 14:34:00 UTC
From: Not Cocksucker Lloyd <not_time_turd_lloyd@yahoo.com>
Message-ID: <1167230040.019945.157050@42g2000cwt.googlegroups.com>
Source record: 9084
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

Mark@kb9rqz.aprs wrote:
> On 26 Dec 2006 19:47:45 -0800, "cmdr buzz corey"
> <cmdr-buzz-corey@mailcity.com> wrote:
>
> >
> >hot-ham-and-cheese@hotmail.com wrote:
> >
> >> I pointed out that MARS absolutely has non-amateur leadership,
> >> non-amateur participants, and an entirely non-amateur mission.
> >
> >Well, that certainly shows your ignorance.
>
> no oh foolish cartoon chartacter

Yes, Markie, you show your ignorance every time you post.

5934. Re: WTD:MSR-2000 VHF XMTR

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-27 15:41:13 UTC
From: charlie <wehatespam@wymsey.co.uk>
Message-ID: <L5CdndZjQ_6ECQ_YRVnyhQA@pipex.net>
Source record: 9085

Bill Turner wrote:
<SNIP>
>
> Wanting to buy a spare circuit board has to do with repairing, not
> homebrewing. Homebrewing means building a new piece of equipment
> essentially from scratch.
>
> Bill, W6WRT

Oh come on, whatever your security problems, whatever your need to be a pedant, get it sorted and find some real issues to deal with.

If I was looking for something a bit unusual then a group of homebrewers is one the first places I would try. Your definition of this group is far too narrow, surely it also includes fault finding, problems and repairing. The common link is that these are things we do ourselves rather ran to the nearest shop.

I just wish I had a spare board to offer :)

Charlie.

--
www.wymsey.co.uk

5935. Re: A moment of silence my friends for a silent key.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-27 16:22:55 UTC
From: JIM <jslaird@goldfieldaccess.net>
Message-ID: <SNednTkkkupkAA_YnZ2dnUVZ_rqhnZ2d@deskmedia.com>
Source record: 9086
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

"Bill Turner" <noway@nowhow.com> wrote in message
news:blbbo25epdssnp6sk1g1ss5sc3dmuc0007@4ax.com...
> Please folks, do not reply to these off topic posts.
>
> If these idiots never get any replies, they will eventually give up
> and go away.
>
> Thanks,
>
> Bill, W6WRT

I just tuned into this News Group to find some and not all ham's like to speak better of there self's than they act.
I thought that was why people became Ham radio Operators and had gotten away from C.B. God I hate that C.B. I get sick thinking about it. I've been a S S B Radio Operator for a long time. Yes I prefer to that think that there are Three types of Radio. No need to go there and get my but kicked by the know it's on here. It has been said so many times no matter what the Hobby. There is always someone out there trying to take the fun out of anything good. And I just seen some of them here. I have been wanting to become a Ham operator for I'll bet at least 35 or 40 years. The code has always stopped me. And the But head's and those with attitude Overly goody two shoes crowds. I have a learning disorder. It does not make me retarded, it simply means that I learn better for me in a hands on manner. Code is plainly just to much for people like me.
Now My point to all this is once again I'm hanging on a tread, I just don't know why I would want to go into Ham and put up with these too kinds people when I'm already doing it and I don't like it any better now. The only plus that I can see at this point is more Frequencies. Ham was a Hobby that was intended to be HELPFUL IN ALL OF IT'S ASPECTS.....
Now look what it's coming to. Some don't want the no Code, other's do and if they remove the code I'm afraid it will let in all the nut's .Well my friends you folks all ready have them. And in the mean time your keeping Good honest people out. Honest people aren't Born..... It takes a Very strong willingness now days to be one.. Ask me it's hard and we don't always win so . Your art form, your hobby no matter what your calling it today is steadily going by the way side. And some of you are so caught up in yourselves that you just can't see it. Some of you are the Sign of your time. I'll Bet there are a lot of old timer's just shaking in there Graves at the way you have been presenting the hobby that they helped to grow. Kind people used to run the Ham band's and there are still some out there are you one of them. Or do you just think you are Action's speak louder and farther then the Air waves. I'm not even a Hammer and I can see that..... I'll be

listening......

5936. Re: A moment of silence my friends for a silent key.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-27 17:52:04 UTC
From: "Mark@kb9rqz.aspr" <Mark@kp9rqz.asr>
Message-ID: <4592a60a$0$15425$88260bb3@free.teranews.com>
Source record: 9087
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

"JIM" <jslaird@goldfieldaccess.net> wrote in message
news:SNednTkkkupkAA_YnZ2dnUVZ_rqhnZ2d@deskmedia.com...
>
> "Bill Turner" <noway@nowhow.com> wrote in message
> news:blbbo25epdssnp6sk1g1ss5sc3dmuc0007@4ax.com...
>> Please folks, do not reply to these off topic posts.
>>
>> If these idiots never get any replies, they will eventually give up
>> and go away.
>>
>> Thanks,
>>
>> Bill, W6WRT
>
>
> I just tuned into this News Group to find some and not all ham's like to
> speak better of there self's than they act.
> I thought that was why people became Ham radio Operators and had gotten
> away from C.B. God I hate that C.B. I get sick thinking about it. I've
> been a S S B Radio Operator for a long time. Yes I prefer to that think
> that there are Three types of Radio. No need to go there and get my but
> kicked by the know it's on here. It has been said so many times no matter
> what the Hobby. There is always someone out there trying to take the fun
> out of anything good. And I just seen some of them here. I have been
> wanting to become a Ham operator for I'll bet at least 35 or 40 years. The
> code has always stopped me. I have a learning disorder. It does not make
> me retarded
indeed it do make you reatrted im fact you give reterds a badname is just
the sume of your delsuion an hag dug youself in two deep aigan so in colsing
with the punce gotcha do you hav anyting cognet two say?
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5937. Re: Tri-Faced Robesin Strikes Out Again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-27 18:11:39 UTC
From: Mark@kb9rqz.aprs
Message-ID: <hpd5p29bvj4v62gv4uqf622opfd7rcqfi3@4ax.com>
Source record: 9088
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

On 27 Dec 2006 06:34:00 -0800, "Not Cocksucker Lloyd"
<not_time_turd_lloyd@yahoo.com> wrote:

>
>Mark@kb9rqz.aprs wrote:
>> On 26 Dec 2006 19:47:45 -0800, "cmdr buzz corey"
>> <cmdr-buzz-corey@mailcity.com> wrote:
>>
>> >
>> >hot-ham-and-cheese@hotmail.com wrote:
>> >
>> >> I pointed out that MARS absolutely has non-amateur leadership,
>> >> non-amateur participants, and an entirely non-amateur mission.
>> >
>> >Well, that certainly shows your ignorance.
>>
>> no oh foolish cartoon chartacter
>
>Yes, Markie, you show your ignorance every time you post.

no woger you do and the cartoon chararter MARS merely uses memeber of
the ARS it is otherwise unconceted with the ARS
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5938. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-27 19:57:24 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <reAkh.10099$n57.8441@bignews3.bellsouth.net>
Source record: 9089

julian814 wrote:
> ken scharf wrote:
>> julian814 wrote:
>>> Managed to find a regenerative receiver based on the 12AT7 tube. I've
>>> been told I can substitute one of my 12AV6 tubes without a problem, so
>>> that looks promising.
>>>
>>> I have some twin triode tubes, as well. (6FQ7, 6BZ7 and 4BC8) I've been
>>> wondering if I couldn't make some one tube receivers with them. (Use
>>> one triode for regeneration, the other an amplifier.) As for the rest
>>> of the tubes I have, I'd be willing to sell or swap for parts I'll
>>> need.
>>>
>>> Ralph
>>>
>> http://www.lindsaybks.com/bks/twin/index.html
>
> I think this link might be more helpful and cheaper.
>
> http://dzabcik.home.texas.net/doerle.html
>
> Of course, it doesn't have Lindsay's notes on using newer tubes.
>
>
> Ralph
>
Well If you are familiar with the book you know he showed a version
using a 6sl7gt tube. The 12at7 triode is identical to one half of the
6sl7 (except for heater voltage) so you can use a pair of these tubes in
the same circuit.

I built the #19 version, which worked ok but this tube is VERY
microphonic. I suspect the 12at7 will not have that problem.

Another interesting version of the theme was a single tube regen that
appeared in 'poptronics. It used a 6af11 compactron. This tube has two
triodes and a power pentode, so it will drive a speaker.

Also the current issue of QST shows a very simple untuned rf amplifier
that can be added to any tube type regen receiver. It uses only 7 parts
(a resister, 3 caps, 1 diode, an rf choke, and a transistor). The rf
choke and one of the caps can be eliminated if you directly couple the
output of the rf amp to the receiver via a link added to the input coil.
One of the caps and the diode are used to steal 9v dc from the 6.3v
heater supply. I would recommend adding this as it makes the receiver

easier to tune by isolating it from the antenna.

5939. Re: Older ARRL Handbooks

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-27 19:58:13 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <bfAkh.10100$n57.5969@bignews3.bellsouth.net>
Source record: 9090

ken scharf wrote:
> julian814 wrote:
>> ken scharf wrote:
>>> julian814 wrote:
>>>> Managed to find a regenerative receiver based on the 12AT7 tube. I've
>>>> been told I can substitute one of my 12AV6 tubes without a problem, so
>>>> that looks promising.
>>>>
>>>> I have some twin triode tubes, as well. (6FQ7, 6BZ7 and 4BC8) I've been
>>>> wondering if I couldn't make some one tube receivers with them. (Use
>>>> one triode for regeneration, the other an amplifier.) As for the rest
>>>> of the tubes I have, I'd be willing to sell or swap for parts I'll
>>>> need.
>>>>
>>>> Ralph
>>>>
>>> http://www.lindsaybks.com/bks/twin/index.html
>> I think this link might be more helpful and cheaper.
>>
>> http://dzabcik.home.texas.net/doerle.html
>>
>> Of course, it doesn't have Lindsay's notes on using newer tubes.
>>
>>
>> Ralph
>>
> Well If you are familiar with the book you know he showed a version
> using a 6sl7gt tube. The 12at7 triode is identical to one half of the
> 6sl7 (except for heater voltage) so you can use a pair of these tubes in
> the same circuit.
>
> I built the #19 version, which worked ok but this tube is VERY
> microphonic. I suspect the 12at7 will not have that problem.
>
> Another interesting version of the theme was a single tube regen that
> appeared in 'poptronics. It used a 6af11 compactron. This tube has two
> triodes and a power pentode, so it will drive a speaker.
>
> Also the current issue of QST shows a very simple untuned rf amplifier
> that can be added to any tube type regen receiver. It uses only 7 parts
> (a resister, 3 caps, 1 diode, an rf choke, and a transistor). The rf
> choke and one of the caps can be eliminated if you directly couple the
> output of the rf amp to the receiver via a link added to the input coil.
> One of the caps and the diode are used to steal 9v dc from the 6.3v

> heater supply. I would recommend adding this as it makes the receiver
> easier to tune by isolating it from the antenna.
opps I meant 12at6 tube.

5940. DDS kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-28 01:14:32 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <sPEkh.12314$641.3726@bignews4.bellsouth.net>
Source record: 9091

I bought one of these kits to make use of a sample AD9851 chip I got from Analog Devices a few years ago.

http://www.amqrp.org/kits/dds60/index.html

I knew it was hopeless to bread board something with this chip, but even with a PC board soldering something with such close lead spacing is a challenge (especially when you're past 50 with failing close in vision and less than rock solid stable hands). Still I figured I'd give it a try. Armed with the smallest soldering tip available for my Weller PES51 soldering station, a good magnifier lamp AND a binocular microscope I gave it a try to solder the chip to the board.

Well there is good news and bad news. The bad news is that it is impossible to solder the chip by hand without creating solder bridges. The good news is that I did a good enough job to get the chip 99% perfectly centered on the solder pads, and you can remove the solder bridges with solder wick without removing the chip from the PC board.

It would have been easier with thiner solder (I had .021" dia solder) and a thiner soldering iron tip, but inspection with the microscope shows no shorts, and it looks like all the pins are properly soldered. Naked eye it doesn't look pretty but it should work.

Now to solder those chip caps and resistors! (They should be easier, the AD9851 was the worst part to place with the tight spacing, all the other parts have lead spacing at least twice as wide).

5941. Re: DDS kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-28 01:20:58 UTC
From: dplatt@radagast.org
Message-ID: <12p66vqe98jm331@corp.supernews.com>
Source record: 9092

In article <sPEkh.12314$641.3726@bignews4.bellsouth.net>,
ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net> wrote:

>Well there is good news and bad news. The bad news is that it is
>impossible to solder the chip by hand without creating solder bridges.
>The good news is that I did a good enough job to get the chip 99%
>perfectly centered on the solder pads, and you can remove the solder
>bridges with solder wick without removing the chip from the PC board.

I've seen people recommend this as the preferred hand-soldering
approach for dealing with small-pitch surface mount parts. Don't
worry about creating bridges... use a bit of liquid flux on the pins,
get a nice blob of fresh solder onto the tip of the iron, and then
just gently drag the molten solder-ball along the pins and get them
soldered to the traces. Then, go back over it with solder-wick and a
bit more liquid flux, and wick away the excess.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5942. Re: DDS kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-28 02:03:08 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <iBFkh.11973$cB6.11909@bignews7.bellsouth.net>
Source record: 9093

Dave Platt wrote:
> In article <sPEkh.12314$641.3726@bignews4.bellsouth.net>,
> ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net> wrote:
>
>> Well there is good news and bad news. The bad news is that it is
>> impossible to solder the chip by hand without creating solder bridges.
>> The good news is that I did a good enough job to get the chip 99%
>> perfectly centered on the solder pads, and you can remove the solder
>> bridges with solder wick without removing the chip from the PC board.
>
> I've seen people recommend this as the preferred hand-soldering
> approach for dealing with small-pitch surface mount parts. Don't
> worry about creating bridges... use a bit of liquid flux on the pins,
> get a nice blob of fresh solder onto the tip of the iron, and then
> just gently drag the molten solder-ball along the pins and get them
> soldered to the traces. Then, go back over it with solder-wick and a
> bit more liquid flux, and wick away the excess.
>
I did smear the pc lands under the chip with paste flux first. Not a
heavy coat, just lightly applied. It does help.
I've watched the technicians at work hand solder even finer pitch chips.
One young woman has very good close in eyesight and works without a
magnifier. She does have to clean up with the solder-wick, but makes
machine like perfect solder connections. (she makes it look EASY!)
Whats hard is doing an entire board in one sitting without getting a
visual version of writer's cramp. (eye strain)

5943. Re: Ideal ham receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-28 05:10:58 UTC
From: laura halliday <marsgal42@hotmail.com>
Message-ID: <1167282658.688001.110070@42g2000cwt.googlegroups.com>
Source record: 9094

bcdlr wrote:
> Guys, this is has been an interesting discussion. I wish I was more
> knowledgeable - I would venture out building like that but I just don't
> know enough.
> ---
> I'm kind of starting over. Long story...
> What would be a good receiver - or good enough to listen for VFOs, test
> and build, etc.
> Or better yet what should I avoid?
> What about something like the Ten-Tec 1056 kit and some way to band
> switch - maybe modules...
> It's kind of a catch 22 - I have to have a receiver to build one (or
> transmitter).

A good receiver is important in any ham shack.

You can build state-of-the-art performance, especially
for a single-band receiver. While some have talked
about DDS/PLL VFOs, don't underestimate the perfor-
mance of a good LC VFO built with modern components,
after a bit of tweaking to nail down the temperature
compensation.

I know you have your heart set on building something,
and there have been excellent suggestions in this
thread, but it's not a crime to buy your first receiver
to give you a known-good building block for further
development.

Laura Halliday VE7LDH "That's a totally illegal,
Grid: CN89mg madcap scheme. I like it!"
ICBM: 49 16.05 N 122 56.92 W - H. Pearce

5944. Re: Ideal ham receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-28 08:01:16 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <24r6p21mok5ndc1k2145hk44f1e3k6mt5v@4ax.com>
Source record: 9095

On Sat, 23 Dec 2006 11:32:04 -0500, ken scharf
<wa2mzeNOSPAMBOTS@bellsouth.net> wrote:

>Yet another idea is a single conversion with a 9mhz IF. Since I have a
>bunch of surplus 9mhz filters (they are 8 pole units with 3.2 khz
>bandwidth) I was also thinking of a rig with these. True the filters
>are a bit wider than common today, but if I put THREE of them in cascade
>(between IF stages) they should do a good job.

A single 9 MHz IF filter unit with I/Q detection (to handle the
opposite sideband) could be an other alternative and do the rest of
the filtering in audio stages.

>I would use a DDS VFO,
>but would also used a tuned (not broadband) front end. I have enough
>toroids and multi section variable caps in the junk box for that.

The _unloaded_ Q values shown by toroid manufacturers are not very
spectacular (in the 200-300 range at most). If you aim for a filter
loaded Q of 100, there are going to be a considerable loss (several
dB), so placing the filter before the first RF amplifier stage will
deteriorate the noise figure quite badly, which can be a bad thing on
upper HF bands.

With a preselector loaded Q in the 50-100 range would still cover an
entire WARC band without tuning and with wider bands and tunable front
end filters, a 100-500 kHz segment would still be present at the mixer
input at full amplitude. Thus, the mixer would still need to be strong
to handle all those signals in that range.

A preselector filter will most definitively help in keeping out strong
broadcast band signals (e.g. the strong 49 m BC band in Europe) from
the mixer, but it does not help much against strong amateur signals in
the same amateur band.

Paul OH3LWR

5945. Re: DDS kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-28 13:39:41 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <WMydnTNmMKSDVA7YnZ2dnUVZ_vipnZ2d@bright.net>
Source record: 9096

One thing you might try "next time"...

Pre-tin the PC pads by heating them with a heat gun, (being careful to not overheat the board) and applying a very small amount of solder to each pad. If you can get the IC pins all lined up with their PC board pads, tack solder one of the corner pins (or one that is easiest to solder without bridging). Use a toothpick (or some other device) to apply gentle down pressure to the IC to keep it from moving. Use the heat gun again (carefully) until the solder melts and the chip should "settle" down into the molten solder. Keep the heat gun moving around all pins to be sure all get down into molten solder. If you happen to have a piece of copper clad PC board, you can practice by putting some solder blobs on it and putting the leads of some sort of junkbox parts on to the solder and heat it up with the heat gun, apply the down pressure to the component and you can get the feel of how far the heat gun should be away from the board and the length of time it takes to melt the solder...

Scott
N0EDV

ken scharf wrote:
> I bought one of these kits to make use of a sample AD9851 chip I got
> from Analog Devices a few years ago.
>
> http://www.amqrp.org/kits/dds60/index.html
>
> I knew it was hopeless to bread board something with this chip, but even
> with a PC board soldering something with such close lead spacing is a
> challenge (especially when you're past 50 with failing close in vision
> and less than rock solid stable hands). Still I figured I'd give it a
> try. Armed with the smallest soldering tip available for my Weller
> PES51 soldering station, a good magnifier lamp AND a binocular
> microscope I gave it a try to solder the chip to the board.
>
> Well there is good news and bad news. The bad news is that it is
> impossible to solder the chip by hand without creating solder bridges.
> The good news is that I did a good enough job to get the chip 99%
> perfectly centered on the solder pads, and you can remove the solder
> bridges with solder wick without removing the chip from the PC board.
>
> It would have been easier with thiner solder (I had .021" dia solder)
> and a thiner soldering iron tip, but inspection with the microscope
> shows no shorts, and it looks like all the pins are properly soldered.
> Naked eye it doesn't look pretty but it should work.

>
> Now to solder those chip caps and resistors! (They should be easier,
> the AD9851 was the worst part to place with the tight spacing, all the
> other parts have lead spacing at least twice as wide).
>

5946. Re: DDS kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-28 16:34:07 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <x0Rnj9QHkFFArr@ifwtech.co.uk>
Source record: 9097

ken scharf wrote:

>
>Now to solder those chip caps and resistors! (They should be easier,
>the AD9851 was the worst part to place with the tight spacing, all the
>other parts have lead spacing at least twice as wide).
>
It's MUCH easier to begin with the easy parts! Start with the largest chip caps and resistors, continue with the rest of the simple passives, and then the largest ICs (largest pin spacing).

Finally, when you've honed your SMD skills, solder the large ICs with the small pin spacings.

And give up the industrial-strength coffee for the duration :-)

--
73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

5947. Re: WTD:MSR-2000 VHF XMTR

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-28 17:04:57 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <u4u7p2t1v61dc5qfqvmtqvqclj25gtvrl9@4ax.com>
Source record: 8948

ORIGINAL MESSAGE:

On Wed, 27 Dec 2006 15:41:13 +0000, charlie <wehatespam@wymsey.co.uk>
wrote:

>Oh come on, whatever your security problems, whatever your need to
>be a pedant, get it sorted and find some real issues to deal with.
>
>If I was looking for something a bit unusual then a group of
>homebrewers is one the first places I would try. Your definition of
>this group is far too narrow, surely it also includes fault
>finding, problems and repairing. The common link is that these are
>things we do ourselves rather ran to the nearest shop.

------------ REPLY FOLLOWS ------------

Nonsense. Homebrewing is building things from scratch, period.
Crossposters and off-topic posters like yourself are the bane of the
newsgroups. If you want to purchase parts for repair, go to
rec.radio.swap. It's why different newsgroups exist in the first
place.

Bill, W6WRT

5948. Re: A moment of silence my friends for a silent key.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-28 17:20:45 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <btu7p2p382261d68p90qh0uaqfu40pec8t@4ax.com>
Source record: 8949
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

ORIGINAL MESSAGE:

On Wed, 27 Dec 2006 10:22:55 -0600, "JIM"
<jslaird@goldfieldaccess.net> wrote:

>I'll Bet there are a lot of old timer's just shaking in there Graves
>at the way you have been presenting the hobby that they helped to grow.

------------ REPLY FOLLOWS ------------

I'll bet there are even more newsgroup users who are tired of people
posting messages that have nothing to do with the topic of the
newsgroup.

I'll spell it out for you: The three newsgroups you have posted to
have nothing to do with a "moment of silence". There is newsgroup
which is a catch-all for amateur radio related items:
rec.radio.amateur.misc.

Now that you know, I trust you will post correctly in the future.

Bill, W6WRT

5949. Re: QSL Cards

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-28 17:25:09 UTC
From: Bill Turner <noway@nowhow.com>
Message-ID: <7fv7p29vkq43e0fg1098pgh43bhsgufeak@4ax.com>
Source record: 8950

Please folks, do not reply to these posts which have nothing to do
with the purpose of this newsgroup.

If these clueless bozos never get any replies, they will eventually
learn to post to the correct newsgroup.

Thanks,

Bill, W6WRT

5950. Re: DDS kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-28 18:53:34 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <gkUkh.12641$641.9012@bignews4.bellsouth.net>
Source record: 8951

Ian White GM3SEK wrote:
> ken scharf wrote:
>
>>
>> Now to solder those chip caps and resistors! (They should be easier,
>> the AD9851 was the worst part to place with the tight spacing, all the
>> other parts have lead spacing at least twice as wide).
>>
> It's MUCH easier to begin with the easy parts! Start with the largest
> chip caps and resistors, continue with the rest of the simple passives,
> and then the largest ICs (largest pin spacing).
>
> Finally, when you've honed your SMD skills, solder the large ICs with
> the small pin spacings.
>
> And give up the industrial-strength coffee for the duration :-)
>
>
For some reason the instructions that came with the DDS-60 kit have you solder all the ic's on first, then the resistors and caps.

After thinking I had done a good job on the AD9851 I put the board under my binocular microscope for a close in look. I saw what looked like microscopic solder bridges between the chip leads. I was able to remove these with a stiff piece of paper slid between the chip leads. I still see strange 'hair like' structures all over the board under the microscope. I may be seeing dust, bits of flux, who knows! The microscopic world is strange, especially in 3D.

5951. Re: WTD: Flat mica capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-28 19:07:13 UTC
From: Telstar Electronics <briangriffey@sbcglobal.net>
Message-ID: <1167332833.468691.211930@h40g2000cwb.googlegroups.com>
Source record: 8952
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

KC0EH wrote:
> I am in need of some capacitors (600 vdc) for a homebrew 20's vintage
> project and am looking for period correct parts. If you have some to sell or
> know of a source , please let me know the price.
>
> (2) .002
> (2) .005
> (1) .00025
>
> Thanks ,
>
> Charlie

You might want to consider these...
http://www.rfparts.com/caps_dippedmica.html#cd19

www.telstar-electronics.com

5952. Re: QSL Cards

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-28 19:26:11 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <mIqdnfwNOZfJhwnYnZ2dnUVZ_qGjnZ2d@bright.net>
Source record: 8953

Another dang canned message...it's getting kind of boring reading the
same thing over and over and over...try a new message please.

The Message Template is the enemy of actually saying something
important. It is far too easy to bring up the pre-typed message and
offer a generic response to everything that gets one's dander up.

Now to add something to make this post "legitimate"...

I'm building (from scratch) a remote frequency readout so other hams
will be able to determine which frequency I'm on while mobile, should
they actually like to talk. I plan to use only one 7447 for BCD to 7
segment conversion and each digit LED will be wired in parallel and
multiplexed. I went this way to save money, but it will have one
slightly annoying feature...no lead zero blanking. So...can anyone tell
me the proper way to hook up the blanking inputs and outputs on a 7447
(I would use one for each digit to get this lead zero blanking). The
data sheet I have isn't real clear about the BI/RBO and the RBI pin. I
suspect something like the RBO pin of a lesser significant bit would be
connected to the next higher digits RBI pin or something like that?

Scott
N0EDV

Bill Turner wrote:
> Please folks, do not reply to these posts which have nothing to do
> with the purpose of this newsgroup.
>
> If these clueless bozos never get any replies, they will eventually
> learn to post to the correct newsgroup.
>
> Thanks,
>
> Bill, W6WRT

5953. Re: A moment of silence my friends for a silent key.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-28 19:29:53 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <mIqdnf8NOZevhgnYnZ2dnUVZ_qHinZ2d@bright.net>
Source record: 8954

Huh? I missed the part of the reply that had something to do about homebrewing. Was it in the fine print somewhere? Everybody loves an internet cop. Now that you know, I trust you will post correctly in the future.

Scott
N0EDV

Bill Turner wrote:

> ORIGINAL MESSAGE:
>
> On Wed, 27 Dec 2006 10:22:55 -0600, "JIM"
> <jslaird@goldfieldaccess.net> wrote:
>
>
>>I'll Bet there are a lot of old timer's just shaking in there Graves
>>at the way you have been presenting the hobby that they helped to grow.
>
>
> ------------ REPLY FOLLOWS ------------
>
> I'll bet there are even more newsgroup users who are tired of people
> posting messages that have nothing to do with the topic of the
> newsgroup.
>
> I'll spell it out for you: The three newsgroups you have posted to
> have nothing to do with a "moment of silence". There is newsgroup
> which is a catch-all for amateur radio related items:
> rec.radio.amateur.misc.
>
> Now that you know, I trust you will post correctly in the future.
>
> Bill, W6WRT

5954. Re: WTD: Flat mica capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-28 19:34:23 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <dJudnVqoR4HcgQnYnZ2dnUVZ_vmqnZ2d@bright.net>
Source record: 8955

Oh God, be careful...you're looking to BUY something on a homebrewing newsgroup. Make sure you have zee papers when W6WRT comes jumping all over you...

Now that I've got that out of the way...are you looking for the brown square types with the color coded dots on top that look like one sided dice? I have some of those things, but I'd have to dig them out and check the values.

Scott
N0EDV

Telstar Electronics wrote:

> KC0EH wrote:
>
>>I am in need of some capacitors (600 vdc) for a homebrew 20's vintage
>>project and am looking for period correct parts. If you have some to sell or
>>know of a source , please let me know the price.
>>
>>(2) .002
>>(2) .005
>>(1) .00025
>>
>>Thanks ,
>>
>>Charlie
>
>
> You might want to consider these...
> http://www.rfparts.com/caps_dippedmica.html#cd19
>
> www.telstar-electronics.com
>

5955. Re: WTD: Flat mica capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-28 19:42:55 UTC
From: kludge@panix.com
Message-ID: <en16nvkos1@panix2.panix.com>
Source record: 8956
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

In article <1167332833.468691.211930@h40g2000cwb.googlegroups.com>,
Telstar Electronics <briangriffey@sbcglobal.net> wrote:
>KC0EH wrote:
>> I am in need of some capacitors (600 vdc) for a homebrew 20's vintage
>> project and am looking for period correct parts. If you have some to sell or
>> know of a source , please let me know the price.
>>
>> (2) .002
>> (2) .005
>> (1) .00025
>
>You might want to consider these...
>http://www.rfparts.com/caps_dippedmica.html#cd19

Old issues of Hints and Kinks and also the Radio Cyclopedia have directions
on making your own mica caps, as well as paper/foil capacitors. If you
are going to homebrew it, why not do it all the way? It would be appropriate
for the time period.

With a modern DVM, doing cut-and-try work to get the values right will be
much easier than it was eighty years ago, too.
--scott

--
"C'est un Nagra. C'est suisse, et tres, tres precis."

5956. Re: QSL Cards

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-28 20:48:02 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnep8bc2.2m8g.bit-bucket@shell.config.com>
Source record: 8957

On Thu, 28 Dec 2006 19:26:11 +0000, Scott wrote:
> Another dang canned message...it's getting kind of boring reading the
> same thing over and over and over...try a new message please.

Just plonk him. I have. He's now in my killfile just behind the script
that kills googlegroups postings -- which is where most of the OT posts
he uselessly replies to (e.g., the OP here) come from.

But, now, as additional phules start making useless replies to _his_
useless replies....

5957. Re: A moment of silence my friends for a silent key.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-28 21:33:13 UTC
From: JIM <cjjimmie@yahoo.com>
Message-ID: <UeCdnYLIR_qDpQnYnZ2dnUVZ_rCsnZ2d@deskmedia.com>
Source record: 8958

bill:w6wrt You also replied to and off post. By First telling everyone to stop replying.. And now to me on how to post.
You make a bad Internet cop by breaking the LAWS that you chose to protect. Bill I set the coin back up on edge would you like to try a best two out of three and see if you can knock it over onto TAILS again???????? You are being the best example of the Know it all I was talking about. Your not being helpful . Your being condescending. KINDNESS bill.. Be a big man, not a small one. Also as long as I'm on here....ah... how can I say this. "Breaking all the rules". The Other person the self professed you know what ever. If you give them another Ear to listen they keep on trying to prove how right there wrong cause is. Just sit quietly by and let AID'S Take care of them all. It's a great answer to there cause. Big MOUTH & A BIG you know what..... = Aid's The perfect answer. OH YES BILL...
I........LOVE.....ROCK& ROLL.... And BEAUTIFUL WOMEN, AND FAST CAR'S TOO.....And even FASTER MOTORCYCLE'S. I ..... LOVE .....To.....GO OFFROADING..... And I love my Children and my Grand Baby's TOO.
Come on Copper Boy Give me another Ticket..... Like you are so PERFECT MR>> BILL..... Answer me this Grasshopper..... Which hand do you wipe with???????????
Signed By ..... Jim

"Scott" <acepilot@bloomer.net> wrote in message news:mIqdnf8NOZevhgnYnZ2dnUVZ_qHinZ2d@bright.net...
> Huh? I missed the part of the reply that had something to do about
> homebrewing. Was it in the fine print somewhere? Everybody loves an
> internet cop. Now that you know, I trust you will post correctly in the
> future.
>
> Scott
> N0EDV
>
> Bill Turner wrote:
>
>> ORIGINAL MESSAGE:
>>
>> On Wed, 27 Dec 2006 10:22:55 -0600, "JIM"
>> <jslaird@goldfieldaccess.net> wrote:
>>
>>
>>>I'll Bet there are a lot of old timer's just shaking in there Graves at
>>>the way you have been presenting the hobby that they helped to grow.
>>
>>
>> ------------ REPLY FOLLOWS ------------

>>
>> I'll bet there are even more newsgroup users who are tired of people
>> posting messages that have nothing to do with the topic of the
>> newsgroup.
>>
>> I'll spell it out for you: The three newsgroups you have posted to
>> have nothing to do with a "moment of silence". There is newsgroup
>> which is a catch-all for amateur radio related items:
>> rec.radio.amateur.misc. Now that you know, I trust you will post
>> correctly in the future.
>>
>> Bill, W6WRT

5958. Re: DDS kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-28 21:43:51 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrnep8ekn.1lj1.ben@saturn.home.ben.com>
Source record: 8959

On 2006-12-28, ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net> wrote:
> I've watched the technicians at work hand solder even finer pitch chips.
> One young woman has very good close in eyesight and works without a
> magnifier. She does have to clean up with the solder-wick, but makes
> machine like perfect solder connections. (she makes it look EASY!)
> Whats hard is doing an entire board in one sitting without getting a
> visual version of writer's cramp. (eye strain)

After you've done it enough under a microscope you learn what is going
to happen and you can do a lot of it without even being able to see it,
by timing and feel. Like you said in another post, there's also the
part where you get used to how disgusting any solder joint looks under
sufficient magnification...

--
Ben Jackson AD7GD
<ben@ben.com>
http://www.ben.com/

5959. Re: cut out the Bullshit or turn in your license and imporve the service SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-29 02:57:33 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1167361053.909725.206720@k21g2000cwa.googlegroups.com>
Source record: 8960
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

You have to hand it to him! He did a good job declaring his views
ragarding ham radio
ande he may be right. Ham radio is shurely on the downslide and we
can't blaim that on the FCC. We have the internet now that welcomes
everybody so it wouldn't hurt us if the FCC gave somebody else the
frequencies. We talk of public service well looking at this newsgroups
work it would be better for the whole world if America got off the
bands because we are not liked anymore and this newsgroup does not do
service to America other than showing who we really are.
Art

Christopher Cox wrote:
> Mark@kb9rqz.aprs wrote:
> > On Fri, 15 Dec 2006 22:31:31 -0600, "Vince Fiscus, KB7ADL"
> > <radiation17@bresnan.net> wrote:
> >
> >
> > >>Ham radio died today.
> > >>
> > >>Sorry for all the brow beating, it won't be happening anymore.
> > >>
> > >>73 de KB7ADL, AKA Slow Code
> > >
> > >
> > > bullshit
> > > http://kb9rqz.blogspot.com/
> > >
> >
> > I am actually surprised to find out it was/is Vince. He's an O.K. guy,
> > puts in volunteer time and is very knowledgeable. While I firmly believe
> > this alter personality detracted from Amateur radio (Slow Code), Vince
> > has done other things to advance it.
> >
> > Although I know Vince is very pro Morse code, I am having trouble
> > believing it was him (being Mr. Slow Code)
> >
> > If it was/is him, turning in his license would only be a detriment to
> > the community IMHO.
> >
> > Chris KC8FRJ

5960. Re: cut out the Bullshit or turn in your license and imporve the service SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-29 03:49:09 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1167364149.514586.39870@k21g2000cwa.googlegroups.com>
Source record: 8961
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

art wrote:
> You have to hand it to him! He did a good job declaring his views
> ragarding ham radio
> ande he may be right.

and his views on personal privacy (no such thing) that he wants to end
the existance of Ham radio

> Ham radio is shurely on the downslide and we
> can't blaim that on the FCC. We have the internet now that welcomes
> everybody so it wouldn't hurt us if the FCC gave somebody else the
> frequencies. We talk of public service well looking at this newsgroups
> work it would be better for the whole world if America got off the
> bands because we are not liked anymore and this newsgroup does not do
> service to America other than showing who we really are.
> Art
>
>
>
>
> Christopher Cox wrote:
> > Mark@kb9rqz.aprs wrote:
> > > On Fri, 15 Dec 2006 22:31:31 -0600, "Vince Fiscus, KB7ADL"
> > > <radiation17@bresnan.net> wrote:
> > >
> > >
> > > >>Ham radio died today.
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> > > >>Sorry for all the brow beating, it won't be happening anymore.
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> > > >>73 de KB7ADL, AKA Slow Code
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> > >
> > > > bullshit
> > > > http://kb9rqz.blogspot.com/
> > >
> >
> > I am actually surprised to find out it was/is Vince. He's an O.K. guy,
> > puts in volunteer time and is very knowledgeable. While I firmly believe
> > this alter personality detracted from Amateur radio (Slow Code), Vince
> > has done other things to advance it.
> >
> > Although I know Vince is very pro Morse code, I am having trouble
> > believing it was him (being Mr. Slow Code)

> >
> > If it was/is him, turning in his license would only be a detriment to
> > the community IMHO.
> >
> > Chris KC8FRJ

5961. Re: cut out the Bullshit or turn in your license and imporve the service SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-29 04:29:05 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1167366545.563639.106660@s34g2000cwa.googlegroups.com>
Source record: 8962
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

No he is being realistic. We have more CB sets out there than ham sets
and they are no different to hams. If there is an emergency then CB ers
would probably do a better job than hams and with less quibling. I
think the writing is on the wall for ham radio since they dont provide
a thing for the country It would be better if home security took over
the frequency as we all now use the net instead. Have you heard anybody
on the radio lately if you get my drify
Att

an old friend wrote:
> art wrote:
> > You have to hand it to him! He did a good job declaring his views
> > ragarding ham radio
> > ande he may be right.
>
> and his views on personal privacy (no such thing) that he wants to end
> the existance of Ham radio
>
> > Ham radio is shurely on the downslide and we
> > can't blaim that on the FCC. We have the internet now that welcomes
> > everybody so it wouldn't hurt us if the FCC gave somebody else the
> > frequencies. We talk of public service well looking at this newsgroups
> > work it would be better for the whole world if America got off the
> > bands because we are not liked anymore and this newsgroup does not do
> > service to America other than showing who we really are.
> > Art
> >
> >
> >
> >
> > Christopher Cox wrote:
> > > Mark@kb9rqz.aprs wrote:
> > > > On Fri, 15 Dec 2006 22:31:31 -0600, "Vince Fiscus, KB7ADL"
> > > > <radiation17@bresnan.net> wrote:
> > > > >
> > > > >
> > > > >>Ham radio died today.
> > > > >>
> > > > >>Sorry for all the brow beating, it won't be happening anymore.
> > > > >>
> > > > >>73 de KB7ADL, AKA Slow Code
> > > > >
> > > > >

> > > > bullshit
> > > > http://kb9rqz.blogspot.com/
> > > >
> > >
> > > I am actually surprised to find out it was/is Vince. He's an O.K. guy,
> > > puts in volunteer time and is very knowledgeable. While I firmly believe
> > > this alter personality detracted from Amateur radio (Slow Code), Vince
> > > has done other things to advance it.
> > >
> > > Although I know Vince is very pro Morse code, I am having trouble
> > > believing it was him (being Mr. Slow Code)
> > >
> > > If it was/is him, turning in his license would only be a detriment to
> > > the community IMHO.
> > >
> > > Chris KC8FRJ

5962. Re: A moment of silence my friends for a silent key.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-29 04:33:41 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1167366821.344302.125770@48g2000cwx.googlegroups.com>
Source record: 8963
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Heh Bill it is free membership here, leave them alone. You tell other
people to talk to them and then you do it yourself. Share and share
alike I say
Art

Bill Turner wrote:
> ORIGINAL MESSAGE:
>
> On Wed, 27 Dec 2006 10:22:55 -0600, "JIM"
> <jslaird@goldfieldaccess.net> wrote:
>
> >I'll Bet there are a lot of old timer's just shaking in there Graves
> >at the way you have been presenting the hobby that they helped to grow.
>
> ------------ REPLY FOLLOWS ------------
>
> I'll bet there are even more newsgroup users who are tired of people
> posting messages that have nothing to do with the topic of the
> newsgroup.
>
> I'll spell it out for you: The three newsgroups you have posted to
> have nothing to do with a "moment of silence". There is newsgroup
> which is a catch-all for amateur radio related items:
> rec.radio.amateur.misc.
>
> Now that you know, I trust you will post correctly in the future.
>
> Bill, W6WRT

5963. Re: cut out the Bullshit or turn in your license and imporve the service SC

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-29 04:41:13 UTC
From: Mark@kb9rqz.aprs
Message-ID: <sq69p2hue4g81lhemee43lohgncc80n0ik@4ax.com>
Source record: 8964
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On 28 Dec 2006 20:29:05 -0800, "art" <aunwin@insightbb.com> wrote:

>No he is being realistic

did you read his coments?

I think so

amoug his alegations were that code skill is related to intelgence
that it worked to filter lunatics (he himself disproves that one)
that oposing his views was proof of criminal intent

>. We have more CB sets out there than ham sets
>and they are no different to hams.

they are different not saying better or worse but often quite
different

> If there is an emergency then CB ers
>would probably do a better job than hams and with less quibling.
in local matters I agree with you in larger matter no the ability of
Ham radio organize nationaly is an advantage

> I
>think the writing is on the wall for ham radio since they dont provide
>a thing for the country

I don't and I hope that finaly being free of the shcackles SC was
devoted will in time allow us to prove that

> It would be better if home security took over
>the frequency as we all now use the net instead.

nah there is NOTHING the Govt can't fuck up

> Have you heard anybody
>on the radio lately if you get my drify

I have heard em mostl y queit plenty of room for people to work on
stuff and yes some nut jobs (on CB and HAM) and some decent folks
>Att
>
>
>
>an old friend wrote:
>> art wrote:
>> > You have to hand it to him! He did a good job declaring his views

>> > ragarding ham radio
>> > ande he may be right.
>>
>> and his views on personal privacy (no such thing) that he wants to end
>> the existance of Ham radio
>>
>> > Ham radio is shurely on the downslide and we
>> > can't blaim that on the FCC. We have the internet now that welcomes
>> > everybody so it wouldn't hurt us if the FCC gave somebody else the
>> > frequencies. We talk of public service well looking at this newsgroups
>> > work it would be better for the whole world if America got off the
>> > bands because we are not liked anymore and this newsgroup does not do
>> > service to America other than showing who we really are.
>> > Art
>> >
>> >
>> >
>> >
>> > Christopher Cox wrote:
>> > > Mark@kb9rqz.aprs wrote:
>> > > > On Fri, 15 Dec 2006 22:31:31 -0600, "Vince Fiscus, KB7ADL"
>> > > > <radiation17@bresnan.net> wrote:
>> > > >
>> > > >
>> > > > >>Ham radio died today.
>> > > > >>
>> > > > >>Sorry for all the brow beating, it won't be happening anymore.
>> > > > >>
>> > > > >>73 de KB7ADL, AKA Slow Code
>> > > > >
>> > > >
>> > > > bullshit
>> > > > http://kb9rqz.blogspot.com/
>> > > >
>> > >
>> > > I am actually surprised to find out it was/is Vince. He's an O.K. guy,
>> > > puts in volunteer time and is very knowledgeable. While I firmly believe
>> > > this alter personality detracted from Amateur radio (Slow Code), Vince
>> > > has done other things to advance it.
>> > >
>> > > Although I know Vince is very pro Morse code, I am having trouble
>> > > believing it was him (being Mr. Slow Code)
>> > >
>> > > If it was/is him, turning in his license would only be a detriment to
>> > > the community IMHO.
>> > >
>> > > Chris KC8FRJ
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5964. Re: DDS kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-29 07:10:10 UTC
From: Jim <kill-spam@no-spam.org>
Message-ID: <HNmdnbqlGNfOIgnYnZ2dnUVZ_ompnZ2d@comcast.com>
Source record: 8965

Personally, I'd do the DDS chip first, before the resistors and capacitors. One of the tricks I use is to clean the IC pins with rubbing Alcohol after soldering and removing shorts.

Then, I apply a hot air gun, SLOWLY bringing the temperature up on the pins of the IC. I try to get to barely melting the solder, but not burning the main board. A slow application allows the IC to heat up gradually.

This tends to remove the hairline solder bridges and clean up between the pins of the IC. Since the main DDS chip is the only part on the board, I don't have to worry about heating up and blowing the resistors and capacitors clean off the board !!!

I can, and have, used this same method on a completely assembled board, but I have to pay close attention to the small parts, the tend to want to blow away. In that case, I build a heat shield with tin foil and I press it down on the board all around the IC I want to solder flow and that usually keeps the other parts on the board where I want them.

This all takes a delicate touch, it's pretty easy to get things too hot, but it does provide nice and clean solder joints.

Jim Pennell
N6BIU

--

23:10 Pacific Time Zone
Dec 28 2006

International Time
07:10 UTC
29.12.2006

5965. Re: Cal. kit for a 4195A & 41951A

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-29 19:22:06 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1167420126.404594.22160@h40g2000cwb.googlegroups.com>
Source record: 8966
Cross-posted to: sci.electronics.equipment,rec.radio.amateur.homebrew

Fred Bartoli wrote:
> Hi,
>
> Probably a question for Tom, but others are welcomed to answer too :-)
>
> I've finally got my hands on an HP4195A (0-500MHz and freshly caled) and
> also the 41951A impedance set + 16092A fixture. Unfortunately the 41951A
> has been badly tempered and the calibration kit (short and 50R load) is
> missing.
> After some time spent I've fixed the 41951A, and seem to have a fully
> functional unit (checked through calibrating it *with* the 16092A
> fixture and a pair of selected 100R-0805 as the reference load).
> At least the measurements I could do make sense, so far.
>
> Now I'd just like to have all the possible accuracy from this and thus
> want to rebuild an APC7 cal kit I can trust.
>
> The original parts aren't available anymore, just 2 50R load left at
> agilent at a (cough) $1350 price! and no more short.
>
> I've found agilent has the 909C load which should be OK (given for
> SWR=1.005 @ 2GHz).
> I've also found an Amphenol short which should be OK since, AIUI, the
> short is made by compressing a flat piece against the ref plane of the
> mating connector.
>
> I also want to add to this an APC7-SMA adapter for some on board
> impedance measurement.
>
> I believe all this would be perfectly OK but since I have not much hands
> on experience with VNAs I'd just want to make sure.
>
> Oh, last point, for those knowing it: I don't know if the open load
> (04191-85302)is complete or not (it has an opened threading at the
> opposite of the mating end) and could I find any picture/doc of it.
>
>
> Any comment much appreciated.
>
>
> --
> Thanks,
> Fred.

Hi Fred,

Unless you are interested in making precision lab-grade measurements, I think you'll do fine with much less expensive and more available cal standards. Personally, I'd get a set of adapters from your APC-7s to SMAs -- and out to only 500MHz, even BNCs should be OK. If you want to get a bit fancier, adapt the APC-7s to 3.5mm connectors, which mate with SMAs but are higher precision. I personally don't think it's worth worrying about. It's a really good idea to always leave adapters connected to the APC-7s to protect them anyway, assuming you use the instrument often enough that you don't want to leave them covered most of the time. But never leave them uncovered! They are far to easy to damage if left unmated/uncovered.

My experience designing a 3-way splitter that needed to work well to 6GHz is that inexpensive 0805 SMT resistors in the 25 to 100 ohm range work quite well to several GHz, if you're careful about the environment around them (e.g., the size and shape of the holes bored in the grounded block that holds the connectors). I expect that if you keep lead length to essentially zero, you can turn an SMB thru-hole jack into a 50 ohm load that will have at least 40dB return loss out to 500MHz: cut the center pin to the height of the resistors, and solder two 100 ohm 0.1% 0805's radially symmetrically out from the center pin to the outer shell. If possible, get someone with a known-good cal standard set to compare it with that set. An open and a short can be created in the same way. I suppose that one of the free 2-d fields solver applications could tell you if you need to make any adjustment for length, but in any event, just using the same jacks for all three should yield lengths within a degree out to 500MHz. Maybe if I get some time to play next week, I can make some measurements of hacked "standards" against my known-good ones. I'm pretty sure I still have some of the 0.1% 50 ohm parts around.

Cheers,
Tom

5966. How hard for a spy to receive 6855 or 8010 kHz?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-29 19:50:42 UTC
From: Clark Magnuson <c.magnuson@comcast.net>
Message-ID: <U4KdnUv85tC57AjYnZ2dnUVZ_uiknZ2d@comcast.com>
Source record: 8967

Could a spy modify an AM radio by adding a few capacitors?

TIA
Clark KC7FGB

I read this:
http://www.washingtonpost.com/wp-dyn/content/article/2006/12/28/AR2006122801190.html

Messages to Spies Are Coded but Not Hidden
Over Shortwave, Anyone Can Listen

By James Gordon Meek
New York Daily News
Friday, December 29, 2006; Page A25

It turns out that anybody can tune in to the world's top spy agencies talking to operatives. All you need is a cheap shortwave-radio receiver, the kind available at any drugstore.

Tune it to 6855 or 8010 kHz.

On the hour, you might hear a girlish voice repeating strings of numbers monotonously in Spanish. "Nueve, uno, nueve, tres, cinco-cinco, cuatro, cinco, tres, dos . . .," went one seemingly harmless message heard last month on a Grundig radio.

It was the Cuban Intelligence Directorate or Russian FSB broadcasting coded instructions from Havana to spies inside the United States.

Turn the dial up to 11545 kHz, and you might hear a few notes of an obscure English folk song, "Lincolnshire Poacher," followed by a voice repeating strings of numbers. That's believed to be British Secret Intelligence Service, MI6, broadcasting from Cyprus.

On 6840 kHz, you may hear a voice reading groups of letters. That's a station nicknamed "E10," thought to be Israel's Mossad intelligence.

Chris Smolinski runs SpyNumbers.com and the "Spooks" e-mail list, where "number stations" hobbyists log hundreds of shortwave messages transmitted every month. "It's like a puzzle. They're mystery stations," explained Smolinski, who has tracked the spy broadcasts for 30 years.

While hobbyists guess at the meaning of each cryptic message or which spy service sent it, it's no mystery to intelligence officials, who confirmed the purpose is espionage.

The signals are too strong to be made by amateurs and are often on licensed frequencies. The State Department once complained to the

Israeli Embassy in Washington that "E10" was blocking a U.S. broadcast, a source said.

"I can't imagine who else would waste the time in front of a microphone reading numbers" but a spy, said James Bamford, who has written about intelligence. Bamford calls number stations "simple but effective" spycraft.

"It's extremely effective," agreed a senior intelligence official. "If you have a one-time pad, the code can't be broken, and you can send out dummy broadcasts as much as you want to confuse your enemy."

A "one-time pad" is the key to unlocking coded shortwave messages that the CIA calls "one-way voice link."

It is low-risk because it's known only to the sender and the recipient and used just once before being destroyed, said retired CIA officer Tony Mendez.

Mendez said he would often imprint the code on microfilm or even a cigarette paper. Once inside the target country, a CIA operative could make a shortwave receiver out of simple materials. "The voices are not real people," he added. "They're computer-generated."

A CIA spokeswoman declined to comment.

One-time pads and coded radio began in World War I, said Thomas Boghardt, a historian at the International Spy Museum. Little has changed since, judging by recent espionage cases involving shortwave radios, including that of a man detained in Canada last month and accused of being a Russian spy.

In Miami last week, Carlos and Elsa Alvarez pleaded guilty to lesser charges after the United States accused them of spying for Cuba. A prosecutor alleged in a court hearing this summer that they received shortwave "messages in five-digit groupings." An FBI interview transcript shows Alvarez admitted going into his bathroom "on Fridays to listen at 11" for messages aimed at the couple, code-named "David" and "Deborah."

5967. Re: Tri-Faced Robesin Strikes Out Again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-29 20:34:19 UTC
From: Not Cocksucker Lloyd <not_time_turd_lloyd@yahoo.com>
Message-ID: <1167424458.974494.42550@a3g2000cwd.googlegroups.com>
Source record: 8968
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

Mark@kb9rqz.aprs wrote:
> On 27 Dec 2006 06:34:00 -0800, "Not Cocksucker Lloyd"
> <not_time_turd_lloyd@yahoo.com> wrote:
>
> >
> >Mark@kb9rqz.aprs wrote:
> >> On 26 Dec 2006 19:47:45 -0800, "cmdr buzz corey"
> >> <cmdr-buzz-corey@mailcity.com> wrote:
> >>
> >> >
> >> >hot-ham-and-cheese@hotmail.com wrote:
> >> >
> >> >> I pointed out that MARS absolutely has non-amateur leadership,
> >> >> non-amateur participants, and an entirely non-amateur mission.
> >> >
> >> >Well, that certainly shows your ignorance.
> >>
> >> no oh foolish cartoon chartacter
> >
> >Yes, Markie, you show your ignorance every time you post.
>
> no woger you do and the cartoon chararter MARS merely uses memeber of
> the ARS it is otherwise unconceted with the ARS

Wrong, Markie, as usual. But you are just a beginner training wheel no
code tech.

5968. Re: DDS kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-29 20:37:28 UTC
From: Dan Andersson <dan@andersson.co.uk>
Message-ID: <XfydnRCA96EU4QjYRVnysgA@eclipse.net.uk>
Source record: 8969

ken scharf wrote:

> I bought one of these kits to make use of a sample AD9851 chip I got
> from Analog Devices a few years ago.
>
> http://www.amqrp.org/kits/dds60/index.html
>
> I knew it was hopeless to bread board something with this chip, but even
> with a PC board soldering something with such close lead spacing is a
> challenge (especially when you're past 50 with failing close in vision
> and less than rock solid stable hands). Still I figured I'd give it a
> try. Armed with the smallest soldering tip available for my Weller
> PES51 soldering station, a good magnifier lamp AND a binocular
> microscope I gave it a try to solder the chip to the board.
>
> Well there is good news and bad news. The bad news is that it is
> impossible to solder the chip by hand without creating solder bridges.
> The good news is that I did a good enough job to get the chip 99%
> perfectly centered on the solder pads, and you can remove the solder
> bridges with solder wick without removing the chip from the PC board.
>
> It would have been easier with thiner solder (I had .021" dia solder)
> and a thiner soldering iron tip, but inspection with the microscope
> shows no shorts, and it looks like all the pins are properly soldered.
> Naked eye it doesn't look pretty but it should work.
>
> Now to solder those chip caps and resistors! (They should be easier,
> the AD9851 was the worst part to place with the tight spacing, all the
> other parts have lead spacing at least twice as wide).

Be sure to more or less "drown" the pins to be soldered with flux. If you get solder bridges, you probably have to little flux applied - really slob the flux on the pins. When you think you have enough of flux, add more...

Any bridges are corrected with solder wick.

The AD98xx can be soldered with a 0.5mm ceramic tip. Get one of these cheap (10$) magnifying visors, especially if you are half blind as I am...

The AD9851 is one of the easiest SMD IC's to solder as there are pins only on two sides.

Besides... We have been using SMD's since the early eighties now so stop whinging over it, adapt! They wont go away and they actually improve most RF designs!

//Dan, M0DFI

5969. Re: How hard for a spy to receive 6855 or 8010 kHz?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-29 20:48:49 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1167425329.812085.297600@n51g2000cwc.googlegroups.com>
Source record: 8970

Clark Magnuson wrote:
> Could a spy modify an AM radio by adding a few capacitors?

Not well, but where can you buy an AM radio or capacitors anymore :-) ?
Or was this some hypothetical 1940's time-travel question?

A $10 super-el-cheapo pocket SW receiver from a discount store does
just fine for picking up numbers stations. Some but not all number
stations are CW or SSB and you'd need a BFO which is one step up from
the super-el-cheapos.

Tim.

5970. New Mail List for QRP and Homebrewers

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-29 21:30:54 UTC
From: Brian <kb9bvn@earthlink.net>
Message-ID: <iOflh.5036$yx6.3460@newsread2.news.pas.earthlink.net>
Source record: 8971

A new mail list has been created, catering to the QRP and homebrew hams out there. Check out the new qrp-l by visting http://qrp-l.org and signing up. You can learn more about this new group by going to http://qrp-l.net

73 de KB9BVN

5971. Re: How hard for a spy to receive 6855 or 8010 kHz?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-29 21:49:49 UTC
From: dplatt@radagast.org
Message-ID: <12pb3bt4abitda5@corp.supernews.com>
Source record: 8972

In article <U4KdnUv85tC57AjYnZ2dnUVZ_uiknZ2d@comcast.com>,
Clark Magnuson <c.magnuson@comcast.net> wrote:

>Could a spy modify an AM radio by adding a few capacitors?

Possibly, but I doubt that it would work well if you started from a standard US-type AM broadcast-band receiver. The frequencies that this article speaks of are up in the HF band, roughly 10 times higher than the AM broadcast-band frequencies, and these radios' built-in loopstick antennas are not well suited to receive these sorts of signals.

A spy in most Western countries could simply buy an off-the-shelf AM/FM/shortwave receiver (very widely available).

Simple but very effective direct-conversion or superheterodyne receivers (capable of receiving CW, SSB, and AM) can be built out of "junk box" parts by anyone with a modest amount of training and experience. Many of the popular QRP receiver designs could be tweaked to receive on these sorts of frequencies with very little difficulty.

Now, if somebody had an old "7-transistor" AM radio (circa 1960 or so), it would likely be possible to salvage enough parts from it to build a simple direct-conversion shortwave receiver.

I doubt that this would be possible (or at least not easy) for today's highly-integrated IC-based radios.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

5972. Re: DDS kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-29 23:13:06 UTC
From: wackyvorlon <wackyvorlon@gmail.com>
Message-ID: <1167433986.286313.214350@i12g2000cwa.googlegroups.com>
Source record: 8973

On Dec 29, 3:37 pm, Dan Andersson <d...@andersson.co.uk> wrote:
>
> Besides... We have been using SMD's since the early eighties now so stop
> whinging over it, adapt! They wont go away and they actually improve most
> RF designs!
>
I've seen some suggestions go around that are very similar to hot-air
rework. I just wanted to mention that SparkFun electronics sells some
rework stations cheaply, and has useful tutorials on soldering SMD
parts. Their site: http://www.sparkfun.com

5973. radiosisma

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-29 23:51:33 UTC
From: microcosmoh@libero.it
Message-ID: <1167436293.463362.295170@s34g2000cwa.googlegroups.com>
Source record: 8974

Hi you all there! We do want to give you something you can't miss! Next saturday the fantastic webradio RADIOSISMA will be activated on the evening (with no problem in buffering, we're streaming now). Stay tuned to see how rock we are! To go to the link click here:www.arcimero.blogspot.com.

5974. FA: MORE PARTS AND STUFF--LOOK

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-30 01:06:17 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <dYilh.603544$QZ1.15149@bgtnsc04-news.ops.worldnet.att.net>
Source record: 8975

Have just added more parts and stuff --take a look--HELP ME GET RID OF
THIS ACCUMULATION!

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx heytubeguy

5975. Re: Tri-Faced Robesin Strikes Out Again

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-30 04:06:16 UTC
From: Mark@kb9rqz.aprs
Message-ID: <kcpbp2l9ksqg40j4qme0tnie8auv1kggv5@4ax.com>
Source record: 8976
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.homebrew

On 29 Dec 2006 12:34:19 -0800, "Not Cocksucker Lloyd"
<not_time_turd_lloyd@yahoo.com> wrote:

>
>Mark@kb9rqz.aprs wrote:
>> On 27 Dec 2006 06:34:00 -0800, "Not Cocksucker Lloyd"
>> <not_time_turd_lloyd@yahoo.com> wrote:
>>
>> >
>> >Mark@kb9rqz.aprs wrote:
>> >> On 26 Dec 2006 19:47:45 -0800, "cmdr buzz corey"
>> >> <cmdr-buzz-corey@mailcity.com> wrote:
>> >>
>> >> >
>> >> >hot-ham-and-cheese@hotmail.com wrote:
>> >> >
>> >> >> I pointed out that MARS absolutely has non-amateur leadership,
>> >> >> non-amateur participants, and an entirely non-amateur mission.
>> >> >
>> >> >Well, that certainly shows your ignorance.
>> >>
>> >> no oh foolish cartoon chartacter
>> >
>> >Yes, Markie, you show your ignorance every time you post.
>>
>> no woger you do and the cartoon chararter MARS merely uses memeber of
>> the ARS it is otherwise unconceted with the ARS
>
>Wrong, Markie, as usual. But you are just a beginner training wheel no
>code tech.

woger MARS is simply a part of the Dod operating on thiier rules

gues even taking your test twice taught you nothing
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

5976. Re: How hard for a spy to receive 6855 or 8010 kHz?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-30 04:39:25 UTC
From: Brian <kb9bvn@earthlink.net>
Message-ID: <14mlh.4465$pQ3.2365@newsread4.news.pas.earthlink.net>
Source record: 8977

Or the spy could just login to any of the dozens of SW receivers on the web
and tune to his/her favorite spy frequency.

But that's not romantic at all!

"Clark Magnuson" <c.magnuson@comcast.net> wrote in message
news:U4KdnUv85tC57AjYnZ2dnUVZ_uiknZ2d@comcast.com...
> Could a spy modify an AM radio by adding a few capacitors?
>
> TIA
> Clark KC7FGB
>
> I read this:
> http://www.washingtonpost.com/wp-dyn/content/article/2006/12/28/AR2006122801190.html
>
> Messages to Spies Are Coded but Not Hidden
> Over Shortwave, Anyone Can Listen
>
> By James Gordon Meek
> New York Daily News
> Friday, December 29, 2006; Page A25
>
> It turns out that anybody can tune in to the world's top spy agencies
> talking to operatives. All you need is a cheap shortwave-radio receiver,
> the kind available at any drugstore.
>
> Tune it to 6855 or 8010 kHz.
>
> On the hour, you might hear a girlish voice repeating strings of numbers
> monotonously in Spanish. "Nueve, uno, nueve, tres, cinco-cinco, cuatro,
> cinco, tres, dos . . .," went one seemingly harmless message heard last
> month on a Grundig radio.
>
> It was the Cuban Intelligence Directorate or Russian FSB broadcasting
> coded instructions from Havana to spies inside the United States.
>
> Turn the dial up to 11545 kHz, and you might hear a few notes of an
> obscure English folk song, "Lincolnshire Poacher," followed by a voice
> repeating strings of numbers. That's believed to be British Secret
> Intelligence Service, MI6, broadcasting from Cyprus.
>
> On 6840 kHz, you may hear a voice reading groups of letters. That's a
> station nicknamed "E10," thought to be Israel's Mossad intelligence.
>
> Chris Smolinski runs SpyNumbers.com and the "Spooks" e-mail list, where

> "number stations" hobbyists log hundreds of shortwave messages transmitted
> every month. "It's like a puzzle. They're mystery stations," explained
> Smolinski, who has tracked the spy broadcasts for 30 years.
>
> While hobbyists guess at the meaning of each cryptic message or which spy
> service sent it, it's no mystery to intelligence officials, who confirmed
> the purpose is espionage.
>
> The signals are too strong to be made by amateurs and are often on
> licensed frequencies. The State Department once complained to the Israeli
> Embassy in Washington that "E10" was blocking a U.S. broadcast, a source
> said.
>
> "I can't imagine who else would waste the time in front of a microphone
> reading numbers" but a spy, said James Bamford, who has written about
> intelligence. Bamford calls number stations "simple but effective"
> spycraft.
>
> "It's extremely effective," agreed a senior intelligence official. "If you
> have a one-time pad, the code can't be broken, and you can send out dummy
> broadcasts as much as you want to confuse your enemy."
>
> A "one-time pad" is the key to unlocking coded shortwave messages that the
> CIA calls "one-way voice link."
>
> It is low-risk because it's known only to the sender and the recipient and
> used just once before being destroyed, said retired CIA officer Tony
> Mendez.
>
> Mendez said he would often imprint the code on microfilm or even a
> cigarette paper. Once inside the target country, a CIA operative could
> make a shortwave receiver out of simple materials. "The voices are not
> real people," he added. "They're computer-generated."
>
> A CIA spokeswoman declined to comment.
>
> One-time pads and coded radio began in World War I, said Thomas Boghardt,
> a historian at the International Spy Museum. Little has changed since,
> judging by recent espionage cases involving shortwave radios, including
> that of a man detained in Canada last month and accused of being a Russian
> spy.
>
> In Miami last week, Carlos and Elsa Alvarez pleaded guilty to lesser
> charges after the United States accused them of spying for Cuba. A
> prosecutor alleged in a court hearing this summer that they received
> shortwave "messages in five-digit groupings." An FBI interview transcript
> shows Alvarez admitted going into his bathroom "on Fridays to listen at
> 11" for messages aimed at the couple, code-named "David" and "Deborah."

5977. Re: How hard for a spy to receive 6855 or 8010 kHz?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-30 12:14:01 UTC
From: mailbox@cpacker.org
Message-ID: <1167480841.353997.223460@k21g2000cwa.googlegroups.com>
Source record: 8978

Brian wrote:
> Or the spy could just login to any of the dozens of SW receivers on the web
> and tune to his/her favorite spy frequency.
>

Could you clarify this? You mean there are Web sites where
you type in an arbitrary frequency and hear what's being
broadcast on it?

--
Charles Packer
http://cpacker.org/whatnews
mailboxATcpacker.org

5978. Re: DDS kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-30 19:10:21 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <iQylh.12850$n57.7802@bignews3.bellsouth.net>
Source record: 8979

wackyvorlon wrote:
>
> On Dec 29, 3:37 pm, Dan Andersson <d...@andersson.co.uk> wrote:
>> Besides... We have been using SMD's since the early eighties now so stop
>> whinging over it, adapt! They wont go away and they actually improve most
>> RF designs!
>>
> I've seen some suggestions go around that are very similar to hot-air
> rework. I just wanted to mention that SparkFun electronics sells some
> rework stations cheaply, and has useful tutorials on soldering SMD
> parts. Their site: http://www.sparkfun.com
>
When you have a proper pc board smt is easy (once you've mastered the
new soldering techniques. I had no problem getting the AD9851 onto the
board. I think the microscopic hairs I'm seeing are a result of using
the solder braid wick. I may have not heated it enough and pulled it
off too soon leaving solder hairs behind. Flux sure does help, and I'll
use plenty when I solder the next few smt ic's down.

I have some smt mounting boards that allow mixing smt parts with through
hole on 100 mil grid proto boards. I fear that the extra long leads
this adds to the smt parts will make rf performance a problem,
especially with 100-400mhz clock signals to the dds chips (AD9951).
I've heard of people designing their own pc boards using laser printer
output and iron on toner for resit. I've tried this before but with
'bleeding' of the toner during application I don't think I can get
better than 50 mil trace separation. Also I've had bad luck etching
boards with very thin traces, the traces get etched away before larger
areas of copper are finished etching. If I try designing boards for SMT
parts I'll probably have to farm them out to a professional house, but
this can be expensive for making but one board. (Unless you plan on
writing a QST article and selling the extra boards....).

5979. Re: A moment of silence my friends for a silent key.

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-30 19:25:42 UTC
From: JIM <cjjimmie@yahoo.com>
Message-ID: <1PSdndZAPL-iIAvYnZ2dnUVZ_vupnZ2d@deskmedia.com>
Source record: 8980
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Art::
You are a Scholar and a Gentleman, and you are right on the point.
Thank You for your Honesty. A truly Noble Man you are. My friend ordered me
a Gordon West study guide.I thought it over and I feel I might just be able
to add a little bit of good to the Wonderful Hobby Of Ham Radio. Good men as
yourself will be needing help in the future. I learned a important thing.
Don't complain if your not willing to help. I will be honored to Follow in
the foot step's of those who have walked down the Road before me. I am but a
humble man in the eye's of my peer's.
Soon to be a New Be......
.....Jim....

"art" <aunwin@insightbb.com> wrote in message
news:1167366821.344302.125770@48g2000cwx.googlegroups.com...
> Heh Bill it is free membership here, leave them alone. You tell other
> people to talk to them and then you do it yourself. Share and share
> alike I say
> Art
>
>
> Bill Turner wrote:
>> ORIGINAL MESSAGE:
>>
>> On Wed, 27 Dec 2006 10:22:55 -0600, "JIM"
>> <jslaird@goldfieldaccess.net> wrote:
>>
>> >I'll Bet there are a lot of old timer's just shaking in there Graves
>> >at the way you have been presenting the hobby that they helped to grow.
>>
>> ------------ REPLY FOLLOWS ------------
>>
>> I'll bet there are even more newsgroup users who are tired of people
>> posting messages that have nothing to do with the topic of the
>> newsgroup.
>>
>> I'll spell it out for you: The three newsgroups you have posted to
>> have nothing to do with a "moment of silence". There is newsgroup
>> which is a catch-all for amateur radio related items:
>> rec.radio.amateur.misc.
>>
>> Now that you know, I trust you will post correctly in the future.
>>
>> Bill, W6WRT

>

5980. Re: How hard for a spy to receive 6855 or 8010 kHz?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-30 19:46:24 UTC
From: Gandhi <no@email.here>
Message-ID: <mn.f4de7d6cf7585f31.64286@email.here>
Source record: 8981

mailbox@cpacker.org asked:
>
> Could you clarify this? You mean there are Web sites where
> you type in an arbitrary frequency and hear what's being
> broadcast on it?
>

http://www.dxtuners.com/

--
Gandhi

Lisa, if the Bible has taught us nothing else - and it hasn't - it's
that girls should stick to girls' sports, such as hot oil wrestling and
foxy boxing and such and such.

5981. Re: How hard for a spy to receive 6855 or 8010 kHz?

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-30 19:47:48 UTC
From: Gandhi <no@email.here>
Message-ID: <mn.f4df7d6c8d70be78.64286@email.here>
Source record: 8982

Tim Shoppa wrote:
>
> A $10 super-el-cheapo pocket SW receiver from a discount store does
> just fine for picking up numbers stations. Some but not all number
> stations are CW or SSB and you'd need a BFO which is one step up from
> the super-el-cheapos.
>
> Tim.

Well, some numbers stations actually transmit modulated morse, so you
wouldn't need a BFO.

--
Gandhi

Son, when you participate in sporting events, it's not whether you
win or lose: it's how drunk you get.

5982. Re: DDS kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-31 00:18:48 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <0mDlh.114$yF6.56376@news.sisna.com>
Source record: 8983

All of my first year students can hold 20 mil traces and spaces, the C students can hold 15 mil, and the really good ones can hold 10.

Jim

> I've heard of people designing their own pc boards using laser printer
> output and iron on toner for resit. I've tried this before but with
> 'bleeding' of the toner during application I don't think I can get
> better than 50 mil trace separation.

5983. Re: DDS kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-31 10:22:42 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrnepf3ri.dva.ben@saturn.home.ben.com>
Source record: 8984

On 2006-12-30, ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net> wrote:
> I've heard of people designing their own pc boards using laser printer
> output and iron on toner for resit. I've tried this before but with
> 'bleeding' of the toner during application I don't think I can get
> better than 50 mil trace separation.

Print your design on some kind of clay coated paper (people have
used everything from magazine pages to photo paper intended for
inkjets) and look at the print with a loupe. Cheap laser printers
will produce a result full of pinholes. A nice Xerox will make a
good, solid black. I haven't had any trouble with toner melting
or running. In fact, once you transfer it onto the PCB it's hard
to get off!

> If I try designing boards for SMT
> parts I'll probably have to farm them out to a professional house, but
> this can be expensive for making but one board. (Unless you plan on
> writing a QST article and selling the extra boards....).

You've got to pick the right board house for each order. Some, like
batchpcb.com, are particularly cheap if you want few, small boards.
They don't have setup fees or even per-board fees, only a per-order
charge. But their $2.50/in^2 grows faster than some other places
which have bigger minimum size boards/minimum orders.

--
Ben Jackson AD7GD
<ben@ben.com>
http://www.ben.com/

5984. Re: DDS kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-31 12:29:44 UTC
From: quandong nut <me@privacy.net>
Message-ID: <75bfp2ducsamivafphe5mqmf3acgt9qvq6@4ax.com>
Source record: 8985

On Sun, 31 Dec 2006 04:22:42 -0600, Ben Jackson <ben@ben.com> wrote:

>You've got to pick the right board house for each order. Some, like
>batchpcb.com, are particularly cheap if you want few, small boards.
>They don't have setup fees or even per-board fees, only a per-order
>charge. But their $2.50/in^2 grows faster than some other places
>which have bigger minimum size boards/minimum orders.

I have been using an off-shore fab for years and they seem to do just what i
want, but have setup fees that make protos expensive. So I went and looked at
batchpcb.com but they do mention a $US10 setup fee in their FAQ.

http://www.batchpcb.com/faq.php?osCsid=87afcc3754a0ea1bc1a389ad75decda8

Do they actually charge it?

5985. Visit Nighthawk's Forum

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-31 18:38:54 UTC
From: Nighthawk <miner1@flash.net>
Message-ID: <jtTlh.10746$ZT3.9390@newssvr19.news.prodigy.com>
Source record: 8986
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

If you have communications equipment you either want to buy, sell or give away, or you want to find out information on that new antenna, or radio you got for Christmas, visit Nighthawk's Forum

http://nighthawk.suddenlaunch2.com

5986. Re: DDS kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-31 19:39:35 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <IlUlh.21972$3v6.16672@bignews8.bellsouth.net>
Source record: 8987

Ben Jackson wrote:
> On 2006-12-30, ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net> wrote:
>> I've heard of people designing their own pc boards using laser printer
>> output and iron on toner for resit. I've tried this before but with
>> 'bleeding' of the toner during application I don't think I can get
>> better than 50 mil trace separation.
>
> Print your design on some kind of clay coated paper (people have
> used everything from magazine pages to photo paper intended for
> inkjets) and look at the print with a loupe. Cheap laser printers
> will produce a result full of pinholes. A nice Xerox will make a
> good, solid black. I haven't had any trouble with toner melting
> or running. In fact, once you transfer it onto the PCB it's hard
> to get off!
>
>> If I try designing boards for SMT
>> parts I'll probably have to farm them out to a professional house, but
>> this can be expensive for making but one board. (Unless you plan on
>> writing a QST article and selling the extra boards....).
>
> You've got to pick the right board house for each order. Some, like
> batchpcb.com, are particularly cheap if you want few, small boards.
> They don't have setup fees or even per-board fees, only a per-order
> charge. But their $2.50/in^2 grows faster than some other places
> which have bigger minimum size boards/minimum orders.
>
My problem with the iron on transfers wasn't being able to print thin,
close spaced lines on to the transfer medium. The problem was that when
ironed on the toner lines 'spread out' so adjacent lines touched. Also
a problem was timing just how long to leave the board in the soup to
etch. I did heat the etchant up first and used an IR lamp to try and
keep it warm, but even so the thin close spaced traces were close to
being over etched long before larger and wider spaced traces were
'done'. (maybe a problem with 'Radio Shack' etchant?)

5987. Re: DDS kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-31 19:49:47 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <4598145A.5010005@invalid.invalid>
Source record: 8988

RST Engineering wrote:
> All of my first year students can hold 20 mil traces and spaces, the C
> students can hold 15 mil, and the really good ones can hold 10.

Yeah, but I'll bet your first year students' eyesight is 30 years
younger than that of the average participant in this NG<grin>!

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com
(I was a first-year student 29 years ago)

5988. Re: DDS kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2006-12-31 21:34:22 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrnepgb6u.ngo.ben@saturn.home.ben.com>
Source record: 8989

On 2006-12-31, quandong nut <me@privacy.net> wrote:
> I have been using an off-shore fab for years and they seem to do just what i
> want, but have setup fees that make protos expensive. So I went and looked at
> batchpcb.com but they do mention a $US10 setup fee in their FAQ.
>
> http://www.batchpcb.com/faq.php?osCsid=87afcc3754a0ea1bc1a389ad75decda8
>
> Do they actually charge it?

There's a $10 fee per order. But it's not per board or even per design.
It's more like a "shipping and handling" fee. So if you keep some boards
on file with them you can always throw in a few (smt adapters, or proto
boards) with another order for only the sq in cost.

--
Ben Jackson AD7GD
<ben@ben.com>
http://www.ben.com/